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federal register

Friday
January 14, 1983

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Environmental Protection Agency

Animal Drugs
Food and Drug Administration

Charter Flights
Civil Aeronautics Board

Endangered and Threatened Wildlife
Fish and Wildlife Service

Excise Taxes
Internal Revenue Service

Food Additives
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Presidential Documents

Title 3——

The President

Proclamation 5013 of January 12, 1983

National Inventors' Day, 1983

By the President of the United States of America

A Proclamation

Almost two hundred years ago, President George Washington recognized that invention and innovation were fundamental to the welfare and strength of the United States. He successfully urged the First Congress to enact a patent statute as expressly authorized by the U.S. Constitution and wisely advised that "there is nothing which can better deserve your patronage than the promotion of science . . ." In 1790, the first patent statute initiated the transformation of the United States from an importer of technology to a world leader in technological innovation.

Today, just as in George Washington's day, inventors are the keystone of the technological progress that is so vital to the economic, environmental, and social well-being of this country. Individual ingenuity and perseverance, spurred by the incentives of the patent system, begin the process that results in improved standards of living, increased public and private productivity, creation of new industries, improved public services, and enhanced competitiveness of American products in world markets.

In recognition of the enormous contribution inventors make to the nation and the world, the Congress, pursuant to Senate Joint Resolution 140 (Public Law 97–198), has designated February 11, 1983, the anniversary of the birth of Thomas Alva Edison, one of America's most famous and prolific inventors, as National Inventors' Day. Such recognition is especially appropriate at a time when our country is striving to maintain its global position as a leader in innovation and technology. Key to our future success will be the dedication and creativity of inventors.

NOW, THEREFORE, I, RONALD REAGAN, President of the United States of America, do hereby proclaim February 11, 1983, as National Inventors' Day and call upon the people of the United States to observe this day with appropriate ceremonies and activities.

IN WITNESS WHEREOF, I have hereunto set my hand this 12th day of Jan., in the year of our Lord nineteen hundred and eighty-three, and of the Independence of the United States of America the two hundred and seventh.

Ronald Reagan

[FR Doc. 83-1247
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Rules and Regulations

Federal Register
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Friday, January 14, 1983

This section of the FEDERAL REGISTER contains regulatory documents having general applicability and legal effect, most of which are keyed to and codified in the Code of Federal Regulations, which is published under 50 titles pursuant to 44 U.S.C. 1510.
The Code of Federal Regulations is sold by the Superintendent of Documents. Prices of new books are listed in the first FEDERAL REGISTER issue of each month.

DEPARTMENT OF AGRICULTURE

Agricultural Stabilization and Conservation Service

7 CFR Parts 713, 730, 792, 794 and 795

Feed Grain, Rice, Upland Cotton, and Wheat Programs for Crop Years 1982–85

AGENCY: Agricultural Stabilization and Conservation Service, USDA.

ACTION: Interim rule.

SUMMARY: The Agriculture and Food Act of 1981, which was enacted on December 22, 1981, amended the Agricultural Act of 1949 to authorize price support, payment, and production adjustment programs for the 1982 through 1985 crops of feed grain, rice, upland cotton, and wheat. The Omnibus Budget Reconciliation Act of 1982, which was enacted on September 8, 1982, further amended the Agricultural Act of 1949 with respect to these programs. This interim rule sets forth certain terms and conditions of these programs, as well as combining a number of related regulations into this regulation, 7 CFR Part 713.

DATES: Effective Date: January 14, 1983. Comments must be submitted on or before March 15, 1983 in order to be assured of consideration.

ADDRESS: Address comments to: Director, Cotton, Grain, and Rice Price Support Division, ASCS, USDA, Room 3630, South Building, P.O. Box 2415, Washington, D.C. 20013.

FOR FURTHER INFORMATION CONTACT: William Harshaw (ASCS), 202–447–7634. An impact analysis is being prepared and will be available for review before publication of the document that analyzes public comment on this interim rule.

SUPPLEMENTARY INFORMATION: This interim rule has been reviewed under USDA procedures implementing Executive Order 12291 and Secretary's Memorandum No. 1512–1 and has been classified "not major." It has been determined that this rule will not result in: (1) An annual effect on the economy of $100 million or more; (2) a major increase in costs or prices for consumers, individual industries, Federal, State or local governments, or geographic regions; or (3) significant adverse effects on competition, employment, investment, productivity, innovation or the ability of United States-based enterprises to compete with foreign-based enterprises in domestic or export markets.

The titles and numbers of the Federal assistance program to which this interim rule applies are: Cotton Production Stabilization, 10.052; Feed Grain Production Stabilization, 10.055; Rice Production Stabilization, 10.065; and Wheat Production Stabilization, 10.058; as found in the Catalog of Federal Domestic Assistance.

It has been determined that the Regulatory Flexibility Act is not applicable to this interim rule since the Agricultural Stabilization and Conservation Service is not required by 5 U.S.C. 553 or any other provision of law to publish a notice of proposed rulemaking with respect to the subject matter of this rule.

A. Statutory Background

General—Sections 101(i), 103(g), 105B, and 107B of the Agricultural Act of 1949 were added by the Agriculture and Food Act of 1981 (hereafter referred to as the "Act") effective for the 1982 through 1985 crops of rice, upland cotton, feed grains, and wheat, repectively. The Act provides for price support, payment, and production adjustment programs for these commodities. The Omnibus Budget Reconciliation Act of 1982 (hereafter referred to as the "Reconciliation Act") added Section 107C to the Agricultural Act of 1949 effective for the 1982 through 1985 crops of rice, upland cotton, feed grains, and wheat. The Reconciliation Act also amended the Agricultural Act of 1949 to specify certain requirements for the 1983 programs for rice, feed grains, and wheat. The regulations provided herein (7 CFR Part 713) set forth a number of terms and conditions with which producers must comply in order to be eligible for benefits under the programs for rice, upland cotton, feed grains, and wheat. A summary of the significant statutory authorities for these programs for the 1982 through 1985 crops is as follows:

(1) *Price Support*—The Act provides that support shall be made available to producers of rice, upland cotton, feed grains, and wheat by means of nonrecourse loans and/or purchase agreements. The general terms and conditions for price support are found generally in 7 CFR Part 1421. The loan and/or purchase rates for each such crop are set forth in an annual Notice of Determination published in the **Federal Register.**

(2) *Deficiency ("target price") Payments*—The Act provides that deficiency payments shall be made available to producers of rice, upland cotton, wheat, corn, grain sorghum, oats, and, if designated by the Secretary, barley. Payments for any of these crops are computed by multiplying: (i) The payment rate, by (ii) the farm program acreage for the crop, by (iii) the farm program payment yield for the crop. The payment rate for these commodities is the amount by which the higher of the national weighted average market prices received by producers during the first five months of the marketing year for the crop (the calendar year which includes the first five months of the marketing year for such crop for upland cotton) or the National average price support loan level for such crop is less than the established "target" price. The deficiency payment rates for grain sorghum, oats, and, if designated by the Secretary, barley, are to be established at such rate which is determined to be fair and equitable in relation to the rate at which payments are made available for corn. The established "target" price for each crop is set forth in an annual Notice of Determination published in the **Federal Register.**

(3) *Disaster Payments*—The Act generally provides that the Secretary shall make prevented planting and low yield disaster payments to producers of rice, upland cotton, feed grains, and wheat unless crop insurance is available to them under the Federal Crop Insurance Act with respect to their acreage. Even if crop insurance is available, however, the Secretary is authorized to make prevented planting and low yield disaster payments to

producers on a farm if it is determined that (i) As the result of drought, flood, or other natural disaster, or other condition beyond the control of the producers, producers on a farm have suffered substantial losses of production either from being prevented from planting rice, upland cotton, wheat, and feed grains or other nonconserving crop or from reduced yields, and that such losses have created an economic emergency for the producers; (ii) Federal crop insurance indemnity payments and other forms of assistance made available by the Federal Government to such producers for such losses are insufficient to alleviate such economic emergency, or no crop insurance covered the loss because of transitional problems attendant to the Federal crop insurance program; and (iii) additional assistance must be made available to such producers to alleviate the economic emergency.

(4) *National Program Acreage*—The Act generally provides that the Secretary is required to announce a national program acreage for each crop of rice, upland cotton, feed grains, and wheat. The national program acreage for any crop shall be the number of harvested acres the Secretary determines will produce the quantity (less imports) that the Secretary estimates will be utilized domestically and for export during the marketing year for such crop. The amount of the national program acreage for any crop is set forth in an annual Notice of Determination published in the Federal Register. However, the national program acreage is not applicable for any crop of a commodity for which an acreage limitation program has been announced.

(5) *Program Allocation Factor*—The Act generally provides that the Secretary is required to determine a program allocation factor for each crop of rice, upland cotton, feed grains, and wheat. In general, the factor is determined by dividing the national program acreage for the crop by the number of acres that the Secretary estimates will be harvested for such crop. The factor is set forth in an annual Notice of Determination published in the Federal Register. However, the factor is not applicable for any crop of a commodity for which an acreage limitation program has been announced.

(6) *Individual Farm Program Acreage*—The Act generally provides that the individual farm program acreage for each crop shall be determined by multiplying the allocation factor by the acreage of the crop planted for harvest on the farm. However, this is not applicable for any crop of a commodity for which an acreage limitation program has been announced.

(7) *Farm Program Payment Yields for Feed Grains and Wheat*—The Act generally provides that the farm program payment yield for a farm for each crop of wheat and feed grains shall be the yield established for the farm for the previous year, adjusted to be fair and equitable. The Secretary may establish national, State, or county program payment yield based on historical yields to which the farm program payment yields shall balance. The Act requires the Secretary to take into account the actual yields proved by the producer in establishing the farm program payment yield for wheat and feed grains.

(8) *Farm Program Payment Yield for Upland Cotton and Rice*—The Act provides that the yield established for the farm for each crop of cotton and rice shall be determined on the basis of the actual yields per harvested acre for the 3 preceding years. Adjustments shall be made for abnormal yields caused by natural disaster or other condition beyond the control of the producer.

(9) *Acreage Limitation (Reduction) Program*—The Act authorizes the Secretary to establish an acreage limitation program for any of the crops of rice, cotton, barley, corn, grain sorghum, oats and wheat if the Secretary determines that the total supply of any such commodity will be excessive in the absence of such a program. The limitation shall be achieved by applying a uniform percentage reduction to the acreage base for the crop for the farm. Producers who knowingly produce in excess of the permitted acreage of the crop are ineligible for loans and purchases and payments with respect to that farm and crop. The acreage base for the farm is required to be either the acreage planted to the crop for the preceding year or the average acreage planted to the crop in the 2 preceding years, with adjustments to reflect crop-rotation practices and to achieve a fair and equitable base. However, the Reconciliation Act requires that the acreage base for the farm under the programs for the 1983 crops of wheat, feed grains, and rice shall be the same as the acreage base applicable to the farm under the 1982 programs, with adjustments to reflect crop rotation practices and to achieve a fair and equitable base. The acreage which is reduced under the acreage limitation program is required to be devoted to conservation uses. Under this program the individual farm program acreage is the acreage planted on the farm to the crop within the permitted acreage.

(10) *Set-aside Program*— The Act authorizes the Secretary to establish a set-aside program for any crop of wheat or feed grains if the Secretary determines that the total supply of wheat or feed grains would be excessive in the absence of such a program. Under a set-aside program, producers on a farm are required to devote to conservation uses an acreage equal to a specified percentage of the acreage planted to the crop. There may also be a limit imposed on the acreage planted to the crop.

(11) *Land Diversion Program*—The Act authorizes the Secretary to make land diversion payments to producers of rice, upland cotton, feed grain, and wheat if a land diversion program is determined to be necessary in order to adjust the total national acreage of a crop of any such commodity to desirable goals. The acreage diverted must be devoted to conservation uses. The extent of the diversion and the manner in which diversion contracts are made are to be determined by the Secretary. The Reconciliation Act requires the Secretary to implement land diversion programs for the 1983 crops of wheat, feed grains, and rice and specifies certain of the requirements with respect to such programs.

(12) *Conservation Use Acreage*—The Act generally provides for the Secretary to issue regulations with respect to the conservation uses to which reduced acreage, set-aside acreage, and diverted acreage must be devoted. These regulations are required to assure that the acreage is protected from weeds as well as wind and water erosion. The Secretary may permit the acreage to be devoted to certain crops and uses if the production is needed to provide an adequate supply of the commodity, is not likely to increase the cost of the price support program, and will not affect farm income adversely. This acreage may be devoted to wildlife food plots or wildlife habitat. The Secretary may pay a share of the cost of these practices or make additional payments if the producer agrees to permit public access to the land for hunting, fishing, trapping, and hiking.

(13) *Cross Compliance*—"Cross Compliance" is a requirement whereby producers on a farm must comply with the terms and conditions of the program for one crop in order to be eligible for loans, purchases or payments authorized for another crop. The Act prohibits cross compliance requirements to be imposed for wheat or feed grains when an acreage reduction program is in effect for wheat or feed grains but

permits cross compliance requirements to be imposed for such crops if a set-aside program is in effect. The Act prohibits cross compliance requirements for upland cotton and rice in all cases.

(14) *Normal Crop Acreage (NCA)*—Section 1001 of the Food and Agriculture Act of 1977 was amended by the Act to provide that whenever a set-aside program was in effect for a crop of wheat or feed grains, a requirement could be imposed as a condition of eligibility for program benefits that producers not exceed the acreage on the farm normally planted to crops designated by the Secretary reduced by any set-aside or diverted acreage. When this "NCA" limitation is in effect, the Secretary may increase the deficiency payments, or make payments to compensate producers for not exceeding the NCA and participating in any required set-aside.

(15) *Payment Limitation*—The Act provides that the total amount of payments that a person shall be entitled to receive under one or more of the rice, upland cotton, feed grains, and wheat programs shall be limited to $100,000 for disaster payments and $50,000 for deficiency, and diversion, and wheat haying and grazing payments. The Secretary is authorized to issue regulations defining the term "person" (which are found at 7 CFR Part 795).

(16) *Advance Deficiency Payments*—The Reconciliation Act added Section 107C to the Agricultural Act of 1949. This section requires the Secretary to make available advance deficiency payments for the 1982 and 1983 crops of rice, upland cotton, feed grains, and wheat, and authorizes advance deficiency payments for the 1984 and 1985 crops of such commodities. Such payments are limited to producers who participate, or who have indicated an intention to participate, in the acreage limitation or set-aside program announced for the commodity for the year. Section 107C also prescribes conditions for the refunding of unearned advance payments.

B. Pertinent Provisions

(1) *General.* The following is a discussion of a number of significant provisions of the 1982 through 1985 rice, upland cotton, feed grain and wheat programs which differ from the provisions which were applicable to these programs for the 1978 through 1981 crops of these commodities.

(2) *State and County Check Yields.* In previous years county check yields for feed grain and wheat have been established based on Statistical Reporting Service (SRS) data, with provision for adjustment for abnormal conditions. It has been determined that SRS data is more statistically sound at the State level than at the county level. Therefore, this interim rule provides for establishing State check yields based on SRS State data. Once the State check yield is determined by the Deputy Administrator, the State committee establishes county check yields that must weight back to the State check yield. The State committee may use available SRS data, as well as its best judgment, in establishing the county check yields.

This interim rule also provides that the basis for the State check yields is to be a 10-year period, with adjustments for productivity trends or abnormal conditions, rather than the 3-year period used for county check yields in the past. This change will result in generally lower county yields being established in 1982 and subsequent years than would have occurred under the formula used in prior years. However, the combination of using State check yields and a 10-year period should result in yields that are more valid statistically and more representative of the actual yield capability of the farm. This change also makes ASCS yield procedures more similar to those used in other USDA agencies.

(3) *Farm Yields.* This interim rule provides for a change in the base period for proven farm yields for feed grains and wheat from 3 years to 5 years. If acreage or production evidence is not available for the 2 earliest years, and actual yield could be assigned and the proven yield could still be computed. The reason for the change in the base period is to minimize the effects of abnormal weather conditions and to provide yields that are more representative of the farm's actual yield capability over a longer period of time.

A study of upland cotton yields indicates that the formula previously used for computing and adjusting cotton yields has resulted in unreasonably high yields. This is the result of a limitation which has previously been imposed on the amount by which cotton yields could be reduced from one year to the next. Accordingly, one very good yield could significantly boost the farm cotton yield and keep it high for several years. This interim rule eliminates the limitation which has been imposed on the year-to-year reduction.

(4) *Yield Reductions.* Farm yields represent a projection by the local county ASC committee as to what the production of a commodity on a farm would be based upon the past production of the commodity on such farms. This projection is invalid if the producer significantly changes the cultural practices used to produce the commodity. For example, yields based on a history of summer fallow wheat would be excessive should the producer change to continuous production of wheat. In the past, such cases were likely to be associated with a low yield disaster application, since the current year production is lower than the average historical farm yield. Therefore, this interim rule provides for a reduction of the farm yield if a low yield disaster application was filed with ASCS with respect to a commodity and the yield for the commodity for the current year was reduced as the result of conditions over which the producer had direct control.

Also, it would be unreasonable and inequitable to make deficiency payments in the same amount to a producer who deliberately undertook a course of action which was designed to not fully produce the farm yield for a commodity as opposed to a producer who did everything possible to produce the farm yield for a commodity. Therefore, while this interim rule continues the same provision for reducing farm yields as was applicable to the commodity program for prior crops, the condition that a low yield disaster application must be filed is eliminated.

(5) *Planted and Considered Planted Acreage.* This interim rule provides for including in the computation of the acreage base both the acreage of a commodity which was planted in the previous year and the other acreage (referred to as "considered planted") that would have been planted to the commodity in the previous year. This "considered planted" acreage includes, for nonparticipating farms, the acreage that the producer was prevented from planting to the program crop (i.e. rice, upland cotton, feed grains, or wheat) or other nonconserving crops as the result of a natural disaster or other condition beyond the producer's control. For producers who enroll their farm in one of the commodity programs, or who reduce their planted acreage of a program commodity to zero, the planted and considered planted acreage will equal the acreage base for the crop of the commodity. The latter provision is needed to avoid penalizing those producers who participate in the program, or who voluntarily reduce their planted acreage to zero. For example, an upland cotton producer who did not participate in the program authorized by this part could plant upland cotton in excess of the acreage base established for the farm and, therefore, receive an increased acreage base the next year. A producer who did participate in the

upland cotton program would be required to plant less than the farm's acreage base and would thus receive a smaller acreage base the next year if "considered planted" acreage was not permitted to be a factor which is used to compute the acreage base for the farm for such year.

(6) *Crop Acreage Bases.* This interim rule provides for establishing acreage bases as: (a) The planted and "considered planted" acreages for the previous year; or (b) the average for the 2 previous years; or (c) the previous year's acreage base. For 1982, the higher of (a) or (b) is used. This allows producers more flexibility, in view of the late announcement of the 1982 acreage reduction programs which resulted from the late passage of the Act.

Since crop rotation is a common practice that often conserves soil and other resources, this rule also provides for determining rotation bases for farms that have an established rotation over 2 or more years. If the county ASC committee determines that there is a rotation, the acreage bases will be established taking into consideration the corresponding years in the rotation. For example, if there is a 2-year rotation, the acreage bases for 1982 are computed using the planted and "considered planted" acreages for 1978 and 1980.

Adjustments due to abnormal conditions may not exceed the sum of planted and "considered planted" acreages for 1 or more previous years. To obtain this adjustment, the county committee must determine that the acreage base originally established for the farm is not representative of the normal operations on the farm.

(7) *NCA's.* An NCA was established for each farm in the 1978–81 crop years for rice, upland cotton, feed grains, and wheat. The NCA was the total acreage of fourteen major crops grown on the farm in 1977, as adjusted for abnormal conditions.

This interim rule provides that:

(a) The NCA crops designated for the 1978–81 crop years shall not apply for 1982–85.

(b) The NCA established for a farm for the 1978–81 crop years shall not apply for 1982–85.

(c) If the Secretary requires compliance with an NCA for feed grains and wheat in any of the 1982–85 crops years, a new designation of NCA crops will be made and new farm NCA's will be established at that time.

(8) *Conservation Use Acreage.* This rule continues the provisions which were applicable with respect to the conservation bases for the set-aside and diverted acreage for the 1978–81 crops of rice, upland cotton, feed grains, and wheat, with certain modifications and changes. These modifications and changes are as follows:

(a) In addition to any set-aside and diverted acreages the same conservation use requirements are also made applicable to the reduced acreage under an acreage reduction program. The overall term of "conservation use acreage" is adopted.

(b) The interim rule provides for 1982 that acreage which is designated as conservation use acreage must have been in a small grain or row crop in 1 of the past 2 years, instead of 1 of the past 3 years, unless the farm had an established crop rotation pattern. This rule further provides for the following requirement for the 1983 through 1985 crops. Except for land that is in a summer fallow rotation, land designated as conservation use acreage must have been devoted to a small grain or row crop, or designated as conservation use acreage under a crop program in 2 of the last 3 years. These provisions are designed to increase the likelihood that land now in active production of crops would be removed from such production if an acreage limitation or set-aside program is in effect. The change is made instead of requiring that the conservation use acreage be of equal productivity to the land planted to the crop in the current year.

(c) This interim rule further provides that cover crops or conservation practices which are required to be planted or installed on conservation use acreage in order to prevent wind and water erosion may be developed locally and approved by the State committee with the concurrence of the State SCS Soil Conservationist. This is intended to recognize the great variation between different areas of the country which are subject to erosion hazards and to provide for a method of controlling such hazards. Allowing the State committee to exercise this authority should assure that conservation use requirements are adapted to local conditions. For the 1982 rice, upland cotton, feed grains, and wheat programs, soybeans, corn, grain sorghum, cotton or rice were permitted to be grown as cover crops on conservation use acreage under certain limited conditions. The provisions for permitting these crops to be grown as cover crops on conservation use acreage have been deleted for the 1983 through 1985 crops.

(d) The regulations governing conservation use acreage which previously appeared at 7 CFR Part 792 for the 1978–81 crop years have been revised and amended and now appear in §§ 713.60–713.74 of this interim rule.

(e) This interim rule also sets forth provisions which are designed to encourage the establishment of permanent conservation practices on conservation use acreage, particularly permanent vegetative cover. For the 1982 crops, the restriction that such practices will be acceptable as conservation use acreage only if they were installed in the current year or the fall of the preceding year has been removed. This interim rule further provides for the 1983 through 1985 crops that, installing and maintaining a permanent vegetative cover on eligible land will preserve the land's eligibility for designation as conservation use acreage through 1985.

(9) *Disaster Payments.* The Act provides that ASCS prevented planting and low yield disaster payments shall be made available to producers on a farm only if crop insurance under the Federal Crop Insurance Act is not available to them with respect to their crop acreage. This interim rule incorporates these provisions with respect to the availability of disaster payments. Since FCIC has not yet completely covered all program crops in all areas, there will be some availability of ASCS disaster payments. However, FCIC will be ultimately responsible for determining whether crop insurance was available to a producer with respect to the producer's crop acreage. We anticipate that only in marginal and high-risk areas and in the minor oat-growing counties will ASCS disaster payments be available.

In those areas where ASCS disaster payments are available for a crop, the regulations governing these payments will generally be the same as those which were applicable to the 1978 through 1981 crops. However, with respect to those situations where some of the crop acreage on a farm is eligible for disaster payments and some of the acreage is ineligible, disaster payments will be made on the smaller of the loss for the total farm or on the loss of the eligible acreage.

In addition, the Act provides that the Secretary may make disaster payments when additional assistance is needed to alleviate an economic emergency resulting from a natural disaster. This interim rule incorporates these provisions.

(10) *Offsetting Compliance.* Offsetting compliance is, in general, a requirement that is intended to prohibit a producer from participating in the program for a crop on one farm and offsetting that participation by increasing production of the crop on another, nonparticipating farm. An offsetting compliance

requirement was in effect for the 1978 and 1979 crops for rice, upland cotton, feed grains and wheat. However, this requirement is not in effect for 1982 or 1983 for any of the crops for which the program has been announced. Since the Secretary could impose an offsetting compliance requirement in future program announcements, if such requirement is determined to be necessary, the regulations which set forth offsetting compliance requirements for the 1979 crop year have been generally adopted in this interim rule. The requirements have been changed to apply only to those producers who have effective control of the farming operations on the farm and are thus able to comply with any offsetting compliance requirements. The following are examples of producers who would not be subject to the application of any offsetting compliance requirements which may be imposed:

(a) Landowners who own less than a majority interest in a tract of land are exempt from offsetting compliance requirements. The exempt interest must be an undivided interest, as in a joint ownership. An owner who owns a specific parcel of land can request that a parcel be treated as a separate farm in accordance with the regulations found at 7 CFR Part 719.

(b) Owners who have assumed ownership after the crop was planted are exempt from offsetting compliance requirements.

(c) Owners who had leased land before a commodity program is announced are exempt from any offsetting compliance requirements for that year if the provisions of the lease prevent compliance with the program.

(d) All producers who are neither owners nor operators are exempt from any offsetting compliance requirements.

(e) An individual producer and a legal entity such as a corporation or partnership will be treated as one person for the purposes of any offsetting compliance requirements on a farm only if the producer has the majority interest in the entity or is legally responsible for the actions of the entity.

(f) Members of a partnership who do not have a majority interest in the partnership will be deemed to be individual persons.

When offsetting compliance requirements are in effect under an acreage reduction program for a commodity, a producer, except as excluded under paragraphs (a)–(f) above, must assure, as a condition for receiving program benefits, that the acreage base which has been established for that commodity for each nonparticipating farm in which the producer has an interest is not exceeded. Further, when offsetting requirements are in effect under a set-aside program for wheat or feed grains, a producer must assure, as a condition for receiving program benefits, that the NCA which is established for each nonparticipating farm in which the producer has an interest is not exceeded.

(11) *Late payment and Interest charges.* This interim rule provides that in accordance with the provisions of 7 CFR Part 1403, producers will be charged late payment charges with respect to delinquent debts which are owed to the Commodity Credit Corporation (CCC). The provisions of 7 CFR Part 1403 will also be amended to cover the charging of interest when there is misrepresentation or a scheme or device to defeat the purpose of the program. For 1982 through 1985, interest will also be charged when an advance payment was made to a producer and where there has been a failure by the producer to comply with specified program requirements.

C. Additional Discussion

This interim rule also incorporates into 7 CFR Part 713 a number of regulations which have previously appeared in other parts of Title 7 of the Code of Federal Regulations. These include 7 CFR Part 730 (Rice), 7 CFR Part 792 (Normal Crop Acreage and Set-aside Acreage) and 7 CFR Part 794 (Division of Payments) and 7 CFR 795.18 and 795.19 (Downward Adjustment in Set-Aside and Acreage Limitation Requirements related to Payment Limitation). This interim rule also corrects the title of Subchapter B to reflect more completely the contents of the subchapter. Since producers must be made aware of these program provisions, it has been determined that this interim rule shall become effective on January 14, 1983. However, comments from interested persons are requested and comments must be received by March 15, 1983 in order to be assured of consideration. After the comments have been received and reviewed, a final rule will be published setting forth any changes which may be necessary in these regulations.

List of Subjects

7 CFR Part 713

Acreage allotments, Cotton, Feed grains, Price support programs, Wheat, and Rice.

7 CFR Part 730

Acreage allotments, Disaster assistance, Marketing quotas, Price support programs, Rice.

7 CFR Part 792

Agriculture.

7 CFR Parts 794 and 795

Price support programs.

Accordingly, the regulations at Chapter VII, of Title 7 of the Code of Federal Regulations are amended by:

1. Revising the title of Subchapter B to read "Farm Marketing Quotas, Acreage Allotments, and Production Adjustment."
2. Removing Part 730 from Subchapter B.
3. Removing Parts 792 and 794 from Subchapter D.
4. Removing §§ 795.18 and 795.19 from Part 795.
5. Revising Part 713 to read as follows:

PART 713 FEED GRAIN, RICE, UPLAND COTTON AND WHEAT

Subpart—Feed Grain, Rice, Upland Cotton, and Wheat Programs for Crop Years 1982–85

Sec.

713.1 Applicability.
713.2 Administration.
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713.6 Farm yields.
713.7 Crop acreage bases.
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713.10 Reconstitution of farms.
713.11–713.49 [Reserved]
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713.70 Insufficient conservation use acreage.
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713.75–713.99 [Reserved]
713.100 Cross compliance on the farm.

Sec.
713.101 Offsetting compliance between farms.
713.102 Determination of compliance.
713.103 General payment provisions.
713.104 Advance payments.
713.105 Disaster payments.
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713.107 National program acreage.
713.108 Deficiency payments.
713.109 Division of program payments.
713.110 Provisions relating to tenants and sharecroppers.
713.111 Successors-in-interest.
713.112 Misrepresentation and scheme or device.
713.113 Setoffs and assignments.
713.114 Appeals.
713.115 Performance based upon advice or action of county or State committee.

Authority: Secs. 101(i), 103(g), 105B, 107B, 107C, 113, and 1001; 95 Stat. 1221, 95 Stat. 1227, 95 Stat. 1234, 95 Stat. 1242, 96 Stat. 766, 95 Stat. 1263; 7 U.S.C. 1441, 7 U.S.C. 1444, 7 U.S.C. 1444d, 7 U.S.C. 1445b–1, 7 U.S.C. 1445b–2, 7 U.S.C. 1445d, 7 U.S.C. 1445h, 7 U.S.C. 1421 note, 7 U.S.C. 1501 note.

Subpart—Feed Grain, Rice, Upland Cotton, and Wheat Programs for Crop Years 1982–1985

§ 713.1 Applicability.

(a) The regulations in this subpart provide terms and conditions for the feed grain, rice, upland cotton, and wheat programs for the 1982 through 1985 crops, under which producers of these commodities who meet the eligibility requirements specified in § 713.50 may qualify for program benefits (i.e., price support loans and purchases, deficiency, diversion, disaster payments and any wheat grazing and hay payments.)

(b) In accordance with section 1101 of the Agriculture and Food Act of 1981, and the regulations in Part 795 of this Chapter, as amended, the total amount of:

(1) Payments (excluding disaster payments) which a person shall be entitled to receive annually under the feed grain, rice, upland cotton, and wheat programs shall not exceed $50,000.

(2) Disaster payment which a person shall be entitled to receive annually under the feed grain, rice, upland cotton, and wheat programs shall not exceed $100,000.

(c) In accordance with the regulations in Part 796 of this Chapter, as amended, payments shall not be made to program participants who harvest or knowingly permit to be harvested for illegal use marihuana or other such prohibited drug-producing plants on any part of the lands owned or controlled by them.

(d) The programs are applicable throughout the United States, including Puerto Rico.

§ 713.2 Administration.

(a) The programs will be administered under the general supervision of the Administrator, Agricultural Stabilization and Conservation Service (ASCS) and shall be carried out in the field by State and county Agricultural Stabilization and Conservation committees (herein called "State and county committees").

(b) State and county committees, and representatives and employees thereof do not have authority to modify or waive any of the provisions of the regulations of this subpart, as amended or supplemented.

(c) The State committee shall take any action required by these regulations which has not been taken by the county committee. The State committee shall also (1) correct, or require a county committee to correct, any action taken by such county committee which is not in accordance with the regulations of this subpart, or (2) require a county committee to withhold taking any action which is not in accordance with the regulations of this subpart.

(d) No provision or delegation herein to a State or county committee shall preclude the Administrator, ASCS, or a designee, from determining any question arising under the program or from reversing or modifying any determination made by a State or county committee.

§ 713.3 Definitions.

The following definitions shall be applicable for all purposes of program administration. The terms defined in Part 719 of this Chapter, as amended, governing reconstitutions of farms, shall also be applicable.

(a) *"Annual nonconserving crop"* means any annual crop intended for harvest or use in any feed form, except for the following:

(1) Grasses regardless of use, including sweet sorghum, millet and sudan grass;

(2) Legumes, including peas, beans, or soybeans produced for seed, grain, or processing where their planting was delayed beyond the normal planting period by a disaster and the crop is too poor to be used for seed, grain, or processing. In all other cases, soybeans produced for seed, grain, or processing are a nonconserving crop; and

(3) Small grains that are disposed of before the disposal deadline and excluded by the operator.

(b) *"Considered planted acreage"* means for a crop the following:

(1) For farms that participate in an acreage reduction program for the crop, the considered planted acreage shall be the difference between the acreage base for the crop and the planted acreage of the crop;

(2) For farms that participate in a set-aside, voluntary diversion, or wheat grazing and hay program, the considered planted acreage shall be the sum of the following as applicable:

(i) Any acreage required to be devoted to conservation used under a set-aside, acreage reduction, or diversion program,

(ii) For wheat, any acreage for payment under the wheat grazing and hay program.

(iii) Any voluntary reduction below the acreage base established for the crop, and

(iv) The acreage that the county committee determines the producer intended to plant to the crop but was prevented from planting to the crop and to later nonconserving corps as the result of a natural disaster or other condition beyond the control of the producer;

(3) For farms that report zero planted acreage of the crop in a year when an acreage reduction program is in effect for the crop, the considered planted acreage shall be the acreage base for the crop; and

(4) For other farms, the considered planted acreage shall be that acreage which the county committee determines that the producer intended to plant to the crop but was prevented from planting to the crop and to later nonconserving crops as a result of a natural disaster or other condition beyond the control of the producer.

(c) *"Corn"* means field corn or sterile high-sugar corn. Popcorn, sweet corn, and corn varieties grown for decoration uses are excluded.

(d) *"Crop" or "Commodity"* means barley, corn, grain sorghum, oats, rice, upland cotton, or wheat ("Crop" is used when the reference is to a specific year or to growing plants; "Commodity" is used when the reference is general and abstract).

(e) *"Current year"* means the calendar year in which the crop with respect to which payment may be made under this subpart would normally be harvested.

(f) *"Disposal deadline"* means the date or time by which an acreage of barley, wheat, or oats must be disposed of in order that such acreage will not be considered as barley, wheat or oats for harvest or by which an acreage of rye or similar grain must be disposed of in order for the acreage to qualify as conservation use acreage under § 713.62.

(g) *"Grain sorghum"* means grain sorghums of a feed grain or dual purpose variety (including any cross which, at all stages of growth, has most of the characteristics of a feed grain or dual

purpose variety]. Sweet sorghum is excluded regardless of use.

(h) *"Marketing year"* means the 12-month period beginning in the current year and ending the next year as follows:

(1) *Barley, oats, and wheat.* June 1–May 31.

(2) *Upland cotton and rice.* August 1–July 31.

(3) *Corn and grain sorghum.* October 1–September 30.

(i) *"NCA crops"* means the crops which are so designated by the Secretary of Agriculture for any crop year as set forth in a notice of determination published in the **Federal Register.**

(j) *"Planted acreage"* for a crop means the total of:

(1) The acreage planted for harvest as determined by the county committee under guidelines as set forth in § 713.4; and

(2) The volunteer acreage of the crop which is harvested for grain.

(k) *"Planted and considered planted acreage"* means for a crop the total of the planted and considered planted acreages for the crop.

(l) *"Rice"* means rice excluding sweet, glutenous, or candy rice such as Mochi Gomi.

(m) *"Small grains"* means barley, oats, and wheat.

(o) *"Upland cotton"* means planted cotton and stub cotton other than extra long staple cotton as defined in Part 722 of this Chapter.

§ 713.4 Determining crop acreages.

The county committee shall apply the following guidelines in determining crop acreages planted for harvest, as well as any further instructions which may be issued by the Deputy Administrator:

(a) The county committee shall include as crop acreage planted for harvest any of the following:

(1) The acreage harvested;

(2) The acreage of small grains which was not disposed of before the disposal deadline; and

(3) The acreage of small grains which was disposed of before the disposal deadline if such acreage qualified for a low yield disaster payment or credit in accordance with the provisions of § 713.105.

(b) The county committee shall exclude as crop acreage planted for harvest any of the following:

(1) The acreage which failed and could have been replanted by the ending planting date established for the crop but which was not replanted;

(2) The acreage that is approved as conservation use acreage in accordance with the provisions of §§ 713.60–713.74;

(3) The acreage which was disposed of without feed or other benefit (including lint benefit for cotton) and excluded by the operator on the report of acreage as provided in Part 718 of this Chapter;

(4) The acreage of barley, oats, or wheat disposed of with feed benefit before the disposal deadline;

(5) The acreage which was approved for wildlife food plots or planted for wildlife in accordance with instructions issued by the Deputy Administrator;

(6) The acreage approved for grazing and hay payment in accordance with the provisions of § 713.54; and

(7) The acreage that was planted so late that it could not mature and produce grain or lint and, with respect to corn and grain sorghum, was not harvested for silage.

(c) The county committee shall consider mixtures of crops to be the crop that is predominant in the mixture. However, when a crop of barley, oats, or wheat is the first seeded crop in a mixture of small grains seeded or volunteered at different times, the mixture is considered to be the crop of barley, oats, or wheat which is first seeded.

§ 713.5 State and county check yields.

(a) *State check yields.* State check yields for the current year are determined for each State where feed grains or wheat are produced. State check yields are determined on the basis of the average yields per acre for the 10-year period immediately preceding the year prior to the current crop year. If average yields are not available, State check yields are determined by the Deputy Administrator on the basis of available data for the State and for other States. Adjustments may be made in the State check yields to reflect productivity trends or abnormal conditions during any such 10-year period.

(b) *County check yields.* County check yields for the current year are determined for each county where feed grains or wheat are produced. The county check yield for the current year shall be established by the State committee in accordance with instructions issued by the Deputy Administrator and shall be the State check yield as adjusted to reflect the productivity of the county.

(c) *Source and availability of data.* State yield data for each year are obtained from the Statistical Reporting Service (SRS), USDA. The county feed grain and wheat yields for the current year are available for inspection in the county ASCS office. Both the State and county feed grain and wheat yields are available for inspection in the State ASCS office.

(d) *Cotton and rice.* State and county check yields are not determined for upland cotton and rice.

§ 713.6 Farm yields.

(a) *Barley, corn, grain sorghum, oats, and wheat yields.*

(1) *Determining yields.* The bushel per acre farm yield for the current year shall be established in accordance with instructions issued by the Deputy Administrator and shall be the county check yield for the crop as adjusted to reflect the farm productivity.

(2) *Provable yields.* Notwithstanding the provisions of paragraph (a)(1) of this section, if reliable records of the actual yield in bushels per acre on the farm for each of the 5 years immediately preceding the current year are available to the county committee, the yield established for the farm shall not be less than the average of such yields. The actual yield for a year may be assigned or adjusted as follows:

(i) If for either of the 2 earliest years of the 5-year base period there was no acreage of the crop or the production or acreage of the crop on the farm cannot be reconstructed, a yield may be assigned for any such year in an amount not to exceed the farm's established yield for the crop for the current year that a proven yield is first requested.

(ii) If the acreage report filed according to Part 718 of this chapter shows that no acreage of the commodity was grown for 1979 and subsequent years, the county committee shall assign a yield for the farm based upon the actual yield for similar farms in the county or other surrounding area; and

(iii) If any yield for a farm for any year which is used in the calculation of the 5-year base period is adversely affected as the result of a natural disaster or other condition beyond the producer's control, the county committee may make an adjustment in the yield for any such year up to 80 percent of the average of the actual and assigned yields for the farm for the 5 year period. If any such adjustment is made, the farm yield shall be the 5-year average, including the adjusted yield.

(b) *Upland cotton and rice yields.* The yield in pounds per acre for the current year shall be the average of the actual yields per harvested acre for the farm for the 3 preceding years, adjusted as follows:

(1) If no acreage of the crop was grown on the farm for any year, a yield for the crop may be assigned for the farm for such year based on the actual yields for similar farms in the county or

surrounding area, except that such assigned yield cannot exceed the county weighted average yield for the year to be assigned;

(2) If any yield in the 3-year period preceding the current year is adversely affected as the result of a natural disaster or other condition beyond the producer's control, the county committee may adjust the yield for any such year upward to the simple average of the highest 4 actual yields of the most recent 5 years; and

(3) In producer administrative rice areas under the rice program for the crop years 1978–81, the actual yield for a farm shall be the weighted average of the producer yields on that farm for that year.

(c) *Yield reduction.* For the purpose of determining the amount of any deficiency payment as provided for in § 713.108 or the amount of any low yield or prevented planting disaster payment as provided for in § 713.105, the established yield for a farm shall be reduced in accordance with instructions issued by the Deputy Administrator to reflect any reduction in the current year's yield for such farm which is the result of causes other than a natural disaster or other condition beyond the producer's control, such as a change in farming practice.

§ 713.7 Crop acreage bases.

An acreage base shall be established each year for barley, corn, grain sorghum, oats, rice, upland cotton, and wheat.

(a) The base established for a crop on a farm shall be:

(1) For 1982, the higher of:

(i) The planted and considered planted acreage for the crop for the previous year, or

(ii) The average of the planted and considered planted acreages for the crop for the previous 2 years.

(2) For 1983 and subsequent years, as announced in a notice of determination published in the **Federal Register.**

(b) If the county committee determines that a crop is grown on a farm in a clearly established crop-rotation pattern for 2 or more years, the acreage bases for the crop will be computed using the years in the rotation cycle that correspond to the previous year or the 2 previous years. For example, if there is a 2-year rotation, 1982 acreage bases would be computed using 1980 as the previous year and 1978 and 1980 as the 2 previous years.

(c) The acreage base established for the commodity on the farm may be adjusted as follows:

(1) The operator must show, and the county committee must determine, that the acreage base established for the commodity for the farm is not representative of the current operator's normal operations of the farm; and

(2) The county committee may approve a recomputation of the acreage base for the farm in an amount not to exceed the planted and considered planted acreages for the farm for one or more previous years in accordance with instructions issued by the Deputy Administrator.

(d) The operator of a farm may request that the acreage bases for a farm be determined: (1) In accordance with paragraph (a) of this section instead of paragraph (b), or (2) in accordance with paragraph (b) of this section instead of paragraph (a). Such a request shall not increase the base for a crop in the current year. The county or State committee may approve an increase in the base for future years in accordance with instructions issued by the Deputy Administrator.

(e) For 1982 only, in those areas that were designated as producer administrative areas under the rice program for 1978–81, adjustment will be permitted in the rice acreage base which is established for a farm on which a producer shares in the rice in 1982 provided a compensating downward adjustment is made in the rice acreage base on any farm in which such producer shared in the rice production in 1981. Such adjustments shall be in accordance with instructions issued by the Deputy Administrator.

(f) For 1983 and subsequent years, adjustments will be permitted in the rice acreage base established for a farm in accordance with instructions to be issued by the Deputy Administrator provided that the farm is subject to red rice problems and no other land suitable for the growing of rice is available on the farm.

§ 713.8 Normal crop acreages.

The normal crop acreage (hereinafter called "NCA") is the sum of the acreages for the farm of the NCA crops as designated by the Secretary of Agriculture as set forth in a notice of determination which is published in the **Federal Register** and which establishes an NCA requirement for the crop year.

§ 713.9 Notice of crop acreage bases, yields, and NCA.

The operator of a farm shall be notified in writing of the crop acreage bases, yields, and, if applicable, the NCA which is established for the farm. However, no such notice shall be mailed to any producer who has on file in the county office a request in writing that such producer not be furnished with the notice. This producer shall be considered as having been timely and correctly notified of the contents of the notice.

§ 713.10 Reconstitution of farms.

(a) Farms shall be reconstituted in accordance with Part 719 of this Chapter.

(b) The county committee shall establish a yield for wheat, barley, corn, grain sorghum, and oats for each combined farm that has an acreage base for the crop after taking into consideration such factors as the yield(s) on the component parts of such farms, comparable farms, and other factors that will result in yields being representative of the reconstituted farm.

(c) The yield established for upland cotton and rice for a combined farm shall not, except for rounding, exceed the weighted average of the yields established for the component parts of such farm.

(d) The actual yields established for wheat and feed grains for a combined farm shall not, except for rounding, exceed the weighted average of the actual yields established for the component parts of such farm.

(e) The weighted average of the yields established for any crop for the farms resulting from a division shall not, except for rounding, exceed the yield established for the parent farm before being divided.

(f) In determining the weighted average yields in paragraphs (c), (d), and (e) of this section, the farm acreage base for the current year shall be used.

§§ 713.11–713.49 [Reserved]

§ 713.50 Requirements for program participation.

(a) *General.* A person is eligible for loans, purchases, and payments for a specific crop as authorized by the provisions of this part if such person is a producer on a farm which meets the requirements of paragraph (b) of this section relating to that crop and such person otherwise fulfills the requirements of paragraph (c) of this section.

(b) *Farm requirements.*

(1) This paragraph is applicable to the 1982 through 1985 crops of rice, upland cotton, feed grains, and wheat. The operator of a farm on which any producer grows barley, corn, grain sorghum, oats, rice, upland cotton, or wheat must file within the period authorized by the Deputy Administrator the following:

(i) A Report of Acreage (herein called "Form 578") for the applicable crop and

in accordance with Part 718 of this Chapter;

(ii) A report of production and disposition when this information is needed for program determinations in accordance with instructions issued by the Deputy Administrator. When production has been disposed of through commercial channels, the county committee may require the producer to furnish documentary evidence in order to verify the information provided on the report. Acceptable evidence shall include the original or copy of commercial receipts, gin records, Commodity Credit Corporation (CCC) loan documents, settlement sheets, warehouse ledger sheets, elevator receipts or load summaries. The county committee may also verify the evidence submitted with the warehouse, gin, or other entity which receives the production. If the evidence is not furnished or the information provided on the report cannot be verified, the county committee may disapprove the report of production; and

(iii) For consideration for disaster payment or acreage credit purposes, a Prevented Planting Claim (herein called "Form 574–1") or an Application for Disaster Credit (herein called "Form 574");

(2) Whenever a notice of determination has been published in the **Federal Register** announcing that an acreage reduction or set-aside requirement, or required land diversion is in effect for a crop or a voluntary diversion program or wheat grazing and hay program is available for a crop, the operator of a farm on which any producer produces one or more of the crops for which such a requirement or program is in effect must do all of the following:

(i) File an Intention to Participate (herein called "Form 477") in accordance with instructions issued by the Deputy Administrator;

(ii) If applicable, comply with the acreage reduction requirements as set forth in § 713.51,

(iii) If applicable, comply with the set-aside requirements as set forth in § 713.52;

(iv) If applicable, comply with the land diversion requirements as set forth in § 713.53;

(v) If applicable, comply with the requirements for such program as set forth in § 713.54; and

(vi) Assure that there is compliance with the requirements of §§ 713.60–713.74 with respect to the designation, care, and use of conservation use acreage.

(3) Whenever a notice of determination has been published in the **Federal Register** announcing that no acreage reduction or set-aside requirement is in effect for a crop and that no land diversion program nor wheat grazing and hay program is available for a crop, to be eligible for deficiency payments the operator of a farm on which any producer grows barley, corn, grain sorghum, oats, rice, upland cotton, or wheat must file an Application for Payment (herein called "Form 477") as prescribed by the Deputy Administrator.

(4) In addition to the foregoing requirements, a farm must also be in compliance with any cross compliance requirements which are specified in § 713.100 if such requirements are made applicable to a crop by a notice of determination published in the **Federal Register**.

(5) Land owned by the Federal Government shall be ineligible for participation in the program if such land is occupied without a lease, permit, or other right of possession or the lease or permit prohibits the growing of the program crop.

(c) *Producer eligibility requirements.*

(1) The producer must be a person who shares in the risk of producing the program crop produced in the current year (or shares in the proceeds therefrom) on a farm meeting the requirements of paragraph (b) of this section, or would have shared in the crop if it had been produced on such farm in the current year. The producer must also comply with any offsetting compliance requirements which are in § 713.101 if such requirements are made applicable to a crop by a notice of determination published in the **Federal Register**.

(2) A minor will be eligible to participate in the program only if one of the following conditions exists:

(i) The right of majority has been conferred on the minor by court proceedings;

(ii) A guardian has been appointed to manage the minor's property and the applicable documents are signed by the guardian;

(iii) A bond is furnished under which a surety guarantees to protect the Commodity Credit Corporation from any loss incurred for which the minor would be liable had the minor been an adult;

(iv) It is determined that the responsibilities of the minor under the program have been carried out.

§ 713.51 Required acreage reduction.

(a) A notice of determination will be published in the **Federal Register** for each crop providing as follows:

(1) Whether an acreage reduction program is in effect for a crop year for a specific crop;

(2) The percentage reduction to be applied to the crop acreage base to determine the amount of required reduction; and

(3) Other requirements of the program for the year.

(b) Producers of the applicable crop or crops shall:

(1) Not knowingly exceed the permitted acreage, which is the acreage base less the required reduction; and

(2) Devote to conservation uses as prescribed in §§ 713.60–713.74 an acreage equal to the reduced acreage, or a proportionately smaller acreage if the planted acreage is smaller than the permitted acreage.

§ 713.52 Required set-aside.

(a) A notice of determination will be published in the **Federal Register** for each crop providing as follows:

(1) Whether a set-aside requirement is in effect for a crop year for a specific crop of feed grain or wheat;

(2) The percentage of the planted crop acreage that is required to be set-aside; and

(3) Whether producers on a farm are required not to exceed the NCA established for the farm, less any acreage which is devoted to conservation uses under any program plus any wheat grazing and hay acreage.

(4) Other requirements of the program for the year.

(b) Producers of the applicable crop or crops shall:

(1) Not knowingly exceed the NCA requirements, if applicable; and

(2) Devote to conservation uses as prescribed in §§ 713.60–713.74 an acreage equal to the set-aside requirement.

§ 713.53 Land diversion.

(a) A notice of determination will be published in the **Federal Register** for each crop providing as follows:

(1) Whether a land diversion program is in effect for a crop year for a specific crop;

(2) The percentage of the planted crop acreage or of the crop acreage base that producers are required to divert from the production of the crop under the program;

(3) The payment rate;

(4) Whether advance payments will be available;

(5) Whether compliance with the diversion requirement is voluntary or is required in order for the producer on the farm to be eligible for loans, purchases and payments for the crop; and

(6) Other requirements of the program.

(b) In order to be eligible for any land diversion payment, producers of the applicable crop or crops shall:

(1) Comply with all other program requirements for the crop; and

(2) Devote to conservation uses as prescribed in §§713.60–713.74 an acreage which is equal to the required diverted acreage.

§ 713.54 Wheat grazing and hay.

(a) A notice of determination will be published in the **Federal Register** announcing whether a wheat grazing and hay program is offered for a crop year and the applicable payment rate.

(b) In order to be eligible for payment under the wheat grazing and hay program for a crop year, producers of wheat shall do all of the following:

(1) Graze or cut for green chop, hay, or silage immature wheat that was planted for harvest as grain;

(2) Record the acreage for grazing and hay on Form 477;

(3) Have the cutting completed, or grazing to the point that the wheat is substantially destroyed by the disposal deadline; and

(4) Comply with all other program requirements for the crop.

(c) In no event can producers receive a payment under the wheat grazing and hay program on more than the larger of:

(1) 50 acres; or

(2) 40 percent of the total acreage of barley, corn, grain sorghum, oats, upland cotton, and wheat which is intended for harvest in the current year.

§ 713.55 Reduction in acreage to be devoted to conservation uses.

(a) A producer whose payments under the feed grain, rice, upland cotton, or wheat programs may be reduced because of the application of the provisions with respect to the payment limitation as specified in accordance with Part 795 of this chapter may request a downward adjustment in the amount of acreage which is otherwise required to be devoted to conservation uses on the farm. The request shall be in writing and shall be filed with the county committee by a date prescribed by the Deputy Administrator. If such a producer is sharing in program payments in two or more counties, it shall be the producer's responsibility to furnish information concerning the producer's participation in the other counties to the county committee with which the application for downward adjustment is filed.

(b) Any reduction in conservation use acreage to be required under this section shall be computed by: (1) Estimating the producer's total payments which would be received under the feed grain, rice, upland cotton, and wheat program on all farms, (2) determining the percentage by which the estimated total payments must be reduced in order to comply with the payment limitation, and (3) multiplying the percentage by the number of acres in the producer's portion of the conservation use acreage which is required for the farm or farms participating in the programs. When both land diversion and acreage reduction or set-aside programs are in effect, the conservation use acreage under the acreage reduction or set-aside programs shall be reduced to zero before the diversion acreage is reduced. If the producer is participating in the acreage reduction or set-aside program on two or more farms, the producer may elect to have the reduction in conservation use acreages under these programs, but not under the land diversion program, divided among the farms in such proportion as the producer may designate.

§ 713.56 [Reserved].

§ 713.60 Basic rules for conservation use acreage.

Except as set forth in §§ 713.65–713.74 and in Notices of Determination published in the **Federal Register**, conservation use acreage which is designated in accordance with the provisions of §§ 713.51–713.53 must:

(a) Be eligible land according to § 713.61;

(b) Meet minimum size and width requirements as specified in Part 718 of this Chapter, as amended;

(c) Be devoted to approved cover or practices in accordance with the provisions of § 713.62;

(d) Not be grazed or harvested, except as provided in § 713.63; and

(e) Be cared for in accordance with the provisions of § 713.64.

§ 713.61 Eligible land.

Conservation use acreage:

(a) For 1982, must be cropland that was:

(1) Devoted to a small grain or row crop in 1 of the previous 2 years: or

(2) Devoted to a small grain or row crop before the previous 2 years as part of an established crop rotation practice which is used by the county committee to establish the acreage base for the farm based crop rotation; or

(3) Devoted to a hay crop in the past 2 years (including hay, green chop, silage, or processing, but not pasture), and is in an established crop rotation pattern with a small grain or row crop as determined by the county committee.

(b) For 1983 and subsequent years, must be cropland that was:

(1) Devoted to a small grain or row crop in 2 of the past 3 years, except that land which is in a summer fallow crop rotation pattern need only have been devoted to a small grain or row crop in 1 of the past 2 years. Land that was designated to meet conservation use acreage requirements under a crop program for a previous year shall be regarded as having been devoted to a small grain or row crop in that year;

(2) Devoted to a hay crop in 2 of the last 3 years (including hay, green chop, silage, or processing, but not pasture) if an equal acreage of cropland that is otherwise eligible under paragraph (b)(1) of this section is seeded to an equivalent hay crop in the current year or the fall of the preceding year; or

(3) Designated as conservation use acreage in the preceding year on which a permanent vegetative conservation practice was established in the preceding year or will be established in the current year. Such acreage will be eligible to be designated as conservation use acreage through the 1985 crop year if the permanent vegetative practice is maintained. Planting trees or shrubs for nursery stock or orchards or vineyards is not acceptable as a permanent vegetative conservation practice.

(c) May not be land:

(1) That is designated as conservation use acreage under the Water Bank Program as authorized in 7 CFR Part 752 or the Great Plains Conservation Program as authorized in 7 CFR Part 635;

(2) For which a deficiency payment is or could be made for the program crop;

(3) Used as turn areas, except that these areas may be designated if both of the following apply:

(i) Minimum size requirements as specified in Part 718 of this Chapter, as amended, are met; and

(ii) The county committee determines that the areas are normally planted to a crop;

(4) That the producer does not have authority to use for program crops (e.g., highway, railroad, and other right of way, airport buffer strips, and other similar areas).

§ 713.62 Approved cover and practices.

(a) The conservation use acreage shall be devoted as soon as practical to one or more of the following approved covers or to other cover or practices described in paragraph (b) of this section:

(1) Annual, biennial, or perennial grasses and legumes, including volunteer stands other than weeds that meet the criteria set forth by the State committee, but excluding soybeans;

(2) Small grains, including volunteer stands other than weeds that meet the criteria set forth by the State committee, except that such grain must be clipped before the disposal deadline or must have been planted too late to form grain; and

(3) The crop residue from the use of "no till" or "minimum till" practices.

(b) Other cover or practices that will protect the acreage from wind and water erosion throughout the calendar year may be approved if such cover or practices are:

(1) Recommended by the county committee in consultation with the district conservationist, SCS; and

(2) Approved by the State committee, with written concurrence of the SCS State conservationist that the practices will sufficiently protect the land from wind and water erosion. Any such approval must be reviewed annually. The following guidelines are applicable:

(i) Before the approval of practices, the State committee should consult with appropriate wildlife agencies and organizations (e.g., State wildlife agencies, fish and game commissions, Izaak Walton League, Audubon Society, and Wildlife Management Institutes), and other interested groups to determine if additional practices that further the goals of these entities can be developed.

(ii) Control measures shall be consistent with erosion control measures normally carried out on other cropland in the area. It is not intended to require control measures that would be more costly to the producer than those measures which are normally carried out in the area.

(c) Any crop not included in paragraph (a) of this section may be planted as a cover on conservation use acreage provided that the following conditions are met:

(1) SCS must agree that the cover will prevent wind and water erosion in accordance with the provisions of paragraph (b) of this section;

(2) The producer must meet conditions specified by the State committee in accordance with the provisions of § 713.63 to assure that the crop will not be harvested, although the crop may be grazed after the end of the nongrazing period.

(3) Other conditions prescribed by the Deputy Administrator are met.

(d) The conservation use acreage may be seeded to crops in the fall for harvest the next year. The land may be prepared in the fall and left bare only when recommended and approved in accordance with the provisions of paragraph (b) of this section.

§ 713.63 Use of conservation use acreage.

(a) *Harvesting.* Harvesting on conservation use acreage is prohibited for all crops:

(1) In the current year; and

(2) After December 31 of the current year if the crop would normally mature and be harvested in the current year.

(b) *Grazing.* Grazing is prohibited during the 6 principal growing months between February 28 and November 1 as determined by the county committee.

(c) *Other uses.*

(1) Removing catfish, crayfish, and other fish for commercial purposes is prohibited during the 6 principal growing months as determined by the county committee.

(2) The conservation use acreage may be used for noncommercial recreation, temporary location of beehives, or for home gardens.

§ 713.64 Control of erosion, insects, weeds, and rodents on conservation use acreage.

(a) The farm operator shall use needed control measures in a timely manner to control erosion, insects, weeds and rodents on the conservation use acreage.

(b) Control measures for weeds need only be sufficient to prevent the spread of weeds. These measures should be consistent with control practices normally carried out on similar cropland in the area. Control practices are not intended to be more costly to the producer than what is normal for the area.

(c) The county committee shall prescribe and require additional control measures upon a determination that those used by the producer are inadequate. When clipping or mowing to control weeds is prescribed, the county committee shall specify a time for clipping or mowing which is compatible with wildlife practices but before seed forms.

§ 713.65 Orchards and vineyards.

(a) The entire area of an orchard or vineyard meeting the minimum size requirements specified in Part 718 of this Chapter is eligible conservation use acreage if the trees or vines were planted in the current year or fall of the previous year. The land must meet the eligibility requirements of § 713.61.

(b) The land between rows of trees or vines (from drip area to drip area) is eligible conservation use acreage if the county committee determines that the land would be devoted to small grains or row crops in the current year in the absence of the program. This land shall be eligible in 1983 and subsequent years only in counties designated by the State committee. The land must meet the eligibility requirements of § 713.61.

§§ 713.66–713.68 [Reserved]

§ 713.69 Noncrop uses or practices.

(a) The uses and practices listed in paragraph (b) of this section are eligible for conservation use acreage if:

(1) Such uses and practices are installed on acreage that is otherwise eligible as provided in paragraph (a) of § 713.61 for 1982 or paragraph (b) of § 713.61 for 1983; and

(2) The requirements in §§ 713.62 and 713.63 are met.

(b) The following uses and practices are eligible conservation use acreage:

(1) Trees or shrubs planted for any purpose other than orchards or vineyards;

(2) Terraces and sod waterways;

(3) Water storage developed for any purpose, including fish or wildlife habitat; or

(4) Filter strips used to reduce siltation in a stream or ditch.

§ 713.70 Insufficient conservation use acreage.

Before the final date for reporting crop acreage as provided in Part 718 of this Chapter, producers may destroy crop acreage to do one of the following:

(a) Decrease the amount of program crop so that the conservation use acreage available is sufficient; or

(b) Designate all or part of the destroyed acreage as conservation use acreage. The acreage must be eligible land as provided in § 713.61. The acreage shall be devoted to an approved cover or practice in accordance with the provisions of § 713.62 as soon as practicable after destruction of the crop.

§ 713.71 Destroyed crop acreage.

(a) Operators may substitute acreages of small grains or row crops that were destroyed for the conservation use acreage already designated and reported on Form 578. However, with respect to such substitution, the following conditions are applicable.

(1) The operator must request the substitution in writing and agree that there will be no deficiency payment with respect to the production from the substituted acreage;

(2) The land must be eligible as provided in § 713.61; and

(3) The land must be devoted to an approved cover or practice in accordance with the provisions of § 713.62 as soon as practicable after the substitution.

(b) Substitution cannot be used to reduce a payment reduction of failure to

comply fully in accordance with the provisions of Part 971 of this Chapter.

§ 713.72 Provisions applicable to certain small grains.

The following provisions are applicable with respect to 1982 conservation use acreage only:

(a) Acreage that was planted to barley, oats, or wheat before January 29, 1982 may be designated as conservation use acreage.

(b) The crop may be harvested for hay, silage, or green chop, but not for grain. Hay may be removed from such acreage only before the disposal deadline. After haying, the acreage may then be grazed without regard to the 6-month nongrazing period established by the county committee.

(c) Grazing of livestock on conservation use acreage may be permitted for the entire year. However, the acreage shall not be overgrazed so that the land is subject to wind or water erosion.

(d) If there is seeding or overseeding of a subsequent crop on the acreage, the provisions of § 713.63 with respect to other conservation use acreage shall be subject to such acreage.

(e) The acreage may be planted to an eligible cover after haying or grazing. This cover may not be:

(1) Harvested; or

(2) Grazed during the remainder of the 6 principal growing months as determined by the county committee.

(f) The acreage shall be subject to the requirements for minimum size as specified in Part 718 of this Chapter and the requirements for the care of conservation use acreage as set forth in § 713.64.

§ 713.73 Late harvesting.

Harvesting of a crop on conservation use acreage may be permitted when all of the following apply:

(a) The crop matured in the preceding year.

(b) The county committee determines that:

(1) The crop was not harvested because of adverse weather or other reason beyond the producer's control; and

(2) Harvesting will be completed as soon as practicable.

§ 713.74 Skip rows.

The acreage between rows of the crop is eligible conservation use acreage if:

(a) The skip is at least the larger of 4 normal rows or 160 inches from plant to plant, and

(b) The land meets the requirements for eligible land as set forth in § 713.61 and use and care of the acreage as set forth in § 713.63 and § 713.64.

§ 713.75–713.99 [Reserved]

§ 713.100 Cross compliance on the farm.

(a) With respect to feed grains, rice, upland cotton, and wheat, whenever an acreage reduction program is announced for one or more such crops in a notice of determination published in the **Federal Register**, compliance on the farm with any one commodity program (feed grain, rice, upland cotton, or wheat) may not be required as a condition of eligibility for loans, purchases and payments with respect to any of the other commodity programs.

(b) With respect to feed grains, and wheat, whenever a set-aside program is announced for one or more of such crops in a notice of determination published in the **Federal Register**, compliance on the farm with any one commodity program (i.e., wheat or feed grain) may be required as a condition of eligibility for loans, purchases and payments under the other commodity programs.

§ 713.101 Offsetting compliance between farms.

Whenever offsetting compliance requirements are made applicable to a crop program for the current year as announced in a notice of determination in the **Federal Register**, the following provisions shall be applicable:

(a) To be eligible for loans, purchases, and payments authorized for a crop when an acreage reduction or set-aside program is in effect for a crop (i.e., feed grain, rice, upland cotton or wheat), the landlord, landowner, or operator shall assure that on any other farm in which the landlord, landowner, or operator has an interest as landlord, landowner, or operator, the total acreage of the crop on the farm does not exceed the acreage base for such crop.

(b) To be eligible for loans, purchases, and payments authorized for an NCA crop when compliance with the NCA is required for a crop of wheat or feed grains, the landlord, landowner, or operator shall assure that on any other farm in which the landlord, landowner, or operator has an interest as landlord, landowner, or operator, the total acreage of NCA crops on the farm does not exceed the NCA on such farm.

(c) A landowner or landlord cannot escape responsibility for complying with paragraph (a) or (b) of this section by leasing for cash or other consideration all or part of a farm when the lease is executed after the notice of determination announcing any offsetting compliance requirement is published in the **Federal Register**.

(d) Any executor, trust officer, or farm manager responsible for the management of a farm shall be considered as the operator of the farm for purposes of paragraph (a) or (b) of this section when he or she receives a percentage of the gross or net farm income exceeding 10 percent of the crops or proceeds thereof for such management service.

(e) For purposes of paragraph (a) or (b) of this section, all persons or entities in each category listed below shall be considered as the same producer and fully responsible for the actions of any person or entity in that category:

(1) Husband and wife, except that the husband and wife may be considered as separate producers if the spouse receiving benefits does not share to any degree in crops or proceeds thereof from the other farm, ownership or managerial control of the other farm is not shared by such spouse, and there have been no changes in the ownership, operation, or managerial control of the other farm which would tend to defeat the purposes of paragraph (a) or (b) of this section.

(2) Minor children and the parent, guardian, or other person legally responsible for the minor unless the person legally responsible for the minor does not occupy the same household as the minor and shares no interest in the farming operations of the minor.

(3) A partnership and a member of the partnership with over 50 percent interest in the partnership.

(4) A corporation and a stockholder with over 50 percent of the stock of such corporation.

(5) An estate and the sole heir of the estate.

(6) A trust and the sole beneficiary of the trust.

(7) Two or more corporations, estates, trusts, or any combination of such entities which have common stockholders, beneficiaries, or heirs who own more than a combined 50 percent interest in each corporation, estate, or trust.

(f) Notwithstanding the foregoing:

(1) Any person who places land in a trust the beneficary of which is such persons's parent, brother, sister, spouse, child or grandchild shall be considered the same producer as the trust for purposes of paragraph (a) or (b) of this section if he or she acts as the trustee or trust officer for the trust or in any other way retains the management responsibility for the trust land even though he or she does not receive any share of the crops or proceeds thereof from the trust land.

(2) When the State committee, or the county committee with the approval of the state committee, determines that a corporation, partnership, or trust was formed, modified or used for the purpose

of circumventing paragraph (a) or (b) of the section, the corporation and any stockholder of the the corporation, the partnership and any member of the partnership, or the trust and any beneficiary of the trust shall be considered as the same producer and fully responsible for the actions of the corporation, partnership, or trust.

(3) A landowner, landlord, or operator may be exempted from complying with paragraph (a) or (b) of this section with respect to a crop if the county committee determines that a lease which prevents compliance was executed prior to the time that a notice of determination was published in the **Federal Register** making offsetting compliance a requirement of the program for such crop.

(4) A landowner may be exempt from complying with paragraph (a) or (b) of this section if the landowner has an undivided interest in the farm that does not exceed 50 percent.

(5) A landowner, landlord, or operator may be exempt from complying with paragraph (a) or (b) of this section for the current year if that person assumed ownership or control of the land after the crop was planted for the current year.

§ 713.102 Determination of compliance.

Acreage determinations shall be made in accordance with Part 718 of this Chapter, as amended.

§ 713.103 General payment provisions.

(a) *Issuance.* Payment of any amounts due the producers on a farm shall be made only after such producers sign an application for payment as prescribed by the Deputy Administrator and the payments are approved by the county committee or by an authorized representative thereof. An application for payment which is signed after May 1 of the year following the current year shall not be accepted by the county committee unless prior approval of a representative of the State committee is obtained.

(b) *Failure to comply fully.* Except as otherwise provided herein and in Part 791 of this Chapter, as amended, payment shall not be made for a farm or to a producer when there is failure to comply fully with the regulations set forth in this subpart and in Part 718 of this Chapter.

(c) *Payment due producer.* Subject to the provisions of the payment limitation regulations in Part 795 of this Chapter, as amended, the total earned payment due each eligible producer under the program shall be determined by multiplying the total earned payment for the farm by the producer's share of such payment.

(d) *Payment declined.* If a producer declines to accept all or any part of the producer's share of the payment computed for the farm in accordance with the provisions of this section, such payment or portions thereof shall not become available for any other producer on the farm.

(e) *Unearned payments and overpayments.* Effective with respect to determinations of overpayments made after enactment of this rule, a person shall refund to the Commodity Credit Corporation (CCC) any amounts representing payments that exceed the payments actually earned under the programs prescribed by this part. A late payment charge may be assessed in accordance with the provisions of 7 CFR Part 1403.

§ 713.104 Advance payments.

(a) *General.* To receive any advance deficiency or diversion payment authorized for a crop:

(1) Producers on a farm must sign Form 477 indicating an intention to participate in any acreage limitation, set-aside, or land diversion program required for the crop and request the advance payment; and

(2) The farm must not have been determined to be out of compliance with any of the requirements of the program at the time of payment.

(b) *Advance deficiency payments.*

(1) *For 1982:*

(i) No advance deficiency payments will be made for barley, oats, or wheat, since final payments for these crops will be made as soon as practicable after December 1, 1982.

(ii) Advance payments will be made as soon as practicable after October 1, 1982 for corn, grain sorghum, upland cotton, and rice. The amount of the advance payment shall be computed by multiplying: (A) The producer's share of the crop times; (B) the farm's program acreage of the crop times; (C) the farm's program payment yield for the crop minus; (D) the number of pounds or bushels for which a low yield payment under § 713.105 has been made times; (E) 70 percent of the projected 1982 deficiency payment rate for the crop.

(2) *For 1983 through 1985* advance deficiency payments will be made for crops as announced in a notice of determination published in the **Federal Register.** Such announcements will specify the rates and time of payment.

(c) *Advance diversion payments.* Advance diversion payments shall be made when a land diversion program is in effect for a crop if so announced in a notice of determination published in the **Federal Register.** Such announcement will specify the rates and time of payment.

(d) *Refunds.*

(1) The provisions of § 713.103(e) are applicable to the amounts of any advance diversion or deficiency payments which are not earned, except that no late payment charge shall be assessed for failure to refund advance deficiency payments before the end of the marketing year for the crop when:

(i) The amount of the advance deficiency payment to the producer exceeds the amount finally determined to be payable to the producer as a deficiency payment for the crop; or

(ii) An advance deficiency payment was made to a producer for a crop, but it was later determined that no deficiency payments were payable for the crop under § 713.108(a).

(2) In addition to the provisions of § 713.103(e), interest shall be charged as follows:

(i) Interest shall be charged on the amount of the advance payment if a producer obtains an advance deficiency or land diversion payment, or both, for a crop on a farm but does not comply with the requirements for any acreage limitation, set-aside or land diversion program required for the crop on the farm for the year;

(ii) Interest shall be charged when the producer obtains an advance deficiency payment for a crop based on the producer's certification of the acreage which is intended to be planted to the crop for such year and the acreage of the crop actually planted for harvest is less than 50 percent of the intended acreage, unless the producer was prevented from planting the intended crop acreage as the result of reasons beyond the producer's control. The amount of the overpayment subject to the interest charge shall be the smaller of:

(A) The difference between the total advance deficiency and diversion payments made for the crop minus the total final deficiency and diversion payment for the crop earned by the producer; or

(B) The difference between the intended and the actual crop acreage times the payment yield for the farm times one-half the final deficiency payment rate; and

(iii) Interest shall be computed on the amount determined under paragraphs (d)(2) (i) and (ii) of this section from the date of issuance of the payment to the date such payment is refunded. The rate of interest shall be 5 percentage points higher than the rate of interest in effect for CCC commodity loans on the date of issuance of the payment.

§ 713.105 Disaster payments.

Except as provided in paragraph (c) of this section, prevented planting and low yield disaster payments are authorized to be made to producers only if crop insurance under the Federal Crop Insurance Act is not available to the producers for the commodity with respect to the producers' acreage of such commodity. Producers may qualify for disaster payments only when the county committee determines that producers were prevented from planting an eligible commodity or that the production of an eligible commodity on a acreage resulted in a low yield of such commodity as hereinafter described in this section because of a drought, flood or other natural disaster or other condition beyond the producers' control. Disaster payments shall be made as soon as practicable after the disaster is reported, the extent of the crop loss is determined, and payment is approved.

(a) *Prevented planting.*

(1) *Payment rate.* The payment rate is one-third of the established (target) price as provided for in § 713.106.

(2) *Acreage eligible for payment.* The acreage eligible for payment shall be only that acreage for which crop insurance under the Federal Crop Insurance Act is not available. Such acreage shall equal the smallest of the following:

(i) The acreage of the crop intended for harvest, but which could not be planted to the crop or other nonconserving crops because of a drought, flood or other natural disaster or other condition beyond the producer's control;

(ii) The result obtained by subtracting the acreage of the crop planted in the current year from the acreage of the crop that was planted or prevented from being planted in the previous year; or

(iii) For crops for which an acreage reduction or set-aside requirement is in effect or on farms participating in a land diversion or wheat grazing and hay program, the amount by which the permitted acreage of the crop for the current year exceeds the acreage of the crop planted in the current year.

(3) *Payment computation.* Prevented planting payments for each crop shall be the result of multiplying the acreage eligible for payment times 75 percent of the farm yield as provided in § 713.6 times the prevented planting payment rate.

(b) *Low yield.*

(1) *Payment rate.* The low yield payment rate is one-third for upland cotton and rice and one-half for barley, corn, grain sorghum, oats, and wheat of the established (target) price as provided for in § 713.106.

(2) *Payment computation.* Low yield payments shall be determined for each crop by multiplying the low yield payment rate times the smaller of the following computations:

(i) The result determined by multiplying the acreage of the crop on the farm by 60 percent (75 percent for upland cotton and rice) of the farm yield as provided in § 713.6, and subtracting the determined production for the farm therefrom; or

(ii) The result determined by multiplying the acreage of the crop on the farm for which crop insurance under the Federal Crop Insurance Act was not available by 60 percent (75 percent for upland cotton and rice) of the farm yield as provided in § 713.6, and subtracting the determined production for the eligible acreage therefrom.

(3) *Determining production.* The production from any acreage shall be determined as follows:

(i) The production from acreage which is not harvested shall be appraised in accordance with instructions issued by the Deputy Administrator and shall be added to the actual production for the purpose of determining eligibility for and the amount of low yield disaster payments; and

(ii) Any acreage for which the production cannot be determined shall be charged with the farm yield. However, if the county committee determines that the acreage was affected by a disaster, such acreage shall be charged with the larger of 60 percent (75 percent for upland cotton and rice) of the farm yield as provided in § 713.6 or the actual average yield from the harvested acreage of the crop.

(c) *Special disaster payments.*

(1) Irrespective of whetherr crop insurance under the Federal Crop Insurance Act is available, the Secretary may make special disaster payments available to producers on a farm whenever the Secretary determines that:

(i) As the result of drought, flood, or other natural disaster, or other condition beyond the control of the producers, producers on a farm have suffered substantial losses of production either: (A) From being prevented from planting feed grains, rice, upland cotton, or wheat, or other nonconserving crop; or (B) from reduced yields, and such losses have created an economic emergency for the producers;

(ii) Federal crop insurance indemnity payments and other forms of assistance made available by the Federal Government to such producers for such losses are insufficient to alleviate such economic emergency, or no crop insurance covered the loss because of transitional problems attendant to the Federal crop insurance program; and

(iii) Additional assistance must be made available to such producers to alleviate the economic emergency.

(2) The Secretary may make such adjustments in the amounts of payments made available under this subparagraph with respect to individual farms so as to assure the equitable allotment of such payments among producers taking into account other forms of Federal disaster assistance provided to the producers for the crop involved.

§ 713.106 Established (target) prices.

The established prices for each crop of a commodity will be announced in a notice of determination published in the **Federal Register.**

§ 713.107 National program acreage.

Whenever an acreage reduction requirement is not in effect for a crop, a national program acreage shall be established and announced in a notice of determination published in the **Federal Register.** The national program acreage shall equal the number of harvested acres the Secretary of Agriculture estimates will produce the quantity (less imports) that will be used domestically and for export during the marketing year for such crop. The national program acreage, which is established for any crop, may later be revised if the Secretary of Agriculture determines that an adjustment is necessary based upon the latest information for the purpose of determining an allocation factor for use as provided for in § 713.108.

§ 713.108 Deficiency payments.

(a) *Basis for payment rate.* The deficiency payment rate shall be the amount by which the established (target) price exceeds that higher of: (1) the national weighted average market price received by farmers for the crop during the first 5 months of the marketing year (during the calendar year for upland cotton) or (2) the national average loan rate established for the crop.

(b) *Acreage for payment.*

(1) The acreage for payment shall be acreage of the crop for the current year reduced by an allocation factor if no acreage reduction requirement is in effect for such crop. The allocation factor shall be determined by dividing the national program acreage for the crop, as specified in § 713.107, by the estimated national current year acreage of the crop. However, the following shall be applicable to the allocation factor:

(i) The allocation factor shall not be less than 80 percent for each of the crops of barley, corn, grain sorghum, oats, rice, and wheat;

(ii) The acreage for payment shall not be reduced by the allocation factor if the current year acreage of the crop on the farm is reduced voluntarily from the acreage base for the crop by a percentage to be announced in the notice of determination published in the Federal Register; and

(iii) The allocation factor shall be adjusted in accordance with instructions issued by the Deputy Administrator to provide equity for a farm for which the reduction in the current year's acreage is insufficient to exempt the farm from the application of the allocation factor.

(2) If an acreage reduction requirement or required land diversion program is in effect for the crop, the acreage for payment shall be the acreage of the crop planted for harvest but not to exceed the permitted acreage.

(c) *Payment computation.* Deficiency payments shall be determined for each crop by multiplying the acreage for payment by the established farm yield as provided for in § 713.6 and by the deficiency payment rate. However, no deficiency payment shall be made for any quantity for which a low yield payment is made.

(d) *Date of payment.* Deficiency payments will be made to producers as soon as practicable after the following dates:

(1) *Barley, oats and wheat.* December 1 of the current year.

(2) *Upland cotton and rice.* February 1 following the current year.

(3) *Corn and grain sorghum.* April 1 following the current year.

§ 713.109 Division of program payments.

(a) *General.* Each person on a participating farm shall be given the opportunity to participate in the program for a crop in proportion to such person's interest in the program crop or the interest such person would have had if the crop had been produced. The name of such person shall be listed on a form which is approved by the Deputy Administrator for recording payment shares, herein called "application for payment." If such person refuses or fails to sign the application for payment, the share of the payment to which such person would otherwise be entitled shall nevertheless be shown on the form. Federal agencies can earn no program payments, but any shares to which such agencies would otherwise be entitled shall also be shown on the form as though the agencies were earning them. The sum of the percentage shares of the program payment shall equal 100 percent.

(b) *Division of program payment.* Each producer's share of the farm program payment for a crop shall be based on the following:

(1) The producer's share of the crop or the proceeds thereof, or

(2) If no crop is produced, the share which the producer would have otherwise received had the crop been produced.

Notwithstanding the foregoing sentence, a different division of payment which is fair and equitable may be approved by the county committee if all of the producers who would otherwise share in the payment agree to the different division in writing. Such different division of payments may also be approved by the county committee, with the concurrence of a representative of the State committee, even though all of the producers cannot agree on the division. In addition, a different division of payments may be approved by the county committee when required by § 713.111 which relates to successors-in-interest.

(c) *Refund of payments not properly divided.* Payments which producers receive with respect to which they are determined not to be entitled shall be refunded to the Commodity Credit Corporation as required by § 713.103. In the event of fraud, the producer shall be subject to the provisions relating to fraudulent representation as set forth in § 713.112.

§ 713.110 Provisions relating to tenants and sharecroppers.

(a) Payment shall not be approved for the current year if the county committee determines that any of the conditions specified below exist:

(1) The landlord or operator has not given the tenants and sharecroppers on the farm an opportunity to participate in the program;

(2) The number of tenants and sharecroppers on the farm is reduced by the landlord or operator below the number on the farm in the year before the current in anticipation of or because of participating in the program, except that this provision shall not apply to the following:

(i) A tenant or sharecropper who leaves the farm voluntarily or for some reason other than being forced off the farm by the landlord or operator in anticipation of or because of participating; or

(ii) A cash tenant, standing-rent tenant, or fixed-rent tenant unless:

(A) Such tenant was living on the farm in the year immediately preceding the current year, or

(B) At least 50 percent of such tenant's income was received from farming in the immediately preceding year;

(3) There exists between the operator or landlord and any tenant or sharecropper, any lease contract, agreement or understanding unfairly exacted or required by the operator or landlord which was entered into in anticipation of participating in the program the effect of which is:

(i) To cause the tenant or sharecropper to pay over to the landlord or operator any payments earned by the person under the program,

(ii) To change the status of any tenant or sharecropper so as to deprive the person of any payments or other right which such person would otherwise have had under the program,

(iii) To reduce the size of the tenant's or sharecropper's producer unit, or

(iv) To increase the rent to be paid by the tenant or decrease the share of the crop or its proceeds to be received by the sharecropper;

(4) The landlord or operator has adopted any other scheme or device for the purpose of depriving any tenant or sharecropper of the payments to which such person would otherwise be entitled under the program. If any of such conditions occur or are discovered after payments have been made, all or any such part of the payments as the State committee may determine, shall be refunded to the Commodity Credit Corporation.

(b) Notwithstanding any other provision of this section, landlords or operators who in the past had tenants or sharecroppers on their land for purposes of producing the program crop and such individuals are now classified as employees subject to the minimum wage provisions under the Fair Labor Standards Act, may pay these individuals on a wage basis and will not be considered as reducing the number of tenants or sharecroppers.

§ 713.111 Successors-in-interest.

(a) In the case of death, incompetency, or disappearance of any producer whose name appears on the application for payment, the payment due such producer shall be made to such producer's successor, as determined in accordance with the regulations in Part 707 of this Chapter, as amended.

(b) When any person who had an interest as a producer of the crop or would have had an interest if the crop had been planted (herein called "predecessor") is succeeded on the farm by another producer (herein called "successor") after an application for payment has been filed, the payment to

the predecessor and successor shall be divided between them on such basis as they agree is fair and equitable. If such persons are unable to agree to a division of the payment, a fair and equitable division shall be determined by the county committee.

(c) In any case where any payment due any successor producer has previously been paid to the producer who filed an application for payment, such payment shall not be paid to the successor producer unless it is recovered from the producer to whom it has been paid or payment is authorized by the Deputy Administrator.

§ 713.112 Misrepresentation and scheme or device.

(a) A producer who is determined by the county committee or the State committee to have erroneously represented any fact affecting a program determination shall not be entitled to payments under the crop program with respect to which the representation was made and shall refund to CCC all payments received by such producer with respect to such farm and such crop program.

(b) A producer who is determined by the State committee, or the county committee with the approval of the State committee to have knowingly (1) adopted any scheme or device which tends to defeat the purpose of the program, (2) made any fraudulent representation or (3) misrepresented any fact affecting a program determination shall refund to CCC all payments received by such producer with respect to the farm.

(c) Refunds determined to be due CCC after enactment of this rule under the provisions of this section shall bear interest at the rate specified in 7 CFR Part 1403, as amended. Such interest shall accrue from the date of disbursement to the date refunded.

(d) The provisions of this section shall be applicable in addition to any liability under criminal and civil fraud statutes.

§ 713.113 Setoffs and assignments.

(a) *Producer indebtedness and claims.* Except as provided in paragraph (b) of this section, any payment or portion thereof due any person shall be allowed without regard to questions of title under State law, and without regard to any claim or lien against the crop, or proceeds thereof, in favor of the owner or any other creditor except agencies of the U.S. Government. The regulations issued by the Secretary governing setoffs and withholdings, Part 13 of this Chapter, as amended, shall be applicable to the programs.

(b) *Assignments.* Any producer entitled to any payment may assign such payments in accordance with the regulations governing assignment of payment, Part 709 of this Chapter, as amended.

§ 713.114 Appeals.

A producer may obtain reconsideration and review of determinations made under this subpart in accordance with the appeal regulations, Part 780 of this Chapter, as amended.

§ 713.115 Performance based upon advice or action of county or State committee.

The provisions of Part 790 of this Chapter, as amended, relating to performance based upon action or advice of an authorized representative of the Secretary shall be applicable to this subpart.

Signed at Washington, D.C., on January 10, 1983.

Everett Rank,

Administrator, Agricultural Stabilization and Conservation Service.

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7 CFR Part 770

Special Program of Payment in Kind for Acreage Diversion for 1983 Crops of Wheat, Corn, Grain Sorghum, Upland Cotton and Rice

Note.—This document originally appeared in the **Federal Register** of Wednesday, January 12, 1983. It is reprinted in this issue to meet requirements for publication on the Tuesday/Friday schedule assigned to the Agricultural Stabilization and Conservation Service.

AGENCY: Agricultural Stabilization and Conservation Service, USDA.

ACTION: Interim rule.

SUMMARY: This interim rule establishes a program of payment in kind for acreage diversion for the 1983 crops of wheat, corn, grain sorghum, rice and upland cotton. Under the program producers will be offered a quantity of a commodity as compensation for diverting acreage normally planted to that commodity in addition to that being taken out of production under the 1983 acreage reduction and cash land diversion programs for wheat, corn, grain sorghum, rice and upland cotton previously announced. Even with these programs the supply of these commodities will greatly exceed demand. Accordingly, the Department has determined that the diversion of additional acreage from the production of such crops is necessary to adjust the total national acreage of such commodities to desirable goals and that producers should be compensated by receipt of like commodities. This document sets forth, in general, the requirements for program participation and the manner in which payment in kind will be made available.

DATES: Effective date January 12, 1983. Comments must be submitted on or before February 11, 1983, in order to be assured of consideration.

ADDRESS: Comments should be addressed to Director, Analysis Division, ASCS, USDA, Room 3741, South Building, P.O. Box 2415, Washington, D.C. 20013.

FOR FURTHER INFORMATION CONTACT: Dr. Howard C. Williams, ASCS, 202-447-3391.

SUPPLEMENTARY INFORMATION: This interim rule has been reviewed under Department of Agriculture procedures implementing Executive Order 12291 and Secretary's Memorandum No. 1512-1 and has been classified as "major" since the program will have an annual effect on the economy exceeding $100 million.

It has been determined that the Regulatory Flexibility Act is not applicable to this interim rule since the Department is not required by 5 U.S.C. 553 or any other provision of law to publish a notice of proposed rulemaking with respect to the subject matter of this rule.

This action is not expected to have any significant impact on the quality of the human environment, health, and safety. Therefore, neither an Environmental Assessment nor an Environmental Impact Statement is needed.

The Department has prepared an Interim Regulatory Impact Analysis of this regulation. Copies of the analysis are available to the public from Director, Analysis Division, Agricultrural Stabilization and Conservation Service, USDA, Room 3741, South Agriculture Building, 14th and Independence Avenue, SW., Washington, D.C. 20250.

The title and number of the federal assistance program to which this notice applies are: Cotton Production Stabilization, 10.052; Feed Grain Production Stabilization, 10.055; Rice Production Stabilization, 10.065; and Wheat Production Stabilization, 10.058; as found in the Catalog of Federal Domestic Assistance.

Statutory Authority

The program will be conducted pursuant to the authority of the Agricultural Act of 1949, as amended,

and the Commodity Credit Corporation Charter Act. The Agricultural Act of 1949, as amended by the Agriculture and Food Act of 1981, authorizes the Secretary to make land diversion payments to producers of wheat, feed grains, upland cotton and rice if the Secretary determines that the payments are necessary to assist in adjusting the total national acreage of the commodities to desirable goals. The Charter Act gives the Corporation broad authority to support the price of agricultural commodities, stabilize agricultural commodity markets and remove and dispose of agricultural surpluses.

Need for Program

Acreage reduction and land diversion programs have already been instituted for the 1983 crops of wheat, feed grains, upland cotton and rice under provisions of the Agricutural Act of 1949, as amended. Producers participating in those programs will reduce planted acreage for wheat by at least 20%, for feed grains by at least 20%, for upland cotton by at least 20%, and for rice by at least 20%. Even with these programs the supply of these commodities will greatly exceed demand. Record production coupled with a weak worldwide demand for these commodities due to the global recession and severe financial problems of some of our major foreign customers has created undesirable surpluses. Accordingly, the Department has determined that the diversion of additional acreage from the production of such crops is necessary to adjust the total national acreage of such commodities to desirable goals and that producers should be compensated by receipt of like commodities.

Program Provisions

Contracts. The Commodity Credit Corporation will enter into contracts with producers under which producers who divert acreage from the production of 1983 crops of wheat, corn, grain sorghum, upland cotton or rice and devote the acreage to approved conservation uses will be compensated in the form of quantities of those commodities. The acreage would be in addition to that which the producer has agreed to take out of production under the 1983 acreage reduction and cash land diversion programs previously announced.

Acreage Diversion. Any producer may enter into a contract to divert not less than 10 percent nor more than 30 percent of the farm acreage base for any crop. In addition, producers may submit bids for a contract to divert 100 percent of the farm acreage base for any crop. Bids must be in terms of the percentage of the farm's yield for the crop which the producers consider to be an acceptable level of compensation. The Department will determine the number of acres for which bids will be accepted for each commodity in each county, based on particular supply/demand situations, conditions in local communities, and other relevant factors. In no event will more than 50 percent of the total acreage bases for a commodity in a county be taken out of production under this and the previously announced 1983 acreage reduction and cash land diversion programs.

Compensation. In the case of contracts for the diversion of between 10 and 30 percent of the acreage base of a commodity, the quantity of the commodity received as compensation will be the acreage diverted times the farm's yield for the commodity, multiplied by 95 percent for wheat, 80 percent for corn and grain sorghum, 80 percent for upland cotton, and 80 percent for rice. In the case of contracts for the diversion of 100 percent of the acreage base of a commodity, the quantity of the commodity received as compensation will be determined in the same way utilizing the percentage of the farm's yield specified in the bid.

To the extent that a producer has outstanding farmer owned reserve loans obtained before January 12, 1983 or regular price support loans for which the producer has pledged as security a commodity which the Department is obligated to pay the producer, the producer must sell the commodity to the Department up to the quantity the Department is obligated to pay the producer at a price equal to the cost of liquidating the loan for which the commodities sold to the Department are pledged. In the case of farmer owned reserve loans, the price will be reduced by the amount of any unearned advance storage payments. Further, in the case of farm stored farmer owned reserve loans, the price will include additional compensation to take account of long term storage related commitments the producer may have undertaken. It is the present intention of the Department to provide 15.5 cents per bushel in additional compensation. The commodities sold to the Department will then be paid to the producer. To the extent that commodities are not available for purchase by the Department from the producer, the producer will receive commodities from warehouses designated by CCC. In all cases, proper adjustments for grade and other characteristics affecting quality will be made.

Other Contract Provisions. The regulations authorize the Department to include other appropriate terms and conditions in its contracts with producers.

The Department will pay commodities which it owes a producer upon request at any time during the five month period beginning on the normal harvest date for the commodity in the producer's area. These days will be established by the Department on a county-by-county basis. The Department presently intends to include in the contracts provisions under which it will pay producers who request the commodities after the normal harvest date, and are paid commodities previously pledged by them as loan security, the costs the Department would have incurred had it been required to store the commodities from the normal harvest date until the date of payment. The payment will be calculated on the basis of an annual rate of $.265 per bushel for wheat and corn, $.4732 per hundredweight for grain sorghum and $.85 per hundredweight for rice. The rate for upland cotton will be based on individual warehouse rate schedules.

The Department also intends to offer additional payment in kind to producers whose conservation use acreage requirement under the previously announced acreage reduction and cash land diversion programs has been reduced because of the payment limitation imposed by section 1101 of the Agriculture and Food Act of 1981. These producers will have the opportunity to forego this reduction in conservation use acreage in return for a payment in kind based on 50 percent of the farm yield for the commodity to which the acreage is normally planted.

Payment Limitation. The limitations imposed by section 1101 of the Agriculture and Food Act of 1981 on the amount of payments which a person may receive under the wheat, feed grain, upland cotton and rice programs are not applicable to commodities received as compensation under the payment in kind program.

If the payment in kind program is to be effective in reducing production with respect to 1983 crops in order to assist in bringing supply in line with demand and stabilizing the domestic market, the program must be made effective as soon as possible without opportunity for public comment so that producers and others might be made aware of their opportunity to participate in the program. Comments received on the program will be considered and any appropriate changes in the program will be made before the final rule is issued.

The Department anticipates issuing a final rule by February 25. Producers may sign contracts and submit bids for contracts until March 11, and previously submitted contracts and bids may be withdrawn until that date. If any change is made in the regulations, producers who have already signed contracts or submitted bids will have an opportunity to revoke them if they are unwilling to agree to the modifications.

The form of the contracts to be used by the Department in implementing this rule will not become effective until approved by the Office of Management and Budget under the Paperwork Reduction Act of 1980.

List of Subjects in 7 CFR Part 770

Cotton, Feed grains, Price support program, Wheat, Rice.

Accordingly, Subchapter C of Chapter VII of Title 7 of the Code of Federal Regulations is amended by adding after Part 760 a new Part 770 as follows:

PART 770—SPECIAL PROGRAM OF PAYMENT IN KIND FOR ACREAGE DIVERSION FOR 1983 CROPS OF WHEAT, CORN, GRAIN SORGHUM, UPLAND COTTON AND RICE

Sec.

770.1 General description of program.
770.2 Obligations of operators and producers.
770.3 Obligations of the Department.
770.4 Other contract provisions.
770.5 Contracting procedures.
770.6 Miscellaneous provisions.

Authority: Secs. 101(i), 103(g), 105B and 107B of the Agricultural Act of 1949, as amended (7 U.S.C. 1441, 1444, 1444d and 1445b-1) and the Commodity Credit Corporation Charter Act (15 U.S.C. 714).

§ 770.1 General description of program.

(a) The Department of Agriculture will enter into contracts with operators and producers who agree to devote acreage normally planted to wheat, corn, grain sorghum, upland cotton or rice to a conserving use in return for compensation in the form of the commodity normally planted on the acreage. This part describes the general terms and conditions of these contracts and the procedures under which the Department will enter into them.

(b) This special program is available throughout the United States, including Puerto Rico, for the 1983 crops of wheat, corn, grain sorghum, upland cotton and rice.

§ 770.2 Obligations of operators and producers.

(a) The contract between the Department and the operator of a farm and any other producers on the farm will impose the following obligations on the operator and any other producers:

(1) The operator and any other producers will be required to comply with all of the requirements of any other acreage reduction or paid diversion program established by the Department for any commodity included in the contract.

(2) The operator and any other producers will be required to devote a percentage of the farm's acreage base for any commodity included in the contract to an approved conserving use in addition to any other acreage reduction or paid diversion. This percentage will depend on the contract between the Department and the operator and any other producers.

(i) The Department will enter into a contract with the operator of a farm and any other producers on the farm which provides for devoting from 10 to 30 percent of the farm's acreage base for one or more commodities to an approved conserving use, with a concomitant reduction in permitted acreage, if the operator and any other producers wish to do so. The operator and any other producers may select the commodities to be included in the contract, except that the contract must include either both corn and grain sorghum or neither. They may also select, within the 10 to 30 percent range, the percentage of the acreage base of each included commodity that will be devoted to an approved conserving use. Compensation to operators and other producers under these contracts will be based on a fixed percentage of the farm yield for each of the commodities included in the contract. See § 770.3(a)(1).

(ii) In addition, the Department may, in some cases, enter into a contract with the operator of a farm and any other producers on the farm which requires the operator and any other producers to devote 100 percent of the farm's acreage base for one or more commodities to an approved conserving use. These contracts will be awarded on a competitive bid basis and the compensation to an operator and any other producers under one of these contracts will be based on the percentage of the established yield for the farm for each of the commodities included in the contract which was bid by the operator and any other producers. See § 770.5(b).

(3) If the operator of a farm or any other producers on the farm have outstanding farmer owned reserve loans obtained prior to January 12, 1983, or regular price support loans, for which they have pledged as security a commodity which the Department is obligated to pay them under the contract, at the time they request payment of the commodity, they must sell the commodity to the Department up to the quantity the Department is obligated to pay them, at a price equal to the cost of liquidating the loan or portion of the loan for which the quantity sold to the Department is pledged, subject to the following adjustments:

(i) In the case of a farmer owned reserve loan, the price will be reduced by the amount of any unearned advance storage payments received under the loan.

(ii) In the case of farm stored commodities pledged as security for a farmer owned reserve loan, additional compensation will be provided to take account of long term storage related commitments the operator or other producer may have undertaken.

(4) To the extent that the operator or any other producers have loans to which paragraph (a)(3) of this section applies at the time they enter into the contract, they may liquidate those loans or forfeit the commodity securing them only to the extent that the liquidation or forfeiture does not reduce the quantity of the commodity pledged as security for the loans still held by the operator and such other producers below the quantity of the commodity the Department is obligated to pay the operator and such other producers under the contract. The commodities pledged as security for loans that must be held under this paragraph will be used by the Department to compensate the operator and any other producers under the contract. See § 770.3(a)(2)(i).

(b) The contract shall provide for the payment of liquidated damages in the event that the operator or any other producers fail to comply with their obligations under the contract.

§ 770.3 Obligations of the Department.

(a) The contract between the Department and the operator of a farm and any other producers on the farm will impose the following obligations on the Department:

(1) The Department will be required to compensate the operator and any other producers for devoting acreage to an approved conserving use by payment of a quantity of the commodity or commodities that would otherwise have been produced on that acreage, except that the Department may substitute corn of equivalent quantity for grain sorghum. The quantity shall be the yield for the farm for a commodity multiplied by the acreage devoted to a conserving use under the contract that would otherwise

have been planted to that commodity, multiplied by 95 percent for wheat, 80 percent for corn and grain sorghum, 80 percent for upland cotton, and 80 percent for rice, except that in the case of contracts awarded on a competitive bid basis, the percentage shall be the percentage bid by the operator and any other producers.

(2) The contract will provide that the commodities will be paid in the following manner:

(i) To the extent that the operator and any other producers have outstanding regular price support or farmer owned reserve loans for which they have pledged as security a commodity which they must sell to the Department, the commodities sold to the Department will be paid to the operator and such other producers. See § 770.2(a)(3).

(ii) To the extent that a commodity cannot be paid using the procedure described in paragraph (a)(2)(i) of this section, it shall be paid out of stocks available to the Department for that purpose.

(3) The contract will provide that the commodities will be paid upon request of the operator and any other producers at any time during the five month period beginning with normal harvest date for the commodity in the area where the farm is located.

(4) The contract may contain special arrangements and requirements with respect to the Department's obligations to producers who are active members of a marketing cooperative.

§ 770.4 Other contract provisions.

(a) The contract between the Department and the operator of a farm and any other producers on the farm will establish standards for the grade and other characteristics affecting the quality of any commodity the Department is obligated to pay to the operator and any other producers. It will further provide for adjustments in the quantity of a commodity paid to the operator and any other producers to compensate for any differences between these standards and the grade and other characteristics affecting the quality of the commodity paid to the operator and any other producers. For the purpose of determining these adjustments, a commodity paid under the procedure described in § 770.3(a)(2)(i) shall be treated as having the grade and other characteristics affecting its quality which it was treated as having at the time that the price support or farmer owned reserve loan for which it was pledged as security was made.

(b) The contract between the Department and the operator of a farm and any other producers on the farm shall contain such other provisions as the Department determines appropriate to carry out the program established by this part.

§ 770.5 Contracting procedures.

(a) An operator of a farm and any other producers on the farm may enter into a contract with the Department which provides for devoting 10 to 30 percent of the farm's acreage base for one or more commodities to an approved conserving use at the appropriate county ASCS office prior to the close of business on March 11, 1983.

(b) An operator of a farm and any other producers on the farm may submit a bid for a contract with the Department which provides for devoting 100 percent of the farm's acreage base for one or more commodities to an approved conserving use at the appropriate county ASCS office prior to the close of business on March 11, 1983.

(1) The operator and any other producers may select the commodities to be included in the bid, except that the bid must include either both corn and grain sorghum or neither.

(2) The bid shall state the percentage of the established yield for the farm for each of the commodities included in the bid to be used in determining the compensation to be paid to the operator and any other producers under the contract if the bid is accepted. The operator and any other producers may select any percentage, except that the percentage for a commodity cannot exceed 95 percent for wheat, 80 percent for corn and grain sorghum, 80 percent for upland cotton, or 80 percent for rice. The percentage may be different for different commodities, except that the percentage must be the same for corn and grain sorghum.

(c) After March 11 the bids in each county shall be ranked for each commodity, treating corn and grain sorghum as a single commodity, on the basis of the percentage of established yield to be used in determining compensation stated in the bids, with the lowest percentage being ranked highest. In the case of identical bids, they shall be ranked in the order received. The bids for each commodity shall then be accepted in rank order. The Department will establish the number of acres for which bids will be accepted for each commodity in each county, based on particular supply/demand situations, conditions in local communities, and other relevant factors. In no case will more than 50 percent of the total of the acreage bases for a commodity in a county be removed from production of the commodity under the program established by this part and any other acreage reduction or diversion program established under part 713 of this chapter. Acceptance of a bid under this subsection with respect to a commodity shall terminate any contractual obligations with respect to that commodity entered into under paragraph (a) of this section.

§ 770.6 Miscellaneous provisions.

(a) Payments in kind under the program established by this part shall not be considered payments for purposes of the payment limitations imposed by section 1101 of the Agriculture and Food Act of 1981.

(b) Part 713 of this chapter contains regulations which govern regular annual acreage reduction and diversion and other programs for wheat, feed grains, cotton and rice. Sections 713.60 through 713.74 of that part concerning land eligible for designation as conserving use acreage and the obligations of producers with respect to the use of that acreage shall apply to the program established by this part, except for the following:

(1) Summer fallow producers may designate only land that would normally be devoted to production of small grains or row crops in 1983.

(2) Wheat planted prior to January 11, 1983, may be grazed throughout the year and harvested for hay.

(c) In addition, the following provisions of this title concerning general program administration also apply to the program established by this part.

(1) Part 707—Payments Due Persons Who Have Died, Disappeared, or Have Been Declared Incompetent.

(2) Part 718—Determination of Acreage and Compliance.

(3) Part 780—Appeal Regulations.

(4) Part 790—Incomplete Performance Based Upon Action Or Advice of an Authorized Representative of the Secretary.

(5) Part 791—Authority to Make Payments When There Has Been a Failure to Comply Fully with the Program.

(6) Part 1403—Interest on Delinquent Debts.

(7) Section 110 of Part 713 concerning protection of tenants and sharecroppers.

Signed at Washington, D.C. on January 10, 1983.

John R. Block,

Secretary.

[FR Doc. 83-1022 Filed 1-11-83; 10:51 am]

BILLING CODE 3410-05-M

Agricultural Marketing Service

7 CFR Part 910

[Lemon Reg. 394]

Lemons Grown in California and Arizona; Limitation of Handling

AGENCY: Agricultural Marketing Service, USDA.

ACTION: Final rule.

SUMMARY: This regulation establishes the quantity of fresh California-Arizona lemons that may be shipped to market during the period January 16–22, 1983. Such action is needed to provide for orderly marketing of fresh lemons for the period due to the marketing situation confronting the lemon industry.

EFFECTIVE DATE: January 16, 1983.

FOR FURTHER INFORMATION CONTACT: William J. Doyle, Chief, Fruit Branch, F&V, AMS, USDA, Washington, D.C. 20250, telephone 202–447–5975.

SUPPLEMENTARY INFORMATION: This final rule has been reviewed under Secretary's Memorandum 1512–1 and Executive Order 12291, and has been designated a "non-major" rule. William T. Manley, Deputy Administrator, Agricultural Marketing Service, has determined that this action will not have a significant economic impact on a substantial number of small entities. This action is designed to promote orderly marketing of the California-Arizona lemon crop for the benefit of producers, and will not substantially affect costs for the directly regulated handlers.

This final rule is issued under Marketing Order No. 910, as amended (7 CFR Part 910; 47 FR 50196), regulating the handling of lemons grown in California and Arizona. The order is effective under the Agricultural Marketing Agreement Act of 1937, as amended (7 U.S.C. 601–674). The action is based upon recommendations and information submitted by the Lemon Administrative Committee and upon other available information. It is hereby found that this action will tend to effectuate the declared policy of the Act.

This action is consistent with the marketing policy for 1982–83. The marketing policy was recommended by the committee following discussion at a public meeting on July 6, 1982. The committee met again publicly on January 11, 1983, at Los Angeles, California, to consider the current and prospective conditions of supply and demand and recommended a quantity of lemons deemed advisable to be handled during the specified week. The committee reports the demand for lemons continues easier.

It is further found that it is impracticable and contrary to the public interest to give preliminary notice, engage in public rulemaking, and postpone the effective date until 30 days after publication in the **Federal Register** (5 U.S.C. 553), because of insufficient time between the date when information became available upon which this regulation is based and the effective date necessary to effectuate the declared purposes of the Act. Interested persons were given an opportunity to submit information and views on the regulation at an open meeting. It is necessary to effectuate the declared purposes of the Act to make these regulatory provisions effective as specified, and handlers have been apprised of such provisions and the effective time.

List of Subjects in 7 CFR Part 910

Marketing agreements and orders, California, Arizona, Lemons.

PART 910—[AMENDED]

Section 910.694 is added as follows:

§ 910.694 Lemon regulation 394.

The quantity of lemons grown in California and Arizona which may be handled during the period January 16, 1983, through January 22, 1983, is established at 190,000 cartons.

(Secs. 1–19, 48 Stat. 31, as amended; 7 U.S.C. 601–674)

Dated: January 12, 1983.

D. S. Kuryloski,

Deputy Director, Fruit and Vegetable Division, Agricultural Marketing Service.

[FR Doc. 83-1301 Filed 1-13-83; 11:46 am]

BILLING CODE 3410-02-M

[Marketing Agreements and Orders; Milk]

7 CFR Part 1011

Milk in the Tennessee Valley Marketing Area; Temporary Revision of Supply Plant Shipping Percentage

AGENCY: Agricultural Marketing Service, USDA.

ACTION: Temporary revision of rule.

SUMMARY: This action reduces the supply plant shipping requirement of the Tennessee Valley Federal milk order by 10 percentage points for January and February 1983. This temporary reduction was requested by the operator of a supply plant which is regulated as a pool plant under the order. A notice that this action was being considered was issued December 21, 1982, and interested parties were invited to submit comments. No comments were received. This temporary change will remove the necessity for the supply plant operator to incur uneconomic shipments of milk to a distributing plant merely to maintain pool status for the supply plant under the current shipping requirements of the order.

EFFECTIVE DATE: January 14, 1983.

FOR FURTHER INFORMATION CONTACT: Richard A. Glandt, Marketing Specialist, Dairy Division, Agricultural Marketing Service, U.S. Department of Agriculture, Washington, D.C. 20250, 202–447–4829.

SUPPLEMENTARY INFORMATION: Prior document in this proceeding: Proposed Temporary Revision of Shipping Percentage: Issued December 21, 1982; published December 28, 1982 (47 FR 57728).

This action has been reviewed under USDA procedures established to implement Executive Order 12291 and has been classified as a "non-major" action.

It has also been determined that the need for adjusting certain provisions of the order on an emergency basis precludes following certain review procedures set forth in Executive Order 12291. Such procedures would require that this document be submitted for review to the Office of Management and Budget at least 10 days prior to its publication in the **Federal Register**. However, this would not permit the completion of the procedure in time to advise the industry on a timely basis regarding final action on the supply plant shipping requirement revision.

William T. Manley, Deputy Administrator, Agricultural Marketing Service, has determined that this action would not have a significant economic impact on a substantial number of small entities. Such action would lessen the regulatory impact of the order.

This temporary revision is issued pursuant to the provisions of the Agricultural Marketing Agreement Act of 1937, as amended (7 U.S.C. 601 et seq.), and the provisions of § 1011.7(b) of the order.

Notice of proposed rulemaking was published in the **Federal Register** (47 FR 57728, December 28, 1982) concerning a proposed decrease in the shipping requirement for pool supply plants for the months of January and February 1983. Interested parties were afforded the opportunity to comment on the proposal by submitting written data, views, and arguments. No comments were received.

After consideration of all relevant material, including the material set forth

in the aforesaid notice, it is hereby found and determined that for the months of January and February 1983 the supply plant shipping percentage of 60 percent as set forth in § 1011.7(b) should be decreased to 50 percent.

This action was requested by Kraft, Inc., which operates a supply plant that is regulated as a pool plant by the Tennessee Valley order. Kraft stated that over the past year the Tennessee Valley market has experienced an increase in milk production without a corresponding increase in Class I sales. The handler claimed that this marketwide development made it difficult for its supply plant to meet the 60 percent shipping requirement without engaging in uneconomic shipments of milk if it wished to maintain pool plant status. Kraft projected that the general imbalance of supply over demand in the market that led to a temporary reduction in the supply plant shipping requirements for October and November 1982 would continue through January and February 1983.

A review of the available information indicates that the Tennessee Valley market has undergone some changes in marketing conditions in the past 18 months. Although month-to-month and year-to-year comparisons are complicated by the varying regulatory status of certain plants, the trend in the market has been towards increased producer milk recipients and almost no growth in Class I sales. Increases in production have resulted from greater output by producers historically associated with the Tennessee Valley market, and by the addition of new producers to the market.

Historically, this market has had a high Class I utilization. However, the percentage of producer milk in Class I has been declining for the past two years. The percent of producer milk in Class I averaged about 4 percentage points less in 1981 than in 1980. For the first 11 months of 1982 this figure averaged about 5 percentage points below year-earlier levels. It is expected that the percent of producer milk in Class I will continue to be below year-ago levels during January and February 1983.

Because of this general relationship of supplies to demand, the Department responded to an earlier petition by Kraft by reducing the supply plant shipping percentage for October and November 1982. Absent the proposed relief it is likely that Kraft will have to back-haul some of its milk in order to maintain pool status for its supply plant during early 1983. Under these circumstances, a temporary reduction in the shipping requirement for January and February 1983 is appropriate because it can remove the need for uneconomic movements of milk merely for purposes of assuring pool plant qualification.

It is hereby found and determined that 30 days' notice of the effectiveness date hereof is impractical, unnecessary, and contrary to the public interest in that:

(a) This temporary revision is necessary to reflect current marketing conditions and to maintain orderly marketing conditions in the marketing area for the months of January and February 1983;

(b) This temporary revision does not require of persons affected substantial or extensive preparation prior to the effective date; and

(c) Interested parties were afforded an opportunity to file written data, views or arguments concerning this temporary revision.

Therefore, good cause exists for making this temporary revision effective for the months of January and February 1983.

List of Subjects in 7 CFR Part 1011

Milk marketing orders, Milk, Dairy Products.

It is therefore ordered, That the shipping percentage in § 1011.7(b) of the order is hereby revised for the months of January and February 1983.

(Secs. 1–19, 48 Stat. 31, as amended (7 U.S.C. 601–674)

Effective Date: January 11, 1983.

Signed at Washington, D.C., on January 11, 1983.

Edward T. Coughlin,
Director, Dairy Division.

[FR Doc. 83-1109 Filed 1-13-83; 8:45 am]
BILLING CODE 3410-01-M

Animal and Plant Health Inspection Service

9 CFR Part 92

[Docket No. 82-088]

Importation of Certain Animals; Harry S Truman Animal Import Center

AGENCY: Animal and Plant Health Inspection Service, USDA.

ACTION: Rule related notice.

SUMMARY: This document establishes a specific date for receipt of applications for special authorization to be drawn on a lottery basis for the allotment of quarantine space for the next two groups of cattle to be imported through the Harry S Truman Animal Import Center (HSTAIC). It also lists the geographic areas from which cattle will be considered for importation and the schedules of fees for importation of such cattle. This action is being taken to notify potential applicants of the lottery and fee schedule in accordance with the regulations.

DATES: Deadline for receipt of applications March 15, 1983.

Date and time of drawing: March 22, 1983 at 9 a.m.

ADDRESSES:

Place of drawing: Room 643A, Federal Building, 6505 Belcrest Road, Hyattsville, MD 20782.

Application forms may be obtained upon request from and completed applications should be set to Import-Export Animals and Products Staff, Veterinary Services, APHIS, United States Department of Agriculture, 6505 Belcrest Road, Room 840, Hyattsville, MD 20782.

FOR FURTHER INFORMATION CONTACT: Dr. Melvin Crane, VS, APHIS, USDA, Room 840, Federal Building, 6505 Belcrest Road, Hyattsville, MD 20782, 301–436–8530.

SUPPLEMENTARY INFORMATION: Procedures are established in § 92.41 of Title 9, Code of Federal Regulations (9 CFR 92.41), concerning the allocation of space at the HSTAIC. These procedures include holding a drawing to determine from submitted applications which interested persons will have a right to qualify animals to enter the United States through the HSTAIC. The HSTAIC is intended to process animals from countries affected with exotic diseases and not otherwise eligible for importation into the United States.

The regulations require that at least 60 days prior notice be provided in the **Federal Register** of the date, time, and place of the drawing; the geographic areas from which animals will be considered for importation; and the fee schedule for the proposed importation (9 CFR 92.41(a)(1)). The Department has determined that it would be too complicated and would pose unnecessary disease risks to allow cattle from Europe and Brazil to be combined in one importation. Therefore, cattle from Europe and Brazil shall be imported in separate importations. Importers of cattle from Europe are much more limited than importers from Brazil in when they can have their cattle qualified for importation into the HSTAIC. This is because of several factors including the severe winter weather and certain vaccination programs required by European countries but not found in Brazil. Cattle which have been vaccinated cannot

enter the HSTAIC so an importation of European cattle must occur before the cattle reach an age where they must, by law, be vaccinated. Based on these factors the Department anticipates that the next importation of cattle from Brazil should be able to enter the HSTAIC on or before May 1983, and cattle from Europe in or before the fall of 1983. The drawing for cattle from Europe is scheduled for March 22, 1983, at 9 a.m., in Room 643A, Federal Building, 6505 Belcrest Road, Hyattsville, MD 20782. The drawing for cattle from Brazil will begin immediately after the drawing for cattle from Europe is completed.

Each appplicant for importation shall complete an application for importing cattle through the HSTAIC which shall be received by Veterinary Services at least 5 days prior to the date of the drawing. Application forms may be obtained upon request from and completed applications must be sent to and received by Import-Export Animals and Products Staff, Veterinary Services, APHIS, United States Department of Agriculture, 6505 Belcrest Road, Room 840, Hyattsville, MD 20782.

Each application from Brazil or Europe shall be accompanied by a certified check, money order, or letter of credit payable to the United States Department of Agriculture, Animal and Plant Health Inspection Service, in the amount of one thousand dollars ($1,000), for each animal for which special authorization is requested on the application. If a letter of credit is utilized, the effective date on the letter of credit accompanying an application for the importation of cattle from Brazil must run to October 1, 1983, and the effective date on the letter of credit accompanying an application for the importation of cattle from Europe must run to May 1, 1984. (The $1,000 deposit per animal does not apply to applications for exclusive use, pursuant to 9 CFR 92.41(b)(1).

In the event the applicant does not receive special authorization for cattle for which the applicant has applied, the amount deposited with the application for each animal not so authorized will be refunded. If the applicant receives special authorization, the deposited amount shall be applied against the total cost of importation of each animal. However, the $1,000 per head deposit is nonrefundable for each animal granted special authorization.

All applicants or their designated legal agents or representatives shall be required to appear in person at the drawing. Each designated legal agent or representative shall have a notarized statement of authority signed by the applicant. On the day of the drawing, the applicants selected or their legal representatives shall be required to execute a cooperative agreement and pay the required fee in accordance with the provisions of the cooperative agreement.

If the total number of cattle for which special authorizations are requested is not at least 50, there shall not be a lottery or importation pursuant to 9 CFR 92.41(a) and the deposits shall be refunded to the applicants.

Special authorization for the exclusive use of the HSTAIC shall be issued in accordance with 9 CFR 92.41(b) when the HSTAIC is not scheduled for use for an importation of cattle pursuant to 9 CFR 92.41(a).

The fee schedules presented below are graduated depending on the number of cattle for which authorization is granted to qualify the cattle for entrance into the USDA approved embarkation facility and depending upon the number of cattle which go through the quarantine period at the UDSA approved embarkation facility and the HSTAIC. To calculate the total cost of importation, the cost per head for qualifying or attempting to qualify cattle on the premises of origin must be added to the cost per head for cattle to be quarantined in the country of origin and the HSTAIC. The fees are as follows:

COST OF QUARANTINING CATTLE BRAZIL AND HSTAIC [1]

No. of cattle	Total fixed cost	In quarantine		Total cost per head
		Fixed cost per head [2]	Variable cost per head	
50- 55	$324,557	$5,901	$925	$6,826
56- 60	324,557	5,409	925	6,334
61- 65	324,557	4,993	925	5,918
66- 70	324,557	4,636	925	5,561
71- 75	324,557	4,327	925	5,252
76- 80	324,557	4,056	925	4,981
81- 85	324,557	3,818	925	4,743
86- 90	324,557	3,606	925	4,531
91- 95	324,557	3,416	925	4,341
96-100	324,557	3,245	925	4,170
101-105	333,823	3,179	925	4,104
106-110	343,089	3,118	925	4,043
111-115	352,355	3,063	925	3,988
116-120	361,621	3,013	925	3,938
121-125	370,887	2,967	925	3,892
126-130	380,153	2,924	925	3,849
131-135	389,419	2,884	925	3,809
136-140	398,685	2,847	925	3,772
141-145	407,951	2,813	925	3,738
146-150	417,217	2,781	925	3,706
151-155	425,527	2,745	925	3,670
156-160	433,837	2,711	925	3,636
161-165	442,147	2,679	925	3,604
166-170	450,457	2,649	925	3,574
171-175	458,767	2,621	925	3,546
176-180	467,077	2,594	925	3,519
181-185	475,387	2,569	925	3,494
186-190	483,697	2,545	925	3,471
191-195	492,007	2,523	925	3,448
196-200	500,317	2,501	925	3,426

[1] Includes personnel at Cananeia.
[2] At USDA approved embarkation facility and at the HSTAIC.

COST OF QUARANTINING CATTLE, EUROPE AND HSTAIC [1]

No. of cattle	Total fixed cost	In quarantine		Total cost per head
		Fixed cost per head [2]	Variable cost per head	
50- 55	$323,436	$5,880	$891	$6,771
56- 60	323,436	5,390	891	6,281
61- 65	323,436	4,975	891	5,866
66- 70	323,436	4,620	891	5,511
71- 75	323,436	4,312	891	5,203
76- 80	323,436	4,042	891	4,933
81- 85	323,436	3,805	891	4,696
86- 90	323,436	3,593	891	4,484
91- 95	323,436	3,404	891	4,295
96-100	323,436	3,234	891	4,125
101-105	332,542	3,167	891	4,058
106-110	341,648	3,105	891	3,996
111-115	350,754	3,050	891	3,941
116-120	359,860	2,998	891	3,889
121-125	368,966	2,951	891	3,842
126-130	378,072	2,909	891	3,800
131-135	387,178	2,867	891	3,758
136-140	396,284	2,830	891	3,721
141-145	405,390	2,795	891	3,686
146-150	414,496	2,763	891	3,654
151-155	422,903	2,729	891	3,620
156-160	431,310	2,695	891	3,586
161-165	439,717	2,664	891	3,555
166-170	448,124	2,636	891	3,527
171-175	456,531	2,608	891	3,499
176-180	464,938	2,582	891	3,473
181-185	473,345	2,558	891	3,449
186-190	481,752	2,535	891	3,426
191-195	490,159	2,513	891	3,404
196-200	498,566	2,492	891	3,383

[1] Includes personnel at Brest.
[2] At USDA approved embarkation facility and at the HSTAIC.

COST OF QUALIFYING OR ATTEMPTING TO QUALIFY CATTLE—BRAZIL ON PREMISES OF ORIGIN

No. of cattle	Total fixed cost	In country		Total cost per head
		Fixed cost per head—Brazil	Variable cost per head	
50- 55	$65,959	$1,199	$382	$1,581
56- 60	65,959	1,099	382	1,481
61- 65	65,959	1,014	382	1,396
66- 70	65,959	942	382	1,324
71- 75	65,959	879	382	1,261
76- 80	65,959	824	382	1,206
81- 85	65,959	775	382	1,157
86- 90	65,959	732	382	1,114
91-95	65,959	694	382	1,076
96-100	65,959	659	382	1,041
101-105	68,791	655	382	1,037
106-110	71,623	651	382	1,033
111-115	74,455	647	382	1,029
116-120	77,287	644	382	1,026
121-125	80,119	640	382	1,022
126-130	82,951	638	382	1,020
131-135	85,783	635	382	1,017
136-140	88,615	632	382	1,014
141-145	91,447	630	382	1,012
146-150	94,279	628	382	1,010
151-155	97,224	627	382	1,009
156-160	100,169	626	382	1,008
161-165	103,114	624	382	1,006
166-170	106,059	623	382	1,005
171-175	109,004	622	382	1,004
176-180	111,949	621	382	1,003
181-185	114,894	621	382	1,003
186-190	117,839	620	382	1,002
191-195	120,784	619	382	1,001
196-200	123,729	618	382	1,000

COST OF QUALIFYING OR ATTEMPTING TO QUALIFY CATTLE—EUROPE ON PREMISES OF ORIGIN

No. of cattle	Total fixed cost	In country		Total cost per head
		Fixed cost per head—Europe	Variable cost per head	
50- 55	$64,031	$1,164	$294	$1,458
56- 60	64,031	1,067	294	1,361
61- 65	64,031	985	294	1,279
66- 70	64,031	914	294	1,208
71- 75	64,031	853	294	1,147
76- 80	64,031	800	294	1,094
81- 85	64,031	753	294	1,047
86- 90	64,031	711	294	1,005
91- 95	64,031	674	294	968
96-100	64,031	640	294	934
101-105	66,767	635	294	929
106-110	69,503	631	294	925
111-115	72,239	628	294	922
116-120	74,975	624	294	918
121-125	77,711	621	294	915
126-130	80,447	618	294	912
131-135	83,183	616	294	910
136-140	85,919	614	294	908
141-145	88,655	611	294	905
146-150	91,391	609	294	903
151-155	94,239	607	294	901
156-160	97,087	606	294	900
161-165	99,935	605	294	899
166-170	102,783	604	294	898
171-175	105,631	603	294	897
176-180	108,479	602	294	896
181-185	111,327	601	294	895
186-190	114,175	600	294	894
191-195	117,023	600	294	894
196-200	119,871	599	294	893

Done at Washington, D.C., this 10th day of January, 1983

J. K. Atwell,

Deputy Administrator, Veterinary Services.

[FR Doc. 83-1067 Filed 1-11-83; 3:45 pm]

BILLING CODE 3410-34-M

CIVIL AERONAUTICS BOARD

14 CFR Part 320

[Procedural Reg. Docket 40891; Reg. PR-251A]

Procedures for Awarding Japanese Charter Authorizations

AGENCY: Civil Aeronautics Board.

ACTION: Additional supplementary information.

SUMMARY: The CAB adds a statement inadvertently omitted, concerning the reasons for an early effective date for its rules for awarding Japanese charter authorizations.

DATES: Adopted: October 5, 1982. Effective: October 1, 1982.

FOR FURTHER INFORMATION CONTACT: Patricia A. Depuy, Bureau of International Aviation, Civil Aeronautics Board, 1825 Connecticut Avenue, N.W., Washington, D.C. 20428; (202) 673-5871; or Joanne Petrie, Office of the General Counsel, Rules & Legislation Division, Civil Aeronautics Board, 1825 Connecticut Avenue, N.W., Washington, D.C. 20428; (202) 673-5442.

SUPPLEMENTARY INFORMATION: In PR-251, 47 FR 43352, October 1, 1982, the Board issued Part 320, *Procedures for awarding Japanese charter authorizations*. That final rule sets forth procedures for allocating charter flights for operation by U.S. carriers between the United States and Japan under a Memorandum of Understanding (MOU) signed by the two countries on September 7, 1982. The MOU permits the U.S. government to designate carriers to provide 300 one-way flights per year beginning on October 1, 1982, for a 3-year period.

The Board inadvertently omitted the formal statement of justification for an early effective date as required by section 553 of the Administrative Procedure Act. The Supplementary Information did, however, generally discuss the reasons why an early effective date was essential. As was made clear in both the Notice of Proposed Rulemaking and the final rule, the Board found it necessary in the public interest to establish the allocation procedures as soon as possible, since October 1, 1982, marked the beginning of the new charter systems. This notice adds the technical justification and should be included at the end of the Supplementary Information of PR-251.

Regulatory Flexibility Act

This additional supplementary information does not change the Board certification that Part 320 does not have a significant impact on a substantial number of small entities. This notice merely augments the Supplementary Information in the final rule.

List of Subjects in 14 CFR Part 320

Charter flights, Reporting requirements, Treaties.

Accordingly, the Civil Aeronautics Board adds the following statement to the Supplementary Information in PR-251, 47 FR 43352, October 1, 1982, as follows:

These perishable rights under the agreement are exercisable beginning October 1, 1982, and we have found and carriers have affirmed the need for speedy allocation to permit the greatest possible lead time for efficient use of, and maximum public benefit from, these charter opportunities. Accordingly, the Board finds, for good cause shown, that an effective date earlier than 30 days from publication is in the public interest.

(Secs. 204, 401, 407, 1102, Pub. L. 85-726, as amended, 72 Stat. 743, 754, 766, 797, 49 U.S.C. 1324, 1371, 1377, 1502)

By the Civil Aeronautics Board.

Phyllis T. Kaylor,

Secretary.

[FR Doc. 83-1130 Filed 1-13-83; 8:45 am]

BILLING CODE 6320-01-M

DEPARTMENT OF LABOR

Employment and Training Administration

20 CFR Part 655

Labor Certification Process for the Temporary Employment of Aliens in the United States in Agriculture; Adverse Effect Wage Rates

Correction

In FR Doc. 83-140 beginning on page 232 in the issue of Tuesday, January 4, 1983, make the following changes on page 233:

1. In the first column, the first complete paragraph the last four lines should read "seasons, the final rule has been clarified to apply beyond those seasons."

2. In the same column, under Table I, the entry under the "Percentage changes" column for West Virginia should read "+10.0[1]"

3. In the third column, under Table II, the entry under the "Ratio" column for West Virginia should not have a "$" before "1.6".

BILLING CODE 1505-01-M

DEPARTMENT OF HEALTH AND HUMAN SERVICES

Food and Drug Administration

21 CFR Part 176

[Docket No. 81F-0284]

Indirect Food Additives; Paper and Paperboard Components

AGENCY: Food and Drug Administration.

ACTION: Final rule.

SUMMARY: The Food and Drug Administration (FDA) is amending the food additive regulations to provide for the safe use of 1,2-dibromo-2,4-dicyanobutane as a preservative in pigment slurries and paper coatings in the manufacture of paper and paperboard. This action is based on a petition filed by the Calgon Corp.

DATES: Effective January 14, 1983; objections by February 14, 1983.

ADDRESS: Written objections to the Dockets Management Branch (HFA-305), Food and Drug Administration, Rm.

4–62, 5600 Fishers Lane, Rockville, MD 20857.

FOR FURTHER INFORMATION CONTACT: Blondell Anderson, Bureau of Foods (HFF–334), Food and Drug Administration, 200 C St. SW., Washington, DC 20204, 202–472–5740.

SUPPLEMENTARY INFORMATION: In a notice published in the Federal Register of October 23, 1981 (46 FR 52032), FDA announced that a food additive petition (FAP 1B3581) had been filed by Calgon Corp., Box 1346, Pittsburgh, PA 15230, proposing that § 176.170 *Components of paper and paperboard in contact with aqueous and fatty foods* (21 CFR 176.170) be amended to provide for the safe use of 1,2-dibromo-2,4-dicyanobutane as a preservative in pigment slurries and paper coatings in the manufacture of paper and paperboard that may contact food.

FDA has evaluated the data in the petition and other relevant material and concludes that the proposed food additive use is safe and that the regulations should be amended as set forth below. The agency is also making editorial changes in the description of the permitted levels of the preservative in latexes used as pigment binders in coatings from 0.025 weight percent to a range of not more than 0.025 and not less than 0.01 weight percent. This change is made to conform this regulation to other regulations governing the use of similar microbiocides; the change will not alter the effectiveness of the substance for its requested uses.

In accordance with § 171.1(h) (21 CFR 171.1(h)), the petition and the documents that FDA considered and relied upon in reaching its decision to approve the petition are available for inspection at the Bureau of Foods (address above) by appointment with the information contact person listed above. As provided in § 171.1(h)(2), the agency will delete from the documents any materials that are not available for public disclosure before making the documents available for inspection.

The agency has carefully considered the potential environmental effects of this action and has concluded that the action will not have a significant impact on the human environment and that an environmental impact statement is not required. The agency's finding of no significant impact and the evidence supporting that finding may be seen in the Dockets Management Branch (address above), between 9 a.m. and 4 p.m., Monday through Friday.

List of Subjects in 21 CFR Part 176

Food additives, Food packaging, Paper and paperboard.

Therefore, under the Federal Food, Drug, and Cosmetic Act (secs. 201(s), 409, 72 Stat. 1784–1788 as amended (21 U.S.C. 321(s), 348)) and under authority delegated to the Commissioner of Food and Drugs (21 CFR 5.10), § 176.170(b)(2) is amended by inserting new uses for "1,2-Dibromo-2,4-dicyanobutane" and by revising the current use level limitation to read as follows:

PART 176—INDIRECT FOOD ADDITIVES: PAPER AND PAPERBOARD COMPONENTS

§ 176.170 Components of paper and paperboard in contact with aqueous and fatty foods.

* * * * *

(b) * * *

(2) * * *

List of substances	Limitations
* * * * *	
1,2-Dibromo-2, 4-dicyanobutane (CAS Reg. No. 35691–65–7).	For uses only as a preservative at a level not more than 0.025 weight percent and not less than 0.01 weight percent: in latexes used as pigment binders in coatings; in pigment slurries used in coatings; and/or in coatings themselves. The total level of the preservative in the finished coating shall not exceed 0.04 weight percent of the finished coating solids.
* * * * *	

* * * * *

Any person who will be adversely affected by the foregoing regulation may at any time on or before February 14, 1983 submit to the Dockets Management Branch (address above), written objections thereto and may make a written request for a public hearing on the stated objections. Each objection shall be separately numbered and each numbered objection shall specify with particularity the provision of the regulation to which objection is made. Each numbered objection on which a hearing is requested shall specifically so state; failure to request a hearing for any particular objection shall constitute a waiver of the right to a hearing on that objection. Each numbered objection for which a hearing is requested shall include a detailed description and analysis of the specific factual information intended to be presented in support of the objection in the event that a hearing is held; failure to include such a description and analysis for any particular objection shall constitute a waiver of the right to a hearing on the objection. Three copies of all documents shall be submitted and shall be identified with the docket number found in brackets in the heading of this regulation. Received objections may be seen in the office above between 9 a.m. and 4 p.m., Monday through Friday.

Effective date. This regulation shall become effective January 14, 1983.

(Secs. 201(s), 409, 72 Stat. 1784–1788 as amended (21 U.S.C. 321(s), 348))

Dated: January 10, 1983.

William F. Randolph,

Acting Associate Commissioner for Regulatory Affairs.

[FR Doc. 83–1054 Filed 1–13–83; 8:45 am]

BILLING CODE 4160–01–M

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21 CFR Part 181

[Docket No. 77N–0222]

Nitrates and Nitrites in Meat and Poultry Products; Declaration and Codification of Prior Sanctions

AGENCY: Food and Drug Administration.

ACTION: Final rule.

SUMMARY: The Food and Drug Administration (FDA) is amending its regulations to codify prior sanctions for the use of nitrates and nitrites in cured meat and poultry products. This action is based upon conclusions reached by the U.S. Department of Agriculture (USDA) that the use of nitrates and nitrites in cured meat and poultry products was sanctioned and approved by USDA under the Federal Meat Inspection Act (FMIA) and the Poultry Products Inspection Act (PPIA) prior to September 6, 1958.

DATES: Effective January 14, 1983.

FOR FURTHER INFORMATION CONTACT: John L. Herrman, Bureau of Foods (HFF–334), Food and Drug Administration, 200 C St. SW., Washington, DC 20204, 202–472–5690.

SUPPLEMENTARY INFORMATION:

I. Introduction

By this final rule, FDA is codifying the prior sanctions issued by USDA for the use of nitrates and nitrites in meat and poultry products by including those prior sanctions in Part 181 of Title 21 of the Code of Federal Regulations. As used in this document, the term "nitrates" includes sodium and potassium nitrate, and the term "nitrites" includes sodium and potassium nitrite. Previous Federal Register notices on these uses of nitrates and nitrites include those published on November 3, 1972 (37 FR 23456); September 2, 1977 (42 FR 44376); and December 21, 1979 (44 FR 75662).

This rule is based on determinations by USDA that: (1) Nitrates and nitrites may be used in cured red meat products to fix color and to serve as a preservative under the terms of a prior sanction granted under the FMIA (21 U.S.C. 96), and (2) the use of nitrates and

nitrites as a preservative and color fixative in poultry products was sanctioned and approved by USDA under the PPIA (21 U.S.C. 451 et seq.) prior to September 6, 1958.

The effect of this rule is that the historical uses of nitrates and nitrites in red meat and poultry products need not be approved under the food additive provisions of the Federal Food, Drug, and Cosmetic Act (FFDCA). These uses are, however, subject to the general adulteration provisions of the FMIA and the PPIA, both of which are administered by USDA, and of the FFDCA.

II. Legal and Procedural Background

Section 201(s) of the FFDCA (21 U.S.C. 321(s)) defines the term "food additive" as follows:

> The term "food additive" means any substance the intended use of which results or may reasonably be expected to result, directly or indirectly, in its becoming a component or otherwise affecting the characteristics of any food (including any substance intended for use in producing, manufacturing, packing, processing, preparing, treating, packaging, transporting, or holding food; and including any source of radiation intended for any such use), if such substance is not generally recognized, among experts qualified as having been adequately shown through scientific procedures (or, in the case of a substance used in food prior to January 1, 1958, through either scientific procedures or experience based on common use in food) to be safe under the conditions of its intended use; except that such term does not include—
>
> * * * * *
>
> (4) Any substance used in accordance with approval granted prior to the enactment of this paragraph pursuant to this Act, the Poultry Products Inspection Act (21 U.S.C. 451 and the following) or the Meat Inspection Act of March 4, 1907 (34 Stat. 1260), as amended and extended (21 U.S.C. 71 and the following);
>
> * * * * *

This definition was added to the FFDCA by the Food Additives Amendment of 1958 (Pub. L. 85-929, 72 Stat. 1784-1789) ("the 1958 amendment"), which was enacted into law on September 6, 1958. The purpose of the prior sanction provision in section 201(s)(4) was to make it unnecessary for substances that had already been approved by the Government before enactment of the 1958 amendment to go through the premarket testing and approval process that the 1958 amendment made applicable to food additives. "Food Additives," Hearings before the House Committee on Interstate and Foreign Commerce, 85th Cong., pp. 34-35 (1958). Substances excluded from the definition of "food additive" under this provision included not only those approved by FDA under the FFDCA but also those approved by USDA under the PPIA or the FMIA.

In the **Federal Register** of November 3, 1972 (37 FR 23456), FDA published a notice of proposed rulemaking in which it proposed, among other things, to formalize prior sanctions, which the agency presumed that USDA had granted for the use of nitrates and nitrites as curing agents in meat and poultry products, by adding two new sections to Subpart E of Part 121 (since recodified as Part 181 (recodification in the **Federal Register** of March 15, 1977; 42 FR 14302)).

Subsequent to the publication of the November 3, 1972 proposal, USDA attempted to clarify, in letters to FDA, those products for which it has granted prior sanctions. In a letter dated April 22, 1977, to Donald Kennedy, then Commissioner of Food and Drugs, Carol Tucker Foreman, then Assistant Secretary of Agriculture for Food and Consumer Services, stated that "(b)ased upon our review of available information, it does not appear that there is such a prior sanction or approval for the use of nitrates and nitrites in poultry products" (Ref. 1).

FDA then asked USDA for clarification about any prior sanctions or approvals that USDA had issued for the use of nitrates and nitrites in red meat products. Assistant Secretary Foreman, in a January 24, 1978 letter to Sherwin Gardner, then Deputy Commissioner of Food and Drugs, responded that, based upon current regulations (9 CFR 317.8(b)(6) and 318.7(c)(4)), history of use, and articles written by administrative officials of USDA, nitrates and nitrites have been authorized for use in cured meat products to fix color and to serve as a preservative (Ref. 2).

With regard to poultry, because FDA considered USDA's 1977 determination that a prior sanction did not exist to be dispositive, FDA published a Statement of Policy in the **Federal Register** on September 2, 1977 (42 FR 44376) in which the agency announced that it intended to regulate the use of nitrates and nitrites in poultry products as food additives under sections 201(s) and 409 of the FFDCA. FDA also announced that, upon submission of appropriate data and information concerning the safety of nitrates and nitrites in poultry products, FDA would consider issuing food additive regulations to permit the continued use of nitrates and nitrites in poultry on an interim basis pending a full resolution of questions affecting a final decision on their approvability. Two petitions were submitted by an ad hoc committee, the Special Poultry Research Committee (SPRC), for the issuance of interim food additive regulations for the use of sodium nitrite in a variety of poultry products.

On November 2, 1977, SPRC and Tyson Foods, Inc., filed suit in the United States District Court for the Western District of Arkansas against USDA and the Department of Health, Education, and Welfare (now the Department of Health and Human Services) seeking, among other things, a declaratory judgment that a prior sanction exists for the use of sodium nitrite in poultry products. On March 21, 1979, the court dismissed the suit on the ground that it could not consider the merits of the prior sanction issue until the Government had taken some final action premised on the absence of a prior sanction.

The plaintiffs appealed the case to the United States Court of Appeals for the Eighth Circuit. On July 20, 1979, the appeal was dismissed in response to a joint motion of the parties in which FDA stated its intention to initiate rulemaking to resolve the question whether a prior sanction granted under the FFDCA exists for nitrates and nitrites in poultry products. *Tyson Foods, Inc., et al.*, v. *USDA et al.*, No. 77-5059 (W. D. Ark., *dismissed* Mar. 21, 1979), *appeal dismissed*, No. 79-1405 (8th Cir. July 20, 1979).

FDA initiated rulemaking by publishing in the **Federal Register** of December 21, 1979 (44 FR 75662) a proposal to declare that no prior sanction granted under the FFDCA exists for the use of nitrates and nitrites in poultry products. The agency reached this conclusion because it failed to find in its files evidence of a prior sanction for the use of nitrates and nitrites in poultry products. In the proposal, FDA specifically solicited the submission of evidence that would tend to contradict its conclusion. The agency stated that if acceptable evidence that it had issued a prior sanction under the FFDCA was submitted in response to the proposal, it would withdraw the proposal and issue a second proposal recognizing the existence of the prior sanction.

After two extensions, the comment period closed on June 18, 1980. At the close of the comment period, SPRC submitted five volumes to FDA in which SPRC documented its arguments that a prior sanction had been granted for the use of nitrates and nitrites in poultry products (Ref. 3). Because SPRC contended that USDA had issued a prior sanction under the PPIA and the FMIA, FDA sent SPRC's submission to USDA for review.

By letter dated October 9, 1980, Assistant Secretary Foreman responded that, on the basis of the evidence submitted, "we conclude that the use of nitrates and nitrites as a preservative and color fixature (sic) in poultry products was in fact sanctioned and approved by USDA, pursuant to the PPIA, during the 1957–1958 prior sanction period, and that a prior sanction for that use therefore exists" (Ref. 4).

Assistant Secretary Foreman's letters of January 24, 1978 and October 9, 1980 establish that USDA has sanctioned the use of nitrates and nitrites in red meat and poultry products. FDA believes that these sanctions should be a matter of public record (38 FR 12737; May 15, 1973). Therefore, FDA is issuing §§ 181.33 and 181.34 to codify and to recognize them.

FDA has concluded that notice and public procedure on these regulations are unnecessary, and that good cause exists for issuing the regulations as a final rule. Under section 201(s)(94) of the FFDCA, FDA considers itself bound by USDA's determinations concerning prior sanctions granted by that Department under either the PPIA or the FMIA. Therefore, these regulations have no substantive effect on the regulatory status of the use of nitrates and nitrites in meat and poultry products. They merely recognize determinations that have already been made by USDA.

FDA also finds that there is no basis for it to act on its original intention, described in the December 21, 1979 proposal, to issue a new proposal recognizing the existence of a prior sanction for using nitrates and nitrites in poultry products if acceptable evidence that the agency had issued such a prior sanction under the FFDCA was submitted in response to that proposal. The agency points out that the prior sanctions it is codifying were issued under the FMIA and the PPIA and not the FFDCA. Thus, the circumstances in which the agency said it would issue a new proposal do not apply here. More importantly, in publishing §§ 181.33 and 181.34, the agency is not engaging in rulemaking. Instead, the agency is merely giving the public notice, through a section in the Code of Federal Regulations, that by virtue of actions taken by USDA, under 21 U.S.C. 321(s)(4), nitrates and nitrites are not food additives when used in cured red meat and poultry products. Therefore, FDA believes that there is good cause for finding that the publication of a proposal, public comment on these regulations, and delayed effective date are not necessary.

Because of USDA's findings that it had issued sanctions for the use of nitrates and nitrites in red meat and poultry products prior to September 6, 1958, the proposals issued by FDA on November 3, 1972 and December 21, 1979 have been rendered unnecessary. Therefore, FDA will publish in the future its final decision on those proposals.

In a letter dated May 18, 1981, SPRC withdrew its petitions that requested the issuance of interim food additive regulations for the use of sodium nitrite in poultry products.

III. Basis for the Prior Sanctions

As stated earlier, the basis for this notice that USDA granted prior sanctions for the use of nitrates and nitrites in red meat and poultry products are two letters that were sent by USDA to FDA, in which USDA stated its reasons for concluding that prior sanctions exist (Refs. 2 and 4). The following discussion summarizes the points made in the two letters sent by Assistant Secretary Foreman to FDA. For more specific information, readers should refer to these letters (Refs. 2 and 4). With respect to red meat products, supporting material is attached to Assistant Secretary Foreman's letter (Ref. 2). Regarding poultry products, SPRC's submission contains copies of the primary supporting material (Ref. 3).

A. Red Meat Products

In her January 24, 1978 letter to Deputy Commissioner Gardner (Ref. 2), Assistant Secretary Foreman stated USDA's reasons for its conclusion that it had issued a prior sanction for the use of nitrates and nitrites in meat products. She pointed out that the federal meat inspection regulations, 9 CFR 318.7(c)(4), "permit the use of nitrates and nitrites in the preparation of any cured meat products, i.e., any cured carcass, meat, meat byproduct, or meat food product, capable of use as human food." The current regulations also specify, in 9 CFR 318.7(c)(4), the maximum ingoing and residual levels of nitrates and nitrites that may be used in cured products.

Assistant Secretary Foreman stated that in USDA's view "these provisions of the current regulations are in accord with 'prior sanctions or approvals' granted pursuant to the Meat Inspection Act of 1907, as amended."

Assistant Secretary Foreman also cited various Bureau of Animal Industry Service Announcements and Federal meat inspection regulations that disclose that USDA has permitted the use of various nitrate and nitrite salts in meat products from at least 1907 to the present, and that USDA has allowed the maximum amounts of nitrates and nitrites currently permitted in the regulations continuously since 1925 or earlier.

The use of nitrates and nitrites in the preparation of cured products, Assistant Secretary Foreman continued, both as a color fixative and as a preservative, is in accord with a "prior sanction or approval." USDA recognized the color fixing properties of nitrate and nitrite in a Bureau of Animal Industry Announcement issued on October 19, 1925 and in the current provisions in 9 CFR 318.7(c)(4), which became effective October 4, 1964. USDA recognized the preservative properties of nitrates and nitrites in: (1) The current provisions in 9 CFR 317.8(b)(6), which have been in effect since October 1, 1941, (2) articles written by administrative officials of USDA published in 1943 and 1951, and (3) provisions relating to the export of products from March 29, 1945 through May 19, 1959.

USDA's determination that it had granted a prior sanction for the use of nitrates and nitrites in meat products as a preservative and color fixative, under the FMIA, was upheld by the United States Court of Appeals for the D.C. Circuit in *Pubic Citizen* v. *Foreman*, 631 F.2d 969 (D.C. Cir. 1980).

B. Poultry Products

The SPRC submission of June 20, 1980 (Ref. 3) contained depositions and affidavits of former USDA administrative officials and others, USDA memoranda and other correspondence, information relating to product labels, and numerous scholarly publications. Based upon this evidence, USDA concluded that a prior sanction exists for the use of nitrates and nitrites in poultry products (Ref. 4).

Any prior sanction or approval of nitrates or nitrites in poultry granted by USDA under the PPIA would have to have been given after enactment of this law on August 28, 1957 but before enactment of the Food Additives Amendment of 1958 on September 6, 1958. Inspection under the PPIA was not mandatory until January 1, 1959, but USDA inspected poultry products after May 1, 1958 for those who, on a voluntary basis, applied and qualified under regulations issued by the Department. In making its determination on the prior sanction, according to Assistant Secretary Foreman's letter of October 9, 1980, USDA concluded that a sanction or approval is pursuant to the PPIA if it was granted: (1) To a company receiving inspection voluntarily under the PPIA, (2) to a company before it began receiving inspection, if the

sanction or approval continued into the period in which the company did receive inspection; or (3) to a company after August 27, 1957, in anticipation of, or in preparation for, voluntary or mandatory inspection. In addition, Assistant Secretary Foreman pointed out that any approvals that USDA granted were informal because no regulations under the FMIA or PPIA permitting the use of nitrates or nitrites in poultry products were in effect before September 6, 1958.

The conclusion by USDA "that there is a prior sanction, pursuant to the PPIA, for * * * the use of nitrates and nitrites as a preservative and color fixative in the curing of poultry products at the same limits that were applicable to meat products" is based on several lines of evidence:

(1) Depositions and affidavits of former USDA officials, whose tenure included the prior sanction period, reflecting their understanding that it was USDA policy to approve the use of nitrates and nitrites in poultry products.

(2) Label approvals that USDA granted for poultry products containing nitrates and nitrites during the period between August 28, 1957 and September 6, 1958. Assistant Secretary Foreman stated that even though in most cases there is no indication that the labels were used past August 28, 1957, there is also no evidence that the label approvals were withdrawn or cancelled. Assistant Secretary Foreman cited statements by former USDA officials that indicated that they had approved labels during the prior sanction period, and statements by officials of companies that manufactured poultry products that asserted that they had obtained label approvals during the prior sanction period. She found that these statements support USDA's finding that a prior sanction for the use of nitrates and nitrites in poultry products exists. In addition, Assistant Secretary Foreman cited labels for poultry products containing nitrates and nitrites that USDA approved after 1958 as providing further support for USDA's conclusion that a prior sanction exists.

(3) USDA instructions to its poultry inspectors, in effect prior to September 6, 1958, providing details of acceptable methods for curing poultry products with nitrates and nitrites.

(4) A November 20, 1958, list of "Permitted Food Additives" provided by the Poultry Division, USDA, to all its poultry inspectors. Assistant Secretary Foreman found the fact that USDA had included nitrates and nitrites as "permitted food additives" on this list, which was compiled and circulated so soon after the prior sanction period, to be persuasive evidence that USDA had approved the use of nitrates and nitrites in poultry products prior to September 6, 1958 and pursuant to the PPIA. This list was published in December 1958 in the *Food Drug Cosmetic Law Journal* with other lists of prior-sanctioned or approved substances.

(5) Articles, published by USDA scientists in various journals between 1936 and 1966, that recommend the use of nitrates and nitrites for curing smoked turkeys.

(6) Other materials that reflect that USDA knew that nitrates and nitrites were being used in poultry products. These materials include evidence of the delivery of samples to USDA of poultry products cured with nitrates and nitrites and product formulas that employ nitrates and nitrites as curing agents for various poultry products.

On the basis of this evidence, USDA concluded that a prior sanction for the use of nitrates and nitrites in poultry products exists.

IV. References

The following materials are on file with the FDA Dockets Management Branch (HFA-305), address above, and may be seen in that office from 9 a.m. to 4 p.m., Monday through Friday.

(1) Letter from Carol Tucker Foreman, Assistant Secretary of Agriculture for Food and Consumer Services, to Donald Kennedy, Commissioner of Food and Drugs, April 22, 1977.

(2) Letter from Carol Tucker Foreman to Sherwin Gardner, Deputy Commissioner of Food and Drugs, January 24, 1978.

(3) Comments of the Special Poultry Research Committee submitted in response to FDA's Notice of Proposed Rulemaking published in the December 21, 1979 **Federal Register** (44 FR 75662) regarding the prior sanction status of nitrates and nitrites used in poultry products, 5 volumes.

(4) Letter from Carol Tucker Forman to Jere E. Goyan, Commissioner of Food and Drugs, October 9, 1980.

V. Regulatory and Environmental Analyses

FDA is codifying prior sanctions for the use of nitrates and nitrites in cured meat and poultry products. The agency is not engaging in rulemaking but merely giving the public notice of those prior sanctions. Therefore, FDA anticipates that the issuance of this notice will not affect the market distribution or cost of cured meat and poultry products, and that it will not be a major rule as defined by the criteria in Executive Order 12291.

This action is not subject to the regulatory impact analysis provisions of the Regulatory Flexibility Act (Pub. L. 96-354), because it is not based on a general notice of proposed rulemaking. Morever, the effect of this regulation is to maintain current known uses by both large and small businesses of nitrates and nitrites in meat and poultry products.

The agency has determined that this action is not covered under 21 CFR 25.22(a) (proposed December 11, 1979; 44 FR 71742) because it could not significantly affect the quality of the human environment. Therefore, the preparation of an environmental assessment and consideration by the agency of the need for preparing an environmental impact statement are not required.

List of Subjects in 21 CFR Part 181

Food additives, Prior-sanctioned food ingredients.

Therefore, under the Federal Food, Drug, and Cosmetic Act (secs. 201(s) and 701(a), 52 Stat. 1055, 72 Stat. 1784 (21 U.S.C. 321(s) and 371(a))) and under authority delegated to the Commissioner of Food and Drugs (21 CFR 5.10), Part 181 is amended as follows:

PART 181—PRIOR-SANCTIONED FOOD INGREDIENTS

1. By adding new § 181.33 to read as follows:

181.33 Sodium nitrate and potassium nitrate.

Sodium nitrate and potassium nitrate are subject to prior sanctions issued by the U.S. Department of Agriculture for use as sources of nitrite, with or without sodium or potassium nitrite, in the production of cured red meat products and cured poultry products.

2. By adding new § 181.34 to read as follows:

§ 181.34 Sodium nitrite and potassium nitrite.

Sodium nitrite and potassium nitrite are subject to prior sanctions issued by the U.S. Department of Agriculture for use as color fixatives and preservative agents, with or without sodium or potassium nitrate, in the curing of red meat and poultry products.

Effective date. This regulation shall become effective January 14, 1983.

(Secs. 201(s), 701(a), 52 Stat. 1055, 72 Stat. 1784 (21 U.S.C. 321(s), 371(a)))

Dated: December 27, 1982.

Arthur Hull Hayes, Jr.,

Commissioner of Food and Drugs.

[FR Doc. 83-1052 Filed 1-13-83; 8:45 am]

BILLING CODE 4160-01-M

21 CFR Parts 200 and 800

[Docket No. 82N-0332]

Tamper-Resistant Packaging Requirements for Contact Lens Solutions and Tablets; Correction

AGENCY: Food and Drug Administration.

ACTION: Final rule; correction.

SUMMARY: The Food and Drug Administration (FDA) is correcting a final rule that established additional requirements for tamper-resistant packaging of contact lens solutions and tablets used to make those solutions. The rule was published in the Federal Register of November 5, 1982.

EFFECTIVE DATE: January 14, 1983.

FOR FURTHER INFORMATION CONTACT: Joseph M. Sheehan, National Center for Devices and Radiological Health (HFK-140), Food and Drug Administration, 8757 Georgia Ave., Silver Spring, MD 20910, 301-427-7114.

SUPPLEMENTARY INFORMATION: In FR Doc. 82-30644 at page 50452 in the Federal Register of Friday, November 5, 1982, the following corrections are made:

1. On page 50452:

a. In column one in the third sentence of the summary, "opthalmic" is changed to "ophthalmic".

b. In column two in the second paragraph under **"SUPPLEMENTARY INFORMATION"**, "opthalmic" is changed to "ophthalmic".

2. On page 50453:

a. In column two in the next-to-the-last sentence of the second full paragraph, "non-tamper resistant" is changed to "tamper-resistant."

b. In column three in the first sentence of the first full paragraph, "this effective date." is changed to "this retail level effective date."

3. On page 50454:

a. In column one in the next-to-the-last sentence in the first paragraph, "If a firm submits both a stay and an exemption" is changed to "If a firm submits both a petition for a stay and a petition for an exemption"; in the first sentence of the last paragraph, "found in sections 502(c), 515, and 701(a) of the act (21 U.S.C. 352(c), 360(e), and 371(a))." is changed to "found in sections 201(n), 502 (a) and (c), 515, and 701(a) of the act (21 U.S.C. 321(n), 352 (a) and (c), 360e(e), and 371(a)))." In the second sentence of the same paragraph, "Section 502(c) of the act deems" is changed to "As explained in the OTC drug document, the requirement for a label statement on the tamper-resistant feature of a product's packaging is authorized in part, by the misbranding provisions of sections 201(n) and 502(a), further, section 502(c) of the act deems."

4. On page 50455: In column one in the next-to-the-last sentence of the first paragraph, "regulatory analysis" is changed to "regulatory flexibility analysis". In the authority paragraph, "secs. 501, 502," is changed to "secs. 201(n), 501, 502," "52 Stat. 1049-1051" is changed to "52 Stat. 1041 as amended, 1049-1051" and "21 U.S.C. 351, 352," is changed to "21 U.S.C. 321(n), 351, 352,".

5. On page 50456 in § 800.12 *Contact lens solutions and tablets; tamper-resistant packaging:*

a. In the first sentence of paragraph (a), "and to the public health through the loss" is changed to "and with loss"; in the last sentence of paragraph (a), "or tablet for retail sale" is changed to "or tablet to be used to make such a solution for retail sale".

b. In paragraph (b) in the first sentence, "Each manufacturer or packer" is changed to "Each manufacturer and packer"; the third sentence is changed to read, "To prevent the substitution of a tamper-resistant feature after tampering, the indicator or barrier to entry is required to be distinctive by design or by the use of an identifying characteristic."; the last sentence is changed to read, "The tamper-resistant feature shall be designed to and shall remain intact when handled in a reasonable manner during manufacture, distribution, and retail display."

c. In paragraph (c) in the first sentence, "a product subject to paragraph (b) of this section" is changed to "a product covered by this section".

d. In paragraph (e) the last sentence is changed to read, "Any supplemental premarket approval application under this paragraph is required to include data sufficient to show that these changes do not adversely affect the product."

e. In paragraph (f):

(1) In the introductory text of the paragraph, "that the manufacturer" is changed to "that a product's manufacturer" and "a requirement" is changed to "a packaging or labeling requirement". (2) In paragraph (f)(1)(i) and (ii), "packaged on" is changed to "packaged for retail sale on".

(2) In paragraph (f)(2), "The requirements in paragraph (b) of this section for a distinctive indicator or barrier to entry and in" is changed to "The requirement in paragraph (b) of this section that the indicator or barrier to entry be distinctive by design and the requirement in"; and "and packaged on" is changed to "packaged for retail sale on".

(3) In paragraph (f)(3), "packaged before May 5, 1983." is changed to "packaged for retail sale before May 5, 1983."; and "Products packaged after May 5, 1983 must be" is changed to "Products packaged for retail sale after May 5, 1983, are required to be".

6. On page 50456, the authority statement at the bottom of column three is changed to read, "(Secs. 201(n), 501, 502, 515, 521, 701, 52 Stat. 1041 as amended, 1049-1051 as amended, 1055-1056 as amended, 90 Stat. 552-559, 574 (21 U.S.C. 321(n), 351, 352, 360e, 360k, 371).)"

Dated: January 6, 1983.

Mark Novitch,

Acting Commissioner of Food and Drugs.

[FR Doc. 83-1056 Filed 1-13-83; 8:45 am]

BILLING CODE 4160-01-M

21 CFR Parts 211, 314, and 700

[Docket No. 82N-0330]

Tamper-Resistant Packaging Requirements for Certain Over-the-Counter Human Drug and Cosmetic Products; Correction

AGENCY: Food and Drug Administration.

ACTION: Final rule; correction.

SUMMARY: The Food and Drug Administration (FDA) is correcting a final rule that established requirements for tamper-resistant packaging for all over-the-counter (OTC) human drug products, except dermatologics, dentifrices, and insulin, and for cosmetic liquid oral hygiene products and vaginal products. The rule was published in the Federal Register of November 5, 1982.

EFFECTIVE DATE: January 14, 1983.

FOR FURTHER INFORMATION CONTACT: Eileen R. Hodkinson, National Center for Drugs and Biologics (HFN-7), Food and Drug Administration, 5600 Fishers Lane, Rockville, MD 20857, 301-443-6490, or

Heinz J. Eiermann, Bureau of Foods (HFF-440), Food and Drug Administration, 200 C Street SW., Washington, DC 20204, 202-245-1530.

SUPPLEMENTARY INFORMATION: In FR Doc. 82-30645 at page 50442 in the Federal Register of Friday, November 5, 1982, the following corrections are made:

1. On page 50445:

a. In column two in the first full paragraph, the next to the last sentence is changed to read, "A label statement describing the purpose of the seal and cautioning against purchase if the seal were broken or missing is now required by this final rule for OTC drug products.

including ophthalmic OTC drug products."

b. In column three in the last paragraph beginning on page 50445 and ending on page 50446, the second sentence is changed to read, "If a firm submits both a petition for a stay and a petition for an exemption for the same product, it is requested that each petition be submitted separately in its own envelope clearly marked as set forth above."

2. On page 50446:

a. In column two in the second full paragraph, the first two sentences are changed to read as follows: "FDA concludes, therefore, that the sequential effective dates established by these regulations are reasonable and necessary. It is appropriate for FDA to assure an adequate supply of OTC products at a reasonable price, and it is therefore appropriate for FDA to phase in the requirements of these regulations to assure that the supply of these products is not unnecessarily disrupted and that these prices are not unnecessarily increased."

b. In column three:

(1) In the next-to-the-last sentence of the first full paragraph, "non-tamper resistant" is changed to "tamper resistant."

(2) In the last paragraph, the first and third sentences are changed to read as follows: "The agency acknowledges that it may prove difficult to meet this retail level effective date.* * * It is also possible that the quantity of noncomplying products remaining on the market by that time will be negligible, in which case a retail level effective date may be unnecessary." In the fourth sentence, the phrase "effects of this regulation" is changed to "effects of these regulations".

3. On page 50447:

a. In column one in the last sentence of the paragraph above the first full paragraph, the phrase "stays in the retail level" is changed to "stays of the retail level."

b. In column three in the third sentence of the first full paragraph, "501(c)" is changed to "502(c)".

4. On page 50449:

a. In column three in the first sentence of the first paragraph, "regulatory analysis" is changed to "regulatory flexibility analysis". In the authority paragraph, "52 Stat. 1049–1056" is changed to "52 Stat. 1041 as amended, 1049–1056".

5. On page 50450 in § 211.132, *Tamper-resistant packaging requirements for over-the-counter human drug products:*

a. In the third sentence of paragraph (b), "The tamper resistant feature" is changed to "a tamper-resistant feature"; and in the last sentence of paragraph (b), "must remain" is changed to "shall be designed to and shall remain."

b. In paragraph (g)(1) (i) and (ii) and (2), "packaged on" is changed to "packaged for retail sale on"; in the first sentence of paragraph (g)(3), "packaged before May 5, 1983" is changed to "packaged for retail sale before May 5, 1983,"; in the last sentence of paragraph (g)(3), "Products packaged for retail sale after May 5, 1983, must be" is changed to "Products packaged for retail sale after May 5, 1983, are required to be".

6. On page 50451 in § 700.25 *Tamper-resistant packaging requirements for cosmetic products*:

a. In the second sentence of paragraph (a), "responsiblity" is changed to "responsibility";

b. In the third sentence of paragraph (b), "To prevent substitution of the" is changed to "To prevent the substitution of a"; in the last sentence of paragraph (b), "must remain" is changed to "shall be designed to and shall remain".

c. In paragraph (e)(1) (i) and (ii), "of paragraph (b)" is changed to "in paragraph (b)"; in paragraph (e)(1) (i) and (ii) and (2), "packaged on" is changed to "packaged for retail sale on"; and in paragraph (e)(3), "packaged before May 5, 1983" is changed to "packaged for retail sale before May 5, 1983" and "Products packaged after May 5, 1983 must" is changed to "Products packaged for retail sale after May 5, 1983, are required to be".

Dated: January 5, 1983.

Mark Novitch,

Acting Commissioner of Food and Drugs.

[FR Doc. 83-1055 Filed 1-13-83; 8:45 am]

BILLING CODE 4160-01-M

DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT

Office of Assistant Secretary for Housing—Federal Housing Commissioner

24 CFR Part 201

[Docket No. R-83-1069]

Mortgage Insurance Loans; Changes in Interest Rates

AGENCY: Office of Assistant Secretary for Housing—Federal Housing Commissioner, Housing and Urban Development Department.

ACTION: Final rule.

SUMMARY: This change in the regulations decreases the HUD/FHA maximum allowable finance charge on Title I mobile home loans, and combination and mobile home lot loans. This action by HUD is designed to bring the maximum interest rate and financing charges on HUD/FHA-insured loans into line with market rates and help assure an adequate supply of and demand for FHA financing.

EFFECTIVE DATE: January 17, 1983.

FOR FURTHER INFORMATION CONTACT: John L. Brady, Director, Office of Title I Insurance Loans, Office of Single Family Housing, Department of Housing and Urban Development, 451 7th Street, S.W., Washington, D.C. 20410 (202-755-6680).

SUPPLEMENTARY INFORMATION: The following miscellaneous amendments have been made to this chapter to decrease the maximum interest rate which may be charged on loans insured by this Department. Maximum finance charges on mobile home loans lowered from 15.00 percent to 14.50 percent, and the finance charge on combination loans for the purchase of a mobile home and a developed or undeveloped lot has been lowered from 14.50 percent to 14.00 percent.

The Secretary has determined that such changes are immediately necessary to meet the needs of the market and to prevent speculation in anticipation of a change, in accordance with his authority contained in 12 U.S.C. 1709-1, as amended. The Secretary has, therefore, determined that advance notice and public comment procedures are unnecessary and that good cause exists for making this amendment effective immediately.

This is a procedural and administrative determination as set forth in the statutes and as such does not require a determination of environmental applicability.

List of Subjects in 24 CFR Part 201

Health facilities, Historic Preservation, Home improvement, Mobile homes, Manufactured homes and lots.

Accordingly, Chapter II is amended as follows:

PART 201—PROPERTY IMPROVEMENT AND MOBILE HOME LOANS

Subpart B—Eligibility Requirements—Mobile Home Loans

1. Section 201.540(a) is amended to read as follows:

§ 201.540 Financing charges.

(a) *Maximum financing charges.* The maximum permissible financing charge which may be directly or indirectly paid to, or collected by, the insured in

connection with the loan transaction, shall not exceed 14.50 percent simple interest per annum. No points or discounts of any kind may be assessed or collected in connection with the loan transaction, except that a one percent origination fee may be collected from the borrower. If assessed, this fee must be included in the finance charge. Finance charges for individual loans shall be made in accordance with tables of calculation issued by the Commissioner.

* * * * *

Subpart D—Eligibility Requirements—Combination and Mobile Home Lot Loans

2. Section 201.1511 paragraph (a)(1) is revised to read as follows:

§ 201.1511 Financing charges.

(a) *Maximum financing charges.*

* * * * *

(1) 14.00 percent per annum.

* * * * *

(Sec. 3(a), 82 Stat. 113; 12 U.S.C. 1709-1; sec. 7 of the Department of Housing and Urban Development Act, 42 U.S.C. 3534(d)))

Dated: January 7, 1983.

Philip Abrams,

Assistant Secretary for Housing—Federal Housing Commissioner.

[FR Doc. 83-1135 Filed 1-13-83; 8:45 am]

BILLING CODE 4210-27-M

DEPARTMENT OF THE TREASURY

Internal Revenue Service

26 CFR Part 1

[T.D. 7869]

Income Tax; Taxable Years Beginning After December 31, 1953; Deep Discount Industrial Development Bonds

AGENCY: Internal Revenue Service, Treasury.

ACTION: Final regulations.

SUMMARY: This document provides final regulations relating to the determination of the amount of proceeds of issues of industrial development bonds sold by the issuer at a substantial discount. This amount is used in determining whether "substantially all" of the bond proceeds are used for an "exempt purpose" described in section 103(b)(4), (5), (6), or (7) of the Internal Revenue Code of 1954, and for purposes of the "major portion" test in Code section 103(b)(2). These regulations provide necessary guidance to issuers, holders, and recipients of the proceeds of industrial development bonds of the type described above.

DATE: The regulations are effective for obligations sold after June 4, 1982.

FOR FURTHER INFORMATION CONTACT: Diane L. Kroupa of the Legislation and Regulations Division, Office of the Chief Counsel, Internal Revenue Service, 1111 Constitution Avenue, N.W., Washington, D.C. 20224, Attention: CC:LR:T, 202-566-3459.

SUPPLEMENTARY INFORMATION:

Background

On June 9, 1982, the **Federal Register** published proposed amendments (47 FR 25026) to the Income Tax Regulations (26 CFR Part 1) under section 103(b) of the Internal Revenue Code of 1954. The proposed regulations relate to deep discount industrial development bonds.

Interest on an industrial development bond is excluded from gross income only if substantially all of the proceeds of the issue (of which it is a part) are used for one or more statutorily designated purposes. The regulations determine the amount of proceeds of an issue of deep discount industrial development bonds. Such bonds are sold either with no interest coupons payable at least annually or with coupon interest rates significantly lower than on comparable bonds sold at par. The regulations make it clear that included in the proceeds of an issue is an additional amount equal to the interest the payment of which is deferred because the issue does not provide for annual payments equal to the interest accruing on the outstanding bonds based on their yield. No written comments were received. No request for a public hearing was made. Those amendments are adopted as revised by this Treasury decision.

Explanation of Provisions

The final regulations are essentially the same as proposed with minor clarifications. New § 1.103-8(a)(8), Example (6) makes clear that bonds sold with a "put" option (*i.e.*, the right to tender the bond under specified conditions for a specified amount, usually its face amount) are treated the same as other bonds for purposes of determining any imputed proceeds of the issue. Thus, no part of the purchase price of an obligation is allocated to the "put" for purposes of determining the imputed proceeds.

Regulatory Flexibility Act

The Internal Revenue Service has concluded that the regulations promulgated are interpretative and that the notice and public procedure requirements of 5 U.S.C. 553 do not apply. Accordingly, these regulations do not constitute regulations subject to the Regulatory Flexibility Act (5 U.S.C. Chapter 6).

Non-Application of Executive Order 12291

The Treasury Department has determined that this final regulation is not subject to review under Executive Order 12291 or the Treasury or OMB implementation of the Order dated April 28, 1982.

Drafting Information

The principal author of these proposed regulations is Diane L. Kroupa of the Legislation and Regulations Division of the Office of Chief Counsel, Internal Revenue Service. However, personnel from other offices of the Internal Revenue Service and Treasury Department participated in developing the regulations, both on matters of substance and style.

List of Subjects in 26 CFR 1.61-1—1.281-4

Income taxes, Taxable income, Deductions, Exemptions, Industrial development bonds.

Adoption of amendments to the regulations

Accordingly, 26 CFR Part 1 is amended as follows:

PART 1—INCOME TAX; TAXABLE YEARS BEGINNING AFTER DECEMBER 31, 1953

Paragraph 1. Section 1.103-7(b)(1) is amended by adding a sentence at the end thereof to read as follows:

§ 1.103-7 Industrial development bonds.

* * * * *

(b) *Industrial development bonds*—(1) *Definition.* * * * See § 1.103-8(a)(6) to determine the amount of proceeds of an issue for which the amount payable during each annual period over the term of the issue is less than the amount of interest accruing thereon in such period, *e.g.*, in the case of an issue sold by the issuer for less than its face amount.

* * * * *

Par. 2. Section 1.103-8 is amended by striking the phrases "103 (b) (8)" and "103 (b)(10)" each place they appear as a reference or part of a reference and inserting in lieu thereof "103 (b) (13)", by striking "(G)" where it appears in the first sentence of paragraph (a)(1)(i) and in the first sentence of paragraph (a)(4) and inserting in lieu thereof "(J)", by adding a new sentence at the end of paragraph (a)(1)(i), by revising paragraph (a)(6), and by adding new paragraphs (a)(7) and (8). These revised and added provisions read as follows:

§ 1.103-8 Interest on bonds to finance certain exempt facilities.

(a) *In general*—(1) *General rule.* * * * In the event the amount payable with respect to an issue during each annual period over its term is less than the amount of interest accruing thereon in such period, *e.g.*, in the case of an issue sold by the issuer for less than its face amount, see paragraph (a)(6) of this section to determine the amount of proceeds of the issue.

* * * * *

(6) *Deep discount obligations.* (i) Except as otherwise provided in paragraph (a)(7) of this section, the proceeds of any issue of obligations sold by the issuer after June 4, 1982, shall include any imputed proceeds of the issue. The imputed proceeds of an issue equal the sum of the amounts of imputed proceeds for each annual period (hereinafter, bond year) over the term of the issue.

(ii) The amount of imputed proceeds for a bond year equals—

(*a*) The sum of the amounts of interest that will accrue with respect to each obligation that is part of the issue in such year, reduced (but not below zero) by

(*b*) The sum of the amounts of principal and interest that become payable with respect to the issue in that bond year.

(iii) Interest will be deemed to accrue with respect to an obligation on an amount that, as of the commencement of that year, is equal to the sum of—

(*a*) The purchase price (as defined in § 1.103-13(d)(2)) allocable to the obligation and

(*b*) The aggregate of the amounts of interest accruing in each prior bond year with respect to the obligation, reduced by all amounts that became payable with respect to the obligation in prior bond years. Any amount that becomes payable during the 30 day period following any bond year will be deemed to have become payable in such bond year. Thus, to the extent interest on an obligation accruing during a bond year does not become payable within 30 days from the end of such year, it is treated as reinvested under the same terms as the obligation. For purposes of this subparagraph (6), the rate at which such interest accrues is equal to the yield of the obligation. Yield is computed in the same manner as set forth in § 1.103-13(c)(1)(ii) for computing yield on governmental obligations (assuming annual compounding of interest). Such computations shall be made without regard to optional call dates.

(7) *Deep discount obligations; special rules.* (i) There are no imputed proceeds with respect to an obligation if—

(*a*) The obligation does not have a stated interest rate (determinable at the date of issue) that increases over the term of the obligation, and

(*b*) The purchase price of the obligation is at least 95 percent of its face amount.

At the option of the issuer, any obligation described in the preceding sentence may be disregarded in computing the imputed proceeds of the issue. Payments with respect to such obligations are also disregarded in determining the amount payable with respect to the issue in that bond year. If each obligation which is part of an issue is described in this subdivision (i), there are no imputed proceeds with respect to the issue.

(ii) If the actual rate at which interest is to accrue over the term of an obligation is indeterminable at the date of issue then, in computing the yield of the obligation for purposes of this paragraph, such rate shall be determined as if the conditions as of the date of issue will not change over the term of the obligation. Thus, for example, if interest on an obligation is to be paid semiannually at a rate equal to 80 percent of the yield on six month Treasury bills at the most recent public sale immediately prior to the corresponding interest payment date and the yield on six month Treasury bills sold immediately preceding the issue date is 10 percent, then the six month Treasury bill rate is deemed to be a constant 10 percent for purposes of determining the amount of imputed proceeds of the issue. Therefore, all interest payments on the obligation would be deemed to be made at a rate of 8 percent.

(8) *Examples.* The principles of this paragraph may be illustrated by the following examples:

Example (1). State A issues its bonds and plans to use substantially all of the proceeds from such bond issue to purchase land and build a facility which will be used for one of the purposes described in section 103(b)(4) and this section. The arrangement provides that (1) A will issue bonds with a face amount of $21 million and with all accrued interest payable annually, the proceeds of which (after deducting bond election costs, costs of publishing notices, attorneys' fees, printing costs, trustees' fees for fiscal agents, and similar expenses) will be $20 million; (2) $18 million of the proceeds of the bond issue will be used to purchase land and to construct such facility; (3) $2 million of the proceeds will be used for an unrelated facility which will be used by X, a nonexempt person, in a separate trade or business and for a purpose not described in section 103(b)(4) or (5); (4) X will rent both facilities for 20 years at an annual rental equal to the amount necessary to amortize the principal and pay the interest annually on the outstanding bonds; and (5) such payments by X and the facilities will be the security for the bonds. On these facts, substantially all of the proceeds will be used in connection with an exempt facility described in section 103(b)(4) and this section. Accordingly, section 103(b)(1) does not apply to the bonds unless such bonds are thereafter held by a person who is a substantial user of the facilities or a related person within the meaning of section 103(b)(13) and § 1.103-11.

Example (2). On July 1, 1982, State B sells an issue of its obligations to an underwriter in anticipation of a public offering. The initial offering price is $18,627,639.69 of which $17,000,000 is to be used to construct a pollution control facility described in section 103(b)(4)(F). X Corporation, a nonexempt person, is to use the facility and, in exchange, is obligated to pay an amount equal to the face amount of the issue when it becomes due. The obligations are issued on August 1, 1982. The face amount of the issue is $30,000,000. The issue is a term issue with all obligations maturing on August 1, 1987. The issue bears no stated rate of interest; there are no interest coupons on the obligations. The bonds are industrial development bonds with a yield (based upon annual compounding) of ten percent. Based on these facts, the amount of imputed proceeds with respect to the issue is determined as follows:

Date	Purchase price plus accumulated interest	Interest	Imputed proceeds
Aug. 1, 1983	$18,627,639.69	$1,862,763.97	$1,862,763.97
Aug. 1, 1984	20,490,403.68	2,049,040.37	2,049,040.37
Aug. 1, 1985	22,539,444.03	2,253,944.40	2,253,944.40
Aug. 1, 1986	24,793,388.43	2,479,339.84	2,479,338.84
Aug. 1, 1987	27,272,727.27	2,727,272.73	0
Total imputed proceeds			8,645,087.58

Therefore, proceeds of the issue equal $27,272,727.27 less issuance costs. Substantially all of the bond proceeds are not used to provide an exempt facility, and section 103(b)(1) applies to the issue.

Example (3). The facts are the same as example (2) except that the issue has a face amount and purchase price of $18,500,000. The issue also provides for one payment in addition to the redemption payment, in the amount of $10,267,668 payable on or after August 1, 1986, one year before maturity. Section 103(b)(1) applies to the issue.

Example (4). On July 1, 1982, City E sells an issue of industrial development bonds to provide for a convention facility, as described in section 103(b)(4)(C). Assume that the bonds are issued on that date as well. The issue has a face amount of $15,240,000 and a purchase price of $11,929,382.53. The estimated cost of the facility is $11,000,000. The bonds are "zero coupon" bonds, *i.e.*, there are no interest coupons. Each series is initially offered for less than 95 percent of its face amount. The issue matures serially over a five year period, with each series being allocated a part of the purchase price of the issue. The following chart indicates the purchase price and yield for each series and debt service for the issue:

[Amount allocable to each series]

Date	1983 series at 8 percent	1984 series at 8.5 percent	1985 series at 8.75 percent	1986 series at 9.25 percent	1987 series at 9.75 percent	Interest accruing on issue*	Amount due	Imputed proceeds
July 1, 1983	2,939,814.82	2,697,020.54	2,468,629.60	2,228,732.51	1,595,185.06			0
	235,185.18	229,246.75	216,005.09	206,157.76	155,530.54	1,042,125.32	3,175,000	
July 1, 1984		2,926,267.29	2,684,634.69	2,434,890.27	1,750,715.60			0
		248,732.71	234,905.54	225,227.35	170,694.77	879,560.37	3,175,000	
July 1, 1985			2,919,540.23	2,660,117.62	1,921,410.37			0
			255,459.77	246,060.88	187,337.51	688,858.16	3,175,000	
July 1, 1986				2,906,178.50	2,108,747.88			0
				268,821.50	205,602.92	474,424.42	3,175,000	
July 1, 1987					2,314,350.80			0
					225,649.20	225,649.20	2,540,000	
Total							15,240,000	

*This column (interest Accruing on the issue) contains the sums of the interest that accrues on each series in each bond year. The amount of interest accruing on the issue is computed by adding the amount of interest accruing on each series outstanding for that bond year (the bottom number in the line for each bond year). The amount of interest annually accruing on each series also is added to the purchase price of the series to determine the amount of interest accruing in subsequent years, inasmuch as there are no payments with respect to the outstanding series prior to maturity. Thus, the "principal" amount, of the top of the two numbers given in such line for each bond year, is the purchase price allocable to that series plus the amount of interest that accrued on that series in prior years.

There are no imputed proceeds because the amount payable on the issue in each bond year exceeds the total amount of interest accruing on the issue during such bond year. Section 103(b)(1) does not apply to the bonds unless such bonds are held by a person who is a substantial user of the facility or a related person within the meaning of section 103(b)(13) and § 1.103–11.

Example (5). On July 1, 1982, City C issues industrial development bonds in the face amount of $30 million to construct a sports facility described in section 103(b)(4)(B) to be leased to D, a nonexempt person, with payments on the bonds secured by the lease. C receives $30 million in exchange for the bonds which will be used to provide the facility. The bonds mature on July 1, 2002. Each bond provides for an annual interest payment equal to ten percent of the face amount of the bond, with the last payment thereon (on July 1, 2002) including a return of the principal amount of the bond. The proceeds of the issue are $30 million. Section 103(b)(1) does not apply to the bonds unless such bonds are held by a person who is a substantial user of the facility or a related person within the meaning of section 103(b)(13) and § 1.103–11.

Example (6). The facts are the same as example (5) except that each bond provides for an annual interest payment equal to nine percent of its face amount and is sold with the option to tender the bond to D for purchase at par 5 years after the sale date of July 1, 1982 (*i.e.*, the bonds are sold with a "put" option). Such bonds also provide a put option annually thereafter. There are no imputed proceeds (without regard to § 1.103–8(a)(7)), and the result is the same as example (5).

Example (7). On July 1, 1982, City F sells an issue of industrial development bonds in the face amount of $20 million to acquire a parking facility as described in section 103(b)(4)(D). The estimated cost of the facility is $17,800,000. The issue is issued on the same date and will mature serially over the following ten years. Each bond that is part of the issue bears annual interest coupons, each of which is in an amount equal to ten percent of the face amount of the bond. Each maturity has a face amount of $2,000,000. The issue is initially offered to the public for $19,700,000, allocable to each maturity as follows:

Maturity	Purchase price
July 1, 1983	$1,990,000
July 1, 1984	$1,980,000
July 1, 1985	$1,980,000
July 1, 1986	$1,970,000
July 1, 1987	$1,970,000
July 1, 1988	$1,970,000
July 1, 1989	$1,960,000
July 1, 1990	$1,960,000
July 1, 1991	$1,960,000
July 1, 1992	$1,960,000

Based on the foregoing issue proceeds equal $19,700,000 less issuance costs. There are no imputed proceeds with respect to this issue inasmuch as each bond pays interest at a constant rate in each bond year and the purchase price of each bond is at least 95 percent of its face amount. Substantially all of the proceeds are to be used to provide the exempt facility. Accordingly, section 103(b)(1) does not apply to the bonds unless such bonds are thereafter held by a person who is a substantial user of the facility or a related person within the meaning of section 103(b)(13) and § 1.103–11.

* * * * *

(Sec. 7805 of the Internal Revenue Code of 1954 (68A Stat. 917; 26 U.S.C. 7805)

Roscoe L. Egger, Jr.,

Commissioner of Internal Revenue.

Approved: December 30, 1982.

David G. Glickman,

Assistant Secretary of the Treasury.

[FR Doc. 83-1124 Filed 1-12-83; 9:56 am]

BILLING CODE 4830-01-M

26 CFR Part 7

[T.D. 7863]

Transfers Involving Foreign Corporations

Correction

In FR Doc. 82–35038 beginning on page 57489 in the issue of Monday, December 27, 1982 make the following correction to § 7.367(b)–13 in *Example (14)*:

On page 57491, middle column, paragraph (d), in the third line, "5 stock" should have read "F stock". In the sixth line, "for F and 75" should have read "for 5 and 75". In the 14th line, "(b)(2)(1)" should have read "(b)(2)(i)".

BILLING CODE 1505-01-M

26 CFR Part 51

[T.D. 7871]

Excise Tax Regulations Under the Crude Oil Windfall Profit Tax Act of 1980; Exempt Royalty Oil

AGENCY: Internal Revenue Service, Treasury.

ACTION: Final regulations.

SUMMARY: This document contains final excise tax regulations relating to the windfall profit tax on domestic oil. Changes to the applicable tax law were made by the Economic Recovery Tax Act of 1981. The regulations relate to exempt royalty oil and the procedure for executing an exempt royalty owner's certificate.

DATE: The regulations apply to oil removed after December 31, 1981.

FOR FURTHER INFORMATION CONTACT: David R. Haglund of the Legislation and Regulations Division, Office of the Chief Counsel, Internal Revenue Service, 1111 Constitution Avenue, N.W., Washington, D.C. 20224 (Attention: CC:LR:T) (202-566-3459)

SUPPLEMENTARY INFORMATION:

Background

On March 3, 1982, the **Federal Register** published amendments to the Temporary Excise Tax Regulations under the Crude Oil Windfall Profit Tax Act of 1980 (26 CFR Part 150) under sections 4994, 4995, and 4997, as well as proposed regulations containing the same rules. A number of comments on the proposed amendments were received, and a public hearing was held on July 13, 1982. After consideration of all comments regarding the proposed amendments, those amendments are adopted as revised by this Treasury decision. These regulations supersede the temporary regulations issued under §§ 150.4995-2 (b)(2), 150.4997-2(b), and 150.4997-2(d)(1). The effectiveness of these regulations will be evaluated on the basis of comments and information received from the public, other Governmental agencies, and offices within the Treasury Department and Internal Revenue Service.

Exempt Royalty Oil

Section 601(b) of the Economic Recovery Tax Act of 1981 (Pub. Law 97-34, 95 Stat. 336) amends sections 4991, 4994, and 4995 to provide for an exemption for a qualified royalty owner's qualified royalty production. The amendment to section 4995 also provides the Secretary with authority to prescribe regulations for adjusting the withholding of the tax imposed by section 4986 to take into account the royalty owner's exemption. A procedure for the adjustment of the withholding of the tax imposed by section 4986 is provided in the regulations.

Section 4986 of the Code imposes a tax on the windfall profit from taxable crude oil removed from the premises. Section 4991 defines taxable crude oil to include all domestic crude oil other than exempt oil. Section 601(b) of the Economic Recovery Tax Act of 1981 adds "exempt royalty oil" to the class of exempt oils under section 4991(b). Section 4994(f) defines the term "exempt royalty oil" to mean that portion of the qualified royalty owner's qualified royalty production (as defined in section 6429(d)(2)) for the quarter which does not exceed the royalty limit for such quarter. For oil removed during 1982 through 1984 the royalty limit is an average of 2 barrels per day per quarter. For oil removed after 1984 the royalty limit is an average of 3 barrels per day per quarter.

Royalty Owner's Exemption Certificate

Form 6783 is to be used by an exempt royalty owner (as defined in section 6429(d)(1)) for certifying that the entire amount of production from certain property attributable to his interest is exempt royalty oil as defined in section 4994(f). There must be reasonable belief that the production from the property to be certified plus the production from all other properties previously certified will not exceed the applicable royalty owner's exemption limit under section 4994(f)(2). The royalty owner may not certify a portion of his production from a property. For example, an exempt royalty owner with average qualified production of 1½ barrels per day from property A executes an exemption certificate with respect to that property. The royalty owner also owner also owns a royalty interest in property B with an average production level of ¾ of a barrel per day. The royalty owner may not issue an exemption certificate with respect to property B since the total production, taking into account the production from both properties A and B, is more than the average 2 barrels per day royalty limit. Neither can the royalty owner certify that ½ of a barrel from property B is exempt. The exempt royalty owner's certificate does not need to be filed with the Internal Revenue Service.

A number of commentators on the proposed regulations suggested a rule which would allow adjustments in withholding on production up to the exemption limit on a given property. However, representatives of both industry and royalty owners have indicated that it would be administratively infeasible for first purchasers to make adjustments to withholding in this manner. Such an approach would require the first purchaser to monitor on an ongoing basis the amount of oil produced by each royalty owner during each taxable period. In addition, commentators have indicated that up to 90 percent of all qualified royalty owners would be able to adjust their withholding under the procedure adopted by this Treasury decision. The rule contained in this document is a fair compromise between the administrative concerns of the withholding agents and the legitimate expectations of the royalty holders.

Effective Date of Certificate

Several commentators were concerned about the effective date of the certificate since it is likely that many royalty owners may change the properties that they are certifying during the calendar year. The regulations have been amended to treat the certificate as being effective on the day on which the purchaser receives the certificate unless the royalty owner indicates that the certificate is to be given retroactive effect. Of course, a royalty owner is not permitted to retroactively certify production which, when taken together with other certified production, would exceed the producer royalty limit amount. If the royalty owner indicates that the certificate is to have retroactive effect, the purchaser may be required (or permitted) to make adjustments to the withholding in accordance with § 51.4995-1(c).

Other Provisions

Where an exempt royalty owner's certificate has been furnished to the purchaser, the monthly statement to the producer required by § 51.4997-2(b) shall include the number of barrels of oil for the month as if the oil had been taxable crude oil. An exempt royalty owner may also request the detailed statement under § 51.4997-2(d) as if the oil removed had been taxable crude oil.

Drafting Information

The principal author of these regulations is David R. Haglund of the Legislation and Regulations Division of the Office of Chief Counsel, Internal Revenue Service. However, personnel from other offices of the Internal Revenue Service and Treasury Department participated in developing the regulations, both on matters of substance and style.

Special Analyses

The Commissioner of Internal Revenue has determined that this Treasury decision is not a major rule as defined in Executive Order 12291. Accordingly, a Regulatory Impact Analysis is not required.

Pursuant to 5 U.S.C. 605(b), the Secretary of the Treasury has certified that the requirements of the Regulatory Flexibility Act do not apply to this Treasury decision because it will not have a significant economic impact on a substantial number of small entities. The regulations affect primarily individual royalty owners and do not significantly alter the recordkeeping duties of small entities. The exemption certificate procedure is beneficial to qualified royalty owners since they do not have to wait until the end of the year to receive a refund. Purchasers are relieved of withholding the windfall profit tax where a certificate is furnished to them by a qualified royalty owner.

List of Subjects in 26 CFR Part 51

Excise tax, Petroleum, Crude Oil Windfall Profit Tax Act of 1980.

Adoption of Amendments to the Regulations

Accordingly, the proposed amendments to 26 CFR Part 51 are hereby adopted as set out below.

PART 51—[AMENDED]

Paragraph 1. Section 51.4995–2 is amended by revising the ninth sentence in paragraph (a) and by revising paragraphs (b)(2) and (d) to read as follows:

§ 51–4995–2 Producer's certificate.

(a) *In general.* * * * Forms 6458 and 6783 are provided for this purpose. * * *

(b) *Exemption Certificate.* * * *

(2) *Exempt royalty owner's certificate*—(i) *Requirements for certification.* An exempt royalty owner's certificate shall certify that the producer is a qualified royalty owner (as defined in section 6429(d)(1)) and that the entire amount of production from certain property attributable to his interest is qualified royalty production (as defined in section 6429(d)(2)). No certificate may be furnished with respect to oil if it is reasonable to believe that the number of barrels attributable to the interest to be certified, taken together with all other oil with respect to which an exempt royalty owner's cerificate has been furnished by the producer to any operator, purchaser, partnership, or other disburser, will exceed the producer's royalty limit amount (see section 4994(f)(2)). Allocation rules similar to the rules of section 6429(c) (2), (3), and (4) shall apply to the royalty limit amount. A certificate may be furnished with respect to oil removed after December 31, 1981.

(ii) *Date certificate becomes effective.* A certificate furnished pursuant to this subparagraph shall become effective beginning with the day on which the purchaser receives the certificate unless the royalty owner indicates on the certificate that the certificate is to have retroactive effect. Of course, a royalty owner is not permitted to retroactively certify production which, when taken together with other certified production, would exceed the producer royalty limit amount. If the royalty owner indicates that the certificate is to have retroactive effect, the purchaser may be required (or permitted) to make adjustments to the withholding in accordance with § 51.4995–1(c).

Par. 2. Paragraphs (b) and (d)(1) of § 51.4997–2 are revised to read as follows:

§ 51.4997–2 Certain information to be furnished by purchaser and others.

* * * * *

(b) *Monthly statement*—(1) *In general.* The purchaser shall furnish statements for each calendar month showing the total amount of windfall profit tax withheld by the purchaser from payments made to the producer, operator, partnership, or disburser with respect to oil removed during that month. If the purchaser did not withhold tax from payments to that person because of the receipt of an exemption certificate, the monthly statement need only state the reason for the absence of withholding. Where an exempt royalty owner's certificate has been furnished to the purchaser, the monthly statement to the producer shall also include the number of barrels of oil removed during the month on a property-by-property basis as if the oil had been taxable crude oil.

(2) *Time for furnishing monthly statement.* Any statement required to be furnished by a purchaser under this paragraph for any calendar month shall be furnished before the first day of the second month which begins after the close of the month to which the statement applies.

* * * * *

(d) *Detailed statement to be furnished upon request.* (1) Any producer, operator, partnership, or disburser receiving sales proceeds from which windfall profit tax has been withheld or an exempt royalty certificate has been given may furnish the person from whom the proceeds are received a written request for some or all of the following information: The quantity of oil in each tax tier and the removal price, severance tax adjustment, adjusted base price, and tax rate applicable to that quantity. The information request may specify that the information is requested either on a property-by-property basis or in the aggregate. If an exempt royalty certificate has been given to the person receiving such a request, such person shall provide the information requested as if the oil removed had been taxable crude oil. Any person receiving such a request who has made payments to the person making the request who has made payments to the person making the request shall provide the requested information for the period and at the time specified in paragraph (d)(2).

* * * * *

(Secs. 4995 and 7805 of the Internal Revenue Code of 1954 (95 Stat. 337 and 68A Stat. 917; 26 U.S.C. 4995 and 7805).)

Roscoe L. Egger, Jr.,
Commissioner of Internal Revenue.

Approved:

John E. Chapoton,
Assistant Secretary of the Treasury.

January 4, 1983.

[FR Doc. 83-1127 Filed 1-13-83; 8:45 am]
BILLING CODE 4830-01-M

DEPARTMENT OF LABOR

Office of Pension and Welfare Benefit Programs

29 CFR Part 2520

Employee Benefit Plans; Reporting and Disclosure

AGENCY: Pension and Welfare Benefit Programs Office; Labor.

ACTION: Adoption of regulation.

SUMMARY: This document contains an amendment to a regulation under the Employment Retirement Income Security Act of 1974 (ERISA or the Act) relating to certain reporting and disclosure requirements applicable to employee benefit plans. The amendment would permit a plan administrator to establish the five year period for furnishing an updated summary plan description (SPD) in connection with the distribution of the prior SPD. In addition, a plan administrator would be given additional time—210 days after the end of the plan year in which the five year period ends—to furnish the updated SPD. In any event, the first updated SPD would not be required to be furnished prior to June, 1984. The amendment contains parallel deferral provisions

with respect to the requirement that an SPD be furnished, even if there have been no amendments to the plan, every ten years after the plan first becomes subject to Part 1 of Title I of ERISA.

In the absence of these revisions, certain plan administrators may in some circumstances be required to furnish an SPD or updated SPD at intervals of less than five (or ten) years, and may also have insufficient time to adequately prepare an updated SPD.

DATE: The regulation will be effective, upon publication, as of January 1, 1980.

Information collection requirements contained in this regulation have been approved by the Office of Management and Budget under the provisions of 44 U.S.C. Chapter 35 and have been assigned OMB #1210-0039.

FOR FURTHER INFORMATION CONTACT: Ronald D. Allen, Pension and Welfare Benefit Programs, U.S. Department of Labor, Washington, D.C. (202) 523-8515 (This is not a toll-free number).

SUPPLEMENTARY INFORMATION: On March 26, 1982, the Department published in the **Federal Register** (47 FR 13007) notice of a proposal to amend Part 2520 of Chapter XXV of Title 29 of the Code of Federal Regulations by adding a new paragraph (b) to § 2520.104b-2. That section relates to, among other things, the requirements of section 104(b)(1) of ERISA that the administrator of an employee benefit plan furnish each participant covered under the plan and each beneficiary receiving benefits under the plan with a copy of the summary plan description (SPD) described in section 102(a)(1) of ERISA.[1] The proposal provided that the administrator of an employee benefit plan may furnish an updated SPD to participants covered under the plan and to beneficiaries receiving benefits under the plan no later than the later of (i) November 16, 1982, or (ii) five years after the date an SPD (or updated SPD) was last distributed to participants and beneficiaries.[2]

This amendment was proposed because the SPD updating requirements in Section 104(b)(1) are based upon five or ten year periods from the time a plan first becomes subject to Part 1 of Title I of ERISA. However, as a result of several regulatory actions by the Department following enactment of ERISA, plan administrators were permitted generally to defer compliance with the requirement to distribute the initial SPD until November 16, 1977, and in some instances, later. Consequently, absent this proposal, the requirement for timely distribution of an updated SPD might result, in a number of cases, in distribution of an updated or replacement SPD before five or ten years, respectively, have elapsed since the initial SPD was distributed. The Department concluded that such a result would be burdensome.

Upon consideration of the public comments on the notice, the Department has determined to adopt the amendment essentially as proposed, but with certain modifications, as discussed below, to accommodate some of the concerns of the commentators.

Discussion of the Comments and the Revised Regulation

Several commentators requested a further deferral of the November 16, 1982 due date for furnishing an updated SPD because that date would provide insufficient time to revise and republish an updated SPD. In light of the concerns regarding the November, 1982 date and the need, in general, for sufficient lead time to prepare an updated SPD, the Department has made several revisions. First, the regulation provides that a plan administrator will have 210 days after the end of the plan year in which the five or ten year update period ends to distribute the SPD. Second, the regulation establishes a November 16, 1983 "trigger date" for purpose of determining the earliest plan year for which an updated SPD is due. As a result, an updated SPD need not be furnished before June, 1984. Third, in order to avoid situations where a period of time would not be covered by an SPD, the regulation provides that the five and ten year periods are measured from the end of the period covered by the last distributed SPD. Specifically, the five or ten year period begins after the last date a change in the information required to be disclosed would have been reflected in the most recently distributed SPD.

The following examples illustrate the application of the regulation.

(1) If a plan administrator were to use the November 16, 1983, date for triggering the updated SPD requirement and December 31, 1983, is the end of the plan year in which November 16, 1983, occurs, the plan administrator would have until July 28, 1984, to distribute the updated SPD. However, the date from which the disclosure period for the next updated SPD begins in November 17, 1983, because the updated SPD distributed in 1984 covered the disclosure period ending on November 16, 1983.

(2) If a plan were to be established on March 1, 1985, utilizing a calendar plan year, and, pursuant to section 104(b) of the Act, the initial SPD were distributed on June 29, 1985 (120 days after the plan becomes subject to the Act), the plan administrator would be required to distribute an updated SPD on or before July 29, 1991. This document would include a description of any changes, required to be disclosed, which occurred during the five year period beginning on March 2, 1985, and ending on March 1, 1990.

(i) If no changes occurred during this five year period, the ten year updated SPD would reflect any changes which occurred during the ten year period beginning March 2, 1985, and ending on March 1, 1995. The plan administrator would be required to distribute the ten year updated SPD on or before July 28, 1996.

(ii) If, however, a change occurred on January 1, 1987, and the plan administrator distributed an updated SPD on September 30, 1987, which correctly reflected the plan as of March 1, 1987, the new five year update period would begin as of March 2, 1987. The plan administrator would be required to distribute the next five year updated SPD on or before July 29, 1993, which would include a description of any changes, required to be disclosed, occurring during the five year period beginning on March 2, 1987, and ending on March 1, 1992.

A number of commentators raised questions concerning the format and content of the SPD, the events that trigger the requirement to furnish an SPD, and suggested alternatives to the statutory requirements. These matters are beyond the scope of this regulation

[1] Section 104(b)(1) provides, in part, that each such participant and beneficiary be furnished with a copy of the SPD not later than (1) 90 days after he becomes a participant (or, in the case of a beneficiary, 90 days after he first receives benefits under the plan), or (2) 120 days after the plan becomes subject to Part 1 of Title I of ERISA. Section 104(b)(1) also provides that:

The administrator shall furnish to each participant, and each beneficiary receiving benefits under the plan, every fifth year after the plan becomes subject to this part an updated summary plan description described in section 102 which integrates all plan amendments made within such five year period, except that in a case where no amendments have been made to a plan during such five-year period this sentence shall not apply. Notwithstanding the foregoing, the administrator shall furnish to each participant, and to each beneficiary receiving benefits under the plan, the summary plan description described in section 102 every tenth year after the plan becomes subject to this part.

[2] In the case of a plan to which no amendments were made between the date an SPD was last distributed to participants and beneficiaries and the later of November 16, 1982, or five years after such prior distribution, the administrator would have been required to furnish to each participant and beneficiary an SPD by the later of November 16, 1987, or ten years after the date an SPD (or updated SPD) was last distributed to participants and beneficiaries.

but are under active consideration by the Department, and the Department contemplates issuing, in the near future, a regulatory alternative that will resolve many of these issues.

Executive Order 12291 Statement

Pursuant to the requirements of Executive Order 12291, it is the Department's determination that this regulation is not a "major rule" as that term is used in the Order because it does not appear that the regulation will result in: an annual effect on the economy of $100 million or more; a major increase in costs or prices for consumers, individual industries, government agencies, or geographic regions; or significant adverse effects on competition, employment, investment, productivity, innovation, or on the ability of United States-based enterprises to compete with foreign-based enterprises in domestic or export markets. Because the regulation merely defers the date on which updated SPDs would otherwise be required to be distributed and filed under ERISA, the regulation should have no adverse impact on employee benefit plans required to prepare, distribute and file updated SPDs. In fact, because plans will be afforded additional time by the regulation within which to prepare, distribute and file updated SPDs, the regulation should tend to eliminate administrative burdens and costs that might otherwise be incurred by plans in having to comply with the statutory updated SPD requirements within an abbreviated period of time.

Regulatory Flexibility Act Statement

The undersigned has certified that this regulation will not have a significant economic impact on a substantial number of small entities. Therefore, no regulatory flexibility analysis is required in connection with this regulation.

The conclusion that no analysis is necessary is based on the following determinations. Small entities were defined, for these purposes, as employee benefit plans covering fewer than 100 persons. While some large employers may have small plans, in general, most small plans are maintained by small businesses. Therefore, assessing the regulation's impact on small plans is an appropriate substitute for evaluating its effects on small entities. Based on this definition, 90 percent of the pension plans (covering 10 percent of all participants) and 99 percent of the welfare plans (covering 40 percent of all participants) can be categorized as small entities.

This regulation permits administrators of employee benefit plans to defer preparation, distribution and filing of updated SPDs from fiscal year (FY) 1982 and FY 1983 to FY 1984 (i.e., the earliest compliance date for the initial updated SPD under the regulation is June, 1984); although, it is anticipated that certain plans will nonetheless elect to comply with the updated SPD requirements during FY 1983. It is estimated that the effect of the regulation will be to shift over $142 million in SPD preparation and distribution costs from FY 1982 and FY 1983 to FY 1984. Any small plans established in 1978 or earlier that have not otherwise prepared, distributed and filed updated SPDs may be affected by the regulation; and, thus permitted to shift SPD preparation and distribution costs to FY 1984. To the extent there is a change in costs to small plans as a result of the deferral provided by the regulation, a cost savings should result from plans not having to comply with the statutory updated SPD requirements within an abbreviated period of time.

The regulation permits small plans to take advantage of the deferral on precisely the same basis as large plans. Accordingly, small plans should not find it more or less difficult to take advantage of the deferrals provided by the regulation.

Paperwork Reduction Act Statement

This regulation imposes no additional paperwork on employee benefit plans required to prepare, distribute and file updated SPDs under ERISA. The regulation merely permits administrators of employee benefit plans to defer the date by which the plans would otherwise be required to comply with the statutory requirements to distribute to participants and file with the Department updated SPDs. It is anticipated that the immediate effect of this deferral will be a shift, by the majority of plans in existence in 1975 and plans established in 1976 through 1978, of burden hours attributable to compliance with the updated SPD requirements from FY 1982 and FY 1983 to FY 1984. In this regard, it is estimated that of the plans in existence in 1975 and the plans established in 1976 through 1978 that have not otherwise prepared, distributed and filed updated SPDs, seventy-five percent will elect to defer compliance until FY 1984 as provided in the regulation. The remaining twenty-five percent of the impacted plans, it is estimated, will elect to comply, for employee-relations or other reasons, in FY 1983 despite the deferral provided by the regulation. Based on the foregoing, it is estimated that the burden hours attributable to compliance with the updated SPD requirements will be reduced by 3,167,279 hours for FY 1982 and by 3,959,053 hours for FY 1983, resulting in a shift of approximately 7,126,332 hours to FY 1984.

Authority

The regulation set forth below is adopted pursuant to the authority contained in sections 104(a), 110(a), and 505 of ERISA (29 U.S.C. 1024(a), 1030(a), and 1135). The regulation is made effective on publication, pursuant to 5 U.S.C. 553(d)(1), because it is a rule that recognizes an exemption or relieves a restriction.

Information collection requirements contained in this regulation have been approved by the Office of Management and Budget under the provisions of 44 U.S.C. Chapter 35 and have been assigned OMB #1210-0039.

PART 2520—RULES AND REGULATIONS FOR REPORTING AND DISCLOSURE

In view of the foregoing, § 2520.104b-2 of Chapter XXV of Title 29 of the Code of Federal Regulations is amended by adding in the appropriate place a new paragraph (b) to read as follows:

§ 2520.104b-2 Summary plan description

* * * * *

(b) *Periods for furnishing updated summary plan description.* (1) For purposes of the requirement to furnish the updated summary plan description to each participant and each beneficiary receiving benefits under the plan (other than beneficiaries receiving benefits under a welfare plan) required by section 104(b)(1) of the Act, the administrator of an employee benefit plan shall furnish such updated summary plan description no later than 210 days following the end of the plan year within which occurs the later of—

(i) November 16, 1983, or

(ii) Five years after the last date a change in the information required to be disclosed by section 102 or 29 CFR 2520.102-3 would have been reflected in the most recently distributed summary plan description (or updated summary plan description), as described in section 102 of the Act.

(2) In the case of a plan to which no amendments have been made between the end of the time period covered by the last distributed summary plan description (or updated summary plan description), described in section 102 of the Act, and the next occurring applicable date described in paragraph (b)(1)(i) or (ii) of this section, for purposes of the requirement to furnish the updated summary plan description to each participant, and to each beneficiary receiving benefits under the

plan (other than beneficiaries receiving benefits under a welfare plan), required by section 104(b)(1) of the Act, the administrator of an employee benefit plan shall furnish such updated summary plan description no later than 210 days following the end of the plan year within which occurs the later of—

(i) November 16, 1987, or

(ii) Ten years after the last date a change in the information required to be disclosed by section 102 or 29 CFR 2520.102-3 would have been reflected in the most recently distributed summary plan description (or updated summary plan description), as described in section 102 of the Act.

Signed at Washington, D.C., this 10th day of January, 1983.

Jeffrey N. Clayton,

Administrator, Pension and Welfare Benefit Programs, Labor-Management Services Administration, Department of Labor.

[FR Doc. 83-1002 Filed 1-13-83; 8:45 am]

BILLING CODE 4510-29-M

PENSION BENEFIT GUARANTY CORPORATION

29 CFR Part 2619

Valuation of Plan Benefits in Non-Multiemployer Plans; Amendment Adopting Additional PBGC Rates

AGENCY: Pension Benefit Guaranty Corporation.

ACTION: Final rule.

SUMMARY: This amendment to the regulation on Valuation of Plan Benefits in Non-Multiemployer Plans contains the interest rates and factors for the period beginning February 1, 1983. The interest rates and factors are to be used to value benefits provided under terminating non-multiemployer pension plans covered by Title IV of the Employee Retirement Income Security Act of 1974.

The valuation of plan benefits is necessary because, under section 4041 of the Act, the Pension Benefit Guaranty Corporation and the plan administrator must determine whether a terminating pension plan has sufficient assets to pay all benefits under the plan that are guaranteed by the PBGC under the Title IV plan termination insurance program.

The interest rates and factors set forth in Appendix B to Part 2619 are adjusted periodically to reflect changes in financial and annuity markets. This amendment adopts the rates and factors applicable to plans that terminate on or after February 1, 1983, and will enable the PBGC and plan administrators to value the benefits provided under those plans. These rates and factors will remain in effect until PBGC publishes an amendment revising them.

EFFECTIVE DATE: February 1, 1983.

FOR FURTHER INFORMATION CONTACT: Mrs. Renae R. Hubbard, Special Counsel, Office of the General Counsel, Pension Benefit Guaranty Corporation, 2020 K Street, N.W., Washington, D.C. 20006, 202-254-4895 (not a toll-free number).

SUPPLEMENTARY INFORMATION: On January 28, 1981, the Pension Benefit Guaranty Corporation ("PBGC") issued a final regulation (46 FR 9492) establishing the methods for valuing plan benefits of terminating non-multiemployer plans covered under Title IV of the Employee Retirement Income Security Act of 1974, 29 U.S.C. §§ 1001 *et seq.* (1976), as amended by the Multiemployer Pension Plan Amendments Act of 1980, Pub. L. 96-364, 94 Stat. 1208 (the "Act"). That regulation, 29 CFR Part 2610, was recodified as 29 CFR Part 2619 on June 24, 1981, effective June 29, 1981 (46 FR 32574). Appendix B to the regulation, which contains formulas for valuing different types of benefits, sets forth the interest rates and factors that are to be used in the formulas. Because these rates and factors are intended to reflect current conditions in the financial and annuity markets, it is necessary to update the rates and factors periodically.

When published as part of the final regulation, Appendix B contained interest rates and factors for valuing benefits in plans that terminated during the period from September 2, 1974 through April 1, 1981. Subsequently, the PBGC adopted additional rates and factors for valuing benefits in plans that terminated on or after April 1, 1981 and before January 1, 1983 (46 FR 26765, 46 FR 31257, 46 FR 36693, 46 FR 45761, 46 FR 50788, 46 FR 55958, 46 FR 61084, 47 FR 2313, 47 FR 6426, 47 FR 20761, 47 FR 30757, 47 FR 40541, 47 FR 46273, 47 FR 51393).

On December 15, 1982, the PBGC published rates for plans that terminate on or after January 1, 1983 (47 FR 56134). At this time, changes in the financial and annuity markets require a decrease in the rates used for valuing benefits. Accordingly, this amendment adds to Appendix B a new set of interest rates and factors for plans that terminate on or after February 1, 1983. This interest rate and these factors will remain in effect until such time as PBGC publishes another amendment concerning the rates.

Generally, the rates will be in effect for at least one month. Any change in the rates will be published in the **Federal Register**, normally by the 15th of the month preceding the effective date of the new rates.

The PBGC has determined that notice and public comment on this amendment are impracticable and contrary to the public interest. This determination is based on the need to determine and issue new interest rates and factors promptly so that the rates can reflect, as accurately as possible, current market conditions. The PBGC has found that the public interest is best served by issuing the rates and factors on a prospective basis so that plans may be able to calculate the value of plan benefits before submitting a notice of intent to terminate. Also, plans will be able to predict employer liability more accurately prior to plan termination. Moreover, because of the need to provide immediate guidance for the valuation of benefits under plans that will terminate on or after February 1, 1983, and because no adjustment by ongoing plans is required by this amendment, the PBGC finds that good cause exists for making the rates set forth in this amendment to the final regulation effective less than 30 days after publication.

The PBGC has determined that this is not a "major rule" under the criteria set forth in Executive Order 12291, February 17, 1981, because it will not result in an annual effect on the economy of $100 million or more, a major increase in costs for consumers or individual industries, or significant adverse effects on competition, employment, investment, productivity, or innovation.

List of Subjects in 29 CFR Part 2619

Employee benefit plans, Pension insurance, and Pensions.

PART 2619—[AMENDED]

In consideration of the foregoing, Part 2619 of Chapter XXVI, Title 29, Code of Federal Regulations, is hereby amended as follows:

1. The authority citation for Part 2619 reads as follows:

Authority: Secs. 4002(b)(3), 4041(b), 4044, and 4062(b)(1)(A), Pub. L. 93-406, 88 Stat. 1004, 1020, 1025, 1029 (1974) as amended by Secs. 403(1), 403(d), and 402(a)(7), Pub. L. 96-364, 94 Stat. 1302, 1301, and 1299 (1980) (29 U.S.C. 1302, 1341, 1344, 1362).

2. In Appendix B, the introductory text is reprinted, Rate Set 39 is revised, and Rate Set 40 is added to read as follows:

Appendix B—Interest Rates and Quantities Used to Value Immediate and Deferred Annuities

In the table that follows, the immediate annuity rate is used to value immediate annuities, to compute the quantity "G_r" for deferred annuities and to value both portions of a refund annuity. An interest rate of 5% shall be used to value death benefits other than the decreasing them insurance portion of a refund annuity. For deferred annuities, k_1, k_2, k_3, n_1, and n_2 are defined in § 2619.45.

Rate set	For plans with a valuation date		Immediate annuity rate	Deferred Annuities				
	On or After	Before		k_1	k_2	k_3	n_1	n_2
*	*	*	*	*		*		*
39	1-1-83	2-1-83	10.00	1.0925	1.0800	1.0400	7	8
40	2-1-83	.....	9.75	1.0900	1.0775	1.0400	7	8

Edwin M. Jones

Executive Director, Pension Benefit Guaranty Corporation.

[FR Doc. 83-941 Filed 1-13-83; 8:45 am]

BILLING CODE 7708-01-M

VETERANS ADMINISTRATION

38 CFR Part 36

Decrease in Maximum Permissible Interest Rates on Guaranteed Manufactured Home Loans

AGENCY: Veterans Administration.

ACTION: Final regulations.

SUMMARY: The VA (Veterans Administration) is decreasing the maximum interest rates on guaranteed manufactured home loans. These decreases in interest rates apply to manufactured home unit loans, lot loans, and combination manufactured home unit and lot loans. These decreases in interest rates are possible because of recent improvements in the availability of funds in various credit markets. The decreases in the interest rates will allow eligible veterans to purchase manufactured home units with or without lots at a lower monthly cost.

EFFECTIVE DATE: January 10, 1983.

FOR FURTHER INFORMATION CONTACT: Mr. George D. Moerman, Loan Guaranty Service (264), Department of Veterans Benefits, Veterans Administration, 810 Vermont Ave., NW., Washington, DC 20420 (202-389-3042).

SUPPLEMENTARY INFORMATION: The Administrator is required by section 1819(f), title 38, United States Code, to establish maximum interest rates for manufactured home loans graranteed by the VA as he finds the manufactured home loan capital markets demand. The Administrator's statutory authority to establish interest rates has been delegated by 38 CFR 2.6 to the Chief Benefits Director, Deputy Chief Benefits Director, or person authorized to act for them. Recent market indicators—including the prime rate, the general decrease in interest rates charged on conventional manufactured home loans, and the decrease of other short-term and long-term interest rates—have shown that the manufactured home capital markets have improved. It is now possible to decrease the interest rates on manufactured home loans while still assuring an adequate supply of funds from lenders and investors to make these types of VA loans. The lower interest rates for manufactured home loans, lot loans, and combination manufactured home and lot loans should assist more veterans in the purchase of manufactured home housing because of the decrease in the monthly loan payments for principal and interest.

Technical amendments have also been made to sections 36.4212 and 36.4214 to change the term "mobile home" to "manufactured home" as required by section 406 of Pub. L. 97-306, 96 Stat 1429, enacted October 14, 1982.

Regulatory Flexibility Act Executive Order 12291

For the reasons discussed in the May 7, 1981 **Federal Register**, (46 FR 25443), it has previously been determined that final regulations of this type which change the maximum interest rates for loans guaranteed, insured, or made pursuant to chapter 37 of title 38, United States Code, are not subject to the provisions of the Regulatory Flexibility Act, 5 U.S.C. 601-612.

These regulatory amendments have also been reviewed under the provisions of Executive Order 12291. The VA finds that they are not "major rules" as defined in that Order. The existing process of informal consultation among representatives within the Executive Office of the President, OMB, the VA and the Department of Housing and Urban Development has been determined to be adequate to satisfy the intent of this Executive Order for this category of regulations. This alternative consultation process permits timely rate adjustments with minimal risk of premature disclosure. In summary, this consultation process will fulfill the intent of the Executive Order while still permitting compliance with statutory responsibilities for timely rate adjustments and a stable flow of mortgage credit at rates consistent with the market.

These final regulations come within exceptions to the general VA policy of prior publication of proposed rules as contained in 38 CFR 1.12. The publication of notice of a regulatory change in the VA maximum interest rates for VA guaranteed manufactured home loans would deny veterans the benefit of lower interest rates pending the final rule publication date which would necessarily be more than 30 days after publication in proposed form. Accordingly, it has been determined that publication of proposed regulations prior to publication of final regulations is impracticable, unnecessary, and contrary to the public interest.

(Catalog of Federal Domestic Assistance Catalog number 64.119).

List of Subjects in 38 CFR Part 36

Condominiums, Handicapped, Housing, Loan programs—housing and community development, Manufactured homes, Veterans, Veterans Administration.

These regulations are adopted under authority granted to the Administrator by sections 210(c), 1819 (f) and (g) of title 38, United States Code and delegated to the undersigned by 38 CFR 2.6(b)(3). The regulations are clearly within that statutory authority and are consistent with Congressional intent.

These decreases are accomplished by amending §§ 36.4212(a) (1), (2), and (3), Title 38, Code of Federal Regulations.

Approved: January 10, 1983.

By direction of the Administrator.

Dorothy L. Starbuck,

Chief Benefits Director.

PART 36—[AMENDED]

The Veterans Administration is amending 38 CFR Part 36 as follows:

1. In § 36.4212, paragraph (a) is revised as follows:

§ 36.4212 Interest rates and late charges.

(a) The interest rate charged the borrower on a loan guaranteed or insured pursuant to 38 U.S.C. 1819 may not exceed the following maxima except on loans guaranteed or insured pursuant to guaranty or insurance commitments issued by the Veterans Administration prior to the respective effective date: (38 U.S.C. 1819(f))

(1) Effective January 10, 1983, 14 percent simple interest per annum for a loan which finances the purchase of a manufactured home unit only.

(2) Effective January 10, 1983, 13½ percent simple interest per annum for a loan which finances the purchase of a lot only and the cost of necessary site preparation, if any.

(3) Effective January 10, 1983, 13½ percent simple interest per annum for a loan which will finance the simultaneous acquisition of a manufactured home and a lot and/or the site preparation necessary to make a lot acceptable as the site for the manufactured home.

* * * * *

§ 36.4214 [Amended]

2. Section 36.4214 is amended by removing the words "mobile home" and inserting the words "manufactured home."

[FR Doc. 83-1134 Filed 1-13-83; 8:45 am]

BILLING CODE 8320-01-M

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 52

[A-9-FRL 2162-6]

Approval and Promulgation of Implementation Plans; Arizona Plan Revision: Sulfur Oxides Control Strategy and Regulations for Existing Nonferrous Smelters

AGENCY: Environmental Protection Agency (EPA).

ACTION: Final rulemaking.

SUMMARY: On November 30, 1981, EPA published a notice of proposed rulemaking concerning the Arizona Multipoint Rollback (MPR) State Implementation Plan (SIP) submittal. That notice proposed approval of: (1) "Good Engineering Practice" stack height demonstration for ASARCO's 1000 foot stack located at Hayden, Arizona; (2) no action on Arizona Department of Health Services (ADHS) Rule R9-3-309, "Finding of no violation" and (3) no action, conditional approval or approval of various parts of R9-3-515, "Standards of performance for existing primary copper smelters." Today's notice acknowledges receipt of the June 3, 1982 Arizona SIP revision submittal which was intended, in part, to satisfy the conditional approval items proposed by EPA on November 30, 1982; takes final action under the Clean Air Act to approve the Arizona MPR SIP revision; responds to comments received during the public comment period, denies the Environmental Defense Fund's petition for rulemaking and addresses other related issues identified in the proposed rulemaking or since the proposed rulemaking. This notice also takes final action on minor revisions to the SIP submitted on July 17, 1980 and July 13, 1981.

DATE: This action is effective February 14, 1983.

ADDRESSES: Copies of the revisions and the technical support documents are available for public inspection during normal business hours at the EPA Region 9 Office and at the following locations.

Library, The Office of the Federal Register, 1100 L Street NW., Rm. 8401, Washington, D.C. 20408

Public Information Reference Unit, Environmental Protection Agency, Library, 401 M Street SW., Rm. 2404, Washington, D.C. 20460.

FOR FURTHER INFORMATION CONTACT: David P. Howekamp, Acting Director, Air Management Division, Region 9, Environmental Protection Agency, 215 Fremont Street, San Francisco, CA 94105, Attn: Larry Bowerman, (415) 974-8058.

SUPPLEMENTARY INFORMATION:

Background

On September 20, 1979, revisions to the Arizona SIP were submitted to EPA by the Governor's designee. This submittal was subsequently amended on January 14 and September 10, 1980. On November 30, 1981, EPA proposed approval, no action or conditional approval on various parts of the September 20, 1979 submittal, as amended. A detailed discussion of the SIP revisions is contained in the Notice of Proposed Rulemaking (46 FR 58098) and should be used as a reference in reviewing today's notice.

Supplemental Revisions

On June 3, 1982, ADHS submitted supplemental SIP revisions which were intended, in part, to fulfill the conditional approval requirements identified in the Notice of Proposed Rulemaking. In addition, minor revisions to the SIP were made on July 17, 1980 and July 13, 1981, which were not discussed in the proposal notice. A detailed evaluation of these revisions can be found in (1) "Evaluation of Arizona's Response (June 3, 1982) to EPA's Proposed Conditional Approval Items Concerning the September 20, 1979 Multipoint Rollback (MPR) SIP Revision for Sulfur Dioxide Emissions from Copper Smelters," June 1982, and (2) "Evaluation of two Arizona SIP revision amendments to R9-3-515. Standards of Performance for existing primary copper smelters, Paragraphs (A) and (C) concerning applicability and sulfur dioxide emission limitations—Submittal Dates: July 17, 1980 and July 13, 1981," June 1982. This notice takes final action on all of these supplemental revisions in addition to those actions proposed in the November 30, 1981 Notice.

EPA has determined that "good cause" (see Administrative Procedure Act, 5 U.S.C. 553(b)) exists to approve these revisions without providing further notice and opportunity to comment. EPA has already provided opportunity to comment on the substance of these rules and the proposed deficiencies in the November 30, 1981 proposal notice. Additional comment would serve no practical purpose since these revisions merely correct those deficiencies or are minor/insignificant revisions which do not change the intent or meaning of the regulations.

Public Comments

During the public comment period EPA received comments from the State of Arizona, Inspiration Consolidated Copper Company, Kennecott Minerals Company, Phelps Dodge Corporation, Magma Copper Company, Environmental Defense Fund and Utility Air Regulatory Group. A document containing a summary of all substantive comments and the complete EPA response to each, (entitled "Response to Comments Received Concerning EPA's Proposed Conditional Approval of Arizona's Multipoint Rollback (MPR) SIP Revision") has been mailed to the seven commenters and is also available for public inspection as a part of Document File AZ-MPR-1 at the EPA Library in Washington, D.C., at the EPA Region 9 office in San Francisco, California and at the Arizona Bureau of Air Quality Control Offices in Phoenix and Tucson. EPA's final actions are based on the proposed rulemaking notice, Document File AZ-MPR-1, supplemental revisions related to the proposed rulemaking and public comments received by EPA. The following is a brief discussion of EPA's response to the most significant issues raised by the commenters:

I. The Environmental Defense Fund (EDF) commented that EPA's proposed approval of an October 1, 1983 attainment date [40 CFR 52.131] for sulfur dioxide is illegal.

Response

EPA acknowledges that the Arizona plan's attainment date extends beyond the period contemplated in the Clean Air Act. In addition, the present data

suggest that control of "fugitive" emissions from smelters may be needed to attain the standards in one or more locations, and the Arizona plan does not yet completely address this problem. For these reasons, the Arizona plan cannot be found completely satisfactory under the Clean Air Act. It follows that the moratorium currently in effect on the construction or modification of new or modified major stationary sources of SO_2 in the Arizona SO_2 non-attainment areas must be continued in effect until the primary air quality standards are achieved.

However, EPA does not believe the Clean Air Act requires states to adopt all measures beyond the construction moratorium, however unreasonable, that may be needed to attain the standards as expeditiously as theoretically conceivable after the end of 1982. For example, EPA does not interpret the Act to require the mandatory shutdown of the Arizona smelters to attain the standards, though shutdown might indeed be appropriate in some cases. Rather EPA believes that the standards applicable to implementation plans in non-attainment areas after 1982 are similar to those that apply before 1982, namely that the states take all reasonably available steps to attain the standards as expeditiously as practicable, and that they show continuing reductions in emissions that represent reasonable further progress toward attaining the standards.

EPA believes that the present Arizona submission easily meets this test. It provides for reducing SO_2 emissions from the Arizona smelters by 500,000 tons a year from actual emissions which occurred in 1981. This *reduction* amounts to roughly two percent of the total *national* annual emissions of sulfur dioxide. After a decade of unsuccessful attempts to impose controls on the Arizona smelters, the control program contained in this plan will result in significant emission reductions. Of course, if further reductions necessary to meet the standards were reasonably available, the Arizona SIP would be required to achieve them. But as far as stack emissions are concerned, the plan demonstrates that all ambient air quality standards will be attained through a statistical approach that is the functional equivalent of approaches that EPA has accepted in the past. Indeed, for six of seven smelters, that approach shows with very high probability that the "primary" air quality standards—those designed to protect human health—will be attained. The inevitable residual uncertainties largely concern the "secondary" standards—designed to protect against effects on human welfare—which are not subject to any attainment deadline. The state has committed to an intensive continuing study of the issues involved here. That study will yield data on which new control decisions can be based should they turn out to be necessary.

Acceptable data on the effect of fugitive emissions from these smelters on air quality is lacking at present. EPA believes it is more sensible to allow the state until August 1, 1984 to gather and analyze that data before making control decisions than it is to force it to regulate in the absence of information.

II. EDF also contended that the Arizona SIP revision R9-3-515(C) does not provide for the attainment of the sulfur dioxide (SO_2) National Ambient Air Quality Standards (NAAQS) because of its failure to protect the NAAQS during worst-case conditions and because of the high probability (26%) that the plan will allow violations of the NAAQS. In addition, EDF contended that Arizona has not adequately demonstrated that the plan will provide for attainment as required by 40 CFR 51.13(e) and Section 110 of the Clean Air Act.

Response

EPA disagrees with EDF's assertion that Arizona has not adequately demonstrated that the plan will provide for attainment of the NAAQS. With regard to stack emissions, EPA believes that Arizona has adequately demonstrated attainment in its September 20, 1979 MPR SIP revision submittal. While there is always some chance that violations will occur due to less favorable dispersion conditions than occurred in the base year, this possibility exists for the regulations based on single point rollback as well as for the regulations based upon multipoint rollback. In fact, the basis for the 26% probability of NAAQS violations calculated by EDF (and Moyers and Peterson) is the probability of encountering different combinations of dispersion conditions and emissions than were encountered during the base year. Under the assumption that the base year is representative, an assumption made for all control strategies, EPA has concluded that the probability of NAAQS violations is acceptably low.

This point is addressed in more detail in the response to comments document.

III. The State of Arizona and several smelters commented that the proposed rulemaking notice's date (December 31, 1982) for submittal of fugitive emission control strategies and regulations was infeasible and/or premature. Two of the smelters also commented that the submittal of fugitive control strategies and regulations should not be a conditional approval item.

Response

EPA agrees with the general nature of these comments and will not require state submittal of fugitive control strategies and regulations *as a conditional approval item.* However, EPA is requiring that Arizona submit these fugitive control strategies and regulations by August 1, 1984. The compliance date for any necessary fugitive regulations will be three years from EPA approval of the original MPR regulations (about August 1985). These dates are consistent with the fugitive evaluation requirements of the MPR regulations and they allow each smelter and Arizona sufficient time to analyze all fugitive emission problems, and develop any regulations that might be necessary for the control of fugitive emissions.

IV. The State of Arizona commented that the ambient SO_2 data used were the best available and that its quality assurance procedures were adequate. The selection of data periods was limited to periods when supplementary control systems (SCS) were not in operation, and the smelter configurations were representative of the current facilities.

Response

Having reviewed a December 31, 1981 letter from Art Aymar of the ADHS to Louise Giersch of EPA, EPA will not dispute the Arizona copper smelters' quality assurance documentation and, thus, accepts the reliability of the ambient SO_2 data (additional documentation has been added to Document File AZ-MPR-1).

V. The State of Arizona also commented that the use of the most stringent "running" 24-hour rollback factor, rather than the calendar day 24-hour rollback factor, would only increase the stringency of the Ajo emission limit by 4 percent. Arizona believes this correction is small in comparison to the potential impact of fugitive emissions on ambient air quality and urged EPA to defer any correction of the Ajo emission limitation until after completion of the required emissions evaluation.

Response

EPA calculated that the use of the most stringent 24-hour rollback factor would increase the stringency of the Ajo emission limit by 5 percent. However, Arizona correctly states that fugitive

emissions from the Ajo smelter *could* be impacting the air quality readings in the vicinity of the smelter. Therefore, EPA is requiring the submittal of a fugitive emissions control strategy and regulations for the Ajo smelter by August 1, 1984. EPA agrees that any adjustment of the Ajo emission limitation should await the outcome of this fugitive emissions evaluation as long as it is completed prior to August 1, 1984. In the interim, EPA is approving the current MPR emission limitation for the Ajo smelter.

EPA Actions

Under Section 110 of the Clean Air Act EPA is taking final action as follows:

I. SIP Determination of "Good Engineering Practice" (GEP) Stack Height

EPA proposed approval of GEP stack height for the ASARCO smelter based on an evaluation of a fluid modeling study conducted by ASARCO, Inc., which fulfilled the criteria specified in the proposed tall stack regulations (January 12, 1979, 44 FR 2608). Final tall stack regulations were published on February 8, 1982 (47 FR 5864), but the criteria for an acceptable tall stack demonstration based on fluid modeling studies remained unchanged. EPA is, therefore, approving the SIP determination of GEP stack height as proposed (see also EPA's May 17, 1982 supplemental evaluation report in Document File AZ-MPR-1).

II. Items Originally Proposed as Conditional Approval Actions

On June 3, 1982 Arizona submitted a SIP revision which satisfied five of the six conditional approval actions proposed by EPA on November 30, 1981. EPA is, therefore, taking final action to approve these changes (listed below) and will not promulgate any conditional approval actions. The sixth conditional approval action is being deleted based on comments received (see discussion in Section F below). A detailed evaluation of the Arizona conditional approval submittal can be found in Document File AZ-MPR-1 in a report entitled: "Evaluation of Arizona's Response (June 3, 1982) to EPA's Proposed Conditional Approval Items Concerning the September 20, 1979 Multipoint Rollback (MPR) SIP Revision for Sulfur Dioxide Emissions from Copper Smelters," June 1982.

A. *R9-3-515(C)(1):* Arizona added paragraph R9-3-515(C)(1)(i) which states that "periods of malfunction, startup, shutdown and/or other upset conditions shall not be excluded when determining compliance with the cumulative occurrence and/or annual average emission limits specified in this paragraph." This change satisfies EPA's proposed conditional approval item for R9-3-515(C)(1).

B. *R9-3-515(C)(3):* Arizona made changes to subparagraph R9-3-515(C)(3)(a) requiring that compliance with the annual average be determined at the end of each day. This change satisfies EPA's conditional approval item for R9-3-515(C)(3). Arizona also made additional changes to subparagraphs (C)(3) (a), (d), (e), (f) and (g). These changes specify in detail how violations of the annual average and cumulative occurrence limits are to be determined. These changes are in accordance with the requirements of 40 CFR Part 52 and the Clean Air Act. Further, they do not significantly change the September 20, 1979 regulation as proposed by EPA on November 30, 1981. Rather they are clarifications to the original regulation submitted by Arizona on September 20, 1979. These changes are acceptable to EPA, and EPA approves them as part of the MPR regulations.

In reviewing a compiled version of the MPR regulations EPA recently discovered an internal inconsistency in R9-3-515(C)(3)(h) of the regulations. Subparagraph (C)(3)(h) defines the compliance period as "the 365 calendar days immediately preceding the last day of the month being reported." In order to be consistent with the daily calculation of annual average emissions, the compliance period should be defined as "the preceding 365 calendar day period ending on the day for which the annual average is calculated." EPA is approving R9-3-515(C)(3) based on assurances from Arizona that it will correct this internal inconsistency in the MPR regulations.

C. *R9-3-515(C)(4):* Arizona added a sentence to paragraph (C)(4) which requires that captured smelter fugitive emissions be continuously monitored for SO_2 concentrations and volumetric flow rates, and that these emissions shall be included in total plant emissions when determining compliance with all of the MPR emission limits. Arizona also added subparagraph (h) which requires each smelter to have sufficent spare parts or duplicate systems for the continuous emission monitors available to replace within six (6) hours, any monitoring equipment part which fails or malfunctions. These two changes satisfy EPA's conditional approval item for R9-3-515(C)(4).

One of the changes made by the July 13, 1981 SIP revision changes the demonstration dates for continuous instack SO_2 and flow rate monitors from 18 months after the effective date of the MPR regulations to 18 months prior to the compliance date. If the compliance date for a smelter is delayed by issuance of a NSO or delayed compliance order (DCO), this change could result in substantial delays in the installation and demonstration of instack monitors. EPA is approving this change based on assurances from Arizona that they will not delay the demonstration dates for these monitors if the smelter's compliance date is delayed by a NSO or a DCO.

D. *R9-3-515(C)(5):* Arizona changed the second sentence of R9-3-515(C)(5)(a) to require recordkeeping and reporting of the smelter's annual average emission rates at the end of each day, rather than only at the end of each month. This change is consistent with the modified requirements of R9-3-515(C)(3). This change satisfies EPA's proposed conditional approval item for R9-3-515(C)(5).

E. *R9-3-515(C)(9):* Arizona changed the second sentence of R9-3-515(C)(9) to require that ambient monitoring be conducted in accordance with the requirements of 40 CFR Parts 50 and 58. This change satisfies EPA's proposed conditional approval item for R9-3-515(C)(9).

All of the above changes merely satisfy conditional approval items proposed by EPA on November 30, 1981, or are minor insignificant revisions which do not change the intent or meaning of the regulations. Therefore, EPA finds "good cause" (see Administrative Procedure Act, 5 U.S.C. 553(b)) to take final action to approve the following revisions (also identified above), which were originally proposed for conditional approval:

A. Emission limitations and attainment/compliance dates [r9-3-515(C)(1)].

B. Methods of determining compliance after the initial 365 day period [R9-3-515(C)(3)].

C. Continuous emissions monitoring [R9-3-515(C)(4)].

D. Continuous emissions monitoring recordkeeping [R9-3-515(C)(5)].

E. Ambient monitoring [R9-3-515(C)(9)].

F. *R9-3-515(C)(6)(b)(iv) and R9-3-515(C)(8):* Arizona amended the compliance schedule requirements of R9-3-515(C)(6)(b)(iv) to require each smelter to submit "* * * a compliance plan for installation of any additional fugitive emission control equipment necessary to assure attainment and maintenance of the applicable ambient air quality standards in the vicinity of

the smelter * * *" no later than 24 months prior to the compliance date. R9-3-515(C)(8), which requires each of the smelters to conduct a fugitive emissions evaluation, remained unchanged. *This does not satisfy EPA's proposed conditional approval item for control strategies for each smelter town,* since there is no commitment by Arizona to submit fugitive emissions control strategies and regulations by December 31, 1982. However, Arizona and several smelters commented that they could not evaluate fugitive impacts and adopt regulations by December 31, 1982. The smelters also contended that conditional approval would mean that failure to submit these fugitive emissions control strategies and regulations would result in disapproval of the MPR regulations and promulgation of EPA's January 4, 1978 regulations. However, EPA's regulations do not contain fugitive emissions control strategies and regulations either. Thus, the conditional approval deficiency would still exist even if EPA's regulations were promulgated.

To address these two issues, EPA has decided to require submittal of the necessary fugitive emissions control strategies and regulations for the six smelter towns, by August 1, 1984, 19 months later than the proposed date of December 31, 1982.

However, EPA is *not* making this a conditional approval item. Failure to submit these SIP revisions by August 1, 1984 will not result in the disapproval of the MPR regulations, but will result in EPA promulgation of new fugitive control strategies and regulations (if necessary) for each smelter town. This date is consistent with the requirements of R9-3-515(C)(8) and should also enable the smelters to comply with any fugitive emissions control regulations by the attainment date. Furthermore, because there is a high probability that fugitive emissions could be causing or contributing to ambient air quality violations in the vicinity of some smelters, Section 110 (a)(2) of the Clean Air Act requires that Arizona evaluate these potential fugitive emissions impacts at each smelter town and adopt any regulations found to be necessary to attain and maintain the NAAQS.

Therefore, EPA is taking final action to approve Rules R9-3-515(C)(6)(b)(iv) and R9-3-515(C)(8) with the additional provision that the necessary fugitive emissions control strategies and regulations for the six smelter towns be submitted to EPA by August 1, 1984. Arizona has also indicated that it will not extend the dates for submittal of fugitive emission control strategies and regulations beyond the dates established by the original compliance date (3 years from EPA approval of the MPR regulations).

III. Rule R9-3-515

EPA is taking final action to approve the following parts of Rule R9-3-515 as proposed since they were found to be consistent with the Clean Air Act and 40 CFR Part 51.

A. Definition of sources [R9-3-515(A)].

B. Methods of determining compliance during the initial 365 day period [R9-3-515(C)(2)].

C. Compliance schedule requirements [R9-3-515(C)(6)].

D. Fugitive emissions evaluations [R9-3-515(C)(8)].

EPA is taking no action on the following elements of rule R9-3-515 as proposed.

A. A stay from the applicable process weight particulate emission limits since the stay period has expired [R9-3-515(B)].

B. The interim emission limitations, since these emission limitations are not required in a SIP by Section 110(a)(2) of the Clean Air Act [R9-3-515(C)(7)].

IV. EPA's January 4, 1978 Regulations (40 CFR 52.125(a), (d) and (e))

The control strategy does not meet the requirements of § 51.13 of this chapter since it does not analyze the impact of smelter fugitive emissions on ambient air quality (except at Hayden, Arizona) in the Central Arizona Intrastate, the Pima Intrastate and the Southeast Arizona Intrastate (Cochise and Greenlee Counties) Regions. In addition, the requirements of §51.22 of this chapter are not met since the plan does not require permanent control of fugitive smelter emissions necessary to attain and maintain the NAAQS for sulfur oxides. Therefore, the control strategies and/or regulations for the six smelter areas in the Central Arizona Intrastate, the Pima Intrastate and the Southeast Arizona Intrastate (Cochise and Greenlee Counties) Regions are incomplete due to Arizona's failure to address the fugitive emissions problems at copper smelters. Arizona must submit all fugitive emissions control strategies and regulations necessary to attain and maintain the sulfur oxides NAAQS to EPA by August 1, 1984. In addition, EPA is maintaining its previous disapproval (37 FR 15080, July 27, 1972) of Regulation 7-1-4.1 (Copper Smelters) of the Arizona Rules and Regulations for Air Pollution Control for the Central Arizona Intrastate, Pima Intrastate and Southeast Arizona Intrastate (Cochise and Greenlee Counties) Regions. These actions are specified in 40 CFR 52.125(a). The current Arizona SIP revisions include provisions for evaluating the ambient air quality impacts of fugitive emissions and adoption of any necessary fugitive emission control regulations. However, the fugitive control strategies and regulations are not fully approvable until they are actually submitted by Arizona and approved by EPA.

EPA is rescinding its previously promulgated Arizona smelter regulations (40 CFR 52.125(d)) and the stay of their effective date (40 CFR 52.125(e)) since they are being replaced by the MPR regulations being acted on in today's notice. For this same reason, EPA is denying EDF's petition for rulemaking requesting that the previous stay of the Federal regulations [40 CFR 51.125(e)] be terminated and the emissions limitation promulgated at 40 CFR 52.125(d) be made enforceable.

Other Issues

Statistical Demonstration of MPR

Arizona's attainment demonstration relies on the statistical probability that high emissions coinciding with poor dispersion conditions is acceptably low. Although the NAAQS for SO2 is not expressed in probabilistic terms, EPA recognized that whenever an emission limit is set there is always some probability that the standards may be violated even though the limit is met. EPA believes that in evaluating the adequacy of a control strategy based on a statistical analysis, it is appropriate to accept a probability of violation that is sufficiently low.

Subsequent to EPA's proposed conditional approval of Arizona's MPR regulations, two additional documents on this subject were made a part of the document file for this action:

1. Memorandum from Thomas C. Curran of EPA, OAQPS entitled "Comparison of ExEx and MPR Methodologies", dated January 20, 1982, and

2. A paper by T. W. Peterson and J. L. Moyers entitled "Emission Limits for the Arizona Copper Smelters—The Use of MPR to Protect the NAAQS: Statistical Consideration of Projected Violation Return Periods at a Given Site and within a Source Area" dated February 1982.

Based on these documents, the November 30, 1981 proposed rulemaking notice, analysis of comments received, and other documents in the document file (specifically the two SRI International reports entitled "Theoretical and Empirical Evaluation of Multipoint Rollback as Applied to Smelters in the Hayden, Arizona Area" dated May 1979 and "Continuing Analysis of Multipoint Rollback as Applied to Copper Smelters in the State

of Arizona" dated March 1980) EPA believes that the Arizona MPR regulations project an acceptable probability of attainment with regard to stack emissions.

EPA wishes to emphasize, however, that today's action does not imply that any actual violations of the NAAQS will be acceptable. Today's action indicates only that EPA believes the chance of a violation is acceptably low.

Regulatory Process

The Office of Management and Budget has exempted this rule from the requirements of Section 3 of Executive Order 12291.

Under the Clean Air Act, petitions for judicial review of this action must be filed in the United States Court of Appeals for the appropriate circuit by (60 days from today). This action may not be challenged later in proceedings to enforce its requirements.

Incorporation by reference of the State Implementation Plan for the State of Arizona was approved by the Office of the Federal Register on July 1, 1982.

Authority: Secs. 110, 123 and 301(a) of the Clean Air Act as amended (42 U.S.C. 7410, 7423 and 7601(a)).

List of Subjects in 40 CFR Part 52

Air Pollution Control, Ozone, Sulfur oxides, Nitrogen dioxide, Lead, Particulate matter, Carbon monoxide, Hydrocarbons, Intergovernmental relations.

Dated: December 28, 1982.

John W. Hernandez,

Acting Administrator.

PART 52—[AMENDED]

Subpart D of Part 52, Chapter I, Title 40 of the Code of Federal Regulations is amended as follows:

Subpart D—Arizona

1. Section 52.120 is amended by adding paragraphs (c)(37), (45)(i)(C), (50)(i)(B), and (54) to read as follows:

§ 52.120 Identification of plan.

* * * * *

(c) * * *

(37) The following amendments to the plan were submitted on September 20, 1979 by the Governor's designee.

(i) Arizona State Rules and Regulations for Air Pollution Control.

(A) New or amended rule R9-3-515 (Paragraphs C.1.a. to C.1.h.; C.2; C.3, C.3.b., C.3.c., and C.3.h.; C.4.c. to C.4.g. and C.4.i.; C.5 and C.5.b. to C.5.d.; C.6.b.i. to C.6.b.iii., C.6.b.vi., C.6.b.vii., and C.6.c.; and C.8.).

(ii) "ASARCO Incorporated, Hayden Copper Smelter, State Implementation Plan Determination of Good Engineering Practice Stack Height," September 17, 1979, issued by ADHS.

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(45) * * *

(i) * * *

(C) New or amended Rule R9-3-515 (Paragraphs A; and C.6, C.6.b, and C.6.b.v.).

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(50) * * *

(i) * * *

(B) New or amended Rule R9-3-515 (Paragraph C.4.a. and C.4.b.).

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(54) The following amendments to the plan were submitted on June 3, 1982 by the Governor's designee.

(i) Arizona State Rules and Regulations for Air Pollution Control.

(A) New or amended Rule R9-3-515 Paragraphs C to C.1. and C.1.i.; C.3.a. and C.3.d. to C.3.g.; C.4. and C.4.h.; C.5.a; C.6.a. and C.6.b.iv.; and C.9.).

2. Section 52.122 is amended by adding paragraph (e) to read as follows:

§ 52.122 Extensions.

* * * * *

(e) The Administrator hereby extends to (three years from publication date) the attainment date for the national primary and secondary standards for sulfur oxides in the Central Arizona, Pima, and Southeast Arizona Intrastate Regions.

3. In Section 52.125 paragraph (a) is revised and paragraphs (d) and (e) are removed and reserved as follows:

§ 52.125 Control strategy and regulations: Sulfur oxides.

(a)(1) The requirements of § 51.13 of this chapter are not met since the control strategy does not analyze the impact of smelter fugitive emissions on ambient air quality (except at Hayden, Arizona) in the Central Arizona Intrastate, the Pima Intrastate, and the Southeast Arizona Intrastate (Cochise and Greenlee counties) Regions. Arizona must submit these smelter fugitive emissions control strategies to EPA by August 1, 1984. In addition, the requirements of § 51.22 of this chapter are not met since the plan does not require permanent control of fugitive smelter emissions necessary to attain and maintain the national standards for sulfur oxides. The control strategy for Hayden shows that these controls are required to attain and maintain the national standards, and the fugitive control strategy analyses required above may show that they are required for some or all of the other smelter towns in Arizona. Arizona must submit all fugitive emissions control regulations necessary to attain and maintain the national standards for sulfur oxides to EPA by August 1, 1984. Therefore, the control strategies and regulations for the six smelter areas in the Central Arizona Intrastate, the Pima Intrastate and the Southeast Arizona Intrastate (Cochise and Greenlee counties) Regions are incomplete due to Arizona's failure to address the fugitive emissions problems at copper smelters.

(2) Regulation 7-1-4.1 (copper smelters) of the Arizona Rules and Regulations for Air Pollution Control, as it pertains to existing copper smelters, is disapproved for the Central Arizona Intrastate, Pima Intrastate and Southeast Arizona Intrastate (Cochise and Greenlee counties) Regions.

* * * * *

(d) [Reserved]

(e) [Reserved]

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4. In § 52.131 the entries for Arizona are revised as follows:

§ 52.131 Attainment dates for national standards.

* * * * * * *

Air quality control region and nonattainment area	TSP		SO_2		NO_2	CO	O_3
	Primary	Secondary	Primary	Secondary			
*	*	*	*	*	*	*	
Central Arizona Intrastate	July 1975[a]	July 1977[a]	g	g	c	May 31, 1977	May 31, 1975.
*	*	*	*	*	*	*	
Pima Intrastate	July 1975[a]	July 1977[a]	g	g	c	May 31, 1977	May 31, 1975.
Southeast Arizona Intrastate:							
Cochise County	a	a	g	g	c	c	c
Graham County	a	a	b	b	c	c	c
Greenlee County	a	a	g	g	c	c	c

Air quality control region and nonattainment area	TSP		SO_2		NO_2	CO	O_3
	Primary	Secondary	Primary	Secondary			
Santa Cruz County	July 1975*	July 1977*	b	b	c	May 31, 1977	May 31, 1975.
*	*	*	*	*	*	*	*

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5. 3 years from publication date.

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[FR Doc. 83-923 Filed 1-13-83; 8:45 am]

BILLING CODE 6560-50-M

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40 CFR Part 410

[FRL 2285-6]

Availability of the Final Development and Economic Analysis Documents for Effluent Limitations Guidelines and Standards for the Textile Mills Point Source Category

AGENCY: Environmental Protection Agency.

ACTION: Notice of availability.

SUMMARY: EPA promulgated final rules for effluent limitations for the Textile Mills Point Source Category on September 2, 1982 (47 FR 38810; 40 CFR Part 410; Subparts A–I). These regulations are required by the Clean Water Act of 1977. This document announces the availability of a source document which presents the findings of the studies that support the final regulations.

ADDRESSES: Copies of the Development Document may be obtained by contacting the National Technical Information Service (NTIS), 5285 Port Royal Road, Springfield, VA 22161; (703) 487–4600. (Refer to accession number PB83–116871.) The cost is $38.50 for a paper copy or $4.50 for a microfiche. Copies of the Encomic Analysis Document may also be obtained from NTIS. (Refer to accession number PB83–139725.) The cost is $34.00 for a paper copy or $4.50 for a microfiche.

FOR FURTHER INFORMATION CONTACT: Richard Williams, 382–7186.

Dated: January 6, 1983.

Frederic A. Eidsness, Jr.,

Assistant Administrator for Water.

[FR Doc. 83-1079 Filed 1-12-83; 8:45 am]

BILLING CODE 6560-50-M

DEPARTMENT OF THE INTERIOR

Fish and Wildlife Service

50 CFR Part 17

Endangered and Threatened Wildlife and Plants; Emergency Determination of Endangered Status for the Population of Woodland Caribou Found in Washington, Idaho, and Southern British Columbia

AGENCY: Fish and Wildlife Service, Interior.

ACTION: Emergency rule.

SUMMARY: The Service determines as Endangered the population of woodland caribou, sometimes known as the southern Selkirk Mountain herd, found in extreme northeastern Washington, northern Idaho, and southern British Columbia. This isolated herd is the only population of caribou that still regularly occurs in the conterminous United States. An emergency rule is being issued because the caribou population has fallen to only 13 to 20 individuals, a level that probably cannot sustain the herd much longer. At least one or two adults and subadults are being lost each year, calf survival is apparently low, and there is evidently no immigration from other herds in Canada. The population is jeopardized by such factors as illegal hunting, habitat loss to timber harvesting (if not accomplished in accordance with proper guidelines) and wildfires, collisions with motor vehicles, and genetic problems through inbreeding. The premature death of even one more animal could mean the difference between survival and extinction for the herd. The precarious status of the herd is such that the Service deems it necessary to implement the protective provisions of the Endangered Species Act immediately. This emergency rule will apply to the caribou population for 240 days, during which time the Service intends to formally propose permanent Endangered status for the same population.

DATES: This emergency rule is effective on January 14, 1983, and expires on September 12, 1983.

FOR FURTHER INFORMATION CONTACT:

Mr. James F. Gore, Project Leader, Endangered Species Office, 4620 Overland Road, Room 209, Boise, Idaho 83705 (208/334–1806 or FTS 554–1806);

or

Regional Director, U.S. Fish and Wildlife Service, Lloyd 500 Building, Suite 1692, 500 Northeast Multnomah Street, Portland, Oregon 97232 (503/231–6131 or FTS 429–6131).

SUPPLEMENTARY INFORMATION:

Background

According to the most recent taxonomic work (Banfield, 1961; Hall, 1981), the reindeer of Eurasia and the caribou of North America belong to a single species, *Rangifer tarandus*. This species is divided into a number of subspecies, among which is woodland caribou (*Rangifer tarandus caribou*). This subspecies once occupied nearly the entire forested region from southeastern Alaska and British Columbia to Newfoundland and Nova Scotia. In the 48 conterminous States of the United States, populations are known to have occurred in Washington, Idaho, Montana, Minnesota, Wisconsin, Michigan, Vermont, New Hampshire, and Maine. Largely because of killing and habitat alteration by people, indigenous caribou disappeared from New England by about 1908 and from the Great Lakes States by 1940. A few individuals, probably wanderers from Canada, were observed in northeastern Minnesota in 1980–1981 (Mech, Nelson, and Drabik 1982). There had been no records in Montana since 1971, but in 1981, a lone animal was reportedly seen in the northwestern part of the State (Chadwick, 1982). This animal was probably also a wanderer from Canada and not a member of the herd that is the subject of this rule. There are still substantial numbers of woodland caribou in Canada, though populations there have been generally declining.

The only caribou population that still regularly occupies the conterminous United States is found in northern Idaho and northeastern Washington. This population, sometimes called the southern Selkirk Mountain herd, also occurs in southern British Columbia. The total approximate area of utilization is bounded as follows: Starting at the point where the Columbia River crosses the Washington-British Columbia border; thence northward along the Columbia River to its confluence with the Kootenay River in British Columbia; thence northeastward along the Kootenay River to its confluence with Kootenay Lake; thence southward along the Kootenay Lake and the Kottenai River, and across the Idaho-British Columbia border, to the town of Bonners Ferry, Idaho; thence southward along U.S. Highway 95 to the Pend Oreille River; thence westward and northward along the Pend Oreille River, and across the Idaho-Washington State line, to the Washington-British Columbia border; thence westward along the Washington-British Columbia border to the point of beginning. Any caribou within these boundaries are considered a part of the population which this rule classifies as endangered. It is possible, however, that portions of the herd may on occasion be found outside these geographical limits.

Early records suggest that in the 19th century, caribou were plentiful in the mountains of northeastern Washington, northern Idaho, northwestern Montana, and adjacent parts of southwestern Canada. As in the case of other big game animals of North America, unrestricted hunting probably had led to a major reduction of caribou numbers in this region by 1900. From that time until fairly recently, the numerical status of the southern Selkirk herd was not completely clear. Freddy (1974) thought that this herd probably contained fewer than 50 animals after 1900. Flinn (1956) and Evans (1960), however, estimated that there were still about 100 individuals in the population during the 1950's. In any event, there has been a sharp decline in recent decades, since estimates in the 1970's were about 20 to 30 caribou in the herd, and the latest data indicate a count of only 13 to 20.

In addition to the factors listed below, the decline and continued low numbers of the southern Selkirk herd apparently result from low calf survival and absence of immigration from other herds. The only source for immigrants is British Columbia, but there has been a general decline in woodland caribou in that province (British Columbia Ministry of Environment, 1981). Moreover, the southern Selkirk herd is separated from other herds by barriers, such as Kootenay Lake and the human settlements in Kootenay Valley, and substantial distance. The nearest herd is about 30 miles away, on the east side of Kootenay Lake in southeastern British Columbia; it contains about 40 animals (Guy Woods, British Columbia Fish and Wildlife Branch, Ministry of Environment, Nelson, British Columbia, pers. comm.).

Factors Affecting the Species

Section 4(a)(1) of the Endangered Species Act (16 U.S.C. 1531 *et seq.*) and regulations promulgated to implement the listing provisions of the Act (codified at 50 CFR Part 424; under revision to accommodate 1982 amendments) set forth the procedures for adding species to the Federal list. The Secretary of Interior shall determine whether any species is an Endangered species or a Threatened species due to one or more of the five factors described in Section 4(a)(1) of the Act. These factors, and their application to the southern Selkirk Mountain population of woodland caribou, are as follows:

A. *The present or threatened destruction, modification, or curtailment of its habitat or range.* Surveys conducted in the 1950's revealed a population of approximately 50–100 woodland caribou in the southern Selkirks. Since then, the number has fallen to 13–20 animals. The decline was caused, in part, by past logging practices (including road construction) in the caribou's range.

Timber cutting can potentially affect caribou habitat by eliminating escape cover, migration corridors, and lichen production. Food availability is probably not now limiting this caribou population. However, if the population is to be restored to a viable level, estimated by the Forest Service to be about 100 animals, the production of lichens, the primary winter food, would probably have to increase. Timber management strategies would have to be developed which provide timber stands that optimize lichen production.

Currently, the U.S. Forest Service is utilizing caribou management guidelines to design timber sales in caribou habitat. These guidelines are intended to minimize the effects of logging on caribou and also to develop silvicultural prescriptions which may enhance habitat over the long run. Disease and insects, especially spruce bark beetles, are presently impacting timber stands within historic caribou habitat, thereby further complicating management. Salvage sales have taken place and others are planned to remove much of the diseased timber and reduce the spread of bark beetles. Although these sales are being designed utilizing the caribou guidelines, studies and monitoring are necessary to evaluate the actual response of the caribou.

Timber harvesting may prove helpful in portions of caribou habitat by providing food and cover necessary for the survival of this population. For example, if caribou number eventually are limited by lack of food, and if selective tree removal could improve lichen production and availability, then moderate timber harvesting could be beneficial. However, at this time more information is necessary on the response of caribou to timber harvesting and managed timber stands. Timber harvesting, if not properly designed, can significantly impact caribou, especially in conjunction with the effects of poaching, highways, and forest roads. Listing of the caribou would place a higher priority on the acquisition of research funds to study caribou-timber management relationships.

Wildfire is a natural phenomenon in the range of the caribou. In the past, wildfire sometimes destroyed caribou cover and winter food. The caribou historically tolerated this natural adverse impact by itself. However, the cumulative effect of logging and wildfire has eliminated a great deal of the southern Selkirk herd's habitat.

B. *Overutilization for commercial, recreational, scientific, or educational purposes.* An important cause of the decline of the southern Selkirk caribou herd is human hunting, both legal (prior to 1957) and illegal (now and in the past). Caribou are relatively easy for hunters to approach and shoot. Poachers killed at least one animal from this population in 1980, 1981, and 1982 (B. S. Summerfield, U.S. Forest Service, Bonners Ferry, Idaho, pers. comm.). Poaching losses also occurred in previous years. The problem is greatest where the caribou frequent areas with good road access for hunters, for example, near Trans-Canada Highway No. 3. There are even more roads in the portion of the herd's range in the United States, and the potential for poaching is thus greater there. Fortunately, in the past decade, the herd has spent less time in the United States than in Canada. Had the reverse been true, U.S. caribou poachers might already have eliminated the herd. Finally, there is the possibility that licensed deer and elk hunters could accidentally shoot a caribou.

C. *Disease or Predation.* Disease is not known to significantly impact this caribou population. Certain predators, such as the coyote and black bear, occur

in moderate numbers in the range of the herd. They are capable of killing caribou calves and may occasionally do so. Other predators, including the gray wolf, grizzly bear, and mountain lion, are at such low number as to have no significant effect on the caribou. Recovery of wolf and grizzly populations (both on the U.S. List of Endangered and Threatened Wildlife) would probably not jeopardize the caribou population, if caribou habitat is preserved and restored.

D. *Inadequacy of existing regulatory mechanisms.* Much of the important caribou habitat in Idaho and Washington is on Federal (U.S. Forest Service) land. The Forest Service considers the Selkirk population of woodland caribou to be a "sensitive species." Forest Service policy (FSM title 2670.3) states that sensitive species are to be managed so as "to prevent their placement on Federal [Endangered or Threatened] lists." Also, U.S. Department of Agriculture policy (Secretary's memo No. 9500-3, July 20, 1982) states, in part, "habitats for all existing native and desired non-native plants, fish, and wildlife species will be managed to maintain at least viable populations of such species." Similar language appeared in previous Secretarial memoranda. The Forest Service has allowed considerable timber harvesting and road building to occur in old-growth forests within caribou habitat. Some of this timber cutting is having and will have adverse impacts on the Selkirk caribou. Further, the continued removal of old-growth lichen-bearing trees reduces the future opportunity for the caribou population to recover. This is especially serious because a Forest Service wildlife goal in the Northern Region (including Idaho and Montana) is for the caribou population to increase to 100 animals (letter of June 5, 1981, to the Fish and Wildlife Service from Acting Associate Deputy Director, U.S. Forest Service).

The U.S. Forest Service is preparing overall forest management plans for the Colville and Idaho Panhandle National Forests. Those plans will incorporate caribou habitat management. However, the degree to which those plans are followed will be subject to administrative discretion. As seen with the policies on sensitive species, it is sometimes very difficult for forest supervisors to protect caribou habitat in the face of timber quotas, disease outbreaks, and the public's desire for recreational access. The Endangered Species Act will provide additional protection for this species, through Section 7 (interagency cooperation) requirements.

E. *Other natural or manmade factors affecting its continued existence.* Two other factors affect the abundance of this population. Occasionally caribou are killed in collisions with vehicles along Trans-Canada Highway No. 3 at Kootenay Pass, about 5 miles north of the international boundary. Although no highways exist in the U.S. portion of the population's primary habitat, there is a potential for caribou-vehicle collisions in caribou habitat on U.S. Forest Service road used by loggers, miners, and recreationists. Vehicle collisions with deer are known to occur on these roads, so it is reasonable to assume that caribou collisions could occur too. As the number of forest roads and subsequent traffic increases, the threat to caribou of such collisions will increase.

Caribou are by nature wandering animals. Where there are viable caribou herds, a few individuals migrate from one herd to another each year. This tends to equalize caribou "pressure" on the habitat and allows for genetic interchange between herds. As noted above, however, immigration to the southern Selkirk population is apparently not occurring, and the number of caribou in herds closest to the southern Selkirk population is declining. The lack of natural augmentation to the population causes the herd to rely on inbreeding for recruitment and reduces the genetic variability of the offspring. Reduced genetic variability reduces the capacity of animals to adjust to changing environmental conditions and results in less vigorous individuals.

Critical Habitat

Section 4(a)(3) of the Endangered Species Act requires the Service to designate the Critical Habitat of a species, concurrent with listing, "to the maximum extent prudent and determinable." In the case of the southern Selkirk Mountain herd of woodland caribou, the Service considers that no designation of Critical Habitat is prudent. Such a designation would require publication and extensive publicity of the precise areas occupied by the herd and the kind of habitat utilized. There thus would be a serious risk of facilitating illegal hunting. As the loss of even a single animal could be disastrous to the herd, this risk should be avoided.

Reasons for Emergency Determination

The southern Selkirk Mountain population of woodland caribou has become the most critically endangered mammal in the United States, but only within the last few months has the full severity of the situation become apparent. In the **Federal Register** of February 9, 1981 (46 FR 11567-11568), the Service published a notice accepting two petitions to add the population to the U.S. List of Endangered and Threatened Wildlife, and announced its intention to issue a proposal to this effect. At that time, the population was estimated to contain 20 to 30 individuals, about the same as during the previous decade.

Since the notice was published, evidence has accumulated that the status of the southern Selkirk herd has deteriorated badly. The latest field data indicate an actual count of only 13 individuals of all ages in the herd, though there may be a few more animals that were not counted. Such a population size is far below the minimum necessary to insure survival in the face of natural contingencies, even disregarding the host of human-caused problems described above. Moreover, small population size, along with lack of genetic exchange with other populations, leads to inbreeding. This factor reduces adaptiveness, viability, and fecundity, and may result in extinction. Recent studies suggest that the minimum genetically effective size of a population is 50 individuals (Franklin, 1980; Soule, 1980). Other studies have shown that inbreeding in populations of various species of hoofed mammals, including *Rangifer tarandus*, is associated with significant increase in juvenile mortality (Ralls, Brugger, and Ballou, 1979). Such a condition could be responsible for low calf survival in the southern Selkirk population.

Additional losses, even the premature death of a single animal, could be disastrous, and yet the potential for such losses is great and increasing. Habitat disruption, especially with respect to logging activity is continuing without full consideration of the needs of the caribou.

Poaching occurs regularly; in the most recent known case, a mature female was shot on the Canadian side of the border in October 1982. Existing regulations have not been effective in either stopping poaching or preventing serious habitat disturbance. Roads continue to be constructed in caribou range, allowing greater access for hunters and setting up possible collisions between vehicles and caribou. Johnson (1976) suggested that a single accident along an icy winter road, where the caribou have gathered to feed on salt, could wipe out a significant part of the herd.

Any of these problems could at any time result in losses that would be

irreversible and reduce the herd to a point at which recovery is no longer feasible. The Service considers that all available protective measures should be instituted immediately in an effort to prevent such losses, and that full-scale recovery planning should also begin as soon as possible. Therefore, this determination of Endangered status for the caribou is being issued on an emergency basis.

Effects of This Rule

Endangered species regulations already published in Title 50, § 17.21, of the Code of Federal Regulations set forth a series of general prohibitions and exceptions which apply to all Endangered wildlife. These prohibitions, in part, will make it illegal for any person subject to the jurisdiction of the United States to take, import or export, ship in interstate commerce in the course of a commercial activity, or sell or offer for sale any member of the southern Selkirk population of woodland caribou in interstate or foreign commerce. It also will be illegal to possess, sell, deliver, carry, transport, or ship any such wildlife which was illegally taken. Certain exceptions will apply to agents of the U.S. Fish and Wildlife Service and State conservation agencies.

Permits may be issued to carry out otherwise prohibited activities involving Endangered wildlife under certain circumstances. Regulations governing such permits are codified at 50 CFR 17.22 and 17.23. Such permits are available for scientific purposes or to enhance the propagation or survival of the species or population. In some instances, permits may be issued during a specified period of time to relieve undue economic hardship which would be suffered if such relief were not available.

Subsection 7(a) of the Endangered Species Act, as amended, requires Federal agencies to evaluate their actions with respect to any species that is proposed or listed as Endangered or Threatened. This rule requires Federal agencies to satisfy their statutory obligations relative to the southern Selkirk Mountain population of caribou. Since this population is now being added to the List of Endangered and Threatened Wildlife, Federal agencies will be immediately required to insure that the actions they authorize, fund, or carry out are not likely to jeopardize the continued existence of the population.

Listing the southern Selkirk caribou as Endangered will change the management emphasis that agencies place on the population. Listing will further emphasize the national significance of this population. The combination of legal requirements and inceased national awareness will produce a number of advantages for the caribou.

First, as indicated above, all Federal actions that may affect the caribou population will come under the purview of the Endangered Species Act. Since most of the range of the population in the United States is within national forests, and since logging activities therein are having impacts on caribou habitat, it is anticipated that some actions authorized, funded, and carried out by the U.S. Forest Service will be affected by this rule. Such effects should not be major, however, since the Forest Service is already attempting to manage its lands with consideration of the caribou's welfare. Moreover, this rule will allow more control of the actions of other agencies on national forests, and thus give the Forest Service a greater capability than it now has to manage hibitat for the benefit of the caribou. For example, the Forest Service has no legal control over its own lands with respect to construction of power lines by the Bonneville Power Administration, and the issuance of permits and leases for mineral development by the Bureau of Land Management. Henceforth, such actions would require consultation with the Fish and Wildlife Service to insure that they are not likely to jeopardize the caribou population.

Second, listing the caribou as Endangered will bring Section 6 of the Endangered Species Act into effect. Therefore, the Fish and Wildlife Service will be able to grant funds (when they become available) to the States of Idaho and Washington for management actions aiding the protection and recovery of the caribou.

Third, the agents of the Service's Division of Law Enforcement can be assigned to enforce the Act's prohibitions against taking. A law enforcement strategy plan can be developed. Without such protection, these agents could only be used if an illegally taken carcass or its parts were transferred in interstate or foreign transportation or commerce.

Fourth, listing the population under the Act will privide for the development of a caribou recovery plan. Such a plan would draw together agencies (U.S. and Canadian) having responsibility for caribou conservation. The plan would establish an administrative framework, sanctioned by the Act, for agencies to coordinate activities and cooperate with each other in conservation efforts. The plan would set recovery priorities and estimate the cost of various tasks necessary to accomplish them. It would assign appropriate functions to each agency and a timeframe within which to complete them. The plan would establish a formal blueprint for periodic task review. Each agency may now have its own program for caribou management. These programs would be consolidated and modified into one overall recovery plan that would give consideration to all factors needed for caribou conservation.

Fifth, the U.S. State Department could become involved on behalf of the Fish and Wildlife Service. For example, the State Department could encourage Canadian law enforcement agencies to improve surveillance for poachers seeking caribou in the southern Selkirk population. In addition, the State Department could help to encourage Canadian and provincial government agencies to give special consideration to this caribou population when they propose dams, highways, timber sales, etc. in the Canadian part of the herd's habitat. Because Canada has other herds of woodland caribou, the southern Selkirk population has not received the same priority as it does in the United States. Listing it as Endangered may enhance international cooperation.

National Environmental Policy Act

A draft Environmental Assessment will be prepared when the southern Selkirk Mountain population of woodland caribou is formally proposed for permanent addition to the U.S. List of Endangered and Threatened Wildlife. At the time such a rule is made final, a determination will be made as to whether this is a major Federal action which could significantly affect the quality of the human environment within the meaning of Section 102(2)(C) of the National Environmental Policy Act of 1969 (implemented at 40 CFR Parts 1500–1508).

For the reasons described above, the Department has determined that the listing responds to an emergency situation, and that the procedures prescribed by Executive Order 12291 do not apply. Applicable provisions of the order will be followed during the development of any proposed and final rules under 16 U.S.C. 1531 *et seq.* In addition, consideration of this rule's effects upon small entities, as required by the Regulatory Flexibility Act (5 U.S.C. 601), will be made during the development of such proposed and final rules.

Author

The primary author of this rule is James A. Nee, U.S. Fish and Wildlife

Service, 4620 Overland Road, Room 209, Boise, Idaho 83705.

References

Banfield, A.W.F. 1961. A revision of the reindeer and caribou, genus *Rangifer*. National Museum of Canada Bulletin, Biological Series, No. 66, 114 pp.

Bergerud, A.T. 1974. Decline of caribou in North America following settlement. Journal of Wildlife Management 38(4):757–70.

Bergerud, A.T. 1978. Caribou. *In* Schmidt, J.L., and D.L. Gilbert (editors), Big game of North America: ecology and management. Stackpole Books, Harrisburg, Pennsylvania, pp. 82–101.

British Columbia Ministry of Environment. 1981. Woodland caribou in the Thompson-Nicola Resource Region. A report of the Raft-North Thompson Steering Committee, 18 pp.

Carlton J. 1982. Last chance for the caribou. Idaho Wildlife 3(3):14–19.

Chadwick, D.H. 1982. Caribou south of the border? National Wildlife, 20(5):40–2.

Evans, H.F. 1960. A preliminary investigation of caribou in the northwestern United States. M.S. Thesis, Montana State University, Missoula, 145 pp.

Flinn, P. 1956. Caribou of Idaho. Unpublished report, Idaho Department of Fish and Game, Boise, 72 pp.

Franklin, I. R. 1980. Evolutionary change in small populations. *In* Soulé, M. E., and B. A. Wilcox (editors), Conservation biology, Sinauer Associates, Inc., Sunderland, Massachusetts, pp. 135–149.

Freddy, D. J. 1974. Status and management of the Selkirk caribou herd, 1973. M.S. Thesis, University of Idaho, Moscow, 132 pp.

Freddy, D. J. 1979. Distribution and movements of Selkirk caribou, 1972–74. Canadian Field-Naturalist 93(1):71–74.

Hall, E. R. 1981. The mammals of North America. John Wiley & Sons, New York, 2 Vols.

International Mountain Caribou Technical Committee. 1982. Mountain caribou in the Selkirk Mountains of Idaho, Washington, and British Columbia. Idaho Department of Fish and Game, 6 pp.

Jerry, D. 1982. Mountain caribou: status and research summary. Unpublished Report, U.S. Forest Service, Idaho Panhandle National Forests, Coeur d'Alene, 26 pp.

Johnson, D. R. 1976. Mountain caribou: threats to survival in the Kootenay Pass region, British Columbia. Northwest Science 50(2):97–101.

Johnson, D. R. and D. R. Miller. 1979. Observations on reproduction of mountain caribou. Northwest Science 53(2):114–117.

Layser, E. F. 1974. A review of the mountain caribou of northeastern Washington and adjacent northern Idaho. Journal of the Idaho Academy of Science, Special Research Issue, No. 3, 63 pp.

Mech, L. D., M. E. Nelson and H. F. Drabik. 1982. Reoccurrence of caribou in Minnesota. American Midland Naturalist 108(1):206–208.

Ralls, K., K. Brugger, and J. Ballou. 1979. Inbreeding and juvenile mortality in small populations of ungulates. Science 206(4422):1101–03.

Soulé, M. E. 1980. Thresholds for survival: maintaining fitness and evolutionary potential. *In* Soulé, M. E., and B. A. Wilcox (editors). Conservation biology, Sinauer Associates, Inc., Sunderland, Massachusetts, pp. 151–169.

List of Subjects in 50 CFR Part 17

Endangered and threatened wildlife, Fish, Marine mammals, Plants (agriculture).

Regulation Promulgation

PART 17—ENDANGERED AND THREATENED WILDLIFE AND PLANTS

Accordingly, until September 12, 1983, Part 17 of Title 50 of the Code of Federal Regulations is amended as follows:

1. The authority citation for Part 17 reads as follows:

Authority: Pub. L. 93–205, 87 Stat. 884; Pub. L. 95–632, 92 Stat. 3751; Pub. L. 96–159, 93 Stat. 1241; Pub. L. 97–304, 96 Stat. 1411 (16 U.S.C. 1531, et seq.)

2. Section 17.11(n) is amended by adding the following, in alphabetical order, to the List of Endangered and Threatened Wildlife:

§ 17.11 [Amended]

* * * * *

Species		Historic range	Vertebrate population where endangered or threatened	Status	When listed	Critical habitat	Special rules
Common name	Scientific name						
Caribou, woodland	*Rangifer tarandus caribou*	Canada, U.S.A. (AK, ID, ME, MI, MN, MT, NH, VT, WA, WI).	Canada (that part of southeastern British Columbia bounded by the Canada-U.S.A. border, Columbia River, Kootenay River, Kootenay Lake, and Kootenai River), U.S.A. (ID, WA).	E		N/A	N/A

(Emergency Determination of Endangered Status for the Population of Woodland Caribou in Washington, Idaho, and southern British Columbia)

Dated: January 11, 1983.

G. Ray Arnett,

Assistant Secretary for Fish and Wildlife and Parks.

[FR Doc. 83-1118 Filed 1-13-83; 8:45 am]

BILLING CODE 4310-55-M

DEPARTMENT OF COMMERCE

National Oceanic and Atmospheric Administration

50 CFR Part 424

Listing Endangered and Threatened Species and Designating Critical Habitat: Action on Petition To List the Chesapeake Bay Strain of Striped Bass

AGENCY: National Marine Fisheries Service, NOAA, Commerce.

ACTION: Rule related notice.

SUMMARY: On February 2, 1982, Stripers Unlimited of South Attleboro, Massachusetts, petitioned the National Marine Fisheries Service to add the Chesapeake Bay strain of striped bass (*Morone saxatilis*) to the U.S. List of Endangered and Threatened Wildlife (50 CFR Part 17). The Assistant Administrator for Fisheries determined that substantial information was presented to support the petitioned action. A status review was conducted and is presented herein. The purpose of the review is to determine if the petitioned action is warranted. Based principally on the actions Federal and State agencies have adopted and implemented to conserve the species, the Service has determined that a proposed rule to list the striped bass is not warranted at this time.

DATE: Comments on the petition and status review should be submitted to the Assistant Administrator for Fisheries on or before March 15, 1983.

ADDRESS: Assistant Administrator for Fisheries, National Oceanic and Atmospheric Administration, National

Marine Fisheries Service, Washington, D.C. 20235.

FOR FURTHER INFORMATION CONTACT: Mr. Richard B. Roe, Acting Director, Office of Protected Species and Habitat Conservation, Washington, D.C. 20235; (202) 634-7471.

SUPPLEMENTARY INFORMATION:

Background

On February 2, 1982, the Secretary of Commerce, Malcomb Baldrige, received a petition from Stripers Unlimited to list the Chesapeake Bay "strain" of the striped bass as endangered or threatened. The petition, submitted under Section 4(b)(3)(A) of the Endangered Species Act of 1973, as amended (ESA), states that the striped bass should be provided protection under the Act for the following reasons: Reduced commercial landings along the Atlantic Coast indicate that stocks of striped bass are rapidly declining; the Chesapeake Bay stock, which historically accounted for the major portion of the coastal migratory population, has had poor reproductive success for more than ten years; the Chesapeake Bay "strain" or stock is unique; and contamination of eggs by toxic chemicals, loss of submerged aquatic vegetation, overfishing in Chesapeake Bay and on spawning grounds, and lack of consistent management practices all have contributed to the decline in numbers of striped bass in Chesapeake Bay. The petition was reviewed by the National Marine Fisheries Service's (NMFS) fishery biologists and managers as well as other personnel having knowledge and expertise concerning the striped bass. Based on these reviews the Assistant Administrator for Fisheries determined that the petition presented substantial information in support of listing the Chesapeake Bay "strain" or stock of striped bass as endangered or threatened. Section 4 of the Act and rules implementing Section 4 of the Act (50 CFR Part 424) require that a status review be conducted if a petition presents such substantial information.

Status Review

Biological Background

The striped bass, *Morone saxatilis* (Walbaum, 1792), is distributed along the Atlantic Coast from the St. Lawrence River, Canada to the St. Johns River, Florida; in the Gulf of Mexico from western Florida to Louisiana; and along the Pacific coast from British Columbia, Canada to Esenada, Mexico. The Pacific Coast stock was established in the late 1800s by the introduction of Atlantic coast specimens into the Sacramento River/San Francisco Bay watershed. There have been several other successful attempts to establish populations in reserviors and rivers throughout the United States (Setzler et al., 1980). The striped bass has a number of other vernacular names, striper, linesider, rockfish and rock being the most common (Bigelow and Schroeder, 1953).

Striped bass grow to a large size; the heaviest specimen on record weighed about 125 pounds and the longest specimen was estimated to be about 6 feet (Bigelow and Schroeder, 1953). Bigelow and Schroeder (1953) stated that the largest specimen taken with rod and reel was one of 73 pounds, taken off Martha's Vineyard by C.B. Church. Recently, a 76 pound striped bass was caught off Montauk, Long Island, New York and one of 78 pounds was caught off Atlantic City, New Jersey. The species is long-lived, with a life span of 20 or more years (Setzler et al., 1980; Bigelow and Schroeder, 1953). Although prior to sexual maturity males grow faster than females, females reach a larger size than males, with most fish over 30 pounds being females (Atlantic States Marine Fisheries Commission (ASMFC, 1981).

The species is anadromous, spawning in spring in coastal streams and in brackish estuarine waters and then returning to coastal marine waters. Spawning occurs at or near the surface in the shallow stretches of rivers and streams, usually within the first 25 miles of fresh water (Setzler et al., 1980; ASMFC, 1981). The actual time of spawning depends on latitude, being as early as mid-February in Florida and as late as early July in Canada (ASMFC, 1981). Apparently spawning peaks are associated with a noticable increase in water temperature (Setzler et al., 1980). A major spawning site for striped bass along the Atlantic coast has been Chesapeake Bay and its tributaries.

Populations: Atlantic coast striped bass have been divided into a number of populations based on meristic, morphometric, and electrophoretic differences. There is little information on the extent of interbreeding and exhange of genetic material among these populations and systematic biologists have not recognized or described subspecies. Setzler et al., (1980) noted that the following populations of striped bass were included among those described for the Atlantic coast: St. Johns River, Florida; Santee-Cooper river system, South Carolina; Cape Fear, South Carolina; Roanoke River-Albermarle Sound, North Carolina; Chesapeake Bay; Delaware River; Hudson River; Nova Scotia; and St. Lawrence River.

The Chesapeake Bay population has been divided into "subpopulations," the number of which depend upon the criteria used. Meristic studies indicate three "subpopulations,"-James River, York and Rappahannock Rivers, and upper Bay; morphometric studies indicate four, James River, York River, Rappahannock River, and Potomac River; and electrophoretic studies indicate a series of populations in the upper Bay. The reader is referred to Setzler et al. (1980) for a more extensive discussion and for citations of the original studies.

The Atlantic States Marine Fisheries Commission (1981) has developed and adopted a management plan for striped bass from Maine to North Carolina. The management plan indicated that stocks of striped bass along the Atlantic coast from Maine to North Carolina can be classified broadly into southern riverine, northern riverine and Middle Atlantic migratory stocks. The southern riverine stocks are distributed in several rivers south of about Cape Hatteras, and seldom migrate out of their natal river and associated estuaries. The Northern riverine stocks are confined to river systems north of the Canada-United States border. Middle Atlantic migratory stocks (coastal stocks) make seasonal nearshore migrations of considerable magnitude, generally moving north in summer and south in winter. Recruitment into these stocks is from rivers and estuaries along the Mid-Atlantic coast. Migrant fishes generally leave their birth places at about 2-3 years of age and migrate along the open coast in groups. Apparently these migrations are not associated with spawning.

The major spawning areas for this Middle Atlantic migratory stock are the tributaries of Chesapeake Bay and the Roanoke and Hudson Rivers, with Chesapeake Bay accounting for most of the recruitment into migratory stocks. Estimates of the contribution to the migratory stocks from Chesapeake Bay were as high as 90%. However, that high estimate was influenced by the 1970 dominant year class spawned in Chesapeake Bay. When spawning is not very successful in Chesapeake Bay, fish from the Hudson River may provide a relatively large proportion (between 40 and 50%) of the recruitment into coastal stocks (Van Winkle and Kumar, 1982).

Coastal migratory movements of fish spawned in Chesapeake Bay are related to age, sex and maturity. Fish less than two years old generally do not migrate. About half of the three year old females

migrate and a smaller proportion of four year old females migrate. Few males of similar ages migrate and as a result about 90% of young migrant fish are females. Westin and Rogers (1978), Setzler et al. (1980) and ASMFC (1981) give more detailed accounts of populations and migrations of striped bass along the Atlantic coast.

Population Size: The population size of striped bass along the Atlantic coast depends on recruitment and probably changes yearly. The most notable cause of this fluctuation has been the periodic appearance of a larger than average (dominant) year class. Such dominant year classes have been cyclic, with a period of about six years until 1970. Raney (1952) concluded that there has been a general trend of a gradual decline in numbers of striped bass interrupted by the appearance of dominant classes. According to ASMFC (1981), the last dominant year class in Chesapeake Bay was in 1970 and, as indicated by the Maryland young-of-the-year surveys, between 1974 and 1979 recruitment was below the average for 1954–1974. Most researchers and fisheries managers agree that there has been a reduction in the size of the population of striped bass. However, the extent of this decline is difficult, if not impossible, to document in terms of absolute numbers because of the lack of reliable estimates of the population size along the Atlantic coast.

The striped bass is a target species for both commercial and recreational fisheries along the Atlantic coast. Although trends in catch statistics can be used to estimate trends in relative abundance in an area over time and to estimate differences in relative abundance among various areas, these statistics do not provide reliable estimates of absolute abundance. In addition, such statistics often cannot be standardized and comparisons of statistics from different areas may result in misinterpretations and gross errors. Despite such pitfalls, catch statistics are the only source of data available for estimating population sizes in many areas and must be used to determine the general health of the striped bass. The need for standardized surveys to gather data to obtain reliable estimates of the population size of striped bass is obvious.

Total annual commercial landings of striped bass along the Atlantic coast from Maine to North Carolina averaged about 9.5 million pounds between 1958 and 1976, with a maximum of about 14.7 million pounds in 1973. Total annual commercial landings declined from 1973 to 1979, when the total was 3.1 million pounds. Totals for 1980 and 1981 were about 4.5 and 3.8 (preliminary value subject to change) million pounds, respectively (Department of the Interior; Department of Commerce, 1982). Historically Maryland has had the largest landings.

Recreational harvest data are discontinuous and difficult to use to describe trends. According to ASMFC (1982) the harvest of striped bass by sport fishermen probably has decreased by the same magnitude as the commercial harvest, despite an apparent increase in the number of sport fishermen. The National Marine Fisheries Service's Recreational Fisheries Statistics Survey, which started in 1979, is expected to provide reliable information on the recreational fishery for striped bass. Preliminary results indicate that in 1979 more than 1 million striped bass were caught along the Atlantic coast by recreational fishermen, with Maryland accounting for more than half of these.

Commercial landings are correlated strongly with the relative abundance of juveniles produced in Chesapeake Bay. Maryland young-of-the-year surveys show an index of abundance of 8.4 for 1982, compared to 1.2 in 1981, and 1.9 in 1980 (Personal Communication, Maryland Tidewater Administration).

Listing Procedures

Section 4 of the ESA provides that the Secretary of the Interior or Commerce, depending upon the species involved, shall by regulation determine if any species is an endangered or threatened species for any of the following reasons: Present or threatened destruction, modification or curtailment of its habitat or range; Overutilization for commercial, recreational, scientific or educational purposes; Disease or predation; Inadequacy of existing regulatory mechanisms; or Other natural or manmade factors affecting its continued existence. The Act requires such listing determinations to be made solely on the basis of the best scientific and commercial data available after conducting a review of the status of the species and taking into account any efforts being made to protect the species under consideration.

We considered the criteria given above in determining whether to list the Chesapeake Bay strain of striped bass as endangered or threatened. These factors and their relation to the striped bass are discussed below.

1. *The Present or Threatened Destruction, Modification or Curtailment of Its Habitat or Range.* There is little direct evidence that significant modification or destruction of the habitat or range of striped bass in recent years has caused its decline. Presumably there was a substantial loss of habitat in the late 1800's and early 1900's from construction of dams and pollution of large river systems. A major loss of habitat occurred in the Susquehanna River of Maryland and Pennsyvania (Setzler et. al., 1980), which was the site of the largest known production of striped bass eggs (Dovel, 1971). Between 1826 and 1928 a number of canal feeder dams and hydroelectric dams were constructed eliminating all but 10 miles of the lower Susquehanna as spawning grounds for the striped bass (Setzler et al., 1980; ASMFC, 1981).

The Delaware River and its New Jersey tributaries, once an important spawning area for the striped bass, became heavily polluted with municipal and industrial wastes by the late 1800's. At present, from May through September dissolved oxygen in parts of the river are reduced to very low levels and may approach 0 parts per million (ASMFC, 1981).

Recently, submerged aquatic vegetation has declined in Chesapeake Bay (Stevenson and Confer, 1978). Although there is circumstantial evidence that the abundances of such vegetation and striped bass are related, there is no direct evidence that there is a cause and effect relationship between the declines of submerged aquatic vegetation and striped bass. Both were low in abundance in the early 1930's, began increasing in the late 1930's, were abundant from the late 1950's through early 1970, after which abundances declined to low levels. Additional study is needed to better understand the relationship between submerged aquatic vegetation and striped bass (ASMFC, 1981).

2. *Overutilization for Commercial, Recreational, Scientific, or Educational Purposes.* Commercial and recreational harvests of the species have been and remain high. The level of catch from both sources was discussed above. Although little is known about the level of use for scientific and educational purposes, it probably is inconsequential compared to the commercial and recreational harvests. The effects of these harvests on the abundance and status of the striped bass is not well understood because of the lack of reliable estimates of the abundance of striped bass.

3. *Disease or Predation.* There is little information concerning the effects of disease and predation on the abundance of striped bass. These are causes of mortality in all populations. Bluefish *(Pomotamus saltatrix)* and weakfish

(Cynoscion regalis) probably prey on small striped bass, and juvenile white perch *(Morone americana)* probably eat large numbers of larval striped bass. Setzler et al. (1980), list the parasites of striped bass and discuss various diseases and abnormalities of the species.

4. *Inadequacy of Existing Regulatory Mechanisms.* The NMFS, other Federal Agencies and State Agencies have been aware of the decline in the striped bass stock for some time and have implemented a number of management and research efforts to identify and reverse the processes that have contributed to the observed decline in abundance of striped bass.

a. The State/Federal Striped Bass Program. Under funding from this program the Atlantic States Marine Fisheries Commission developed the Interstate Fisheries Management Plan for Striped Bass. The stated goal of this plan is: "To perpetuate the striped bass resource in fishable abundance throughout its range and generate the greatest possible net economic and social benefits from its harvest and utilization over time" (ASMFC, 1981). The plan recommends that the following management measures be implemented to achieve the stated goal: Minimum and maximum size limits for individuals that are harvested to maintain a spawning stock and reduce yearly variations in abundance; Closing certain areas to prevent overharvesting of mature fish in spawning areas; and Data collection and monitoring programs to evaluate the success of the plan. The plan further recommends that research efforts be directed toward understanding the factors affecting abundance and distribution of early life stages, including those controlling reproductive success, loss of spawning areas, the condition of the spawning stock, and viability of eggs. The plan also notes the importance of understanding the interspecific relationships of the striped bass and abiotic factors that affect reproductive success. This plan was adopted by the 12 member States of the ASMFC in October 1981. Those States are in the process of adopting the provisions of the plan. In addition the Congress is considering legislation to provide incentives for the 12 States to implement the plan promptly.

b. The Emergency Striped Bass Study. Section 7 of the Anadromous Fish Conservation Act (Pub. L. 96–118) directs the Secretaries of the Interior and Commerce to conduct studies to monitor the status of striped bass population and to determine the factors responsible for the decline in numbers of striped bass. These studies, collectively known as the Emergency Striped Bass Study, are directed at determining: (1) The size and distribution of the population of striped bass, including the extent and location of annual spawning; (2) The factors responsible for the decline in number of striped bass, including the extent and causes of mortality at various life history stages and the effects of pollution on eggs and larvae; and (3) A survey of the economic importance of sport and commercial striped bass fisheries.

Studies to monitor the status of striped bass stocks are the responsibility of NMFS. These studies focus on the characterization of the sex and age composition of commercial landings, determination of the spatial and temporal patterns of spawning and abundance of early life stages, and surveys to determine the abundance and distribution of juveniles.

Studies to determine the causes and extent of mortality in the striped bass (Decline Studies) are the responsiblity of the U.S. Fish and Wildlife Service (FWS). These focus on: (1) Contaminant studies, including the identification of contaminants in various life stages, the effect of identified contaminants on growth, survival, and susceptibility to pathogens, and the possible role of contaminant-related mortality on the population dynamics of striped bass; (2) Starvation studies to determine the effects of natural or man-induced variations on the abundance and availability of food or recruitment; (3) Exploitation studies utilizing mark and recapture experiments to determine fishing mortality rates; and (4) Correlation studies to determine if there is a relationship between striped bass recruitment and landings and the total discharge of chlorinated effluent, chlorine consumed and other water quality characteristics of the Potomac River.

Both FWS and NMFS are responsible for studies dealing with the economic value of the striped bass. These studies are not pertinent to the issue at hand because decisions to list or delist species must be based solely on biological criteria.

5. *Other Natural or Manmade Factors Affecting Its Continued Existence.* Researchers working under the State/Federal Striped Bass Program and the Emergency Striped Bass Study believe that the poor survival of eggs, larvae, and fry may be due to climatological factors. There are indications that reproductive success is determined to a large degree by spring freshwater flow and variable spring temperatures. Reduced spring freshwater flow reduces detritus levels which results in a decrease in copepod abundance. Copepods are a food resource for fry and juvenile striped bass.

Discussion

The petition states that striped bass stocks are declining at a drastic rate and that the Chesapeake Bay stocks, which often supply the bulk of the coastal migrating population, are suffering from successive years of reproductive failure. The NMFS recognizes that the petition addresses a serious problem to the commercial and recreational fisheries on the Atlantic coast and, more important, to the well being of the striped bass. The petition uses commercial landings in Chesapeake Bay and Maryland's Department of Natural Resources annual young-of-the-year survey to document the perceived decline in relative abundance of striped bass in Chesapeake Bay. The NMFS believes that such localized data may not give a reliable indication of the status of the striped bass throughout its range.

Historically the commercial and recreational harvests of striped bass have indicated that the species' abundance is characterized by the periodic appearance of dominant year classes. Only in recent years has the effect of these dominant year classes on striped bass fisheries become appreciated. The commercial harvest of striped bass for the last 20 years has been geared to six dominant year classes. The most recent dominant year class was in 1970. From 1971 to 1975 the reproduction of striped bass has been "mathematically average" (ASMFC, 1981). Obviously the appearance of one or more dominant year classes in the next few years may have a profound effect on the abundance and harvest of striped bass. Although we realize that there is no assurance that another dominant year class will appear on the Atlantic coast, we must consider the previous patterns of the relative abundance of striped bass including the periodic appearance of such dominant classes.

The petition also states that contamination of eggs and larvae by toxins is the major cause of poor reproductive success of the striped bass in Chesapeake Bay. This conclusion apparently is based on observations of hatchery operations in one river system and may not be applicable to the entire Chesapeake Bay. Preliminary results of extensive tests conducted by the FWS have not identified any substance that is

significantly correlated to survival and growth of fry. However, these studies suggested a trend of increasing mortality with increasing concentrations of PCBs in eggs. In addition there is no evidence that adults, eggs, or young-of-the-year striped bass from various locations, including Chesapeake Bay, contained any single contaminant in high enough concentration to conclude that it alone is the cause for the decline of striped bass along the Atlantic coast. Other studies examined the combined, or synergistic, effects of certain organic and inorganic contaminants found throughout Chesapeake Bay and the Hudson River areas. Preliminary results indicate that there may be a relationship between combined contaminant levels and mortality of eggs and fry. There also may be a relationship between the contaminant load, particularly organic contaminants, and survival of offspring.

Continued extensive harvest of striped bass in Chesapeake Bay undoubtedly will have adverse effects on the spawning stock of striped bass. The Interstate Fisheries Management Plan for Striped Bass recognizes this problem and recommends fishing restrictions that the Coastal States should adopt to increase survival of recruits to maturity and to prevent excessive exploitation of mature fish. The NMFS believes that implementing this Plan is the most effective action that can be taken at this time to reduce pressure on spawning stocks and enhance the ability of the striped bass in Chesapeake Bay to recover from its decline.

Conclusion

The NMFS believes that the best available commercial and scientific data indicate that providing the striped bass with the protections of the Endangered Species Act is not warranted at this time. Therefore we will not initiate rulemaking proceedings to list the Chesapeake Bay strain of striped bass as endangered or threatened with extinction. This decision is based on the following:

(1) The Interstate Fisheries Management Plan for Striped Bass was adopted by all involved States in October 1981. Several States have implemented many of the protective measures recommended in the Plan and other States have pending legislation to do so. In addition the Congress may provide incentives to promote full compliance with and implementation of the Plan by all involved States. Implementing this Plan should alleviate problems caused by overharvesting of the species. The NMFS believes implementation of this Plan will provide sufficient protection for the striped bass under present conditions.

(2) Long-range research conducted under the Emergency Striped Bass Study has not been completed. This research will supplement studies being conducted under the State/Federal Striped Bass Program. The information from these sources will enable NMFS to assess more reliably the status of the striped bass and to determine the effects of various substances, environmental conditions and other factors on populations of striped bass. In addition, at that time there probably will be some indication of the success of the Interstate Fisheries Management Plan for Striped Bass and we will be able to determine the need for other protective measures, including those of the Endangered Species Act.

(3) Although commercial harvests have declined to levels only slightly above historic lows, they still are several million pounds. Results of a survey of the recreational harvest of striped bass in 1979 indicate that nearly 1.2 million fish were taken by recreational fishermen. Taken together these indices of abundance suggest that the striped bass population along the Atlantic coast numbers in the millions.

(4) Preliminary results of the young-of-the-year surveys conducted by Maryland in 1982 showed that the densities of juveniles in Chesapeake Bay increased from an all time low of 1.2 fish per seine haul in 1981 to 8.4 per haul in 1982.

(5) Research on contaminants and pollutants gave no indication that any one substance appears in high enough concentration in Chesapeake Bay to cause the perceived decline in striped bass.

List of Subjects in 50 CFR Part 424

Administrative practice and procedure, Endangered and threatened wildlife.

Dated January 7, 1983.

Carmen J. Blondin,

Acting Deputy Assistant Administrator for Fisheries Resource Management.

Literature Cited

Atlantic States Marine Fisheries Commission (ASMFC). 1981. Interstate Fisheries Management Plan for the Striped Bass of the Atlantic Coast from Maine to North Carolina.

Bigelow, H. B., and W. C. Schroeder. 1953. Fishes of the Gulf of Maine. U.S. Fish and Wildlife Service, Fish. Bull. 74(53):viii–577.

Department of the Interior and Department of Commerce. 1982. 1981 Annual Report, Emergency Striped Bass Research Study. 25 pp.

Dovel, W. L. 1971. Fish Eggs and Larvae of the Upper Chesapeake Bay. Natural Resources Institute Spec. Rept. No. 4, Contrib. No. 460. Natural Res. Inst., University of Maryland. 71 pp.

Raney, E. C. 1952. The Life History of the Striped Bass (*Roccus saxatilis*, Walbaum). Bull. Bingham Oceanogr. Coll. 14(1):5–97.

Setzler, Eileen M., Walter R. Boynton, Kathryn V. Wood, Henry H. Zion, Lawrence Lubbers, Nancy K. Mountford, Phyllis Frere, Luther Tucker, and Joseph A. Mikursky. 1980. Synopsis of Biological Data on Striped Bass, *Morone saxatilis* (Walbaum). NOAA Technical Report NMFS Circular 433, U.S. Department of Commerce. 69 pp.

Stevenson, J. Court and Nedra M. Confer. 1978. Summary of Available Information on Chesapeake Bay Submerged Vegetation. Cont. No. FWS 14–16–0008–2138 Coastal Ecosystems Team, OBS, FWS, U.S. Department of the Interior.

Van Winkle, W., and K. D. Kumar. 1982. Relative Stock Composition of the Atlantic Coast Striped Bass Population: Further Analysis. Environmental Sciences Division Publ. No. 1988, Department of Energy. 15 pp.

Westin, Deborah T., and Bruce A. Rogers. 1978. Synopsis of Biological Data on the Striped Bass, *Morone saxatilis* (Walbaum) 1792. Marine Technical Report 67, Graduate School of Oceanography, Univ. of Rhode Island. 154 pp.

[FR Doc. 83-846 Filed 1-13-83; 8:45 am]

BILLING CODE 3510-22-M

Proposed Rules

Federal Register
Vol. 48, No. 10
Friday, January 14, 1983

This section of the FEDERAL REGISTER contains notices to the public of the proposed issuance of rules and regulations. The purpose of these notices is to give interested persons an opportunity to participate in the rule making prior to the adoption of the final rules.

DEPARTMENT OF AGRICULTURE

Rural Electrification Administration

7 CFR Part 1701

Amendment to REA Bulletin 20-14, Supplemental Financing for Loans Considered Under Section 4 of the Rural Electrification Act

AGENCY: Rural Electrification Administration, USDA.

ACTION: Proposed rule.

SUMMARY: The Rural Electrification Administration (REA) proposes to amend Appendix A—REA Bulletins by amending Bulletin 20-14, Supplemental Financing for Loans Considered Under Section 4 of the Rural Electrification Act. Currently, in order to meet program needs more effectively and conserve available loan funds, REA requires qualified borrowers to obtain a portion of their long-term loan funds from a supplemental lender, on terms and conditions approved by REA, as a prerequisite for obtaining REA loan funds. The intent of the proposed rule is to require both REA and supplemental loans to have the same terms with regard to final maturity and methods of computation of interest and principal payments, such terms to be agreed upon by the borrower, REA and the supplemental lender. REA insured long-term loans would be available along with appropriate supplemental loans for periods of 20, 25, 30 and 35 years.

In addition, REA proposes to reduce the deferment period for repayment of principal from the present 3 years to 2 years for an REA loan. A2-year deferment period would be consistent with the majority of REA loans which are based on 2-year construction plans designed to place facilities in service and produce revenues within 2 years. No requirement would be imposed regarding deferment periods for supplemental lenders.

DATE: Public comments must be received by REA no later than March 15, 1983.

ADDRESS: Submit written comments to the Director, Electric Borrowers' Management Division, Rural Electrification Administration, Room 3342, South Building, U.S. Department of Agriculture, Washington, D.C. 20250.

FOR FURTHER INFORMATION CONTACT: Mr. Charles R. Weaver, Director, Electric Borrower's Management Division, at the above address, telephone number (202) 382-1900. The Draft Impact Analysis describing the options considered in developing and implementing the proposal is available on request from the above office.

SUPPLEMENTARY INFORMATION: Pursuant to the Rural Electrification Act, as amended (7 U.S.C. 901 *et seq.*) (Act), REA proposes to amend REA Bulletin 20-14, Supplemental Financing for Loans Considered Under Section 4 of the Rural Electrification Act. This proposed action has been issued in conformance with Executive Order 12291, Federal Regulation. It will not: (1) Have an annual effect on the economy of $100 million or more; (2) result in major increases in costs or prices for consumers, individual industries, Federal, State or local government agencies or geographic regions; or (3) result in significant adverse effects on competition, employment, investment or productivity, and therefore has been determined "not major.".

This action does not fall within the scope of the Regulatory Flexibility Act and is not subject to OMB Circular A-95 review. This program is listed in the Catalog of Federal Domestic Assistance as 10.850, Rural Electrification Loans and Loan Guarantees.

All written submissions made pursuant to this action will be made available for public inspection during regular business hours at the above address.

Background

In general, REA loans made concurrently with supplemental lenders have a 35-year amortization period which is the maximum permitted by the Act. Currently, REA Bulletin 20-14 does not require concurrent loans made by supplemental lenders to have the same maturity date and repayment schedule as the REA loan. REA has been advised that there is interest among REA borrowers and supplemental lenders in reducing the length of the supplemental loans and in having levelized principal payments. A widespread change in the terms of the supplemental loans without a change by REA would have a significant impact on the REA loan program. Without a change in the current REA practice, there would be an increase in demand for REA loans in order to meet the capital needs of borrowers making shorter term repayments to supplemental lenders.

REA considered various options including retaining the current practice which would permit supplemental loans with a 20-to 35-year payback period and levelized principal or levelized principal and interest payments along with the standard 35-year levelized principal and interest REA loan.

This option could result in borrowers needing to raise from REA, the supplemental lenders or through retail rates, additional funds to cover increased debt service requirements if borrowers selected shorter term supplemental loans. This would have a corresponding effect on the REA loan program as borrowers financed a larger percentage of their capital needs with REA funds and paid off their supplemental debt earlier.

Another option considered by REA would be to require coterminous loan amortization periods which would significantly lessen the impact on the REA Revolving Fund. However, if borrowers were not also required to use the same repayment method, i.e., levelized principal only or levelized principal and interest to both REA and the supplemental lender, REA's proportionate outstanding indebtedness would tend to increase. REA borrowers would make level principal payments to supplemental lenders and continue to pay levelized principal and interest to REA, thus putting increased burdens on the Revolving Fund.

REA has decided to propose to amend Bulletin 20-14 in a manner which will include: (1) Equitable and flexible loan terms and conditions, (2) permit borrowers to evaluate and choose loan maturity dates and repayment schedules to fit their needs, and (3) maintain the resources of the Revolving Fund.

PART 1701—[AMENDED]

Therefore REA proposes to amend Appendix A of Part 1701 by adding to REA Bulletin 20-14 the following

paragraph E to part II, *Policy*, to read as follows:

* * * * *

E. Generally, REA shall require that supplemental loans bear the same maturity and be amortized in the same manner as REA loans made concurrently therewith. Except where REA shall determine otherwise, borrowers may select loan maturities of 20, 25, 30 or 35 years and elect to repay the loans either in periodic installments which provide for interest and level amortization of principal over the term of the loan or in periodic installments, including interest and principal payments, which are equal in amount to every other such periodic installment. Supplemental loans shall otherwise be on such terms and conditions as REA shall approve. REA loan terms will generally offer 2-year deferment of principal payments.

The policy set forth above supersedes all previous policies and requirements regarding deferments, loan maturity dates and amortization schedules including but not limited to those set forth in REA Bulletin 20-2, Electric Loan Policies and Application Procedures, paragraph VIII B, and applicable sections of Bulletin 20-9, Loan Payments and Statements.

List of Subjects in 7 CFR Part 1701

Administrative practice and procedure, Electric utilities, Loan programs—energy.

Dated: December 21, 1982.

Harold V. Hunter,

Administrator.

[FR Doc. 83-082 Filed 1-13-83; 8:45 am]

BILLING CODE 3410-15-M

NUCLEAR REGULATORY COMMISSION

10 CFR Ch. I

Issuance of Quarterly Report on the Regulatory Agenda

AGENCY: Nuclear Regulatory Commission.

ACTION: Issuance of Regulatory Agenda.

SUMMARY: The Nuclear Regulatory Commission has issued the December 1982 Regulatory Agenda. The Agenda, which is a quarterly summary of all rules on which the NRC has proposed or is planning action and all petitions for rulemaking which have been received and are pending disposition by the Commission is issued to provide the public with information regarding NRC's rulemaking activities.

ADDRESS: A copy of this report, designated NRC Regulatory Agenda (NUREG-0936) Vol. 1, No. 4 is available for inspection and copying at a cost of five cents per page at the Commission's Public Document Room, 1717 H Street, NW., Washington, DC 20555.

Single copies of the report may be obtained at a cost of $7.50, payable in advance from the NRC/GPO Sales Program, Division of Technical Information and Document Control, U.S. Nuclear Regulatory Commission, Washington, DC 20555.

FOR FURTHER INFORMATION CONTACT: John Philips, Chief, Rules and Procedures Branch, Division of Rules and Records, Office of Administration, Telephone (301) 492-7086, Toll free number (800) 368-5642.

Dated at Bethesda, Md., this 11th day of January 1983.

For the Nuclear Regulatory Commission.

J. M. Felton,

Director, Division of Rules and Records, Office of Administration.

[FR Doc. 83-1096 Filed 1-13-83; 8:45 am]

BILLING CODE 7590-01-M

DEPARTMENT OF THE TREASURY

Office of the Comptroller of the Currency

12 CFR Parts 5 and 7

[Docket No. 83-1]

Corporate Applications; Operating Subsidiaries

AGENCY: Office of the Comptroller of the Currency, Treasury.

ACTION: Notice of proposed rulemaking.

SUMMARY: The Office of the Comptroller of the Currency (Office) is proposing to simplify its approval process for banks seeking to establish or acquire operating subsidiaries. The proposal eliminates the requirement that a bank file a formal application to establish or acquire an operating subsidiary. Instead, a notification procedure is proposed. The proposed revision benefits national banks and the Office by removing burdensome and costly regulatory requirements, while maintaining the Office's ability to render decisions on the permissibility of proposed activities for operating subsidiaries.

DATE: Written comments must be submitted on or before February 14, 1983.

ADDRESS: Comments should be directed to: Docket No. [83-1], Communications Division, 3rd floor, Office of the Comptroller of the Currency, 490 L'Enfant Plaza, East SW., Washington, D.C. 20219, Attention: C. Christine Jones.

Comments will be available for public inspection and photocopying at the same location.

FOR FURTHER INFORMATION CONTACT: Randall J. Miller, Manager, Policy, Bank Organization and Structure, (202) 447-1184, or Joseph Daly, Attorney, Legal Advisory Services Division, (202) 447-1880, Office of the Comptroller of the Currency.

SUPPLEMENTARY INFORMATION:

Purpose

The purpose of this proposal is to minimize costs and burdens on national banks and the Office by simplifying and streamlining the procedure to establish or acquire operating subsidiaries.

Background

This proposal is part of the Office's Corporate Applications Review and Evaluation (CARE) Program. That program is described in 45 FR 68586, dated October 15, 1980, and involves a comprehensive review of the Office's rules, policies, procedures and forms governing filings for corporate expansion and structural changes for national banks. The goals of the CARE Program are to minimize costs and burdens on applicants, the agency and the public; to provide a better understanding of policies; to modify or eliminate rules, policies, procedures and forms which are unnecessary or lead to inefficiencies; and to remove barriers to competition.

Proposal

The Office is proposing to revise 12 CFR 5.34, which prescribes the application process a national bank must use to establish or acquire an operating subsidiary. The procedure set forth in 12 CFR 5.34 would be simplified by substituting a notification procedure. Title 12 CFR 7.7376, which provides for the establishment or acquisition of operating subsidiaries by national banks, would be rescinded and the authority for a national bank to establish or acquire an operating subsidiary would be incorporated into 12 CFR 5.34.

Discussion

An operating subsidiary of a national bank may perform only activities that can be performed within the corporate structure of its parent bank. If a bank undertakes a new activity within its corporate structure rather than through an operating subsidiary, no application or hearing process is required. Consequently, the current application process for operating subsidiaries may discourage banks from using operating subsidiaries to perform new activities, unnecessarily restricting a bank's ability to determine its organizational structure.

Similarly, if a new activity was undertaken within a bank's corporate structure, the effect of the new activity on a bank's safety and soundness would be determined by the examination process. The safety and soundness effects of operating subsidiaries would be determined in the same manner if the application process is eliminated.

In addition, if new activities were conducted within the corporate structure of the bank, their competitive effects would not be a matter of review by this Office. Consequently, operating subsidiaries should not be subject to a review of competitive effects.

Therefore, the Office proposes that the formal application and public hearing procedure be replaced by a notification procedure. The proposed procedure requires that banks seeking to establish or acquire operating subsidiaries file a letter with the Regional Administrator for the region in which the principal office of the bank is located. The letter must describe the proposed activities and location(s) of the operating subsidiary.

A bank may acquire and/or commence operation of the subsidiary after 30 days from the date on which the bank's letter is mailed unless the Office disapproves the proposed activities or extends the period. The Office will utilize the 30-day period to review the proposal. The Office may reduce the 30-day period upon request of the bank.

The Office will reject the acquisition or establishment during the 30-day period if the activities proposed exceed those permissible to a national bank operating subsidiary. The Office may require the bank to submit further factual material and/or legal analysis, if the activities of the proposed operating subsidiary are unclear or the legality of such activities is in doubt. In that event, the Office will extend its review period until it can adequately consider the proposed transaction.

Although the Office is proposing to eliminate its application procedure to establish or acquire operating subsidiaries, it should be emphasized that such acquisition or establishment will be subject to scrutiny. For instance, the acquisition or establishment of an operating subsidiary may be subject to the branching requirements of 12 U.S.C. 36 and 12 CFR 5.30, if it engages in any of the activities enumerated in 12 U.S.C. 36(f), or may be reviewed by other federal agencies responsible for enforcing the antitrust laws.

In merging the present 12 CFR 7.7376 into § 5.34 the Office is also proposing several technical changes to the language in the regulation. Language changes concerning the 80 percent stock ownership requirement are designed solely to simplify the provision and do not reflect changes in substance. A statement in § 7.7376 (b) concerning the scope of an operating subsidiary's permissible activities and a list of examples is being eliminated because it may be interpreted as limiting the scope of permissible activities to a range narrower than that currently permitted. Paragraph (c) of § 7.7376 which deals with the applicability of 12 U.S.C. 371c to operating subsidiaries is eliminated as unnecessary due to recent amendments to the statute. A requirement in §7.7376(d) (4) that the Office be informed of the disposition of all operating subsidiaries is eliminated.

Regulatory Flexibility Analysis

Pursuant to section 605(b) of the Regulatory Flexibility Act (Pub. L. No. 96-354, 5 U.S.C. 601 *et seq.*), the Secretary of the Treasury has certified that the proposed amendments, if adopted, will not have a significant economic impact on a substantial number of small entities. The proposed amendments would ease the burden of the existing regulations. The effect of the amendments is expected to be beneficial rather than adverse, and small entities are generally expected to share the benefits of the amendments equally with larger institutions.

Regulatory Impact Analysis

The Office has determined that the proposed amendments do not constitute a major rule within the meaning of Executive Order 12291. The amendments would ease burdens imposed by regulations and would have no adverse effect on the operations of the depository institutions subject to them. As such, the amendments would not have an annual effect on the economy of $100 million or more, would not cause a major increase in costs or prices for consumers, individual industries, government agencies or geographic regions, and would not have an adverse effect on competition, employment, investment, productivity, or the ability of United States-based enterprises to compete with foreign-based enterprises in domestic or export markets.

List of Subjects in 12 CFR Parts 5 and 7

National banks, Operating subsidiaries.

Authority and Issuance

Accordingly, the Comptroller of the Currency proposes to amend 12 CFR Parts 5 and 7 as follows:

PART 5—[AMENDED]

1. The authority citation for *Part 5—Rules, Policies, and Procedures for Corporate Activities* reads as follows:

Authority: 12 U.S.C. 1 et seq.

2. Section 5.34 is revised to read as follows:

§ 5.34 Operating subsidiaries.

(a) *Authority.* 12 U.S.C. 1 *et seq.*, section 24 (7), section 93a.

(b) *Rules of general applicability.* Sections 5.8, 5.10 and 5.11 do not apply to operating subsidiaries.

(c) *General.* A national bank may engage in activities which are a part of or incidental to the business of banking by means of an operating subsidiary corporation. In order to qualify as an operating subsidiary, the parent bank must own at least 80 percent of the voting stock of the corporation.

(d) *Policy.* The Office considers the establishment or acquisition of an operating subsidiary to be primarily a business decision of the bank subject to the following requirements.

(1) *Notification.* (i) A national bank which intends to acquire or establish an operating subsidiary shall submit a letter to the Regional Administrator for the region in which the bank's principal office is located. The letter must detail the proposed activities of the operating subsidiary and state whether any activity of the operating subsidiary will be conducted at some location other than the main office or a previously approved branch of the bank.

(ii) The bank may establish or acquire the operating subsidiary after 30 days from the date on which the bank's letter is mailed unless the Office has given notice disapproving the proposed activities or extending the 30-day period. The 30-day period may be extended if the bank's letter raises issues that require additional detail or time for analysis by the Office. If the 30-day period is extended, the bank may establish or acquire the proposed subsidiary only upon written notification by the Office.

(iii) The Office may shorten the 30-day period upon the request of the bank.

(2) *Applicability of banking laws.*—(i) *Banking laws applicable.* Unless otherwise provided by statute or regulation, all provisions of Federal banking laws applicable to the operations of the parent bank shall be equally applicable to the operations of its operating subsidiaries.

(ii) *Consolidation of figures.* Unless otherwise provided by statute or regulation, pertinent book figures of the parent bank and its operating

subsidiaries shall be consolidated for the purpose of applying applicable statutory limitations, such as 12 U.S.C. 56, 60, 84 and 371d.

Example. The combined exposure of the parent bank and all of its operating subsidiaries to a single borrower shall not exceed the bank's loan limit (12 U.S.C. 84).

(3) *Examination and supervision.* Each operating subsidiary shall be subject to examination and supervision by the Office of the Comptroller of the Currency in the same manner and to the same extent as the parent bank. If, upon examination, the Comptroller of the Currency ascertains that the subsidiary is created or operated in violation of law or regulation or that the manner of operation is unsafe or unsound to the business of the parent bank or its depositors, the bank may be ordered to dispose of all or part of the subsidiary upon terms as the Comptroller deems proper.

(e) *Fees.* No filing fee is required to establish or acquire an operating subsidiary.

(f) *Forms.* None.

PART 7—[AMENDED]

3. The authority citation for Part 7—Interpretive Rulings reads as follows:

Authority: 12 U.S.C. 1 et seq.

§ 7.7376 [Removed]

4. Section 7.7376 is removed.

Dated: December 3, 1982.

C. T. Conover,
Comptroller of the Currency.

[FR Doc. 83-1041 Filed 1-13-83; 8:45 am]
BILLING CODE 4810-33-M

DEPARTMENT OF COMMERCE

National Oceanic and Atmospheric Administration

15 CFR Part 929

[Docket No. 21116-229]

Key Largo National Marine Sanctuary; Corection

AGENCY: National Oceanic and Atmospheric Administration (NOAA), Commerce.

ACTION: Proposed rule; correction.

SUMMARY: This notice corrects the comment period closing date erroneously reported in the **Federal Register** on December 17, 1982. The 60-day comment period for the Key Largo National Marine Sanctuary proposed rules will close February 14, 1983. All comments should be sent to: Dr. Nancy Foster, Deputy Chief, Sanctuary Programs Division, Office of Ocean and Coastal Resource Management, National Ocean Service, NOAA, 3300 Whitehaven Street NW, Washington, D.C. 20235.

FOR FURTHER INFORMATION CONTACT: Franklin D. Christhilf, (202) 634-4236.

(Federal Domestic Assistance Catalog Number 11.419 Coastal Zone Management Program Administration)

Dated: January 7, 1983.

K. E. Taggart,
Acting Assistant Administrator for Ocean Services and Coastal Zone Management.

[FR Doc. 83-1126 Filed 1-13-83; 8:45 am]
BILLING CODE 3510-08-M

DEPARTMENT OF HEALTH AND HUMAN SERVICES

Food and Drug Administration

21 CFR Ch. I, Subchapter J

[Docket No. 79N-0147]

Quality Assurance in Nuclear Medicine; Withdrawal of Notice of Intent for Reconsideration

AGENCY: Food and Drug Administration.

ACTION: Withdrawal for reconsideration.

SUMMARY: The Food and Drug Administration (FDA) is withdrawing for reconsideration a notice of intent to propose voluntary recommendations concerning quality assurance in nuclear medicine. This action is part of the agency's reconsideration of proposed and existing regulations in light of the purposes of Executive Order 12291 entitled "Federal Regulation."

DATE: This withdrawal is effective on January 14, 1983.

FOR FURTHER INFORMATION CONTACT: Melvyn R. Altman, National Center for Devices and Radiological Health (HFX-460), Food and Drug Administration, 5600 Fishers Lane, Rockville, Md. 20857, 301-443-3426.

SUPPLEMENTARY INFORMATION: In the **Federal Register** of August 17, 1979 (44 FR 48264), FDA published a notice of intent to propose voluntary recommendations regarding quality assurance in nuclear medicine and to codify the recommendations under Title 21, Chapter I, Subchapter J of the Code of Federal Regulations (CFR).

In 1980, FDA began a program to reconsider and to withdraw outstanding proposed rules that had become obsolete because of the development of new technology, the passage of time, changes in agency priorities and policies, comments received, availability of regulatory alternatives that achieve the same consumer protection goals, or other reasons.

Furthermore, Executive Order 12291 requires Federal agencies, to the extent permitted by law, to undertake regulatory actions only when potential benefits to society outweigh potential costs to society. In addition, in both the Regulatory Flexibility Act (Pub. L. 96-354), and the Paperwork Reduction Act of 1980 (Pub. L. 96-511), Congress intended that Federal agencies reduce unwarranted regulatory burdens.

As a result of the agency's reevaluation of pending proposed rules and in light of the purposes of the Presidential and statutory directives described above, FDA is withdrawing for reconsideration its August 17, 1979 notice of intent. Withdrawal of the notice does not mean that FDA has lost interest in the subject. The agency now believes that the recommendations for the development of voluntary quality assurance programs conducted by health professionals for nuclear medicine facilities need not be codified in the CFR. FDA believes that alternative means are available to disseminate the necessary information to the public.

The alternative means, such as technical reports, scientific papers, demonstration projects and cooperative actions with professional organizations have proven effective in the dissemination of information to the public. Professional organizations that can contribute to the development of voluntary quality assurance programs in nuclear medicine include the Society of Nuclear Medicine, the American Association of Physicists in Medicine, the American College of Nuclear Physicians, the American College of Radiology, and the Federated Council of Nuclear Medicine Organizations. Because of this widespread voluntary public support, FDA's Office of Radiological Health is developing as technical reports the agency's recommendations for quality assurance in nuclear medicine. Therefore, elsewhere in this issue of the **Federal Register**, FDA announces the availability of draft recommendations for quality assurance programs in nuclear medicine facilities and invites interested persons to submit written comments regarding the draft recommendations.

The agency welcomes public participation in the development of its education program concerning quality assurance in nuclear medicine. Individuals or organizations who wish to receive technical reports or further

details on program development or to review draft copies of educational materials may have their names placed on the mailing list by writing to the National Center for Devices and Radiological Health, Division of Training and Medical Applications (HFX-77), 5600 Fishers Lane, Rockville, Md 20857.

This notice is issued under the Public Health Service Act, as amended by the Radiation Control for Health and Safety Act of 1968 (secs. 356, 82 Stat. 1174-1179 (42 U.S.C. 263d, 263f)) and the Federal Food, Drug, and Cosmetic Act (21 U.S.C. 301 et seq., as amended) and under 21 CFR 5.11 as revised (see 47 FR 16010; April 14, 1982).

The administrative record in this proceeding, including copies of any comments received and related correspondence, is on public display in the Dockets Management Branch (HFA-305), Food and Drug Administration, Rm. 4-62, 5600 Fishers Lane, Rockville, Md. 20857, under the docket number found in the heading of this document and may be seen in that office between 9 a.m. and 4 p.m., Monday through Friday.

Arthur Hull Hayes, Jr.,

Commissioner of Food and Drugs.

Richard S. Schweiker,

Secretary of Health and Human Services.

Dated: January 4, 1983.

[FR Doc. 83-603 Filed 1-13-83; 8:45 am]

BILLING CODE 4160-01-M

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21 CFR Parts 182 and 184

[Docket No. 82N-0246]

Ascorbic Acid and Its Sodium and Calcium Salts, Erythorbic Acid and Its Sodium Salt, and Ascorbyl Palmitate; Proposed Affirmation of GRAS Status and Removal of Calcium Ascorbate From the List of GRAS Ingredients

AGENCY: Food and Drug Administration.

ACTION: Proposed rule.

SUMMARY: The Food and Drug Administration (FDA) is proposing to affirm that ascorbic acid (L-ascorbic acid) and sodium ascorbate, its sodium salt; erythorbic acid (D-isoascorbic acid) and sodium erythorbate, its sodium salt; and ascorbyl palmitate (palmitoyl (L-ascorbate) are generally recognized as safe (GRAS) as direct human food ingredients. The agency is also proposing to remove the calcium salt of ascorbic acid (calcium ascorbate) from the list of GRAS direct human food ingredients. The safety of these ingredients has been evaluated under the comprehensive safety review conducted by the agency. The proposal would take no action on the listing of ascorbic acid as GRAS for use in dietary supplements.

DATES: Written comments by March 15, 1983.

ADDRESS: Written comments to the Dockets Management Branch (HFA-305), Food and Drug Administration, Rm. 4-62, 5600 Fishers Lane, Rockville, Md. 20857.

FOR FURTHER INFORMATION CONTACT: Lawrence J. Lin, Bureau of Foods (HFF-335), Food and Drug Administration, 200 C St. SW., Washington, DC 20204, 202-426-8950.

SUPPLEMENTARY INFORMATION: FDA is conducting a comprehensive review of human food ingredients classified as GRAS or subject to a prior sanction. The agency has issued several notices and proposals (see the **Federal Register** of July 26, 1973 (38 FR 20040)) initiating this review, under which the safety of ascorbic acid (L-ascorbic acid) and sodium ascorbate, its sodium salt, and calcium ascorbate, its calcium salt; erythorbic acid D-isoascorbic acid) and sodium erythorbate, its sodium salt; and ascorbyl palmitate (palmitoyl-L-ascorbate) has been evaluated. In accordance with the provisions of § 170.35 (21 CFR 170.35), the agency proposes to affirm the GRAS status of ascorbic acid and its sodium salt for use in conventional food [1] and infant formula and to remove the calcium salt of ascorbic acid from the GRAS list. The agency also proposes to affirm the GRAS status of erythorbic acid and its sodium salt and ascorbyl palmitate for direct use in conventional food.

Ascorbic acid (vitamin C) and its sodium and calcium salts and erythorbic acid and its sodium salt are white or slightly yellow crystalline solids. They are soluble in water but of limited-to-slight solubility in ethyl alcohol. Ascorbyl palmitate is a white or yellowish white solid at room temperature. It is soluble in ethyl alcohol but very slightly soluble in water.

Ascorbic acid is present in nutritionally useful amounts in many edible plants, especially rapidly growing leafy vegetables, fruits, tomatoes, and potatoes. Foods of animal origin, as usually consumed, are generally poor sources of the vitamin.

The natural and synthetic ascorbic acids are equivalent in vitamin C activity. The vitamin C activity of ascorbyl palmitate is approximately equal to that of ascorbic acid.

[1] FDA is using the term "conventional food" to refer to food that would fall within any of the 43 categories listed in § 170.3(n) (21 CFR 170.3(n)).

Commercially available ascorbic acid is produced by synthesis. One process in common use starts with D-glucose which is converted to D-sorbitol by hydrogenation. The D-sorbitol is made to yield L-sorbose by fermentation with *Acetobacter suboxydans*. A carboxyl group is introduced while the L-sorbose is in the form of its diacetone derivative. The resulting diacetone-2-keto-L-gluconic acid is then heated with hydrogen chloride to give ascorbic acid.

Erythorbic acid is produced from D-glucose by a combination of biosynthesis and chemical synthesis. In this process, D-glucose is converted to 2-keto-D-gluconic acid by fermentation with *Pseudomonas fluorescens*. The Gluconic acid derivative is then esterified to give methyl 2-keto-D-gluconate, which, upon heating in basic solution, gives sodium erythorbate. Erythorbic acid is produced by acidifying a water-methanol solution of its sodium salt.

Among the four stereoisomeric ascorbic acids, which include L- and D-ascorbic acids and L- and D-isoascorbic acids, only the L isomer of ascorbic acid has significant vitamin C activity. Because the name D-isoascorbic acid on a product label is capable of misleading a purchaser, the agency issued § 101.33 (21 CFR 101.33) requiring that any label declaration of D-isoascorbic acid use the common name for this ingredient. The common name for this ingredient is erythorbic acid.

A regulation published in the **Federal Register** of November 20, 1959 (24 FR 9368), and recodified in the **Federal Register** of March 15, 1977 (42 FR 14302), listed ascorbic acid and its salts, erythorbic acid, and escorbyl palmitate as GRAS for use as chemical preservatives as follows: § 182.3013 *Ascorbic acid* (21 CFT 182.3013), § 182.3041 *Erythorbic acid* (21 CFR 182.3041), § 182.3149 *Ascorbyl palmitate* (21 CFR 182.3149), § 182.3189 *Calcium ascorbate* (21 CFR 182.3189), and § 182.3731 *Sodium ascorbate* (21 CFR 182.3731). Sodium erythorbate is not listed as a GRAS substance under FDA regulations, but FDA has acknowledged that its use as a chemical preservative is GRAS in numerous opinion letters that the agency has issued since 1960.

Ascorbic acid was listed as a GRAS nutrient/dietary supplement in a regulation published in the **Federal Register** of January 31, 1961 (26 FR 938). However, in a final rule published in the **Federal Register** of September 5, 1980 (45 FR 58837), FDA divided the nutrient/dietary supplement category into separate listings for GRAS dietary

supplements and for GRAS nutrients. Therefore, ascorbic acid currently is listed as GRAS in § 182.5013 (21 CFR 182.5013) for use in dietary supplements and in § 182.8013 (21 CFR 182.8013) for use in food as a nutrient. Section 412(g) of the Federal Food, Drug, and Cosmetic Act (the act) lists ascorbic acid as a required nutrient in infant formula, subject to level restrictions. FDA is reviewing all nutrient levels in infant formulas under a contract with the American Academy of Pediatrics. Any necessary modifications in the nutrient levels of ascorbic acid in infant formula will be proposed by a separate rulemaking under section 412(a)(2) of the act. Ascorbic acid also may be used to fortify foods as described in Part 104 (21 CFR Part 104).

Ascorbic acid is listed as an optional ingredient in the following standards of identity for foods: § 173.105 *Flour* (21 CFR 137.105); § 137.200 *Whole wheat flour* (21 CFR 137.200); § 145.110 *Canned applesauce* (21 CFR 145.110); § 145.115 *Canned apricots* (21 CFR 145.115); § 145.135 *Canned fruit cocktail* (21 CFR 145.135); § 146.110 *Cranberry juice cocktail* (21 CFR 146.110); § 146.113 *Canned fruit nectars* (21 CFR 146.113); § 146.185 *Canned pineapple juice* (21 CFR 146.185); § 146.187 *Canned prune juice* (21 CFR 146.187); § 150.141 *Artificially sweetened fruit jelly* (21 CFR 150.141); § 150.161 *Artificially sweetened fruits preserves and jams* (21 CFR 155.161); § 155.200 *Certain other canned vegetables* (21 CFR 155.200); § 156.145 *Tomato juice* (21 CFR 156.145); and § 161.175 *Frozen raw breaded shrimp* (21 CFR 161.175). Erythorbic acid is listed as an optional ingredient in the following standards of identity for canned fruits and vegetables: § 145.110 *Canned appplesauce* (21 CFR 145.110) and in § 155.200 *Certain other canned vegetables* (21 CFR 155.200).

Ascorbyl palmitate is permitted for use as a preservative in margarine under § 166.110 (21 CFR 166.110). Sodium ascorbate and sodium erythorbate are authorized under the Meat Inspection Act for use in cured meats by the U.S. Department of Agriculture.

In 1971, the National Academy of Sciences/National Research Council (NAS/NRC) surveyed a representative cross-section of food manufacturers to determine the specific foods in which ascorbates and erythorbates were used and the levels of usage. NAS/NRC combined this manufacturing information with information on comsumer consumption of foods to obtain an estimate of consumer exposure to these ingredients. FDA estimates from the NAS/NRC survey that in 1970 about 1,900,000 kilograms of ascorbic acid, 680,000 kilograms of sodium ascorbate, 420,000 kilograms of erythorbic acid, 500,000 kilograms of sodium erythorbate, and 50 kilograms of ascorbyl palmitate were used in food. Ascorbates are used primarily as antioxidants in a variety of foods, including meat products, milk products, poultry products, baked goods, hard candy, breakfast cereals, and processed fruits and drinks. Erythorbates are also used primarily as antioxidants but in fewer food categories than ascorbates.

Ascorbates and erythorbates have been the subjects of a search of the scientific literature from 1920 to the present. The criteria used in the search were chosen to discover any articles that considered: (1) Chemical toxicity, (2) occupational hazards, (3) metabolism, (4) reaction products, (5) degradation products, (6) carcinogenicity, teratogenicity, or mutagenicity, (7) dose response, (8) reproductive effects, (9) histology, (10) embryology, (11) behavioral effects, (12) detection, and (13) processing. A total of 9,724 abstracts was reviewed, and 381 particularly pertinent reports from the literature survey have been summarized in a scientific literature review.

Information from the scientific literature review and other sources has been summarized in a report to FDA by the Select Committee on GRAS Substances (the Select Committee), which is composed of qualified scientists chosen by the Life Sciences Research Office of the Federation of American Societies for Experimental Biology (FASEB). The members of the Select Committee have evaluated all the available data and information on ascorbates and erythorbates.[2] In the Select Committee's opinion:

L-ascorbic acid, vitamin C, occurs in nutritionally significant amounts as a natural constituent of many fruits, vegetables, berries, and melons. As a vitamin it is needed in the diet of all age groups. L-ascorbic acid and its sodium salt are antioxidants and they are extensively used as preservatives, color stabilizers and for related functions in various foods and beverages. Calcium ascorbate and ascorbyl palmitate, a derivative of ascorbic acid, have greater fat solubility, also are antioxidants, but appear not to have significant use in processed foods.

In addition to the use in foods as antioxidants, L-ascorbic acid and its salts are added to some foods as a source of vitamin C. These sources constitute a significant proportion of the total ascorbate intake of the general population.

Erythorbic acid (D-isoascorbid acid), a stereoisomer of L-ascorbic acid, and its sodium salt, also are effective antioxidants and used for this purpose in a number of food products. The quantities used in 1970 were substantially less than for the ascorbates. The vitamin activity of erythorbates is only one-twentieth that of ascorbic acid, and their antioxidant effectiveness is not greater than for ascorbates. For this reason, it would seem desirable where possible, to use L-ascorbic acid rather than erythorbic acid as an antioxidant.

From studies in guinea pigs and man it can be concluded that although erythorbic acid shares the same absorption and tissue uptake system as ascorbic acid it has little antiscorbutic activity. Although competition between ascorbic acid and erythorbic acid has been demonstrated at a biochemical level, there is no firm evidence that such competition will produce a scorbutic state. Whether this biochemical interaction could result in a clinically significant depletion of ascorbic acid remains to be established.

Both short- and long-term toxicity studies have demonstrated tolerance without adverse effects for large amounts of orally administered (L-ascorbid acid, sodium L-ascorbate and erythorbic acid in several species including mice, rats, guinea pigs, rabbits, and dogs.

A substantial number of short-term experiments with human subjects ingesting 1 to 4 g of ascorbate daily have generally not revealed any harmful effects. Some subjects have received higher amounts, up to at least 8 to 10 g per day. In most instances no untoward results have been noted. But there is marked paucity of such studies that were well controlled and in which inquiring attention was given to possible harmful effects. In due course, such studies would be desirable.

In the various studies on the effects of ingesting excessive amounts of ascorbates, attention has been focused on questions including oxalate excretion and renal tract stones, effects on the utilization of copper, iron, and other metals, need for vitamin B_{12}, blood coagulation, and reproductive performance. The findings indicate that the tolerance to excessive amounts of ascorbic acid and its sodium salt is high. Several investigators have reported the development of dependency in animals and humans after ingestion of larger amounts of ascorbates for extended time periods; however, the levels of ascorbate intake in these studies exceeded the estimated daily intakes of ascorbates added to foods by 1 to 3 orders of magnitude.

[2] "Evaluation of the Health Aspects of Ascorbic Acid, Sodium Ascorbate, Calcium Ascorbate, Erythorbic Acid, Sodium Erythorbate, and Ascorbyl Palmitate as Food Ingredients," Live Sciences Research Office, Federation of American Societies for Experimental Biology, 1979, pp. 11–31. In the past, the agency presented verbatim the Select Committee's discussion of the biological data it reviewed. However, because the Select Committee's report is available at the Dockets Management Branch and from the National Technical Information Service, and because it represents a significant savings to the agency in publication costs, FDA has decided to discontinue presenting the discussion in the preamble to proposals that affirm GRAS status in accordance with current good manufacturing practice.

It is notable that no data have been found concerning the possible effects of ascorbyl palmitate and calcium ascorbate in humans, and there is practically no information regarding the latter in animals. Information concerning ascorbyl palmitate in animals is almost as limited. The few meaningful experiments suggest that ascorbyl palmitate is tolerated about the same as ascorbic acid and sodium ascorbate. This should be expected. It is reasonable to assume that the tolerance to calcium ascorbate is approximately the same as for sodium ascorbate and this is at a high level.[3]

The Select Committee concludes that there is no evidence in the available information on ascorbic acid, sodium ascorbate, calcium ascorbate, erythorbic acid, sodium erythorbate, and ascorbyl palmitate that demonstrates, or suggests reasonable grounds to suspect, a hazard to the public when they are used as food ingredients at levels that are now current or that might reasonably be expected in the future.[4]

FDA has undertaken its own evaluation of all available information on these ingredients and concurs with the conclusion of the Select Committee. The agency concludes that no change in the current GRAS status of these ingredients is justified. Therefore, the agency proposes to affirm these ingredients, except calcium ascorbate, as GRAS.

FDA has concluded that calcium ascorbate should be removed from the GRAS list as direct human food ingredient because of the lack of information on its use in food. The agency requested use information on calcium ascorbate in two surveys of food manufacturers, but no information describing the conditions under which this substance is used (technical effects, level of addition, food categories) was provided. To complete its evaluation of the GRAS status of calcium ascorbate, FDA must have information on the conditions under which this substsnce is used in food. Under the Federal Food, Drug, and Cosmetic Act, a food ingredient may be GRAS only under the conditions of its intended use. If use conditions are unknown, a GRAS determination cannot be made. However, if FDA receives as comments on this proposal evidence of actual direct food use of calcium ascorbate, the agency will consider affirming the use as GRAS.

Because the NAS/NRC survey did not specifically request data on dietary supplement use, FDA does not have adequate data upon which to judge the exposure to ascorbic acid from this use. Without such exposure data, FDA cannot evaluate the safety of the use of ascorbic acid in dietary supplements and therefore can take no action on the GRAS status of ascorbic acid for this use. Therefore, FDA is not taking any action on the listing of ascorbic acid in § 182.5013 as a dietary supplement.

The 1971 NAS/NRC survey reported that sodium ascorbate is used in infant formula at 0.016 percent as compared to 0.012 percent for ascorbic acid. These values indicate that ascorbic acid and its sodium salt are added alternatively as nutrient sources of vitamin C. Based on its review of the relevant data, FDA has tentatively concluded that the use of these two ingredients in infant formula is safe. This proposed regulation will allow use of either ingredient as an appropriate source of vitamin C.

FDA is proposing to affirm the GRAS status of ascorbic acid, sodium ascorbate, erythorbic acid, sodium erythorbate, and ascorbyl palmitate when they are used under current good manufacturing practice conditions of use in accordance with § 184.1(b)(1) (21 CFR 184.1(b)(1)). The agency is proposing not to include in the GRAS affirmation regulations for these substances the levels of use reported in the 1971 NAS/NRC survey. Both FASEB and the agency have concluded that a large margin of safety exists for the use of these substances, and that a reasonably foreseeable increase in the level of consumption of these substances will not adversely affect human health.

Because the affirmation of the GRAS status of erythorbic acid, sodium erythorbate, and ascrobyl palmitate is based on the evaluation of limited uses, the proposed regulations for these ingredients set forth the technical effects and food categories that FDA evaluated. On the other hand, because ascorbic acid and sodium ascorbate are used in numerous food categories, FDA has concluded that it is not necessary to include a description of food categories in the proposed GRAS affirmation regulations for these ingredients. The affirmation of the GRAS status of these substances is based on the evaluation of their currently known uses, however, and therefore the agency is setting forth the technical effects for these ingredients in the proposed regulations.

In the **Federal Register** of September 7, 1982 (47 FR 39199), FDA proposed to adopt a general policy restricting the circumstances in which it will specifically describe conditions of use in regulations affirming substances as GRAS under 21 CFR 184.1(b)(1) or 186.1(b)(1). The agency proposed to amend its regulations to indicate clearly that it will specify one or more of the current good manufacturing practice conditions of use in regulations for substances affirmed as GRAS with no limitations other than current good manufacturing practice only when the agency determines that it is appropriate to do so.

Copies of the scientific literature reviews and the report of the Select Committee on ascorbic acid and ascorbates are available for review in the Dockets Management Branch (address above), and may be purchased from the National Technical Information Service, 5285 Port Royal Rd., Springfield, Va. 22161, as follows:

Title	Order No.	Price code	Price [1]
Ascorbic acid (scientific literature review)	PB 241-969	A18	$30.00
Ascorbates (scientific literature review)	PB 223-866	A06	12.00
Ascorbic acid, sodium ascorbate, calcium ascorbate, erythorbic acid, sodium erythorbate, and ascorbyl palmitate (Select Committee report).	PB 80-128796	A04	9.00

[1] Price subject to change.

This proposed action does not affect the current use of ascorbates and erythorbates in pet food or animal feed.

The format of the proposed regulations is different from that in previous GRAS affirmation regulations. FDA has modified paragraph (c) of §§ 184.1013, 184.1041, 184.1149, 184.1731, and 184.1756 to make clear the agency's determination that GRAS affirmation is based upon current good manufacturing conditions of use, including when appropriate both the technical effects and food categories listed. This change has no substantive effect but is made merely for clarity.

The agency has determined under 21 CFR 25.24(d)(6) (proposed December 11, 1979; 44 FR 71742) that this proposed action is of a type that does not individually or cumulatively have a significant impact on the human environment. Therefore, neither an environmental assessment nor an environmental impact statement is required.

FDA, in accordance with the Regulatory Flexibility Act, has considered the effect that this proposal would have on small entities including small businesses and has determined that the effect of this proposal is to

[3] *Ibid.*, p. 32.
[4] *Ibid.*, p. 33.

maintain current known uses of the substances covered by this proposal by both large and small businesses. Therefore, FDA certifies in accordance with section 605(b) of the Regulatory Flexibility Act that no significant economic impact on a substantial number of small entities will derive from this action.

In accordance with Executive Order 12291, FDA has carefully analyzed the economic effects of this proposal, and the agency has determined that the final rule, if promulgated, will not be a major rule as defined by the Order.

List of Subjects

21 CFR Part 182

Generally recognized as safe (GRAS) food ingredients, Spices and flavorings.

21 CFR Part 184

Direct food ingredients, Food ingredients; Generally recognized as safe (GRAS) food ingredients.

Therefore, under the Federal Food, Drug, and Cosmetic Act (secs. 201(s), 409, 701(a), 52 Stat. 1055, 72 Stat. 1784–1788 as amended (21 U.S.C. 321(s), 348, 371(a))) and under authority delegated to the Commissioner of Food and Drugs (21 CFR 5.10), it is proposed that Parts 182 and 184 be amended as follows:

PART 182—SUBSTANCES GENERALLY RECOGNIZED AS SAFE

1. In Part 182:

§ 182.3013 [Removed]

a. By removing § 182.3013 *Ascorbic acid.*

§ 182.3041 [Removed]

b. By removing § 182.3043 *Erythorbic acid.*

§ 182.3149 [Removed]

c. By removing § 182.3149 *Ascorbyl palmitate.*

§ 182.3189 [Removed]

d. By removing § 182.3189 *Calcium ascorbate.*

§ 182.3731 [Removed]

e. By removing § 182.3731 *Sodium ascorbate.*

§ 182.8013 [Removed]

f. By removing § 182.8013 *Ascorbic acid.*

PART 184—DIRECT FOOD SUBSTANCES AFFIRMED AS GENERALLY RECOGNIZED AS SAFE

2. In Part 184:

a. By adding new § 184.1013, to read as follows:

§ 184.1013 Ascorbic acid.

(a) Ascorbic acid (L-ascorbic acid, $C_6H_8O_6$, CAS Reg. No. 50–81–7), also known as vitamin C, is white or slightly yellow crystals or powder. It is present in nutritionally useful amounts in many edible plants, especially rapidly growing leafy vegetables, fruits, tomatoes, and potatoes. Ascorbic acid is commercially synthesized from D-glucose via the following intermediates: D-sorbitol, L-sorbose, and diacetone-2-keto-L-gluconic acid. Ascorbic acid is soluble in water and slightly soluble in ethyl alcohol.

(b) The ingredient meets the specifications of the Food Chemicals Codex, 3d Ed. (1981), p. 27, which is incorporated by reference. Copies are available from the National Academy Press, 2101 Constitution Ave. NW., Washington, DC 20418, or available for inspection at the Office of the Federal Register, 1100 L St. NW., Washington, DC 20408.

(c) In accordance with § 184.1(b)(1), the ingredient is used in food with no limitation other then current good manufacturing practice. The affirmation of this ingredient as generally recognized as safe (GRAS) as a direct human food ingredient is based upon the following current good manufacturing practice conditions of use:

(1) The ingredient is used as an antioxidant as defined in § 170.3(o)(3) of this chapter; as a curing and pickling agent as defined in § 170.3(o)(5) of this chapter; as a flavoring agent and adjuvant as defined in § 170.3(o)(12) of this chapter; as a nutrient supplement as defined in § 170.3(o)(20) of this chapter; as a pH control agent as defined in § 170.3(o)(23) of this chapter; and as a processing aid as defined in § 170.3(o)(24) of this chapter.

(2) The ingredient is used in food at levels not to exceed current good manufacturing practice. The ingredient may be used in infant formula in accordance with section 412(g) of the Federal Food, Drug, and Cosmetic Act (the act) or with regulations promulgated under section 412(a)(2) of the act.

b. By adding new § 184.1041, to read as follows:

§ 184.1041 Erythorbic acid.

(a) Erythorbic acid ($C_6H_8O_6$, CAS Reg. No. 89–65–6) is white or slightly yellow crystals or powder. It is prepared from D-glucose by a combination of biosynthesis and chemical synthesis via the intermediates 2-keto-D-gluconic acid and sodium erythorbate. Erythorbic acid is soluble in water.

(b) The ingredient meets the specifications of the Food Chemicals Codex, 3d Ed. (1981), p. 110, which is incorporated by reference. Copies are available from the National Academy Press, 2101 Constitution Ave. NW., Washington, DC 20418, or available for inspection at the Office of the Federal Register, 1100 L St. NW., Washington, DC 20408.

(c) In accordance with § 184.1(b)(1), the ingredient is used in food with no limitation other than current good manufacturing practice. The affirmation of this ingredient as generally recognized as safe (GRAS) as a direct human food ingredient is based upon the following current good manufacturing practice conditions of use:

(1) The ingredient is used as an antioxidant as defined in § 170.3(o)(3) of this chapter; as a curing and pickling agent as defined in § 170.3(o)(5) of this chapter; as a flavoring agent and adjuvant as defined in § 170.3(o)(12) of this chapter; and as a processing aid as defined in § 170.3(o)(24) of this chapter.

(2) The ingredient is used in the following foods at levels not to exeed current good manufacturing practice: baked goods and baking mixes as defined in § 170.3(n)(1) of this chapter; nonalcoholic beverages and beverage bases as defined in § 170.3(n)(3) of this chapter; fats and oils as defined in § 170.3(n)(12) of this chapter; fruits and water ices as defined in § 170.3(n)(21) of this chapter; gravies and sauces as defined in § 170.3(n)(24) of this chapter; meat products as defined in § 170.3(n)(29) of this chapter; processed vegetables and vegetable juices as defined in § 170.3(n)(36) of this chapter; and soft candy as defined in § 170.3(n)(38) of this chapter.

(d) In accordance with § 101.33 of this chapter, the label of a food that contains this ingredient shall designate the name erythorbic acid.

c. By adding new § 184.1149, to read as follows:

§ 184.1149 Ascorbyl palmitate.

(a) Ascorbyl palmitate (palmitoyl L-ascorbate, $C_{22}H_{38}O_7$, CAS Reg. No. 137–66–6) is a white or yellowish white powder at room temperature. It is prepared by the reaction of ascorbic acid with palmitic acid. It is soluble in ethyl alcohol and very slightly soluble in water.

(b) The ingredient meets the specifications of the Food Chemicals Codex, 3d Ed. (1981), p. 27, which is incorporated by reference. Copies are available from the National Academy

Press, 2101 Constitution Ave. NW., Washington, DC 20418, or available for inspection at the Office of the Federal Register, 1100 L St. NW., Washington, DC 20408.

(c) In accordance with § 184.1(b)(1), the ingredient is used in food with no limitation other than current good manufacturing practice. The affirmation of this ingredient as generally recognized as safe (GRAS) as a direct human food ingredient is based upon the following current good manufacturing practice conditions of use:

(1) The ingredient is used as an antioxidant as defined in § 170.3(o)(3) of this chapter and as a surface-active agent as defined in § 170.3(o)(29) of this chapter.

(2) The ingredient is used in the following foods at levels not to exceed current good manufacturing practice: coffee and tea as defined in § 170.3(n)(7) of this chapter and fats and oils as defined in § 170.3(n)(12) of this chapter.

d. By adding new § 184.1731, to read as follows:

§ 184.1731 Sodium ascorbate.

(a) Sodium ascorbate (sodium L-ascorbate, $C_6H_7O_6Na$, CAS Reg. No. 134-03-2) is a salt of L-ascorbic acid and exists as a white or slightly yellow crystalline solid. It is prepared by neutralization of L-ascorbic acid with sodium bicarbonate.

(b) The ingredient meets the specifications of the Food Chemicals Codex, 3d Ed. (1981), p. 277, which is incorporated by reference. Copies are available from the National Academy Press, 2101 Constitution Ave. NW., Washington, DC 20418, or available for inspection at the Office of the Federal Register, 1100 L St. NW., Washington, DC 20408.

(c) In accordance with § 184.1(b)(1), the ingredient is used in food with no limitation other than current good manufacturing practice. The affirmation of this ingredient as generally recognized as safe (GRAS) as a direct human food ingredient is based upon the following current good manufacturing practice conditions of use:

(1) The ingredient is used as an antioxidant as defined in § 170.3(o)(3) of this chapter; as a curing and pickling agent as defined in § 170.3(o)(5) of this chapter; and as a nutrient supplement as defined in § 170.3(o)(20) of this chapter.

(2) The ingredient is used in food at levels not to exceed current good manufacturing practice. The ingredient may be used in infant formula in accordance with section 412(g) of the Federal Food, Drug, and Cosmetic Act (the act) or with regulations promulgated under section 412(a)(2) of the act.

e. By adding new § 184.1756, to read as follows:

§ 184.1756 Sodium erythorbate.

(a) Sodium erythorbate ($C_6H_7O_6Na$, CAS Reg. No. 6-381-777) is the anhydrous or monohydrate sodium salt of erythorbic acid and exists as white crystalline powder or granules. It is prepared from D-glucose by a combination of biosynthesis and chemical synthesis via the intermediate 2-keto-D-gluconic acid. Sodium erythorbate is soluble in water.

(b) The ingredient meets the specifications of the Food Chemicals Codex, 3d Ed. (1981), p. 285, which is incorporated by reference. Copies are available from the National Academy Press, 2101 Constitution Ave. NW., Washington, DC 20418, or available for inspection at the Office of the Federal Register, 1100 L St. NW., Washington, DC 20408.

(c) In accordance with § 184.1(b)(1), the ingredient is used in food with no limitation other than current good manufacturing practice. The affirmation of this ingredient as generally recognized as safe (GRAS) as a direct human food ingredient is based upon the following current good manufacturing practice conditions of use:

(1) The ingredient is used as an antioxidant as defined in § 170.3(o)(3) of this chapter and a curing and pickling agent as defined in § 170.3(o)(5) of this chapter.

(2) The ingredient is used in the following foods at levels not to exceed current good manufacturing practice: alcoholic beverages as defined in § 170.3(n)(2) of this chapter; nonalcoholic beverages and beverage bases as defined in § 170.3(n)(3) of this chapter; breakfast cereals as defined in § 170.3(n)(4) of this chapter; meat products as defined in § 170.3(n)(29) of this chapter; milk products as defined in § 170.3(n)(31) of this chapter; and poultry products as defined in § 170.3(n)(34) of this chapter.

The agency is unaware of any prior sanction for the use of these ingredients in foods under conditions different from those identified in this document. Any person who intends to assert or rely on such a sanction shall submit proof of its existence in response to this proposal. The action proposed above will constitute a determination that excluded uses would result in adulteration of food in violation of section 402 of the Federal Food, Drug, and Cosmetic Act (21 U.S.C. 342), and the failure of any person to come forward with proof of an applicable prior sanction in response to this proposal constitutes a waiver of the right to assert or rely on it later. Should any person submit proof of the existence of a prior sanction, the agency hereby proposes to recognize such use by issuing an appropriate final rule under Part 181 (21 CFR Part 181) or affirming it as GRAS under Part 184 or 186 (21 CFR 184 or 186), as appropriate.

Interested persons may, on or before March 15, 1983, submit to the Dockets Management Branch (address above), written comments regarding this proposal. Two copies of any comments are to be submitted, except that individuals may submit one copy. Comments are to be identified with the docket number found in brackets in the heading of this document. Received comments may be seen in the office above between 9 a.m. and 4 p.m., Monday through Friday.

Dated: December 21, 1982.

William F. Randolph,

Acting Associate Commissioner for Regulatory Affairs.

[FR Doc. 83-881 Filed 1-13-83; 8:45 am]

BILLING CODE 4160-01-M

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21 CFR Parts 182 and 184

[Docket No. 78N-0308]

Biotin; Proposed Affirmation of GRAS Status

AGENCY: Food and Drug Administration.

ACTION: Proposed rule.

SUMMARY: The Food and Drug Administration (FDA) is proposing to affirm that biotin is generally recognized as safe (GRAS) as a direct human food ingredient. The safety of this ingredient has been evaluated under the comprehensive safety review conducted by the agency. The proposal would take no action on the listing of this ingredient as a GRAS substance for use in dietary supplements.

DATE: Written comments by March 15, 1983.

ADDRESS: Comments to the Dockets Management Branch (HFA-305), Food and Drug Administration, Rm. 4-62, 5600 Fishers Lane, Rockville, MD 20857.

FOR FURTHER INFORMATION CONTACT: Lawrence J. Lin, Bureau of Foods (HFF-335), Food and Drug Administration, 200 C St. SW., Washington, DC 20204; 202-426-8950.

SUPPLEMENTARY INFORMATION: FDA is conducting a comprehensive review of human food ingredients classified as GRAS or subject to a prior sanction. The agency has issued several notices and

proposals (see the **Federal Register** of July 26, 1973 (38 FR 20040)) initiating this review, under which the safety of biotin has been evaluated. In accordance with the provisions of § 170.35 (21 CFR 170.35), the agency proposes to affirm the GRAS status of this ingredient for use as a nutrient supplement in special formula used for weight control and infant formula.

The GRAS status of the use of biotin in dietary supplements (i.e., over-the-counter vitamin preparations in forms such as capsules, tablets, liquids, wafers, etc.) is not affected by this proposal. The agency did not request consumer exposure data on dietary supplement uses when it initiated this review. Without exposure data, the agency cannot evaluate the safety of using biotin in dietary supplements. The use of this ingredient in dietary supplements will continue to be permissible under Subpart F of Part 182 (21 CFR Part 182).

Biotin, one of the B-complex vitamins, is d-*cis*-hexahydro-2-keto-1*H*-thieno-(3,4)-imidazole-4-valeric acid. It is a white crystalline compound with a molecular weight of 244. The biotin molecule contains three asymmetric carbon atoms, making possible four diastereoisomers or eight optically active isomers. Only natural biotin, having the formula indicated above, is biologically active. Biotin is present in small quantities in many foods. Sources of biotin include liver, egg yolk, yeast, soybeans, cauliflower, cowpeas, and certain fish (mackerel, salmon, and sardines).

Biotin was listed as a GRAS nutrient/dietary supplement in a regulation published in the **Federal Register** of January 31, 1961 (26 FR 938). However, in regulation published in the **Federal Register** of September 5, 1980 (45 FR 58837), FDA divided the nutrient and dietary supplement category into separate listings for GRAS dietary supplements and for GRAS nutrients. Therefore, biotin is currently listed as GRAS in §§ 182.5159 and 182.8159 (21 CFR 182.5159 and 182.8159) for use in dietary supplements and as a nutrient. Section 412(g) of the Federal Food, Drug, and Cosmetic Act (the act) lists biotin as a required nutrient in infant formula, subject to level restrictions. FDA is reviewing all nutrient levels in infant formulas under a contract with the American Academy of Pediatrics. Any necessary modifications in the level of biotin in infant formula will be proposed by a separate rulemaking under section 412(a)(2) of the act. Biotin also may be used to fortify foods as described in Part 104 (21 CFR Part 104).

In 1971, the National Academy of Sciences/National Research Council (NAS/NRC) surveyed a representative cross-section of food manufacturers to determine the specific foods in which biotin is used and the levels of usage. NAS/NRC combined this manufacturing information with information on consumer consumption of foods to obtain an estimate of consumer exposure to biotin. FDA estimates from the NAS/NRC survey that the total amount of biotin used in food in 1970 was 17 pounds.

The NAS/NRC survey also indicated that infant formula was the only food to which biotin was added. The Physician's Desk Reference indicates that biotin is not added to milk-based infant formula (i.e., those fed to the great majority of U.S. infants) but is added to some soy isolate-based infant formula and to certain other milk-free formula prepared either for infants or for other age groups at levels ranging from 0.05 to 0.15 milligram per liter. According to the estimates of Fomon,[1] which appear in the report of the Select Committee on GRAS Substances (the Select Committee) to FDA, based on the percentage of infants fed milk-free formula and on the approximately 3.5 million infant births in the United States in 1970, approximately 44 million liters of milk-free formula were fed to infants in that year. If all of this formula had been fortified with biotin at the maximum level (0.15 milligram per liter), about 15 pounds biotin would have been needed.

Biotin has been the subject of a search of the scientific literature from 1920 to the present. The criteria used in the search were chosen to discover any articles that considered: (1) Chemical toxicity, (2) occupational hazards, (3) metabolism, (4) reaction products, (5) degradation products, (6) carcinogenicity, teratogenicity, or mutagenicity, (7) dose response, (8) reproductive effects, (9) histology, (10) embryology, (11) behavioral effects, (12) detection, and (13) processing. A total of 1,543 abstracts on biotin was reviewed, and 53 particularly pertinent reports from the literature survey have been summarized in a scientific literature review.

Information from the scientific literature review and other sources has been summarized in the report to FDA by the Select Committee, which is composed of qualified scientists chosen by the Life Sciences Research Office of the Federation of American Societies for Experimental Biology (FASEB). The members of the Select Committee have evaluated all the available safety information on biotin.[2] In the Select Committee's opinion:

> Biotin, one of the B-complex vitamins, is an essential nutrient functioning as a part of the enzyme systems of the human body that are involved in carboxylation and decarboxylation reactions. It is present in many foods and usual diets of adults probably supply an average of 30 or 40 μg daily, with large variation. The difficulty of producing biotin deficiency in mammals without the use of avidin indicates that the usual intakes are in excess of those required for normal maintenance and growth.
>
> Currently the only food use of biotin is milk-free infant formulas and certain special formulas used for weight control and weight gain. Infant formulas are likely to provide approximately 95 μg of biotin per day for a 4-month-old (about 20 μg per kg body weight) and an adult receiving 2,000 kcal in the form of foods for special dietary use under medical supervision could receive up to 300 μg biotin per day (about 5 μg per kg body weight). Considerably larger doses (up to 2 mg per kg body weight) have been administered without untoward affects in attempts at treating several disease conditions.
>
> Although adverse effects of biotin administration on reproductive performance have been reported in limited experiments in rats, the effective doses have been extremely large (about 50 μg of biotin per kg. of body weight). Such does are orders of magnitude greater than those to which humans could conceivably be exposed by consumption of processed foods containing added biotin.[3]

The Select Committee concludes that no evidence in the available information on biotin demonstrates, or suggests reasonable grounds to suspect, a hazard to the public when it is added to foods at levels that are now current or that might reasonably be expected in the future.[4]

FDA has undertaken its own evaluation of all available information and, insofar as biotin is used as a nutrient supplement in special formula used for weight control and infant formula, concurs with the conclusion of the Select Committee. The agency concludes that no change in the current GRAS status of this ingredient is

[1] Fomon, S. J., "What Are Infants Fed in the United States?" *Pediatrics*, 56:350-354, 1975.

[2] "Evaluation of the Health Aspects of Biotin as a Food Ingredient," Life Sciences Research Office, Federation of American Societies for Experimental Biology, 1978, pp. 4-9. In the past, the agency presented verbatim the Select Committee's discussion of the biological data it reviewed. However, because the Select Committee's report is available at the Dockets Management Branch and from the National Technical Information Service, and because it represents a significant savings to the agency in publication costs, FDA has decided to discontinue presenting the discussion in the preambles to proposals that affirm GRAS status in accordance with current good manufacturing practice.

[3] *Ibid.*, p. 9.

[4] *Ibid.*, P. 10.

justified. Therefore, the agency proposes to affirm biotin as GRAS when it is used as a nutrient supplement in special formula used for weight control and in infant formula. However, because the NAS/NRC survey did not specifically request date on dietary supplement use, and because consumer survey data are minimal, FDA does not have adequate data on which to judge the exposure from the use of biotin as a dietary supplement. Without such exposure data, the agency cannot evaluate the safety of this use and therefore is taking no action on the listing of biotin in § 182.5159 for use as a dietary supplement.

Additionally, FDA is proposing not to include in the GRAS affirmation regulation for biotin the levels of use reported in the NAS/NRC 1971 survey for this ingredient. Both FASEB and the agency have concluded that a large margin of safety exists for the use of this substance, and that a reasonably foreseeable increase in the level of consumption of biotin will not adversely affect human health. Therefore, the agency is proposing to affirm the GRAS status of biotin when it is used under current good manufacturing practice conditions of use in accordance with § 184.1(b)(1) (21 CFR 184.1(b)(1)). To make clear, however, that the affirmation of the GRAS status of this substance is based on the evaluation of limited uses, the proposed regulation sets forth the technical effect and food categories that FDA evaluated.

In the **Federal Register** of September 7, 1982 (47 FR 39199), FDA proposed to adopt a general policy restricting the circumstances in which it will specifically describe conditions of use in regulations affirming substances as GRAS under 21 CFR 184.1(b)(1) or 186.1(b)(1). The agency proposed to amend its regulations to indicate clearly that it will specify one or more of the current good manufacturing practice conditions of use in regulations for substances affirmed as GRAS with no limitations other than current good manufacturing practice only when the agency determines that it is appropriate to do so.

Copies of the scientific literature review on biotin and the report of the Select Committee are available for review at the Dockets Management Branch (address above), and may be purchased from the National Technical Information Service, 5285 Port Royal Rd., Springfield, Va. 22161, as follows:

Title	Order No.	Price code	Price [1]
Biotin (scientific literature review).	PB 234-890/AS	A07	$13.50
Biotin (Select Committee report).	PB 261-421/AS	A02	6.00

[1] Price subject to change.

This proposed action does not affect the current use of biotin in pet food or animal feed.

The format of the proposed regulation is different from that in previous GRAS affirmation regulations. FDA has modified paragraph (c) of § 184.1159 to make clear the agency's determination that GRAS affirmation is based upon current good manufacturing practice conditions of use, including the technical effect and food categories listed. This change has no substantive effect but is made merely for clarity.

The agency has determined under 21 CFR 25.24(d)(6) (proposed December 11, 1979; 44 FR 71742) that this proposed action is of a type that does not individually or cumulatively have a significant impact on the human environment. Therefore, neither an environmental assessment nor an environmental impact statement is required.

FDA, in accordance with the Regulatory Flexibility Act, has considered the effect that this proposal would have on small entities including small businesses and has determined that the effect of this proposal is to maintain current known uses of the substance covered by this proposal by both large and small businesses. Therefore, FDA certifies in accordance with section 605(b) of the Regulatory Flexibility Act that no significant economic impact on a substantial number of small entities will derive from this action.

In accordance with Executive Order 12291, FDA has carefully analyzed the economic effects of this proposal, and the agency has determined that the final rule, if promulgated, will not be a major rule as defined by the Order.

List of Subjects

21 CFR Part 182

Generally recognized as safe (GRAS) food ingredients, Spices and flavorings.

21 CFR Part 184

Direct food ingredients, Food ingredients, Generally recognized as safe (GRAS) food ingredients.

Therefore, under the Federal Food, Drug, and Cosmetic Act (secs. 201(s), 409, 701(a), 52 Stat. 1055, 72 Stat. 1784–1788 as amended (21 U.S.C. 321(s), 348, 371(a))) and under authority delegated to the Commissioner of Food and Drugs (21 CFR 5.10), it is proposed that Parts 182 and 184 be amended as follows:

PART 182—SUBSTANCES GENERALLY RECOGNIZED AS SAFE

§ 182.8159 [Removed].

1. Part 182 is amended by removing § 182.8159 *Biotin*.

PART 184—DIRECT FOOD SUBSTANCES AFFIRMED AS GENERALLY RECOGNIZED AS SAFE

2. Part 184 is amended by adding new § 184.1159, to read as follows:

§ 184.1159 Biotin.

(a) Biotin ($C_{10}H_{16}N_2O_3S$, CAS Reg. No. 58–85–5) is d-*cis*-hexahydro-2-keto-1*H*-thieno-(3,4)-imidazole-4-valeric acid. It occurs naturally and can be prepared from natural sources, such as egg yolk, liver, or milk, by successive extractions, precipitations, and molecular distillation.

(b) The ingredient meets the specifications of the Food Chemicals Codex, 3d Ed. (1981), p. 38, which is incorporated by reference. Copies are available from the National Academy Press, 2101 Constitution Ave. NW., Washington, D.C. 20418, or available for inspection at the Office of the Federal Register, 1100 L St. NW., Washington, D.C. 20408.

(c) In accordance with § 184.1(b)(1), the ingredient is used in food with no limitation other than current good manufacturing practice. The affirmation of this ingredient as generally recognized as safe (GRAS) as a direct human food ingredient is based upon the following current good manufacturing practice conditions of use:

(1) The ingredient is used as a nutrient supplement as defined in § 170.3(o)(20) of this chapter.

(2) The ingredient is used in special formula used for weight reduction at levels not to exceed current good manufacturing practice. The ingredient may be used in infant formula in accordance with section 412(g) of the Federal Food, Drug, and Cosmetic Act (the act) or with regulations promulgated under section 412(a)(2) of the act.

The agency is unaware of any prior sanction for the use of this ingredient in foods under conditions different from those identified in this document. Any person who intends to assert or rely on such a sanction shall submit proof of its existence in response to this proposal. The action proposed above will

constitute a determination that excluded uses would result in adulteration of the food in violation of section 402 of the Federal Food, Drug, and Cosmetic Act (21 U.S.C. 342), and the failure of any person to come forward with proof of an applicable prior sanction in response to this proposal constitutes a waiver of the right to assert or rely on it later. Should any person submit proof of existence of a prior sanction, the agency hereby proposes to recognize such use by issuing an appropriate final rule under Part 181 (21 CFR Part 181) or affirming it as GRAS under Part 184 or 186 (21 CFR Part 184 or 186), as appropriate.

Interested persons may, on or before March 15, 1983, submit to the Dockets Management Branch (address above) written comments regarding this proposal. Two copies of any comments are to be submitted, except that individuals may submit one copy. Comments are to be identified with the docket number found in brackets in the heading of this document. Received comments may be seen in the office above between 9 a.m. and 4 p.m., Monday through Friday.

Dated: December 23, 1982.

William F. Randolph,

Acting Associate Commissioner for Regulatory Affairs.

[FR Doc. 83-880 Filed 1-13-83; 8:45 am]

BILLING CODE 4160-01-M

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21 CFR Parts 182 and 184

[Docket No. 80N-0389]

Calcium Pantothenate, Sodium Pantothenate, and D-Pantothenyl Alcohol; Affirmation of GRAS Status of Calcium Pantothenate as a Direct Human Food Ingredient and Removal of Sodium Pantothenate and D-Pantothenyl Alcohol From GRAS Status

AGENCY: Food and Drug Administration.

ACTION: Proposed rule.

SUMMARY: The Food and Drug Administration (FDA) is proposing to affirm that calcium pantothenate is generally recognized as safe (GRAS) as a direct human food ingredient when used as a nutrient in conventional food. In addition, FDA is proposing not to affirm the GRAS status of sodium pantothenate and D-pantothenyl alcohol and to remove these substances from the list of substances that are GRAS. The safety of these ingredients has been evaluated under a comprehensive safety review conducted by the agency. The proposal would take no action on the listing of calcium pantothenate as a GRAS substance for use in dietary supplements.

DATE: Written comments by March 15, 1983.

ADDRESS: Written comments to the Dockets Management Branch (HFA-305), Food and Drug Administration, Rm. 4-62, 5600 Fishers Lane, Rockville, Md. 20857.

FOR FURTHER INFORMATION CONTACT: Lawrence J. Lin, Bureau of Foods (HFF-335), Food and Drug Administration, 200 C St. SW., Washington, DC 20204; 202-426-8950.

SUPPLEMENTARY INFORMATION: FDA is conducting a comprehensive review of human food ingredients classified as GRAS or subject to a prior sanction. The agency has issued several notices and proposals (see the **Federal Register** of July 26, 1973 (38 FR 20040)) initiating this review, under which the safety of calcium pantothenate, sodium pantothenate, and D-pantothenyl alcohol has been evaluated. In accordance with the provisions of § 170.35 (21 CFR 170.35), the agency proposes to affirm the GRAS status of calcium pantothenate as a nutrient in conventional food [1] and infant formula.

The GRAS status of the use of calcium pantothenate, sodium pantothenate, and D-pantothenyl alcohol as dietary supplements (i.e., over-the-counter vitamin preparations in forms such as capsules, tablets, liquids, wafers, etc.) is not affected by this proposal. The agency did not request consumer exposure data on dietary supplement uses when it initiated this review. Without exposure data, the agency cannot evaluate the safety of these ingredients in dietary supplements. Therefore, the use of these ingredients in dietary supplements will continue to be permissible under Subpart F of Part 182 (21 CFR 182).

Pantothenic acid ($HOCH_2C(CH_3)_2CH(OH)CONHCH_2CH_2COOH$) is one of the vitamins of the B complex. It is a component of coenzyme A, which is involved in many acetylation reactions in tissues, e.g., the conversion of choline to acetylcholine, acetate to acetoacetate, and oxalacetate to citrate. The vitamin has been demonstrated to be essential for monkeys and other animals, and a deficiency syndrome for it has been induced in human subjects. Pantothenic acid is widely distributed throughout the animal and plant kingdoms. Liver, meat, cereal grains, milk, egg yolk, and fresh vegetables are particularly good food sources of this substance.

Calcium pantathenate, sodium pantothenate, and D-pantothenyl alcohol have been added to food in preference to pantothenic acid because of their greater chemical stability. Although only the D-isomer of calcium pantothenate and sodium pantothenate has vitamin activity, commercial preparations of calcium pantothenate and sodium pantothenate contain either the D-isomer alone or the DL-racemic mixture, possessing half of the vitamin activity of the D-isomer. FDA is using the name calcium pantothenate and sodium pantothenate to refer to the D- and DL-isomers of these substances.

Calcium pantothenate, sodium pantothenate, and D-pantothenyl alcohol were listed as GRAS nutrient/dietary supplements in a regulation published in the **Federal Register** of November 20, 1959 (24 FR 9368). However, under a regulation published in the **Federal Register** of September 5, 1980 (45 FR 58837), FDA divided the nutrient/dietary supplement category into separate listings for GRAS dietary supplements and for GRAS nutrients. Therefore, calcium pantothenate, sodium pantothenate, and D-pantothenyl alcohol are currently listed as GRAS for use in dietary supplements in §§ 182.5212, 182.5772 and 182.5580 (21 CFR 182.5212, 182.5772, and 182.5580), respectively, and as GRAS for use in food as a nutrient in §§ 182.8212, 182.8772, and 182.8580 (21 CFR 182.8212, 182.8772, and 182.8580), respectively. Pantothenic acid may be used to fortify foods as described in Part 104 (21 CFR Part 104).

The calcium chloride double salt of calcium pantothenate is regulated under § 172.330 (21 CFR 172.330) for use in foods for special dietary use when the additive is of the D (dextrorotatory) or DL (racemate) form. Section 412(g) of the Federal Food, Drug, and Cosmetic Act (the act) lists calcium pantothenate and pantothenic acid as required nutrients in infant formula, subject to level restrictions. FDA is reviewing all nutrient levels in infant formulas under a contract with the American Academy of Pediatrics. Any necessary modifications in the nutrient levels of calcium pantothenate and pantothenic acid in infant formula will be proposed by a separate rulemaking under section 412(a)(2) of the act.

In 1971, the National Academy of Sciences/National Research Council (NAS/NRC) surveyed a representative cross-section of food manufacturers to determine the specific foods in which calcium pantothenate, sodium

[1] FDA is using the term "conventional food" to refer to food that would fall within any of the 43 categories listed in § 170.3(n) (21 CFR 170.3(n)).

pantothenate, and D-panthothenyl alcohol were used and the levels of usage. The survey found that calcium pantothenate is used as a nutrient supplement in several food categories, including baked goods and meat, poultry, and fish products. NAS/NRC combined this manufacturing information with information on consumer consumption of foods to obtain an estimate of consumer exposure to these ingredients. FDA estimates from the NAS/NRC survey that the total amount of calcium pantothenate used in food in 1970 was 13,330 pounds, about 6.6 times the amount used in 1960. In the NAS/NRC survey, no manufacturers reported adding sodium pantothenate or D-pantothenyl alcohol to food.

Pantothenates have been the subject of a search of the scientific literature from 1920 to the present. The criteria used in the search were chosen to discover any articles that considered: (1) Chemical toxicity, (2) occupational hazards, (3) metabolism, (4) reaction products, (5) degradation products, (6) carcinogenicity, teratogenicity, or mutagenicity, (7) dose response, (8) reproductive effects, (9) histology, (10) embryology, (11) behavioral effects, (12 detection, and (13) processing. A total of 318 abstracts on pantothenates was reviewed, and 32 particularly pertinent reports from the literature survey have been summarized in a scientific literature review.

Information from the scientific literature review and other sources has been summarized in a report to FDA by the Select Committee on GRAS Substances (the Select Committee), which is composed of qualified scientists chosen by the Life Sciences Research Office of the Federation of American Societies for Experimental Biology (FASEB). The members of the Select Committee have evaluated all the available safety information on pantothenates.[2] In the Select Committee's opinion:

Pantothenates occur in all tissues of the body and are essential for normal metabolic function. Daily consumption of calcium pantothenate added to foods by processors in the United States appears to be less than 0.08 mg per capita (1.3 μg per kg), a value that probably also represents total per capita daily consumption of pantothenates added to foods since sodium pantothenate and pantothenyl alcohol do not appear to be used by food processors.

It is estimated that the usual adult diet provides approximately 5 to 19 mg (83 to 316 μg per kg) of naturally occurring pantothenates daily. Animals of several species given 100 mg per kg or more of calcium pantothenate daily for several months showed no evidence of toxicity. Adult patients with disseminated or discoid lupus erythematosus receiving doses of 1 g or more daily (16.6 mg per kg) for several months manifested no evidence of toxicity. Although the evidence is scanty, there appears to be no reason to suspect teratogenicity, fetotoxicity or carcinogenicity from intakes considerably greater than those likely to be obtained from foods.

There are no specifications listed for food grade sodium pantothenate. The Select Committee believes such specifications should be developed even though there appears to be no current use of sodium pantothenate.[3]

The Select Committee concludes that no evidence in the available information on D-pantothenyl alcohol, D- or DL-calcium pantothenate, or DL- or DL-sodium pantothenate demonstrates, or suggests reasonable grounds to suspect, a hazard to the public when they are used at levels that are now current or that might reasonably be expected in the future.[4]

FDA has undertaken its own evaluation of all available information and, insofar as calcium pantothenate is used as a nutrient in conventional food, concurs with the conclusion of the Select Committee. The agency concludes that no change in the current GRAS status of calcium pantothenate is justified. Therefore, the agency proposes that calcium pantothenate be affirmed as GRAS when it is used as a nutrient supplement in conventional foods. However, because the NAS/NRC survey did not specifically request data on dietary supplement uses, FDA does not have adequate data upon which to judge the exposure from use of calcium pantothenate, sodium pantothenate, and D-pantothenyl alcohol as dietary supplements. Without such exposure data, the agency cannot evaluate the safety of their use in dietary supplements and therefore is taking no action on the listing of these ingredients in §§ 182.5212, 182.5772, and 182.5580 for use as dietary supplements.

Additionally, FDA is proposing not to include in the GRAS affirmation regulation for calcium pantothenate the levels of use and food categories reported in the NAS/NRC 1971 survey for this ingredient. Both FASEB and the agency have concluded that a large margin of safety exists for the use of this substance, and that a reasonably foreseeable increase in the level of consumption of calcium pantothenate will not adversely affect human health. There is much evidence to support this conclusion. Pantothenates occur in all tissues of the body and are essential for normal metabolic function. It is estimated by Chung, et al., that the usual adult diet provides approximately 5 to 19 milligrams (mg) (83 to 316μg per kilogram (kg)) of naturally occurring pantothenates daily.[5] Daily consumption of calcium pantothenate added to foods by processors in the United States is apparently less than 0.08 mg per capita (1.3 μg per kg). Animals of several species given 100 mg per kg or more of calcium pantothenate daily for several months showed no evidence of toxicity. Adult patients with disseminated or discoid lupus erythematosus receiving doses of 1 g or more daily (16.6 mg per kg) of calcium pantothenate for several months manifested no evidence of toxicity. Data presented in the FASEB report from long-term animal and human clinical studies do not provide any reason to suspect teratogenicity, fetotoxicity, or carcinogenicity from intakes of calcium pantothenate considerably greater than those likely to be obtained from foods. Therefore, the agency is proposing to affirm the GRAS status of calcium pantothenate when it is used under current good manufacturing practice conditions of use in accordance with § 184.1(b)(1) (21 CFR 184.1(b)(1)). To make clear, however, that the affirmation of the GRAS status of this substance is based on the evaluation of currently shown uses, the proposed regulation sets forth the technical effect that FDA evaluated.

In the **Federal Register** of September 7, 1982 (47 FR 39199), FDA proposed to adopt a general policy restricting the circumstances in which it will specifically describe conditions of use in regulations affirming substances as GRAS under 21 CFR 184.1(b)(1) or 186(b)(1). The agency proposed to amend its regulations to indicate clearly that it will specify one or more of the current good manufacturing practice conditions of use in regulations for substances affirmed as GRAS with no limitations other than current good manufacturing practice only when the

[2] "Evaluation of the Health Aspects of Pantothenates as Food Ingredients," Life Sciences Research Office, Federation of American Societies for Experimental Biology, 1978, pp. 8–14. In the past, the agency presented verbatim the Select Committee's discussion of the biological data it reviewed. However, because the Select Committee's report is available at the Dockets Management Branch and from the National Technical Information Service, and because it represents a significant savings to the agency in publication costs, FDA has decided to discontinue presenting the discussion in the preamble to proposals that affirm GRAS status in accordance with current good manufacturing practice.

[3] *Ibid.*, p. 15.

[4] *Ibid.*

[5] Chung, A. S. M., W. N. Pearson, W. J. Darby, O.N. Miller, and G. A. Goldsmith, "Folic acid, Vitamin B_6, Panthothenic Acid and Vitamin B_{12} in Human Dietaries," *American Journal of Clinical Nutrition*, 75:451–454, 1961.

agency determines that it is appropriate to do so.

Sodium pantothenate and D-pantothenyl alcohol are currently listed as GRAS dietary supplements and as GRAS nutrients. However, industry use surveys of food manufacturers conducted for FDA under contract did not indicate that these ingredients are used in conventional food. Because evidence of actual use in food is required to affirm the GRAS status of an ingredient in accordance with § 170.35, FDA proposes to remove sodium pantothenate and D-pantothenyl alcohol from the list of ingredients that are GRAS for use in conventional human food. FDA will reconsider the regulatory status of these ingredients if adequate use information is submitted. Comments supporting GRAS affirmation of sodium pantothenate and D-pantothenyl alcohol should provide specific information on manufacturing methods, food-grade specifications, food categories in which the ingredients are used, and the usual and maximum use levels in each food category. Alternatively, persons seeking FDA approval of the use of these ingredients may submit a food additive or GRAS petition in accordance with § 171.1 or § 170.35 (21 CFR 171.1 or 170.35).

Copies of the scientific literature review on pantothenates and the report of the Select Committee are available for review at the Dockets Management Branch (address above), and may be purchased from the National Technical Information Service, 5285 Port Royal Rd., Springfield, Va. 22161, as follows:

Title	Order No.	Price code	Price [1]
Pantothenates (scientific literature review)..	PB-234-892/AS	A05	$8.00
Pantothenates (Select Committee report)..	PB-268-672/AS	A03	6.00

[1] Price subject to change.

This proposed action does not affect the current use of calcium pantothenate, sodium pantothenate, or D-pantothenyl alcohol in pet food or animal feed.

The format of the proposed regulation is different from that in previous GRAS affirmation regulations. FDA has modified paragraph (c) of § 184.1212 to make clear the agency's determination that GRAS affirmation is based upon current good manufacturing practice conditions of use, including the technical effect listed. This change has no substantive effect but is made merely for clarity.

The agency has determined under 21 CFR 25.24(d)(6) (proposed December 11, 1979; 44 FR 71742) that this proposed action is of a type that does not individually or cumulatively have a significant impact on the human environment. Therefore, neither an environmental assessment nor an environmental impact statement is required.

FDA, in accordance with the Regulatory Flexibility Act, has considered the effect that this proposal would have on small entities including small businesses and has determined that the effect of this proposal is to maintain current known uses of the substances covered by this proposal by both large and small businesses. Therefore, FDA certifies in accordance with section 605(b) of the Regulatory Flexibility Act that no significant economic impact on a substantial number of small entities will derive from this action.

In accordance with Executive Order 12291, FDA has carefully analyzed the economic effects of this proposal, and the agency has determined that the final rule, if promulgated, will not be a major rule as defined by the Order.

List of Subjects

21 CFR Part 182

Generally recognized as safe (GRAS) food ingredients, Spices and flavorings.

21 CFR Part 184

Direct food ingredients, Food ingredients, Generally recognized as safe (GRAS) food ingredients.

Therefore, under the Federal Food, Drug, and Cosmetic Act (secs. 201(s), 409, 701(a), 52 Stat. 1055, 72 Stat. 1784–1788 as amended (21 U.S.C. 321(s), 348, 371(a))) and under authority delegated to the Commissioner of Food and Drugs (21 CFR 5.10), it is proposed that Parts 182 and 184 be amended as follows:

PART 182—SUBSTANCES GENERALLY RECOGNIZED AS SAFE

§§ 182.8212, 182.8580, 182.8772 [Removed]

1. Part 182 is amended by removing § 182.8212 *Calcium pantothenate*, § 182.8580 *D-Pantothenyl alcohol*, and § 182.8772 *Sodium pantothenate*.

PART 184—DIRECT FOOD SUBSTANCES AFFIRMED AS GENERALY RECOGNIZED AS SAFE

2. Part 184 is amended by adding new § 184.1212, to read as follows:

§ 184.1212 Calcium pantothenate.

(a) Calcium pantothenate ($(C_9H_{16}NO_5)_2Ca$, CAS Reg. No. of the D-isomer, 137–08–6) is a salt of pantothenic acid, one of the vitamins of the B complex. Only the D-isomer of pantothenic acid has vitamin activity, although both the D-isomer and the DL-racemic mixture of calcium pantothenate are used in food. Commercial calcium pantothenate is prepared synthetically from isobutyraldehyde and formaldehyde via 1,1-dimethyl-2-hydroxy-propionaldehyde and pantolactone.

(b) Calcium pantothenate meets the specifications of the Food Chemicals Codex, 3d Ed. (1981), p. 56, which is incorporated by reference. Copies are available from the National Academy Press, 2101 Constitution Ave. NW., Washington, DC 20418, or available for inspection at the Office of the Federal Register, 1100 L St. NW., Washington, DC 20408.

(c) In accordance with § 184.1(b)(1), the ingredient is used in food with no limitation other than current good manufacturing practice. The affirmation of this ingredient as generally recognized as safe (GRAS) as a direct human food ingredient is based upon the following current good manufacturing practice conditions of use:

(1) The ingredient is used as a nutrient supplement as defined in § 170.3(o)(20) of this chapter.

(2) The ingredient is used in foods at levels not to exceed current good manufacturing practice. Calcium pantothenate may be used in infant formula in accordance with section 412(g) of the Federal Food, Drug, and Cosmetic Act (the act) or with regulations promulgated under section 412(a)(2) of the act.

The agency is unaware of any prior sanction for the use of this ingredient in foods under conditions different from those identified in this document. Any person who intends to assert or rely on such a sanction shall submit proof of its existence in response to this proposal. The action proposed above will constitute a determination that excluded uses would result in adulteration of the food in violation of section 402 of the Federal Food, Drug, and Cosmetic Act (21 U.S.C. 342), and the failure of any person to come forward with proof of such an applicable prior sanction in response to this proposal constitutes a waiver of the right to assert or rely on it later. Should any person submit proof of the existence of a prior sanction, the agency hereby proposes to recognize such use by issuing an appropriate final rule under Part 181 (21 CFR Part 181) or affirming it as GRAS under Part 184 or

186 (21 CFR Part 184 or 186), as appropriate.

Interested persons may, on or before March 15, 1983, submit to the Dockets Management Branch (address above), written comments regarding this proposal. Two copies of any comments are to be submitted, except that individuals may submit one copy. Comments are to be identified with the docket number found in brackets in the heading of this document. Received comments may be seen in the office above between 9 a.m. and 4 p.m., Monday through Friday.

Dated: December 20, 1982.

William F. Randolph,

Acting Associate Commissioner for Regulatory Affairs.

[FR Doc. 83-879 Filed 1-13-83; 8:45 am]

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DEPARTMENT OF HEALTH AND HUMAN SERVICES

21 CFR Parts 182 and 184

[Docket No. 81N-0329]

Vitamin A; Proposed Affirmation of Gras Status as a Direct Human Food Ingredient

AGENCY: Food and Drug Administration.

ACTION: Proposed rule.

SUMMARY: The Food and Drug Administration (FDA) is proposing to affirm that vitamin A (including vitamin A acetate and vitamin A palmitate) is generally recognized as safe (GRAS) as a direct human food ingredient. The safety of this ingredient has been evaluated under a comprehensive review being conducted by the agency. The proposal would take no action on the listing of this ingredient as a GRAS substance for use in dietary supplements.

DATE: Comments by March 15, 1983.

ADDRESS: Written comments to the Dockets Management Branch (HFA-305), Food and Drug Administration, Rm. 4-62, 5600 Fishers Lane, Rockville, MD 20857.

FOR FURTHER INFORMATION CONTACT: John W. Gordon, Bureau of Foods (HFF-335), Food and Drug Administration, 200 C St. SW., Washington, DC 20204, 202-426-5487.

SUPPLEMENTARY INFORMATION: FDA is conducting a comprehensive review of human food ingredients classified as GRAS or subject to a prior sanction. The agency has issued several notices and proposals (see the Federal Register of July 26, 1973 (38 FR 20040)) initiating this review, under which the safety of vitamin A, vitamin A acetate, and vitamin A palmitate has been evaluated. In accordance with the provisions of § 170.35 (21 CFR 170.35), the agency proposes to affirm the GRAS status of these ingredients for use as nutrients in conventional foods [1] and infant formula.

The GRAS status of the use of vitamin A, vitamin A acetate, and vitamin A palmitate in dietary supplements (i.e., over-the-counter vitamin preparations in forms such as capsules, tablets, liquids, wafers, etc.) is not affected by this proposal. The agency did not request consumer exposure data on dietary supplement uses when it initiated this review. Without exposure data, the agency cannot evaluate the safety of using these ingredients in dietary supplements. The use of these ingredients in dietary supplements will continue to be permissible under Subpart F of Part 182 (21 CFR Part 182).

Vitamin A (retinol) is the alcohol 9,13-dimethyl-7-(1,1,5-trimethyl-6-cyclohexen-5-yl)-7,9,11,13-nonatetraen-15-ol. Vitamin A acetate (retinyl acetate) and vitamin A palmitate (retinyl palmitate) are esters commonly used to supplement foods with vitamin A activity. Two oxidation products of retinol, retinal and retinoic acid, also exhibit vitamin A activity, but the agency has found no evidence that these substances are added to foods.

Preformed vitamin A (retinol and its esters) is found almost exclusively in animal products, particularly in liver and to a lesser extent in kidney, milk, and blood plasma. β-Carotene, the provitamin, is the primary plant source of vitamin A activity, with carrots, spinach, cantaloupe, apricots, broccoli, and romaine lettuce being particularly rich in vitamin A activity. The all-*trans* isomers of the preformed vitamins and provitamin A carotenoids are the predominant naturally occurring forms.

The biopotency of the various forms of vitamin A is usually expressed in international units (IU) representing total vitamin A and provitamin A activity. The IU equals 0.30 microgram retinol, 0.34 microgram retinyl acetate, 0.55 microgram retinyl palmitate, 0.60 microgram all-*trans* β-carotene, and about 1.2 micrograms of other provitamin A carotenoids.

Vitamin A, vitamin A acetate, and vitamin A palmitate were listed as GRAS nutrients in a regulation published in the Federal Register of November 20, 1959 (24 FR 9368). Subsequently, they were listed as GRAS nutrients and dietary supplements in a regulation published in the Federal Register of January 31, 1961 (26 FR 938). However, in a final rule published in the Federal Register of September 5, 1980 (45 FR 58837), FDA divided the nutrient and dietary supplement category into separate listings for GRAS dietary supplements and for GRAS nutrients. As a consequence, vitamin A, vitamin A acetate, and vitamin A palmitate, respectively, are currently listed as GRAS in §§ 182.5930, 182.5933, and 182.5936 (21 CFR 182.5930, 182.5933, and 182.5936) for use as dietary supplements. Nutrient uses of these substances are covered under §§ 182.8930, 182.8933, and 182.8936 (21 CFR 182.8930, 182.8933, and 182.8936).

Section 412(g) of the Federal Food, Drug, and Cosmetic Act (the act) lists vitamin A as a required nutrient in infant formula subject to level restrictions. FDA is reviewing all nutrient levels in infant formula under a contract with the American Academy of Pediatrics. Any necessary modifications in the nutrient level of vitamin A in infant formula will be proposed by a separate rulemaking under section 412(a)(2) of the act.

In 1971, the National Academy of Sciences/National Research Council (NAS/NRC) surveyed a representative cross-section of food manufacturers to determine the specific foods in which vitamin A, vitamin A acetate, and vitamin A palmitate were used and the levels of usage. NAS/NRC combined this manufacturing information with information on consumer consumption of foods to obtain an estimate of consumer exposure to these ingredients. FDA estimates from the NAS/NRC survey that, in 1970, the approximate poundage of vitamin A used in the United States was: retinol, 11,000 pounds; retinyl palmitate, 300,000 pounds; and retinyl acetate, 1,100 pounds. These figures amount to nearly 2,000 IU per capita daily of what is reported to be added vitamin A. However, based on other survey information (the Hanes survey and a report compiled by Greaves and Tan), the Select Committee on GRAS Substances (the Select Committee) believes this figure to be too high and estimates that the per capita daily intake of vitamin A added to foods is about 800 IU.[2]

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[1] FDA is using the term "conventional food" to refer to food that would fall within any of the 43 categories listed in § 170.3(n) (21 CFR 170.3(n)).

[2] "Evaluation of the Health Aspects of Vitamin A, Vitamin A Acetate, and Vitamin A Palmitate as Food Ingredients," Life Sciences Research Office, Federation of American Societies for Experimental Biology, 1980, p. 10.

The Select Committee reports that the National Research Council has established the recommended daily dietary allowances of vitamin A as 5,000 IU for adult males, 4,000 IU for adult females, 1,400 to 2,000 IU for infants, 2,000 to 3,300 IU for children up to age 11, 5,000 IU for pregnant women, and 6,000 IU for lactating women.

Vitamin A, vitamin A acetate, and vitamin A palmitate were the subjects of two searches of the scientific literature from 1920 to the present. The criteria used in the search were chosen to discover any articles that considered: (1) Chemical toxicity; (2) occupational hazards; (3) metabolism; (4) reaction products; (5) degradation products; (6) carcinogenicity, teratogenicity, or mutagenicity; (7) dose response; (8) reproductive effects; (9) histology; (10) embryology; (11) behavioral effects; (12) detection; and (13) processing. A total of 11,048 abstracts on vitamin A was reviewed, and 361 particularly pertinent reports from the literature survey have been summarized in the two reports. the scientific literature reviews and other studies were summarized in a report to FDA by the Select Committee on GRAS Substances, selected by the Life Sciences Research Office of the Federation of American Societies for Experimental Biology (FASEB). The report to FDA contains the following biological information:

Oral doses of retinol are readily absorbed. In vitamin A, depleted rats, each fed 3 mg retinol (10,000 IU), serum levels of retinyl esters reached a maximum in about 5 h. After 24 h virtually all vitamin A activity was found in the liver. Vitamin A activity in blood and liver was present primarily as the palmitate ester although small amounts were also found of the stearate, myristate, and laurate esters. The dosage form significantly affects the rate of absorption of vitamin A preparations. Nishigaki *et al.* found 10 mg of retinyl palmitate (18,000 IU) fed to rats in aqueous emulsion reached maximum concentrations in the lymph in 1 to 2 h, but required 4 h to peak when the same dose was given as an oily emulsion. In a patient with a cannulated thoracic duct, 78 percent of the radioactivity of feed ^{14}C-labeled retinol (at carbon 15) was found in the lymp between 2 and 8 h, with a peak between 3 and 5 h. In normal men and women, vitamin A levels in blood serum were maximal within 4 to 6 h after ingestion of a single dose of 134 mg whether administered as the alcohol, acetate or natural esters. Schneeberger *et al.* found that serum levels of vitamin A peaked at about 400 µg per 100 ml after 3 to 4 h in eight men fed 150,000 IU (2,500 IU per kg) of retinyl palmitate, returning to normal levels within 24 h. Pereira and Begum fed six Indian children 100,000 IU retinyl palmitate together with 11,12 ^{3}H-labeled retinyl acetate as part of a meal and found serum retinol increased sharply 4 h after dosing and declined during the following week. Monitoring of fecal and urinary excretion indicated a retention of 23 to 54 percent of the dose after 8 days.

Absorption of ingested retinol occurs mainly in the mucosal cells of the intestine and is enhanced by bile. Small amounts may be absorbed from the stomach since about 0.1 percent of an intubated dose of ^{14}C-labeled retinol or retinyl acetate was found after 2 h in the liver of rats with subpylorically ligated stomachs. In most species, retinyl esters, such as retinyl acetate or palmitate, are first hydrolyzed in the lumen of the intestine by retinyl ester hydrolases from the pancreas and within the outer brush border of the intestinal mucosal cell. After absorption of retinol by the mucosal cell it is reesterified (catalyzed by retinyl ester synthetase) mainly to retinyl palmitate which enters the circulation principally via the chylomicron fraction of the lymph and is stored as the palmitate in the liver.

Prior to re-entering the blood, the hepatic retinyl ester is hydrolyzed and the retinol is bound to a specific transport protein, retinol-binding protein (RBP), which occurs in free form in human serum and which, in the plasma, is further complexed, in a molar ratio of 1:1, with a prealbumin. This prealbumin appears to be similar, if not identical, to the prealbumin which binds thyroxine.

The RBP's of man, rat, and dog have similar molecular weights (about 20,000), but a high degree of immunological specificity exists within a given mammalian order. By contrast, Rask found porcine RBP, molecular weight about 21,000, to show no immunological cross-reactivity with the corresponding RBP's of the rat, monkey, or man. Vahlquist, using iodine-labeled and endogenously ^{35}S-labeled proteins as tracers in the monkey, estimated biological half-times of 1.9 h, 6.6 h, and 22.5 h for RBP in free form, RBP-prealbumin complex, and prealbumin itself, respectively.

The RBP-retinol-prealbumin complex is believed to prevent the circulating RBP (and retinol) from glomerular filtration of retinol and excretion by the kidney. It is postulated that retinol transport proceeds via dissociation of the RBP-retinol complex from the prealbumin, followed by release of retinol from RBP, deposition of retinol in a target cell, and excretion of free RBP in the urine. Delivery of retinol to extra-hepatic tissues appears to involve specific cell surface receptors for RBP. In some species, notably fish and eels, retinol appears to be transported by uncomplexed RBP-retinol or as retinyl palmitate attached to a high molecular weight lipoprotein. Other recent studies have provided evidence for the existence of a cellular RBP distinct from plasma RBP, and of another cellular binding protein specific for retinoic acid with no affinity for retinol.

Lindler *et al.* have shown, contrary to earlier conclusions, that the principal storage site of retinol in rats is in the hepatocytes of the liver (more than 90 percent) while less than 10 percent is in the Kupffer cells. They suggest, however, that the possibility cannot be excluded that the Kupffer cells are the initial recipients of vitamin A, subsequently transferring it to the hepatocytes. Sundaresan has postulated further that hepatocytes may store retinyl esters while the Kupffer cells store the free alcohol. Ames *et al.* found in rats that over 50 percent of an ingested daily dose of up to 120,000 IU per kg as vitamin A acetate was stored in the liver by the 28th day, and concluded that liver apparently reaches maximal vitamin A storage at about 50,000 IU per g of fresh liver.

Some investigators believe that stored retinyl esters from the liver are released by retinyl palmitate hydrolase found in the nuclear and mitochondrial fractions of rat liver and by retinyl acetate hydrolase which has been isolated from rat liver microsomes. However, because Yeung and Veen-Baigent were unable to demonstrate retinyl palmitate hydrolase in liver homogenates or powders, they have continued to maintain that retinol is formed from retinyl palmitate by extrahepatic hydrolysis. Thus, the actual mechanism(s) for the hydrolysis of stored retinyl esters remains in doubt. Moreover, at least two other observations must be taken into account in the ultimate unraveling of the sequence of steps and sites involved in the metabolism of vitamin A. Sewell *et al.* found in rats that even though total vitamin A activity in the liver remained constant for a period of 45 days following oral administration of retinyl acetate labeled with tritium on carbons 15 and 16, radioactivity in the liver progressively decreased. Similar results were obtained in steers. The estimated half-time of vitamin A in the liver was 57 days in rats and 48 days in steers. The investigators concluded that liver vitamin A stores are in a dynamic state with a continuous turnover of vitamin A

reserves, even though the total storage remains essentially constant. Retinol and some of its derivatives cycle between the liver and the gut as enterohepatic circulation. About 20, 30, and 60 percent, respectively, of labeled retinol, retinal, and retinoic acid injected intraperitoneally were excreted in the bile of cannaluated rats within 24 h. When the excreted bile was placed in a duodenal loop of another rat, radioactivity disappeared from the gut and reappeared in the bile. Hume *et al.*, reporting similar and substantial recycling of retinol metabolites in sheep, have suggested that this may be a conservation mechanism operative during periods of retinol deprivation.

Several physiological and biochemical roles have been ascribed to vitamin A, some well established and others less so. Retinol is accepted as essential for development and maintenance of normal vision. This mechanism is well understood and has been elaborated in a number of reviews cited by Sundaresan and by Mandel. Retinol is regarded as essential for normal growth and reproduction but the mechanisms remain obscure. Vitamin A may also be involved in biological sulfate activation, in steriod and protein biosynthesis, and in maintenance of membrane integrity. Recent studies point to a possible relationship between vitamin A and zinc metabolism, since zinc-deficient rats, swine, and lambs exhibit reduced plasma vitamin A and RBP, adequate concentrations of liver vitamin A, but depressed concentrations of RBP in the liver. These effects of vitamin A deprivation or deficiency and the mechanisms of response to the administration of vitamin A are not particularly relevant to the purposes of this report in assessing the potential for hypervitaminosis A. There is the view, however, supported by some of the older literature and dietary intake studies, that hypovitaminosis A in some segments of the population could be considerably more serious, relatively, than the potential threat of hypervitaminosis A. However, Underwood contends that while vitamin A deficiency is said to be one of the remaining nutrient-specific deficiency diseases of worldwide public health importance, the magnitude of the problem and its severity on a global basis are not known. This is attributed in part to the lack of adequate indicators of the relative level of subclinical nutriture. She states further that the current means for assessment leaves wanting a definitive answer to the question of whether inadquate vitamin A nutriture is a problem of public health significance in the United States.

Whether retinol itself or a metabolic product(s) is the "active" form of the vitamin as it affects the target organs and tissues indicated above, remains in doubt. According to Sundaresan and Mandel it is currently considered likely that either retinoic acid or an as yet unidentified metablite of retinoic acid is the systemically active form of the vitamin for growth and tissue maintenance, while retinal is the active form for maintenance of vision and retinol for reproduction. DeLuca and Zile also summarize current evidence to indicate that retinoic acid or a metabolite is the form which carries out the growth-promoting functions of vitamin A. Enzymes capable of converting retinol to retinal and to retinoic acid exist in the liver, intestinal mucosa, and retina.

The normal plasma concentration of vitamin A is about 30 to 70 μg (100 to 230 IU) per 100 mil but much higher levels have been reported after vitamin A supplements are consumed. For example, Gerber *et al.* measured blood levels of vitamin A in four patients with differing intakes of the vitamin. The fasting vitamin A levels of these patients per 100 ml blood and their daily intakes were, respectively: 120 μg (25,000 to 100,000 IU for 8 years); 88 μg (25,000 to 50,000 IU for 6 years); 60 μg (25,000 IU for 6 years); 225 μg (50,000 IU for 8 months). Only the first and last of these patients had complaints referable to vitamin A toxicity.

Median concentration of vitamin A in man is about 100 μg per g of liver with about 1μg per g present in such tissues as kidney, lung, adrenal, and intraperitoneal fat. Selective localization of the vitamin occurs in the retina of the eye. The calculated body pools of vitamin A, as measured in four individuals by a radioisotopic method using retinyl-^{14}C acetate, were 315, 412, 766, and 877 mg. Raica *et al.* found the mean concentration of vitamin A in the liver to be 146 μg per g, SD±151, in 372 necropsy samples taken in five different states; most other tissues contained 1 μg or less per g. Only trace amounts of β-carotene were found in the livers. Lorente and Miller demonstrated that vitamin A passes the placenta and concentrates in the fetal liver in rats, but not in rabbits.

The major route of excretion of retinol and its metabolites in the rat appears to be the feces via the bile but significant amounts of some metabolites are also excreted in the urine, and carbon dioxide from oxidation of the carbons of the side chain is excreted via expired air. Roberts and DeLuca injected retinol-deficient rats intravenously with ^{14}C-labeled retinyl acetate and retinoic acid (doses of 2.0 and 14.5 mg, respectively) and measured recovery of radioactivity in expired CO_2, urine, and feces 2 days after injection. With 6, 7 $^{14}C_2$-retinyl acetate, the percentages of the dose recovered in expired CO_2, urine, and feces were about 2, 17, and 18, respectively; with 6, 7 $^{14}C_2$-retinoic acid, the corresponding percentages were about 1, 38, and 64. When 15 ^{14}C-retinyl acetate or 15 ^{14}C-retinoic acid was injected, the corresponding percentages of radioactivity recovered were about 10, 10, and 14 for the acetate, and about 35, 20, and 44 for the acid. Since total recovery of administered dose after 2 days was substantially greater for the acid (about 100 percent) than for the acetate (about 30 percent), the authors concluded that metabolism of the acetate proceeds at a much slower rate. From these and other experiments, DeLuca and associates have postulated at least three pathways for the ultimate excretion of retinyl acetate or retinoic acid metabolites:

I. Products containing intact isoprenoid side chain representing 60 to 80 percent of the ingested dose; excreted predominantly in the feces and the remainder in the urine, presumably as retinoyl β-glucuronic acid.

II. Products decarboxylated at carbon 15 representing about 10 to 20 percent of the ingested dose; carbon 15 will be expired as CO_2 and the remainder excreted in the feces.

III. Products in which some or all of the isoprenoid side chain has been oxidized to CO_2; the CO_2 will be expired and derivatives of the remainder of the molecule excreted in the urine (some 17 to 20 percent).

Similar results were obtained by Nath and Olson who found that about 65 percent of an intraperitoneal dose of 15 ^{14}C-retinoic acid was excreted in the feces of rats with about 30 percent of the radioactivity accounted for by retinoyl β-glucuronide. Lippel and Olson demonstrated that retinoyl β-glucuronide is by far the major metabolite, if not the sole one, in the bile after intraportal injection of retinoic acid and suggested that the reported presence of retinoic acid esters, the υ-lactone of retinoyl β-glucuronide, and retinoic acid itself is due to reactions catalyzed by the anion-exchange resin used in the extraction process.

The nature of the urinary metabolites was explored further by Sundaresan and Bhagavan who found evidence of at least six types of metabolites in the urine after injection of physiological

doses of differentially labeled retinoic acid into retinol-deficient rats. They concluded that the major metabolite(s) was one lacking both carbons 14 and 15 of retinoic acid. Retinoyl β-glucuronide was not present in the urine in significant amounts. Using improved chromatographic procedures, DeLuca and Zile have detected, but not identified, at least eight metabolites of retinoic acid in tissue extracts of liver, kidney, blood, small intestine, and skin. Roberts and Frolik found retinoic acid to be converted both in organ culture and in subcellular preparations from intestinal mucosa, liver, and testis to several metabolites that are more polar than retinoic acid, among them being 4-hydroxy- and 4-keto-retinoic acid. These investigators suggest that oxidative attack at carbon 4 may be the first step in the elimination of retinoic acid from the tissues.

During a study of the requirement of man for retinol in which seven subjects were injected with 10 to 15 mg of 15 ^{14}C-retinyl acetate, pulmonary excretion of $^{14}CO_2$ was found to be the major excretionary route.

Ames *et al.* estimated the oral, single dose, LD_{50} for crystalline vitamin A acetate dissolved in cottonseed oil in the rat to be about 10 million IU(3.4 g) per kg body weight. In 28-day subchronic tests, no deaths occurred at a feeding level of 150,000 IU (51 mg) per kg per day, and an LD_{50} at 28 days of 200,000 to 300,000 IU (68 to 102 mg) per kg per day was simultaneously estimated. They also observed that depression of growth curves closely parallel breaking strength of excised leg bones and, hence, was a very sensitive measure of vitamin A toxicity. Rats on daily supplements as high as 100,000 IU per kg showed normal growth while there was marked growth depression at levels of 150,000 to 200,000 IU per kg. No details concerning animal age or weight, dose range, or sex and number of animals per dose werer provided.

McLaren *et al.* found that only 2 of 20 adult Sprague-Dawley rats survived more than 3 days following intraperitoneal injection of 200 to 500 mg (667,000 to 1.6 million IU) of retinol per kg body weight. Similar results (only 4 of 11 animals survived) were obtained with weanling rats injected with 425 mg (1.4 million IU) retinol per kg. Survival time was inversely related to plasma retinol and retinyl ester levels. However, all 7 adult rats survived 2 months and showed no signs of toxicity after intraperitoneal injection of 370 mg (673,000 IU) of retinyl palmitate per kg body weight.

Acute poisoning resulting from consumption of polar bear liver has been attributed to its high vitamin A content (13,000 to 18,000 IU per g). In typical cases, illness, including drowsiness, irritability, headache, and vomiting followed within a few hours after a meal of polar bear liver.

In infants given single oral doses of 350,000 IU of vitamin A, transient hydrocephalus and projectile vomiting occurred about 12 h after treatment. Woodward *et al.* also noted that an infant given 70,000 IU of vitamin A daily (about 20,000 IU per kg body weight) from age 4 days exhibited bulging of the fontanel at 2 months of age and suffered as well from hyperirritability, hyperesthesia, alopecia, and increased intracranial pressure. Caffey and Silverman have indicated that early clinical features of vitamin A toxicity are not distinctive and it is only after 6 or more months following onset of excessive intake, when the blood level of vitamin A is definitely increased and there is tenderness, pain, and swelling of the extremities, that the clinical picture becomes diagnostic.

Hillman experimentally produced and studied hypervitaminosis A in a 40-year-old, 75 kg male. In the first experimental period, 1 million IU of water-miscible vitamin A (about 13,000 IU per kg body weight) were ingested daily for 13 days. Plasma vitamin A level peaked at about 750 μg per 100 ml on day 14 and receded to less than 100 μg per 100 ml (pretreatment level) by day 20. Principal clinical features included severe headache, chiefly frontal and retro-orbital, pruritic dermatitis, generalized desquamation, alopecia, increased fragility of the fingernails, splitting and chapping of the lips, gastrointestinal disturbance, anorexia, nausea, alternating constipation and diarrhea, visual disturbance, transitory dizziness, weakness, fatigue, and pain and tenderness in the leg bones. Similar effects on plasma level were observed in a second experimental period of 25 days at the same daily dosage. Some of the signs and symptoms experienced during the first experimental period did not appear in the second but some were more severe in the latter.

The adverse effects, principally characteristic bone lesions, of greatly excessive doses of vitamin A concentrates in laboratory animals were note nearly a half century ago. These and other early observations were inconclusive in implicating vitamin A as the causal agent because of the presence of variable amounts of unknown impurities in some of the vitamin A proparations used. However, they were confirmed when pure retinol and its esters became available and many subsequent studies have helped to delineate the multiplicity of adverse consequences of hypervitaminosis A. Wolbach has reviewed the earlier work with respect to the skeletal effects of vitamin A deficiency and excess.

Male rats fed 50,000 IU of vitamin A as retinyl acetate daily for 4 days mixed with their basal ration, and 25,000 IU daily thereafter (330,000 IU per kg body weight per day) for the next 20 days, developed abnormally thin bones, fractures and exophthalmos in all animals and subcutaneous and intramuscular hemorrhages in some animals. Cappellin and Crepax found that rats tolerated a daily intubated dose of 10,000 IU of retinyl acetate (about 130,000 IU per kg body weight) for 3 months without observed adverse effects. When the daily dose was doubled (about 260,000 IU per kg body weight) in another group of rats, all animals lost weight and died within 25 to 30 days. In these animals, spontaneous and multiple bone fractures occurred by the 15th day; alopecia and inflammation of connective tissue accompanied by hemorrhage were observed. Conne *et al.* fed rats vitamin A acetate at a level of about 165,000 IU per kg body weight daily for 2 weeks during which they lost weight and became moribund. Necropsy showed increased vascularization of pulp and periodontium of the upper incisor accompanied by thinning of the dentin and hypercalcification of the enamel and dentin.

Randall fed up to 50,000 IU vitamin A per day as palmitate per kg body weight to rats for 10 months and up to 25,000 IU per day per kg body weight to dogs for 10 months with no observed adverse effects on growth rates or hematology.

Lewis and Cohlan intubated groups of 50 adult male rats with 25,000, 50,000 or 100,000 IU vitamin A (125,000 to 500,000 IU per kg body weight) daily, either with a water dispersible commercial preparation of vitamin A (Aquasol*) or with vitamin A natural esters, for 21 days. All animals receiving 100,000 IU of the Aquasol* died by the eighth day, while 83 percent of the animals receiving 100,000 IU of natural esters survived 21 days. Forty percent of the animals receiving 50,000 IU of the Aquasol* died within 21 days as contrasted with 6 percent mortality in the 50,000 IU natural ester group. During the 21 day experimental period, signs of vitamin A toxicity included scruffiness of the pelt, drowsiness, muscular weakness, reduced appetite and growth, alopecia, exophthalmos, limping, spontaneous fractures, and scoliosis. No mention is made of mortality in the animals receiving 25,000 IU daily, either

as aqueous or oily preparations; presumably no obvious signs of hypervitaminosis A appeared at this level.

Ames *et al.* found depression of growth rate to be a very sensitive measure of vitamin A toxicity. Rats showed normal growth curves with doses of retinyl acetate up to 100,000 IU per kg body weight per day but marked growth depression at levels of 150,000 to 200,000 IU per kg. Breaking strength of excised leg bones decreased with increasing dosages and closely paralleled depression of the growth curve. Organ weights after toxic doses were essentially normal with the exception of marked hypertrophy of the adrenals. Sobel *et al.* found no growth depression in rats on stock ration supplemented by intubated retinyl acetate at doses up to 30,000 IU per kg per day but marked depression in growth rate at 300,000 IU per kg per day.

Nerurkar and Sahasrabudhe fed retinyl palmitate (about 400,000 IU per kg body weight) daily to rats for periods of 3, 6, 9, and 12 consecutive days, and determined the calcium, phosphorus, nitrogen, and ash content of the bone in animals sacrificed following the final daily dose; blood serum levels of calcium and inorganic phosphorus, blood and liver levels of vitamin A, and urinary and fecal excretion of calcium, phosphorus, and nitrogen were also determined. There was reduced food intake, weight loss, and skeletal fractures and hemorrhages, with the degree of toxicity approximately proportional to the total quantity of vitamin A consumed. A negative balance was observed with respect to calcium, phosphorus, and nitrogen with the trend continuing long after cessation of administration of large doses of the vitamin. No changes were detected in the levels of calcium and inorganic phosphorus in the blood, nor in the relative mineral composition of the bones. However, bone thinning occurred accompanied by increased urinary and fecal excretion of calcium and phosphorus.

Matrajt-Denys *et al.* found that Wistar rats, given 2,500 IU of retinyl acetate in peanut oil subcutaneously 3 times a week for 4 weeks (about 35,000 IU per kg body weight on injection days), showed reduced rate of weight gain. Femoral length and the area of cortical bone at midshaft was less than in the controls. Histological studies revealed that the caudal vertebrae had thinner cortices and less trabecular bone, calcified cartilage and growth cartilage. The number of vascular channels and the percentage of osteocytic cavities greater than 15 microns in diameter were increased. However, subcutaneous administration of porcine calcitonin to animals receiving vitamin A at the above level, partially or wholly prevented these changes. The investigators concluded that vitamin A inhibits bone growth and stimulates bone resorption while calcitonin prevents both effects.

Berdjis fed 40 rats 100,000 to 300,000 IU retinol per kg body weight daily, sacrificing 10 rats each week after 1, 2, 3, and 4 weeks. Extensive hemorrhages and multiple spontaneous fractures occurred during the first 2 weeks. In surviving animals, degeneration of cartilage cells and replacement of cartilage by bone were accelerated and resulted in early closure of the epiphyses. Weight loss and similar pathological signs at exaggerated doses were also observed in rats fed about 600,000 IU per kg body weight per day of retinyl acetate for 10 days; about 1,000,000 IU per kg of the acetate ester for 5 days; or about 2,000,000 IU per kg per day of the palmitate ester for 16 days.

Regezi and Rowe fed 10,000 IU retinol every 2 days (60,000 IU per kg body weight on days fed) to 10 male Sprague-Dawley rats for 16 weeks and 50,000 IU daily (455,000 IU per kg per day) to 5 male Sprague-Dawley rats for 16 days. Rats on the lower dosage grew as well as the controls up to the fourteenth week, at which time they began to lose weight. The difference in mean weights between experimental and control animals was not statistically significant until the sixteenth week and the animals were normal in appearance and behavior. Rats on the higher dosage, on the other hand, had progressive weight loss beginning at day 6, were lethargic and inactive, and lost hair. Morphologic abnormalities occurred in the submandibular gland at both dose levels but were more pronounced at the higher level.

Leelaprute *et al.* fed groups of 10 female rats 25,000, 50,000, and 75,000 IU of retinol daily (about 160,000 to 480,000 IU per kg). Animals at the 25,000 IU retinol dose level and the 50,000 IU retinyl palmitate level failed to gain weight but showed no gross bone changes or microscopic calcification of kidneys, lungs, heart, or liver; all animals lost weight at higher dose levels and most showed gross bone changes and organ calcification.

Seawright *et al.* found dietary levels of about 54,000 and 270,000 IU vitamin A per kg body weight as the palmitate for 24 to 41 weeks produced primary lesions mainly in the first three joints of the cervical vertebrae of cats. There was extensive osseocartilagenous hyperplasia at the margins of the joints. These changes did not occur in control animals receiving no supplemental vitamin A or at a dietary level of 27,000 IU vitamin A per kg body weight. Clark fed weanling kittens retinyl acetate (approximately 210,000 IU per kg per day) for 21 to 30 days and found food consumption to be reduced by 20 to 80 percent. Reduced endochondral bone growth occurred because of osteoporosis and damage to the epiphyseal plates.

Male, Hartley strain guinea pigs receiving in the diet up to approximately 4,000 IU vitamin A as retinol per kg per day for 40 to 50 days maintained normal growth with no evidence of toxicity, while a dose of about 130,000 IU per kg for the same period was toxic and caused depressed growth rate.

Weanling crossbred boar pigs fed up to about 20,000 IU of retinyl acetate per kg per day for 5 weeks appeared normal, while animals receiving about 60,000 IU per kg per day showed abnormal stance with varying degrees of lameness and hind limb immobilization, extensive weakness, increased adrenal, heart, and kidney weights, and elevated serum transaminase (SGOT, SGPT). These results were confirmed using Yorkshire-Hampshire crossbred pigs, 4 to 5 weeks old. Normal growth and minimal osseous lesions were found after 5 weeks at the 20,000 IU per kg level, while at the 60,000 IU per kg level, severe lesions occurred in both endochondral and intramembranous bone. Long bones were decreased in length and width with greatest tissue loss in the epiphysis due to lysis of chondroid matrix. Later work in the same laboratory with the same variety of pigs quantitated the osteoblastic response to excess dietary vitamin A. Calcified tranverse diaphyseal sections of radii from pigs receiving 33,000 IU per kg per day for 5 weeks showed significantly decreased growth rate; appositional bone growth in these pigs was 0.059 mm compared to 0.127 mm in control pigs receiving 350 IU per kg per day. Raddi from hypervitaminotic-A pigs had fewer and thiner osteoid seams than radii from control pigs. The investigators suggested that porcine vitamin A toxicosis leads to decreased osteogenesis secondary to decreased osteoblastic activity. Gorgacz *et al.* found a level of 26,000 IU per kg of retinyl acetate to be mildly hypervitaminotic when fed to Holstein calves, while a level of about 58,000 IU per kg produced depressed growth, hyperhidrosis, alopecia, hyperemia of

oral, nasal, and anal mucosae, lameness, and abnormal stance and horn growth.

In an attempt to shed light on the mechanism of hypervitamin A toxicity, Mallia *et al.* fed Holtzman strain rats about 100,000 IU of vitamin A as retinyl acetate daily (about 400,000 IU per kg body weight) for 23 days, together with trace amounts of ^{3}H-retinyl acetate daily. In the blood of these animals 84 percent of the administered vitamin A was found in the lipoprotein fraction unbound to RBP, compared with 18 percent in animals receiving about 1,600 IU as retinyl acetate per kg. In the animals receiving the high doses of vitamin A, substantial and significant decreases in the level of serum RBP occurred, leading the investigators to suggest the possibility that excess vitamin A leads to decreased rate of RBP synthesis in, and its secretion from, the liver. The investigators concluded that serum lipoproteins play an important role in the transport of vitamin A during hypervitaminosis and that toxic manifestations of vitamin A overdosing appear when vitamin A circulates in the plasma in a form not bound to retinol bining protein. They speculated that the nonspecific and unregulated delivery of vitamin A to the tissues in this manner may lead to vitamin A toxicity. Data consistent with this interpretation have been obtained in limited clinical studies of vitamin A toxicity.

In summary, it appears that the lowest reported adverse effect level in experimental animals is about 30,000 IU per kg per day for periods of 3 to 5 weeks.

Prolonged administration of excessive amounts of vitamin A in man can lead to a variety of signs and symptoms characteristic of hypervitaminosis A. In an early report, in 1944, a child receiving 240,000 IU of vitamin A daily (as halibut liver oil) between the ages of 3 months and 3 years (dose level about 50,000 IU per kg at the start, assuming a 5 kg child), showed enlarged liver and spleen, hypoplastic anemia, leucopenia, precocious skeletal development, and clubbing of the fingers. After administration of halibut liver oil was discontinued, most of these manifestations disappeared.

Since 1951 many instances of hypervitaminosis A in adults have been described involving patients who had consumed from 100,000 to 600,000 IU or more of vitamin A daily (about 1,600 to 10,000 IU or more per kg body weight) for periods ranging from several months to 8 years before hospital admission. Complaints varied in severity but consistently included headache, hair loss, joint and bone pain, anorexia, nausea, skin rash, irritability, fatigue, and depression. The patients occasionally experienced diplopia, hepatomegaly, tachycardia, hypercalcemia, and edema of the extremities, and infrequently showed bone changes or central nervous system signs or symptoms. In one 18-year-old female who had consumed 200,000 IU of vitaman A daily (about 3,300 IU per kg) for about 2 years, measurement of rib bone biopsy specimens showed the presence of osteocyte lacunae of greater than usual size and bone resorption approximately 6 times greater than in rib specimens taken from 6 normal persons of similar age. One 54-year-old male who had consumed about 800 IU of vitamin A per kg body weight daily for 3 years exhibited only central nervous system symptoms or signs, and liver enlargement. Vitamin A blood level in this patient, 69 μg per 100 ml, was within the normal range.

A study of 16 females and 1 male (ages 14 to 62) suspected of suffering from hypervitaminosis A revealed that vitamin A intoxication characterized by skin dryness, hair loss, weakness, joint pain, anorexia and headache, occurred within 2 months at daily doses of 200,000 to 275,000 IU (about 3,300 to 4,600 IU per kg). The smallest dose leading to intoxication was found to be about 700 IU per kg daily taken for 8 years.

Körner and Völlm assembled and reviewed data on 132 cases of all ages of presumed chronic hypervitaminosis A. About 75 percent of these cases were genuinely hypervitaminotic and were about equally divided between those who had medicated themselves and those for whom the vitamin had been prescribed. As liver storage capacity was exceeded (about 10-fold normal level), signs of hypervitaminosis A appeared. With comparable doses, symptoms of hypervitaminosis A appeard earlier when the vitamin was given in the emulsified rather than in an oily form, because of its better absorbability in the former state. Liver concentration of vitamin A was highly correlated with daily intake per kg body weight and its duration in these cases. At a daily intake of 5,000 IU per kg of vitamin A in oily solution, hypervitaminosis A symptoms began to appear in about 3.5 years. In contrast, equal doses of aqueous emulsions produced symptoms within 7 months. The investigators suggest, as a rule of thumb, the daily dose per kg body weight, multiplied by the duration in days, should not exceed 1 million.

Hawkins and Burlon have suggested that 50,000 IU per day (about 800 IU per kg) for not more than 2 months is the highest advisable dose of vitamin A for treatment of diseases of skin and mucous membranes.

Oliver summarized 36 cases of vitamin A intoxication which had been reported by 1958. In infants who had received daily vitamin A overdoses for periods of several months, all showed bone changes on X-ray examination. Many showed enlargement of the liver, skin lesions, loose hair, and fissured lips. Of the patients receiving only moderate overdoses of vitamin A, the smallest dose found to elicit these signs, which appeared at age 28 months, was about 3,000 IU per kg body weight daily, consumed over a period of 17 months beginning at age 12 months. Seven infants or young children receiving 75,000 to 500,000 IU (7,500 to 50,000 IU per kg assuming a 10 kg child) of vitamin A daily for 6 to 15 months exhibited pruritis, hyperirritability, swelling, and pain of the extremities accompanied by hypervitaminosis. The minimal toxic daily dose was estimated to be 75,000 units (about 7,500 IU per kg).

Pereira and Begum fed 23 children (age 2 to 6 years) a daily dose of 50 mg retinyl palmitate in peanut oil (about 9,000 IU per kg for a 10 kg child) for 18 weeks with no apparent adverse effects.

Siegel and Spackman found hypervitaminosis A in two siblings. The 12-month-old female had been receiving 25,000 IU vitamin A daily for 9 months (about 3,200 IU per kg) and was hospitalized for vomiting, irritability, exfoliative dermatitis, palpable liver, bulging anterior fontanel, and an elevated serum vitamin A level. The 30-month-old male who had been receiving 57,000 IU vitamin A daily for 1 year (about 4,000 IU per kg) exhibited anorexia, lethargy, pain in the legs, enlarged head, slightly enlarged liver and spleen, and alopecia. Both recovered on discontinuance of vitamin A supplementation.

Persson *et al.* reported 5 cases of chronic vitamin A intoxication among infants 3 to 5.5 months old receiving 18,500 to 60,000 IU daily (about 2,000 to 7,000 IU per kg body weight) of an aqueous preparation of the vitamin for 1 to 3 months. Characteristic features of the intoxication were elevated fasting blood levels of vitamin A, anorexia, irritability, increased intracranial pressure, skin desquamation, occipital edema, pronounced craniotabes, reduction in skeletal calcium content, and cup-shaped deformations of the widened metaphyses, which were sharply demarcated from the epiphyseal cartilages in the wrists and ankles. Withdrawal of excess dietary vitamin A led to cure in all cases with return to

normal skeletal growth within 3 to 4.5 years. As a continuation of this study Tunell *et al.* fed 2,500 IU of aqueous vitamin A daily to 7 infants beginning at age 1 to 2 weeks for 3 to 5 months, and 7,500 IU daily to a similar group of infants for the same period. No symptoms of vitamin A intoxication occurred at either dosage but serum vitamin A level was significantly higher in the infants receiving the higher dosage. The investigators concluded that although the risk of hypervitaminosis A cannot be excluded at a daily dose level of 7,500 IU (about 900 IU per kg), it has not been demonstrated that chronic vitamin A toxicity occurs at that level. Moore has suggested that hypervitaminosis A represents an exaggeration of the vitamin's normal actions.

The least adverse effect intake in human subjects appears to be in the range of 700 to 3,000 IU per kg per day for periods of several months with most estimates falling closer to the top of the range. Dosages employed in the human studies reported are difficult to equate since it is not always clear whether water miscible or oil soluble vitamin A preparations were used; it is recognized that the former are the more readily absorbed and more capable of eliciting toxic signs at lower dosage levels. Nevertheless, daily intakes of 700 to 3,000 IU per kg would be difficult to achieve from usual dietary sources where mean daily vitamin A intakes, as indicated previously, are of the order of 80 IU per kg for adults to 300 for infants. However, the Committee on Drugs and the Committee on Nutrition of the American Academy of Pediatrics, aware that daily intake can be increased by use of over-the-counter vitamin preparations, indicated that daily doses of 25,000 IU or more of vitamin A for extended periods pose a risk and should not be used except in severe cases of vitamin A deficiency. A daily dose of 25,000 IU would amount to 2,500 IU per kg body weight in a 10 kg child and about 400 IU per kg in an adult. Reacting to this statement and other warnings that hypervitaminosis A could result from imprudent dosing with readily available vitamin preparations, the Food and Drug Administration in 1973 issued regulations restricting to prescription sale, oral preparations containing more than 10,000 IU vitamin A per dosage unit. This regulation was revoked in 1978 pursuant to an order by the U.S. Court of Appeals concerning the basis of FDA's regulation.

March *et al.* found that by feeding laying chickens 410,000 IU vitamin A as the palmitate per kg of diet, rate of egg production, egg size and hatchability were depressed. At a level of 210,000 IU per kg of diet, egg production, size, and hatchability were essentially normal. Dubiel *et al.* found single small intramuscular doses (20,000 to 40,000 IU vitamin A per kg body weight) increased volume of ejaculates and sperm survival in male rabbits, while large doses (60,000 to 90,000 IU per kg) decreased the percentage of motile sperms and decreased their survival time. Gellert gave high but non-toxic oral doses of retinyl palmitate (5,000 IU, 3 times per week) to rats for 9 months and observed an inhibition of cyclic ovulatory activity.

Congenital malformations were known to occur in the offspring of vitamin A-deficient mothers. However, the ability of a large oral maternal dose of vitamin A to cause congenital anomalies in the rat was first reported in 1953 by Cohlan. He found that about 175,000 IU per kg daily of an aqueous preparation of natural vitamin A, intubated between the 3rd and 16th days of gestation, reduced the number of litters carried to full term (10 of 100 mated females compared to 44 of 50 in the controls) and the average litter size (7.4 compared to 9.3 in controls). Incidence of congenital defects in 74 offspring of vitamin A-treated animals was 54 percent with zero in the controls. In summarizing the results of more than 100 papers on the teratogenicity of vitamin A published since that time, Shenefelt has indicated that large doses of vitamin A, some many hundredfold the daily requirement in pregnant animals, have been shown to produce more than 70 types of malformations in the rat, mouse, hamster, guinea pig, rabbit, dog, pig, and monkey. The type and incidence of malformations depend on dose and stage of pregnancy, and to a lesser extent on species and strain.

The following definitive studies shed light on the influence of doses of vitamin A on the mortality and incidence of teratogenic effects in offspring.

Giroud and Martinet gave retinyl acetate or retinyl palmitate orally to Wistar rats from day 2 to day 14 of gestation in daily doses of 20,000 to 60,000 IU. At the 35,000 IU level (about 235,000 IU per kg body weight assuming 150 g rats) abortions occurred in 90 percent of the animals. Lowering the dose to 20,000 IU (about 135,000 IU per kg) resulted in some resorptions (number not given) and a number (not given) of abnormal embryos showing malformation of the encephalon, anophthalmia, microphthalmia, cleft palate, or cataracts. Internal organs appeared normal. Experiments with much higher doses (about 400,000 IU per kg) given daily for 2 to 3 days during early, middle, and late gestation, showed that the percentage of resorption decreased the later vitamin A was administered during the gestational period, becoming negligible after the 12th day. More anomalies occurred when vitamin A was given during early pregnancy; when given on the 14th to 16th days only cleft palates were observed in the offspring, and on the 18th to 20th days, only cataracts. At comparable high dose levels the same investigators found rabbits to be more sensitive than rats to the abortifacient effects of vitamin A but less sensitive to the teratogenic effects. Murakami and Kameyama also showed decreasing frequency of resorptions during the latter stages of pregnancy in mice when injected intraperitoneally with a single 15,000 IU dose (about 750,000 IU per kg) of water miscible vitamin A. Resorption rate was no higher than in controls when injection was made after the 12th day of gestation and substantially fewer offspring showed malformations (20 percent compared with 100 percent in animals receiving vitamin A during first 9 to 10 days of gestation). Marin-Padilla and Ferm reported similar results for golden hamsters intubated with single 20,000 IU doses of vitamin A (about 130,000 IU per kg assuming 150 g hamster) on days 5 through 11 of gestation. There were few resorptions when the vitamin was administered after the 8th day of gestation and malformations did not occur when animals were treated after the 10th day. Robens fed golden hamsters varying amounts of water dispersible retinyl palmitate daily on days 6 to 10 of gestation. About 60 percent of the offspring of those receiving 150,000 IU of the vitamin per kg per day had terata; about 7 percent at 100,000 IU per kg; and about 5 percent at 75,000 IU per kg. Only 0.4 percent of the offspring of control animals had terata.

Giroud and Martinet studied the teratogenicity in mice of relatively small oral doses of vitamin A (2,500 to 12,500 IU per kg body weight) given daily during the 8th to 10th days of gestation. The 6,250 IU per kg dose caused 28 percent abortions, 63 percent deaths or resorptions, and 37 percent malformed fetuses; the 2,500 IU per kg dose caused 10 percent abortions, 8 percent deaths and resorptions, and no malformed fetuses. These investigators commented that their lowest dose was close to that then used in patients receiving vitamin A therapy (2,500 to 3,000 IU per kg body weight). They commented further that while a dose of 2,500 IU per kg did not seem to be teratogenic in mice, such a

dose still provoked abortions. Schärer, on the other hand, found that mice and rats had to be treated on days 8, 9, and 10 of gestation with at lest 150,000 IU of vitamin A palmitate per kg body weight to bring about fetal mortality and malformations of the young.

Nolen has described strain differenes among Sprague-Dawley, Charles River, and Wistar female rats given oral doses of aqueous retinyl palmitate at levels of 50,000 or 75,000 IU per day (about 250,000 or 375,000 IU per kg body weight) on days 6 to 15 of gestation. Both Sprague-Dawley and Charles River rats were more sensitive (relative incidence of and pattern of malformations) than the Wistar rats at both dose levels.

Several investigators have reported the effects of large maternal doses of vitamin A on the behavior and learning ability of offspring. All Fischer rat offspring survived maternal doses of 10,000 to 40,000 IU per kg retinyl palmitate, intubated on the 8th, 9th, or 10th days of gestation. At 70 days of age the weights of experimental offspring were the same as the control animals but the vitamin A-exposed animals, particularly those of dams receiving the highest dose, showed impaired learning ability as measured by maze avoidance tests. No impaired learning ability but slower response rates have been reported by Hutchings and Gaston for offspring of Wistar rats given 450,000 IU per kg body weight of water soluble vitamin A intragastrically on days 17 and 18 of gestation. Butcher *et al.* observed impaired learning ability at age 50 days in offspring of Sprague-Dawley rats intubated with 100,000 IU vitamin A per kg body weight on the 8th, 9th, and 10th days of gestation.

The available information concerning the teratogenic potential effects of vitamin A provides some basis for estimating the highest dose at which teratogenic effects do not occur. It has been demonstrated at all hypervitamin-A levels that the stage of pregnancy when the vitamin is administered has a critical bearing on the appearance of teratogenic effects. However, the relatively few experiments in which moderate maternal vitamin A dosages were administered at the stage of pregnancy when teratogenic effects are most likely to occur, indicate that the no-effect level in mice could be as low as 2,500 IU per kg body weight, in hamsters about 75,000 IU per kg, and in rats about 135,000 IU per kg. Thus, species differ in sensitivity. No information is available on the relative sensitivity of man. However, the lowest dose indicated above is more than 25 times greater than adult human intakes of vitamin A from food sources, estimated earlier in this report to approximate 100 IU per kg per day. Some therapeutic dose levels to vitamin A may approach 2,500 IU per kg for short periods of time.

The following papers represent attempts to elucidate possible mechanisms for the production of teratogenic effects in offspring of animals treated during pregnancy with excessive amounts of vitamin A.

Kochhar and Johnson studied cleft palate information in fetuses of black-hooded female rats given about 360,000 IU of vitamin A acetate per kg daily for 3 consecutive days beginning on the 9th or 10th day of pregnancy. More than 80 percent of the embryos developed cleft palate. In many of these embryos, there was a considerably lesser amount of mesenchymal tissue contributed by the maxillary processes to form the palatine shelves than in the control animals. A process of heterotopic chondrogenesis was detected within the preosteoblastic tissues of maxillae and palatine shelves which, in 17-day embryos, had already replaced a major portion of the maxillary bone. Soliman gave pregnant rats 250,000 IU retinyl palmitate per kg body weight during days 8 to 10 of gestation. Approximately three-quarters of their fetuses showed anomalies. Normal control values were not reported. Subcutaneous injection of 0.2 g α-tocopherol on gestation days 8 and 12 to another group of A-hypervitaminotic rats lowered the incidence of fetal anomalies from 76 to 48 percent. As a result of detailed morphological examination of abnormalities occurring in fetal Wistar rats obtained at days 8, 9, 10, and 11 from pregnant animals injected with about 500,000 IU per kg body weight of aqueous retinyl palmitate on the 8th day of gestation, Morriss suggested that malformations originated from a loss of synchrony in the developmental process because of differential toxicity of vitamin A to the three germ layers. Light and electron microscopic studies of the decidual and trophoblastic tissue of the pregnant rat made by the same investigator 5 h after maternal administration of about 500,000 IU vitamin A palmitate per kg body weight, showed membrane damage close to capillaries, vacuolated and distorted blood cells, and cell debris in the blood space around the embryo. Decreased oxygen-carrying capacity and increased peripheral resistance were suggested as maternal vascular factors complementing the direct embryotoxic effect of vitamin A in the teratogenic mechanism. In later studies, Morriss and Steele demonstrated that retinol had a direct teratogenic effect on rat embryos explanted on the 8th day of gestation and cultured in the presence of 0.5 to 20 μg retinol per ml.

A number of experiments with explanted embryos or embryonic tissues in culture appear to confirm the direct teratogenic effects of vitamin A. Degradation of the extracellular matrix of chick limb-bone rudiments occurred in culture solutions containing approximately 5 to 10 IU retinol per ml but not when retinol, complexed with retinol binding protein, was used. A concentration of 10 IU retinol per ml interfered with cell movement in cultured mouse limb buds and with cell division and metabolism in cultured chondrocytes from embryonic chick sterna. Up to 30 g retinyl acetate (100 IU) per ml of culture solution caused a dose-dependent inhibition of acid mucopolysaccharide synthesis in embryonic chick sternal chrondrocytes although collagen synthesis was not inhibited. A concentration of 10 IU of retinol per ml of medium caused decreased chondrification and keratinization of metacarpals and abnormal development in forelimb buds of embryos taken on the 10th to 12th day of pregnancy from ICR–JCL mice. Terashima and Nogami used ^{35}S-sulfate, injected into newborn and 15 to 18 day-old fetuses, to study cartilage metabolism in the extremities of Sprague-Dawley rats whose mothers had received intraperitoneal vitamin A (about 2 million IU per kg body weight) on the 11th day of pregnancy. They observed increased synthesis and degradation of sulfated glycosaminoglycans in the fetal cartilage. March *et al.* found 1,070 IU retinol, injected into eggs prior to incubation, to depress hatchability markedly whereas 8,000 IU of retinyl palmitate had little effect. Developmental abnormalities were noted in a number of dead embryos from retinol-injected eggs and hemorrhaging appeared to be a frequent cause of embryonic death.

Some case reports have been published suggesting that congenital abnormalities may occur in humans whose mothers have been exposed to excessive amounts of vitamin A during pregnancy. Bernhardt and Dorsey attributed urinary tract malformations in a female infant to the consumption of 25,000 IU of vitamin A (as capsules of fish liver oil) by the mother daily for the first 3 months of pregnancy and 50,000 IU daily from the fourth through the ninth months. These investigators referred to another instance where

urinary tract malformations in a human infant were attributed to consumption of 40,000 IU of vitamin A by the mother daily from the sixth to the tenth week of pregnancy. Stånge *et al.* considered malformations of the central nervous system in a human infant to be related to high doses of vitamin A (150,000 IU daily during days 19 to 40 of gestation) given the mother as treatment for acne. Gal *et al.* found higher levels of vitamin A in blood obtained 7 days postpartum from women delivering babies with central nervous system defects than in blood samples from women delivering normal babies. Significance of this finding was considered unclear by these investigators because of the normally wide variation in blood vitamin A levels and the lack of specific information on the blood vitamin A levels during pregnancy. Yeung has shown that young women receiving oral contraceptives have significantly higher mean vitamin A plasma levels than those not using this medication. Elevation of plasma level of the vitamin was not due to variations in vitamin A intake. Yeung indicated that the physiological implication of these findings in subjects receiving oral contraceptives is not clear. However, according to Wild *et al.* and Larsson-Cohn such elevated levels of plasma vitamin A probably represent no risk to the offspring of women taking oral contraceptives shortly before becoming pregnant. The conclusions of a review of recent studies on the effect of oral contraceptives on human plasma vitamin A agree with this latter view.

In a recent comprehensive review of hypervitaminosis A included teratogenicity, Geelen has concluded that there is no definitive proof of teratogenic effects of excess vitamin A in the human but results in animals of different species suggest that hypervitaminosis A in pregnancy may have serious consequences for the developing embryo and fetus.

Retinyl acetate was found to be without mutagenic activity by *in vitro* plate and suspension tests both with and without activation by mouse, rat, or monkey tissue homogenates. Concentrations up to 0.25 percent were used in tests with *Salmonella typhimurium* strains TA-1535, -1537, -1538, -98, and -100, and up to 1.7 percent in tests with *Saccharomyces cerevisiae*, strain D4.

The Select Committee has found no reports indicating that vitamin A is carcinogenic. However, vitamin A may enhance or inhibit responses to viral or chemical carcinogens, particularly during the preneoplastic phase after initiation but prior to cellular transformation. Sporn *et al.* believe there is support for the thesis that deficiency of vitamin A analogs (retinoids) is linked to an increased risk of cancer from chemical carcinogens. They suggest that natural retinoids can prevent the development of epithelial cancer but are limited in their usefulness as chemotherapeutic agents because of inadequate tissue distribution or toxicity. Recent studies of the possible anticarcinogenic effects of vitamin A and its synthetic retinoids, including cis-retinoic acid, may provide a means for overcoming some of these problems. The following recent studies are relevant.

Dietary vitamin A deficiency enhances susceptibility to carcinogenesis in the respiratory tract, bladder, and colon of the rat, as well as the respiratory tract of man after exposure to such carcinogens as polycylic hydrocarbons, nitrofurans, and aflatoxin. A possible explanation of this enhancement of carcinogenesis is the increased DNA synthetic and mitotic activity known to occur in retinoid-deficient epithelia.

Felix *et al.* found that only 4 of 24 BALB/c male mice receiving 3,100 IU retinyl palmitate (about 150,000 IU per kg) daily in drinking water, developed tumors after challenge with injected cells of a transplantable murine melanoma. All controls developed tumors. Rettura *et al.* found a slower rate of tumor growth, but not lower tumor incidence, in C3H/HeJ female mice inoculated with C3HBA tumor cells and receiving in the diet about 20,000 to 40,000 IU of retinyl palmitate per kg body weight, compared to controls fed no supplemental vitamin A. The control animals had a mean survival time of 42 to 43 days after inoculation while mean survival times of treated groups ranged from 54 to 75 days. Seifter and Rettura also found that about 20,000 IU vitamin A per kg of diet increased the resistanace of CBA, BALB/c, and C3H mice to the oncogenic virus, MuSV-M, and to the transplantable mammary adenocarcinoma, C3HBA. Smith *et al.* found no effect of 100 to 2,400 μg of retinyl acetate per week, given intragastrically in divided doses, on incidence of respiratory tumors induced by intratracheal instillations of benzo(α)pyrene in Syrian golden hamsters when the animals were housed in laminar flow cages, but the animals receiving the higher dose of vitamin A experienced a higher incidence of respiratory tract tumors when they were housed conventionally. However, regardless of housing conditions, there was a significant reduction in squamous papillomas of the forestomach in animals receiving the higher dose of vitamin A.

Retinoic acid in concentrations up to 0.3 percent applied topically for 6 to 9 days to dimethylbenzanthracene-induced rabbit ear keratoacanthomas, caused regression of the tumors. Regression was markedly enhanced by concomitant application of fluorouracil. Gross and Newberne observed that low doses of vitamin A enhanced, but high doses repressed, incidence of colon carcinoma in rats treated with dimethylhydrazine. Ong *et al.* have found a protein in extracts of human carcinomas from lung and breast which binds retinoic acid with high specificity. The binding protein was not detected in normal lung or breast tissue from the same patients.

According to Sporn and associates retinoids have uniquely important roles in regulating cell differentiation to prevent malignancy development. They believe the enhancement of these intrinsic physiological controls with pharmacological amounts of synthetic retinoids is an attractive approach to cancer prevention and cite work in their laboratory and those of others in support of his thesis.

It is well established that adequate vitamin A is essential for the normal differentiation of basal (stem) cells to produce the specific mature cells that characterize the various epithelia of the body. This knowledge apparently prompted the therapeutic use of large doses (80,000 IU or more daily for several weeks) of vitamin A in certain skin disorders (ichthyosis, acne, chronic atopic dermatitis), a practice that was limited in effectiveness by the concomitant toxic effects of such doses of the vitamin. The following papers illustrate effects of hypervitaminosis A on epithelial tissues.

Vedrova and Sapelkina showed that doses of 20 or 40 μg vitamin A daily (about 400 or 800 IU per kg) for 2 to 3 months elicited no skin changes in rats that differed from unsupplemented controls. However, a dose of 80 μg daily (about 1,600 IU per kg) caused thickening of the epidermis, proliferation of cells in the basal epidermal layer, increase in the granular layer, thickened and scaly horny layer, abnormal hair follicles, and disintegrating fat gland cells which were frequently overfilled with sebaceous secretion. Spreca *et al.* also observed a sigificant rise in the number of mastocytes with swelling and degranulation in the dermis of rats fed 50,000 to 100,000 IU vitamin A (about 250,000 to 500,000 IU per kg body weight) daily for 10 days.

Pinkus and Hunter studied the stripped off keratin layer of the forearm skin of human volunteers before and after buccal dosing with 2,500 IU vitamin A per kg body weight daily for 30 days. Punch biopsy specimens were also taken of the stripped area. After vitamin A dosing the number of horny cells that could be stripped per unit area decreased, mitosis in the denuded area was decreased in 7 of 10 subjects, and the total number of nucleated cells per unit area was increased. The authors concluded that vitamin A at this level retarded keratinocytic maturation. Sweeney and Hardy found keratinization of skin from the upper lips of 12-day-old embryonic Swiss mice to be suppressed when cultured for 10 days in media containing 5.7 μg retinol per ml. Ciliated and secretory epithelium developed in contrast to squamous stratification and keratinization that occurred in control cultures. Retinyl acetate at 1.56 to 3.12 μg per ml resulted in a 40 percent increase in the cellular RNA content of cultured 1-day-old BALB/c mouse epidermal cells but either increased (6.25 μg per ml) or decreased (0.78 μg per ml) concentrations had less effect.

Enzymes—Working *in vitro* with lysosomes isolated from rat retinas, Dewar *et al.* found that 45 min incubation with 1.0 to 2.5 μg retinol per mg wet weight increased the release of β-glucuronidase, β-galactosidase and hexosaminidase. Wang *et al.* noted a similar release of acid phosphatase, β-glucuronidas, deoxyribonuclease; and N-acetyl-β-D-glucosaminidase from female mouse liver lysosomes by vitamin A. Retinol was more effective than retinyl acetate and retinoic acid in affecting acid phosphatase but these forms of vitamin A were equally effective in the release of the other enzymes. Such enzyme release has also been observed *in vivo*. Extensive hemolysis resulted when human erythrocytes were exposed for 20 min to 40 μg of retinol per ml.

Rats consuming a diet containing up to 180,000 IU of vitamin A per kg for 1 to 2 weeks showed a 2- to 3-fold reduction in the activity of pancreatic lipase and of amylase, enterokinase, and alkaline phosphatase in the duodenal mucosa, while activity of acid phosphatase remained unchanged. A 2- to 3-fold reduction of the activity of blood serum α-amylase and lipase was also observed. Leuts'kii and Baran have also noted a sharp decrease in ATPases in the mucosa of the small intestine and in cell membranes of rats receiving large doses of vitamin A.

Maximum stability of rat liver lysosomes, as measured by the activities of such hydrolytic enzymes as β-glucuronidase, β-hexosaminidase, hyaluronidase, cathepsins, and arylsulfatase, occurred when the rats were fed 100 to 2,000 IU of vitamin A daily (about 1,600 to 33,000 IU per kg body weight); above and below this dosage range, stability was progressively diminished. Since there was no appreciable change in total enzyme activity with variations in vitamin A status and since retinol *in vitro* had no effect on the enzyme activity released from the lysosomal fraction, the investigators concluded that the action of vitamin A *in vivo* is a membrane effect. Toxic doses of vitamin A were found by Eremina *et al.* to inhibit the activity of alcohol dehydrogenase in the liver, kidneys, and small intestine of the rat; aldehydoxidase activity in the small intestine increased.

Dileepan *et al.* fed young male Wistar rats daily for 2 days 30,000 IU OF retinyl palmitate (about 300,000 IU per kg). The *in vitro* incorporation by liver slices of ^{14}C-labeled precursors, such as alanine, bicarbonate, or glycerol, into glucose and glycogen was studied 24 hr. after the last vitiamin A feeding. Amino acid catabolizing enzymes were also studied. Stimulation of hepatic gluconeogenesis in hypervitaminosis A was indicated by increased incorporation of ^{14}C-labeled alanine and bicarbonate into glucose and glycogen. There were marked increases in the activities of hepatic alanine aminotansferase and ornithine aminotransferase and a decrease in that of tryptophan pyrrolase. Activities of liver tyrosine aminotransferase and serine dehydratase were unaffected.

Lipid metabolism—Large doses of retinol (about 70,000 to 500,000 IU per kg body weight) fed daily for 2 to 10 days to Wistar rats caused significant increases in total liver lipids, total fatty acids, glycerides, and esterified cholesterol, but decreased adrenal levels of cholesterol and ascorbate.

Ahuja and Misra found that feeding male Wistar rats 100,000 IU of vitamin A daily (about 1 million IU per kg body weight) for 2 days reduced the utilization of randomly labeled ^{14}C-glucose for fatty acid synthesis in liver and adipose tissue. However, synthesis of neutral lipids and phospholipids was increased in the liver and decreased in adipose tissue. Ramachandran *et al.* found about 2-fold higher levels of free fatty acids in plasma and epididymal fat pads of male Wistar rats after feeding about 375,000 IU retinol per kg per day for 2 days; total lipids and triglycerides in the liver were also increased. In subsequent work, the same investigators reported that ingestion by rats of 30,000 IU of retinol daily (about 375,000 IU per kg body weight) for 2 days increased the liver incorporation of palmitate-1-^{14}C into triglycerides but not into phospholipids. Oxidation of palmitate-1-^{14}C to CO_2 by skeletal muscle was also increased under these conditions.

Pokrovsky *et al.* intubated young male Wistar rats with single doses of 50,000 to 250,000 IU of retinyl palmitate (about 900,000 to 4.5 million IU per kg) and found significant dose-dependent lowering of NADPH-dependent and ascorbate-dependent lipid peroxidation in liver microsomes after 2 to 6 days, suggesting that under these conditions vitamin A may act as an antioxidant. Gerber and Erdman have reported that vitamin A, particularly in the form of retinoic acid, fed for 28 days at levels as low as about 8,000 IU per kg, induced hypertriglyceridemia in male Sprague-Dawley rats; this effect was not mediated by the adrenals.

High dietary levels of vitamin A (a minimum of 15,000 IU per kg feed) have been reported to reduce the severity of atherosclerosis in Japanese quail but divergent effects of high levels (22,000 IU per kg of feed) were observed in different strains of chickens.

Carbohydrate and protein synthesis—Rats given large doses (up to 50,000 IU per animal) of vitamin A daily showed a 50 percent decrease in epithelial proteins (presumably collagens) soluble in 0.5 M NaCl and a 25 percent decrease in skin proteins soluble in citrate buffer. Ahuja and Misra fed male Wistar rats 33 mg retinol (about 100,000 IU per kg) daily for 2 days. Twenty-four hours after the last retinol feeding, leucine-1-^{14}C was injected intraperitoneally to study its incorporation into liver, plasma, and muscle proteins. The retinol-fed rats showed no significant changes compared with controls in the amount of protein per g of tissue in liver, muscle, or plasma, but plasma urea concentration was approximately doubled; incorporation of leucine-1-^{14}C was significantly reduced in muscle proteins and increased in liver proteins in the retinol fed rats. Retinol feeding under these conditions increased liver and adrenal weights relative to body weight, but decreased the ascorbic acid, cholesterol, and lipid content of the adrenals. Chadaeva and Matusis fed doses of 150 IU or 2,000 IU of vitamin A (about 750 or 10,000 IU per kg body weight assuming 200 g animals) to rats for 2 months and found a 2-fold or greater increase in the sialic acid (the N- and O-acyl derivatives of a deoxyamino

sugar acid) content of liver mitochondria. The investigators regarded this as significant because of the roles played by vitamin A and sialic acids in the functioning of biomembranes. It now appears to be established that retinyl phosphate and its mannosyl derivative, mannosyl retinyl phosphate (MRP), are synthesized by mammalian membranes *in vivo* and *in vitro*. Recent evidence supports the concept that MRP is involved in glycoprotein synthesis in a large variety of tissues.

Nucleic acids—Young male Wistar rats (25 days old) fed 5,000 to 40,000 IU of vitamin A daily (about 180,000 to 1.5 million IU per kg) for 2 days were studied for the effects on (a) liver protein, (b) RNA and DNA, (c) liver and plasma lipids. At the lower vitamin A doses the level of each of these substances was equal to or slightly greater than, the controls while at the highest vitamin A dose each was lower than controls. The same investigators also reported that liver content of RNA and its synthesis from orotic acid-6-^{14}C in the liver, as well as its nuclear and mitochondrial fractions, were not affected by feeding 180,000 IU vitamin A per kg but were reduced in rats fed about 720,000 to 1.5 million IU per kg of vitamin A for 2 days.

Blood—Daily intraperitoneal injection of about 70,000 IU retinyl palmitate per kg body weight for 3 months caused lymphomonocytosis and marked changes in organs of the lymphomyeloid complex in male guinea pigs. Soliman reported that the blood of pregnant rats receiving 250,000 IU vitamin A palmitate per kg body weight during days 8 to 10 of gestation showed a significant decrease in hemoglobin, hematocrit, erythrocyte and thrombocyte counts, and in the concentration of various coagulation factors.

Clinical study of several patients (ages 7 to 46) has indicated that hypercalcemia may result from vitamin A overdosing ranging from 2,000 to 4,000 IU per kg per day for from 6 months to 7 years, making it advisable to consider possible hypervitaminosis A in the differential diagnosis of hypercalcemia.

Cerebrospinal pressure—Maddux *et al.* investigated the effect of oral vitamin A on cerebrospinal fluid pressure and brain water in Sprague-Dawley rats. Immature rats given 7.5 mg retinol per day (about 300,000 IU per kg) for 3 to 8 days showed a 73 percent drop in cerebrospinal fluid pressure after 3 to 5 days and a 93 percent drop after 6 to 8 days. Brain volume increased 2 percent.

Immune reactions—A number of studies point to the important involvement of vitamin A in immune responses. Krishnan *et al.* observed marked atrophy of the thymus and spleen in vitamin A-deficient rats. Cohen and Cohen also found that daily intraperitoneal injections of retinyl palmitate in the mouse markedly increased the normal number of antibody-forming cells generated in the spleen in response to immunization with sheep red blood cells.

Dresser found vitamin A to act as an adjuvant in coverting a non-immunogenic antigen (bovine gamma G protein) to an immunogenic form in mice. It was speculated that vitamin A's "adjuvanticity" may result from its damaging effect on lysosomal membranes, thus stimulating cell division. It was thought that stimulation of cell division at the time when antigen is available in the cell may lead to induction of immunity.

Jurin and Tannock investigated the influence of vitamin A (150,000 to 250,000 IU per kg body weight as retinyl palmitate Aquasol® injected daily intraperitoneally on 5 consecutive days) in mice on their immunological response as measured by the titre of haemagglutinin 10 to 15 days after sensitization with sheep red blood cells, or by the time required to reject male mouse skin grafts by isologous female recipients. Daily vitamin A injections for 5 days preceding or following sensitization with sheep red blood cells led to a large increase in the production of haemagglutinin antibodies. After similar vitamin A treatment there was a significantly reduced mean rejection time of male skin grafts.

Mice given 4 consecutive daily intraperitoneal injections of 3,000 IU of water-miscible retinyl palmitate (about 135,000 IU per kg body weight) and subsequently injected intraperitoneally with gram-negatuve *Pseudomonas aeruginosa*, or gram-positive *Listeria monocytogenes*, or the fungus, *Candida albicans*, showed a significant increase in survival as compared to controls. Since vitamin A did not affect *in vitro* growth of the three microorganisms it was concluded that the vitamin induces non-specific resistance to infection in mice. Vitamin A has also been shown to have profound influence on the course of infection in rats by the nematode *Angiostrongylus cantonensis* and by the malarial parasite *Plasmodium berghei*.

Uhr *et al.* found that acute hypervitaminosis A (about 600,000 IU per kg) in guinea pigs can substantially suppress delayed-type hypersensitivity and inflammatory response to intradermal injection of diphtheria toxin, and suggested that the effect was a consequence of the action of vitamin A on lysosomes. Hypervitaminosis A in guinea pigs has no effect on the clearance of bacteriophage $\phi\times174$ from the circulation or on antibody formation to the phage. Acute hypervitaminosis A, characterized by weight loss, weakness, hair loss, and decreased muscle tone within 24 h after administration, was produced by oral administration of 160 mg (about 500,000 IU) of retinoic acid per kg body weight.

Lucy *et. al.*, studying the possible role of intracellular proteinases in the degradation of cartilage matrix in chick limb bone rudiments in culture, found that normal chondrocytes contain an enzyme(s) capable of producing effects on cartilage matrix that closely resemble those produced by excess of vitamin A. They suggested that further study is needed to establish whether there is a relationship between the enzyme(s) and vitamin A in this report.

In studies of vitamin A-deficient children, Bhaskaram and Reddy found T-lymphocytes to be decreased but cell function to be unchanged, leading them to suggest that vitamin A may act as an adjuvant to promote lymphocyte proliferation.[3]

The members of the Select Committee have evaluated all available safety information on vitamin A, vitamin A acetate, and vitamin A palmitate. In the Select Committee's opinion:

Vitamin A is an essential nutrient for man and other animals. Deficiency of vitamin A causes at least four physiologically distinct and clinically recognized states: loss of night vision; defects in bone growth; defects in reproduction; and defects in the growth and differentiation of epithelial tissues. The recommended dietary allowance of vitamin A for adults is about 5,000 International Units (IU) daily. A daily intake of 5,000 IU would amount to about 70 IU per kg for an adult.

Dietary vitamin A activity is supplied by animal products (preformed vitamin A), plant products (provitamin A, such as carotene), and by the addition of vitamin A (retinol) and/or its esters (retinyl acetate and retinyl palmitate) to fortify certain foods. Mean daily intake of vitamin A from all food sources (excluding vitamin preparations) was approximately 5,000 IU in 1971 to 1974. However, some 47 percent of young adults were found to consume no more than 3,500 IU daily. Nevertheless, there is not clear evidence that vitamin A nutriture is a problem of public health significance in the United States. Per capita daily intake of vitamin A used for the fortification of foods is assumed to be about 800 IU (about 13 IU per kg

[3] *Ibid.*, pp. 11–36.

body weight in adults). However, accurate data on the amounts actually added are not available. The Select Committee believes such data should be obtained.

Signs of hypervitaminosis A in laboratory animals include abnormal bone development and fractures, exophthalmos, intramuscular hemorrhages, alopecia, reduced rate of growth or weight loss, adrenal hypertrophy, and at highly toxic dose levels, death. The lowest reported adverse effect level in experimental animals appears to be in the range 25,000 to 60,000 IU per kg per day for periods of 3 to 5 weeks. In man, where expressed feelings of pain or illness on the part of the patient provide an early indication of adverse effects, the symptoms and signs of hypervitaminosis A vary in severity with the dose level, and include skin dryness, anorexia, headache, weakness, hair loss, joint pain, vomiting, irritability, enlarged liver and spleen, and bluging fontanel and increased intracranial pressure in babies. The lowest reported adverse effect level in man appears to lie in the range 700 to 1,000 IU per kg per day, if continued for periods of several months.

With excessive maternal doses of vitamin A, abortions, resorptions, and a large variety of teratogenic effects can be consistently produced in experimental animals, the effectiveness of vitamin A in this regard being greater when administered in the early stages of pregnancy. Administration of a range of doses of vitamin A at the stage of pregnancy when teratogenic effects are most likely to occur, indicate that the highest no-effect level in mice, rats, and hamsters lies in the range 2,500 to 100,000 IU per kg per day. Species differ in sensitivity; the small amount of information available with respect to the relative sensitivity of man indicates that maternal doses of the order of 700 to 800 IU vitamin A per ky daily for most of gestation may lead to abnormalities of the urinary tract in offspring. It is to be noted that congenital malformations also occur in offspring of vitamin A-deficient mothers.

Vitamin A has been found to exhibit no mutagenic activity in *in vitro* tests. There is no evidence that it is carcinogenic.

The lowest doses of vitamin A that produce toxic manifestations in animals and humans are manyfold greater than the daily doses human adults receive from food consumed, only a small portion of which represents vitamin A or its esters that are added to food. Nevertheless, this margin of safety may be compromised by the total intake of vitamin A from all sources.[4]

The Select Committee concludes no evidence in the available information on vitamin A, vitamin A acetate, and vitamin A palmitate demonstrates, or suggests reasonable grounds to suspect, a hazard to the public when these substances are used at levels that are now current or that might reasonably be expected in the future. However, the Select Committee also concludes that it is not possible to determine, without additional data, whether a significant increase in consumption would constitute a dietary hazard.[5]

Before issuing its final report, the Select Committee issued a tentative report in which it expressed concern about the consumption of vitamin preparations containing vitamin A and suggested that it would be prudent to limit the levels at which vitamin A is added to fortified food. On November 19, 1979 (see the **Federal Register** of October 30, 1979 (44 FR 62370)), the Select Committee held a public hearing on its tentative report. Two oral presentations were made at the hearing. One was given by a representative of a manufacturer of vitamin A, and the other was given by a representative of a trade association. A second trade association had also requested an opportunity to make an oral presentation; however, its representative was not present at the hearing.

The manufacturer's representative requested that the Select Committee reconsider and withdraw its proposed recommendation for category 2 for vitamin A, and that the Select Committee recommend instead that it be placed in category 1. The representative cited as a principal reason for making the request the large margin of safety between the level of vitamin A that can be consumed through foods as a nutrient and the level that can cause some adverse effect. He argued also that according to published reports more than half of the nation's population is receiving less than the mean intake for the vitamin.

The trade association representative discussed briefly the scope of the GRAS review as it pertains to dietary supplements. He noted that past FDA action regarding nutrients and dietary supplements had not addressed the dietary supplement use of the ingredient. The representative asserted that it was the association's understanding that dietary supplements are not the subject of this ongoing review. The representative also cautioned the Select Committee against including dietary supplement uses of vitamin A in its safety evaluation.[6]

In response to the testimony at this hearing, the Select Committee modified its tentative opinion. As discussed above, in its final report, the Select Committee expresses its concern about the total intake of vitamin A from all sources.

FDA has undertaken its own evaluation of all available information on these ingredients, and concurs with the conclusion of the Select Committee. Ordinarily, when the data are sufficient to show the safety of current but not significantly increased levels of consumption of an ingredient, the agency affirms the ingredient as GRAS with specific limitations under § 170.30(j) (21 CFR 170.30(j)). However, the agency is deviating from this policy in this case for the following reasons: (1) The scope of the proposed regulation is limited to the use of vitamin A as a nutrient to fortify conventional foods and does not address its use in dietary supplements. (2) The consumption of vitamin A that results from its use as a nutrient to fortify conventional food is small. Available data show that the estimated consumption resulting from this use is about 13 IU/kg/day for adults, which is about one-seventh of the recommended daily allowance for vitamin A. A significant percentage of consumer exposure to vitamin A results from several other sources, including the natural occurrence of this substance in food and the use of vitamin A in dietary supplements and special dietary foods. (3) The use of vitamin A as a nutrient in conventional foods (13 IU/kg/day) is considerably lower than the lowest known toxic dose (700 to 1,000 IU/kg/day). Because of this low consumption, FDA does not agree with the Select Committee that more accurate consumption data are necessary for the uses that are the subject of this proposal. (4) The proposed action is consistent with the Select Committee's opinion regarding the safety of the use of vitamin A as a nutrient in conventional foods. The Select Committee's concern about vitamin A use was not with its use as a nutrient to fortify conventional foods but with dietary supplement uses of the

[4] *Ibid.*, pp. 37–38.

[5] *Ibid.*, p. 38.

[6] Transcript of Proceeding, Federation of American Societies for Experimental Biology, Life Sciences Research Office, "Vitamin A, Vitamin A Acetate, Vitamin A Palmitate," pp. 8, 9, and 17. Copies may be obtained from ACE-Federal Reporters, Inc., 444 N. Capitol St., Washington, DC 20001. A copy of the transcript is also on file with the Dockets Management Branch.

ingredient. However, as previously stated, this proposal does not address dietary supplement uses of vitamin A. Accordingly, the agency has determined that specific limitations on the use of vitamin A and its esters as nutrients in conventional food is not warranted. Therefore, the agency is affirming as GRAS the use of vitamin A, vitamin A acetate, and vitamin A palmitate as nutrient supplements in conventional foods and infant formula in accordance with current good manufacturing practice conditions of use.

Additionally, FDA is proposing not to include in the GRAS affirmation regulation for vitamin A, vitamin A acetate, and vitamin A palmitate the categories and levels of use reported in the NAS/NRC 1971 survey for these ingredients. Both FASEB and the agency have concluded that a large margin of safety exists for the use of these substances, and that a reasonably foreseeable increase in the level of consumption of vitamin A and its esters will not adversely affect human health. Therefore, the agency is proposing to affirm the GRAS status of these ingredients when they are used at current good manufacturing practice conditions of use in accordance with § 184.1(b)(1) (21 CFR 184.1(b)(1)). To make clear, however, that the affirmation of the GRAS status of these substances is based on the evaluation of currently known uses, the proposed regulation sets forth the technical effect that FDA evaluated.

In the **Federal Register** of September 7, 1982 (47 FR 39199), FDA proposed to adopt a general policy restricting the circumstances in which it will specifically describe conditions of use in regulations affirming substances as GRAS under 21 CFR 184.1(b)(1) or 186.1(b)(1). The agency proposed to amend its regulations to indicate clearly that, it will specify one or more of the current good manufacturing practice conditions of use in regulations for substances affirmed as GRAS with no limitations other than current good manufacturing practice only when the agency determines that it is appropriate to do so.

Copies of the scientific literature reviews on vitamin A and its esters, a mutagenic report on vitamin A acetate, and the report of the Select Committee are available for review at the Dockets Management Branch (address above), and may be purchased from the National Technical Information Service, 5285 Port Royal Rd., Springfield, VA 22161, as follows:

Title	Order No.	Price code	Price[1]
Vitamin A (scientific literature review).	PB 241-949/AS.	A99	$48.00
Vitamin A, vitamin A acetate, and vitamin A palmitate (scientific literature review update).	PB 275-754/AS.	A03	6.00
Vitamin A, vitamin A acetate, and vitamin A palmitate (Select Committee report).	PB 80-178650.	A04	7.00
Vitamin A acetate (mutagenicity report).	PB 276-479/AS.	A03	6.00

[1] Price subject to change.

This proposed action does not affect the current use of vitamin A and its esters in pet food or animal feed.

The format of the proposed regulation is different from that in previous GRAS affirmation regulations. FDA has modified paragraph (c) of § 184.1930 to make clear the agency's determination that GRAS affirmation is based upon current good manufacturing practice conditions of use, including the technical effect listed. This change has no substantive effect but is made merely for clarity.

The agency has determined under 21 CFR 25.24(d)(6) (proposed December 11, 1979; 44 FR 71742) that this proposed action is of a type that does not individually or cumulatively have a significant impact on the human environment. Therefore, neither an environmental assessment nor an environmental impact statement is required.

FDA, in accordance with the Regulatory Flexibility Act, has considered the effect that this proposal would have on small entities including small businesses and has determined that the effect of this proposal is to maintain current known uses of the substances covered by this proposal by both large and small businesses. Therefore, FDA certifies in accordance with section 605(b) of the Regulatory Flexibility Act that no significant economic impact on a substantial number of small entities will derive from this action.

In accordance with Executive Order 12291, FDA has carefully analyzed the economic effects of this proposal, and the agency has determined that the final rule, if promulgated, will not be a major rule as defined by the Order.

List of Subjects

21 CFR Part 182

Generally recognized as safe (GRAS) food ingredients, Spices and flavorings.

21 CFR Part 184

Direct food ingredients, Food ingredients, Generally recognized as safe (GRAS) food ingredients.

Therefore, under the Federal Food, Drug, and Cosmetic Act (secs. 201(s), 409, 701(a), 52 Stat. 1055, 72 Stat. 1784–1788 as amended (21 U.S.C. 321(s), 348, 371(a))) and under authority delegated to the Commissioner of Food and Drugs (21 CFR 5.10), it is proposed that Parts 182 and 184 be amended as follows:

PART 182—SUBSTANCES GENERALLY RECOGNIZED AS SAFE

§§ 182.8930, 182.8933, 182.8936 [Removed]

1. In Part 182 by removing § 182.8930 *Vitamin A*, § 182.8933 *Vitamin A acetate*, and § 182.8936 *Vitamin A palmitate*.

PART 184—DIRECT FOOD SUBSTANCES AFFIRMED AS GENERALLY RECOGNIZED AS SAFE

2. In Part 184 by adding new § 184.1930, to read as follows:

§ 184.1930 Vitamin A.

(a)(1) Vitamin A (retinol; CAS Reg. No. 68–26–8) is the alcohol 9,13-dimethyl-7-(1,1,5-trimethyl-6-cyclohexen-5-yl)-7,9,11,13-nonatetraen-15-ol. It may be nearly odorless or have a mild fishy odor. Vitamin A is extracted from fish liver oils or produced by total synthesis from β-ionone and a propargyl halide.

(2) Vitamin A acetate (retinyl acetate; CAS Reg. No. 127–47–9) is the acetate ester of retinol. It is prepared by esterifying retinol with acetic acid.

(3) Vitamin A palmitate (retinyl palmitate; CAS Reg. No. 79–81–2) is the palmitate ester of retinol. It is prepared by esterifying retinol with palmitic acid.

(b) The ingredient meets the specifications for vitamin A in the Food Chemicals Codex, 3d Ed. (1981), p. 342, which is incorporated by reference. Copies are available from the National Academy Press, 2101 Constitution Ave. NW., Washington, DC 20418, or available for inspection at the Office of the Federal Register, 1100 L St. NW., Washington, DC 20408.

(c) In accordance with § 184.1(b)(1), the ingredient is used in food with no limitation other than current good manufacturing practice. The affirmation of this ingredient as generally recognized as safe (GRAS) as a direct human food ingredient is based upon the following current good manufacturing practice conditions of use:

(1) The ingredient is used in food as a nutrient supplement as defined in § 170.3(o)(20) of this chapter.

(2) The ingredient is used in foods at levels not to exceed current good manufacturing practice. Vitamin A may be used in infant formula in accordance with section 412(g) of the Federal Food, Drug, and Cosmetic Act (the act) or with regulations promulgated under section 412(a)(2) of the act.

The agency is unaware of any prior sanction for the use of this ingredient in foods under conditions different from those identified in this document. Any person who intends to assert or rely on such a sanction shall submit proof of its existence in response to this proposal. The action proposed above will constitute a determination that excluded uses would result in adulteration of the food in violation of section 402 of the Federal Food, Drug, and Cosmetic Act (21 U.S.C. 342), and the failure of any person to come forward with proof of such an applicable prior sanction in response to this proposal constitutes a waiver of the right to assert or rely on it later. Should any person submit proof of the existence of a prior sanction, the agency hereby proposed to recognize such use by issuing an appropriate final rule under Part 181 (21 CFR Part 181) or affirming it GRAS under Part 184 or 186 (21 CFR Part 184 or 186), as appropriate.

Interested persons may, on or before March 15, 1983 submit to the Dockets Management Branch (address above), written comments regarding this proposal. Two copies of any comments are to be submitted, except that individuals may submit one copy. Comments are to be identified with the docket number found in brackets in the heading of this document. Received comments may be seen in the office above between 9 a.m. and 4 p.m., Monday through Friday.

Dated: December 22, 1982.

William F. Randolph,

Acting Associate Commissioner for Regulatory Affairs.

[FR Doc. 83-1057 Filed 1-13-83; 8:45 am]

BILLING CODE 4160-01-M

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21 CFR Part 357

[Docket No. 82N-0165]

Orally Administered Menstrual Drug Products for Over-the-Counter Human Use; Establishment of a Monograph

Correction

In FR Doc. 82-32885 beginning on page 55076 in the issue for Tuesday, December 7, 1982, make the following changes:

1. On page 55078, the third column:

a. The tenth line, the words "Cimicifuga racemosa" should be italicized.

b. The fifteenth line, the word "Gylcyrrhiza" should be italicized.

c. The eighteenth line should read "Pamabrom (2-amino-2-methyl-1-".

2. On page 55079, the middle column, the ingredients listed under paragraph designated "b", the ingredient "Essence pepsi" should read "Essence pepsin".

3. On page 55080, the middle column, the seventeenth line from the bottom, the first, "to" should read "of".

4. On page 55083, the middle column, the ninth line from the bottom, the word "doseage" should read "dose".

5. On page 55085:

a. In the first column, the first complete paragraph, the eleventh line from the bottom, the number "10" should read "0.10".

b. In the same paragraph, the tenth line from the bottom, the word "an" should read "and".

c. In the middle column, in the first entry under References, "N-" should read "N-p-".

6. On page 55089, the first column, in the third entry under References, the second line should read "of Diuretic Action of Pamabrom (2-Amino-2-".

7. On page 55092, the first column, the first complete paragraph, the word *"Taraxascum"* should read *"Taraxacum"*.

8. On page 55098, the middle column, in the fifth entry under References, the OTC Volume citation should read "170209".

9. On page 55099, the first column, the second complete paragraph, the word "table" should read "tablet".

BILLING CODE 1505-01-M

DEPARTMENT OF STATE

22 CFR Part 121

[Docket No. SD-182]

Amendment of the International Traffic in Arms Regulations (ITAR)—U.S. Munitions List.

AGENCY: Department of State.

ACTION: Proposed rule.

SUMMARY: The Department proposes to amend the U.S. Munitions List (22 CFR 121.01) of the International Traffic in Arms Regulations, by adding a paragraph concerning certain Very High Speed Integrated Circuits (VHSIC) devices to Category XI of the U.S. Munitions List. The licensing of exports of such devices will consequently be under the jurisdiction of the Deparment of State.

DATES: Comments should be received no later than February 28, 1983.

ADDRESS: Comments should be sent to Mr. William B. Robinson, Director, Office of Munitions Control, Department of State, 2201 C. Street, N.W., Washington, D.C. 20520. All comments will be available for public inspection in the Reading Room of the Department of State.

FOR FURTHER INFORMATION CONTACT. Mr. Steve Koumanelis, (202) 235-9761.

SUPPLEMENTARY INFORMATION: Under the proposed rule, the Office of Munitions Control will have export jurisidiction over those very high speed integrated circuit semiconductor devices that are specifically designed for military applications, such as those produced under the VHSIC program of the Department of Defense. These semiconductors devices are ones which have a high-speed signal and image processing capability with an operational parameter (gate-time-clock-frequency) of greater than 10^{11} gates x hertz. Technical data directly related to these specifically designed military devices will also be under the jurisdiction of the Office of Munitions Control. All integrated circuits and related technical data which do not meet these criteria will remain under the export controls of the Department of Commerce.

List of Subjects in 22 CFR Part 1216

Arms and munitions.

PART 121—[AMENDED]

Accordingly, it is proposed to amend Title 22, Code of Federal Regulations, Part 121, Category XI by adding paragraph (e) to read as set forth below.

§ 121.01 The U.S. munitions list.

* * * * *

Category XI—Military and Space Electronics

* * * * *

(e) Very high speed integrated circuit (VHSIC) semiconductor devices that are specifically designed for military applications and which have a high-speed signal and image processing capability with an operational parameter (gate-time-clock-frequency) of greater than 10^{11} gates x hertz.

* * * * *

(22 U.S.C. 2778(a)(1))

Dated: December 9, 1982.

William B. Robinson,

Director, Office of Munitions Control.

[FR Doc. 83-1219 Filed 1-13-83; 9:50 am]

BILLING CODE 4710-25-M

DEPARTMENT OF THE TREASURY

Internal Revenue Service

26 CFR Part 1

[LR-186-82]

Definition of Partnership Item

AGENCY: Internal Revenue Service.

ACTION: Notice of proposed rulemaking.

SUMMARY: This document contains proposed regulations relating to the definition of "partnership item" under the new rules for the tax treatment of partnership items. The Tax Equity and Fiscal Responsibility Act of 1982 prescribed those new rules. New Code section 6231 (a)(3) provides that a "partnership item" is any item that must be taken into account for a taxable year of a partnership under any income tax provision to the extent that the regulations provide that the item is more appropriately determined at the partnership level. This document sets forth items that the Service considers to be more appropriately determined at the partnership level than at the partner level.

DATE: Written comments and requests for a public hearing must be delivered or mailed by March 15, 1983.

The regulations are proposed to apply with respect to partnership taxable years beginning after September 3, 1982. However, if a partnership and the Service agree to accelerate the effective date for the new consolidated proceedings pursuant to section 407(a)(3) of the Tax Equity and Fiscal Responsibility Act of 1982, the regulations shall apply with respect to that partnership for any partnership taxable year ending after September 3, 1982.

ADDRESS: Send comments and requests for a public hearing to: Commissioner of Internal Revenue, Attention: CC:LR:T (LR-186-82), 1111 Constitution Avenue, NW., Washington, D.C. 20224.

FOR FURTHER INFORMATION CONTACT: Donald Stevenson of the Legislation and Regulations Division, Office of the Chief Counsel, Internal Revenue Service, 1111 Constitution Avenue, NW., Washington, D.C. 20224 (Attention: CC:LR:T) (202-566-3297).

SUPPLEMENTARY INFORMATION:

Background

This document contains proposed amendments to the Income Tax Regulations (26 CFR Part 1) to provide regulations under new section 6231(a)(3) of the Internal Revenue Code of 1954. Section 6231(a)(3) was added to the Code by section 402 of the Tax Equity and Fiscal Responsibility Act of 1982 (Pub. L. 97-248, 96 Stat. 663). The amendments are proposed to be issued under the authority contained in sections 6231(a)(3) and 7805 of the Code (96 Stat. 663; 26 U.S.C. 6231(a)(3), 68A Stat. 917; 26 U.S.C. 7805).

The Tax Equity and Fiscal Responsibility Act of 1982 added to the Code new rules under which the tax treatment of "partnership items" is determined at the partnership level rather than at the partner level.

Under new Code section 6231(a)(3) a "partnership item" is any item that must be taken into account for a taxable year of a partnership under any income tax provision of the Code to the extent that the regulations provide that that item is more appropriately determined at the partnership level than at the partner level. The proposed regulations list the items which the Service considers to be more appropriately determined at the partnership level.

Among the items listed in the proposed regulations are the "distributive share" items that the partnership must allocate to the partners (including partnership liabilities and certain special purpose data such as that necessary to enable partners to compute depletion). Also included are guaranteed payments and partnership-level determinations that have a bearing on transactions affecting particular partners. The proposed regulations provide illustrations of partnership-level determinations that have a bearing on contributions, distributions, transactions between the partnership and a partner, and the application of section 751 (special rules applicable to partnerships with unrealized receivables or substantially appreciated inventory).

These proposed regulations define the term "partnership item" for purposes of income tax proceedings. These proposed regulations do not define that term for purposes of windfall profit tax proceedings.

Comments and Public Hearing

Before the adoption of these proposed regulations consideration will be given to any written comments that are submitted (preferably seven copies) to the Commissioner of Internal Revenue. All comments will be available for public inspection and copying. A public hearing will be held upon written request to the Commissioner by any person who has submitted written comments. If a public hearing is held, notice of the time and place will be published in the **Federal Register.**

Special Analyses

The Commissioner of Internal Revenue has determined that this proposed rule is not a major rule as defined in Executive Order 12291 and that a Regulatory Impact Analysis is therefore not required.

Although this document is a notice of proposed rulemaking which solicits public comment, the Internal Revenue Service has concluded that the regulations proposed herein are interpretative and that the notice and public comment requirements of 5 U.S.C. 553 do not apply. Accordingly, these proposed regulations do not constitute regulations subject to the Regulatory Flexibility Act (5 U.S.C. chapter 6).

Drafting Information

The principal author of these proposed regulations was Paul A. Francis of the Legislation and Regulations Division of the Office of Chief Counsel, Internal Revenue Service. However, personnel from other offices of the Internal Revenue Service and Treasury Department participated in developing the regulations, both on matters of substance and style.

Evaluation of the effectiveness of the proposed regulations after issuance will be based upon comments received from offices within Treasury and the Internal Revenue Service, other governmental agencies, and the public.

List of Subjects in 26 CFR 1.6221-1 through 1.6232-1

Income taxes, Administration and procedure, Partnerships.

Proposed Amendments to the Regulations

A new § 1.6231(a)(3)-1 is proposed to be added to 26 CFR Part 1 to read as follows:

§ 1.6231(a)(3)-1 Partnership items.

(a) *In general.* For purposes of subtitle F of the Internal Revenue Code of 1954, the following items which are required to be taken into account for the taxable year of a partnership under subtitle A of the Code are more appropriately determined at the partnership level than at the partner level:

(1) The partnership aggregate and each partner's share of each of the following:

(i) Items of income, gain, loss, deduction, or credit of the partnership;

(ii) Expenditures by the partnership not deductible in computing its taxable income (for example, foreign taxes and charitable contributions);

(iii) Items of the partnership which may be tax preference items under section 57(a) for any partner;

(iv) Income of the partnership exempt from tax;

(v) Partnership liabilities (including determinations with respect to the amount of the liabilities, whether the liabilities are nonrecourse, and changes from the preceding taxable year); and

(vi) Other amounts with respect to partnership investments, transactions, and operations necessary to enable partners to compute—

(A) The credit provided by section 38;

(B) Recapture under section 47 of the credit provided by section 38,

(C) Their amounts at risk in any activity to which section 465 applies, and

(D) The depletion allowance under section 613A with respect to oil and gas wells;

(2) Guaranteed payments;

(3) Optional adjustments to the basis of partnership property pursuant to an election under section 754 (including necessary preliminary determinations, such as the determination of a transferee partner's basis in a partnership interest); and

(4) To the extent that the determination can be made from determinations that are necessary at the partnership level with respect to an amount, the character of an amount, or the percentage interest of a partner in the partnership for purposes of the partnership books and records or for purposes of furnishing information to a partner—

(i) Contributions to the partnership;

(ii) Distributions from the partnership;

(iii) Amounts to be taken into account by a partner dealing with the partnership in a transaction to which section 707(a) applies (including the application of section 707(b));

(iv) The application to the distributee partner of section 751(b); and

(v) The application to the transferor partner of section 751(a).

(b) *Illustrations.* This paragraph (b) illustrates the provisions of paragraph (a)(4) of this section. The factors enumerated are not exhaustive; there may be additional partnership-level determinations with respect to a determination listed in paragraph (a)(4) of this section.

(1) *Contributions.* For purposes of its books and records, or for purposes of furnishing information to a partner, the partnership needs to determine:

(i) The character of an amount received from a partner (for example, whether it is a contribution, a loan, or a repayment of a loan);

(ii) The amount of money contributed by a partner;

(iii) The applicability of the investment company rules of section 721(b) with respect to a contribution; and

(iv) The basis to the partnership of contributed property.

To the extent that a determination with respect to a contribution can be made from these and similar partnership-level determinations, therefore, the determination is a partnership item. To the extent that that determination requires other information, however, that determination is not a partnership item. For example, it may be necessary to determine whether the contribution of the property causes recapture from the contributing partner of the credit provided under section 38 in certain circumstances in which that determination is irrelevant to the partnership.

(2) *Distributions.* For purposes of its books and records, or for purposes of furnishing information to a partner, the partnership needs to determine:

(i) The character of an amount transferred to a partner (for example, whether it is a distribution, a loan, or a repayment of a loan);

(ii) The amount of money distributed to a partner;

(iii) The adjusted basis to the partnership of distributed property; and

(iv) The character of partnership property (for example, whether an item is inventory or a capital asset).

To the extent that a determination with respect to a distribution can be made from these and similar partnership-level determinations, therefore, the determination is a partnership item. To the extent that that determination requires other information, however, that determination is not a partnership item. Such other information would include those factors used in determining the partner's basis for the partnership interest that are not themselves partnership items, such as the amount that the partner paid to acquire the partnership interest from a transferor partner if that transfer was not covered by an election under section 754.

(3) *Transactions to which section 707(a) applies.* For purposes of its books and records, the partnership needs to determine:

(i) The amount transferred from the partnership to a partner or from a partner to the partnership in any transaction to which section 707(a) applies;

(ii) The character of such an amount (for example, whether or not it is a loan; in the case of amounts paid over time for the purchase of an asset, what portion is interest); and

(iii) The percentage of the capital interests and profits interests in the partnership owed by each partner.

To the extent that a determination with respect to a transaction to which section 707(a) applies can be made from these and similar parnership-level determinations, therefore, that determination is a partnership item. To the extent that that determination requires other information, however, that determination is not a partnership item. Examples of such other information are the cost to the partner of goods sold to the partnership and the extent to which the partner may be treated under secton 267(c) as the constructive owner of a capital or profits interest actually owned by another.

(4) *Application of section 751.* For purposes of its books and records, or for purposes of furnishing information to a partner for use in applying section 751, the partnership needs to determine:

(i) The fair market value and adjusted basis of the partnership's—

(A) Unrealized receivables (within the meaning of section 751(c)),

(B) Substantially appreciated inventory (within the meaning of section 751(d)), and

(C) Other property;

(ii) A partner's share of each of the classes of assets described in paragraph (b)(3)(i) of this section; and

(iii) Whether a distribution to a partner is a disproportionate distribution subject to section 751(b).

To the extent that a determination with respect to the application of section 751 can be made from these and similar partnership-level determinations, therefore, that determination is a partnership item. To the extent that that determination requires other information, however, that determination is not a partnership item. An example of such other information is the amount realized by a partner on the sale of a partnership interest.

(c) *Effective date.* This section shall apply with respect to partnership taxable years beginning after September 3, 1982. This section shall also apply with respect to any partnership taxable year ending after September 3, 1982, if with respect to that year there is an agreement entered into pursuant to section 407(a)(3) of the Tax Equity and Fiscal Responsibility Act of 1982.

Roscoe L. Egger, Jr.,

Commissioner of Internal Revenue.

[FR Doc. 83-1130 Filed 1-13-83; 8:45 am]

BILLING CODE 4830-01-M

26 CFR Part 1

[LR-204-78]

Special Periods of Limitation With Respect to Partnership Items of Federally Registered Partnerships; Public Hearing on Proposed Regulations

AGENCY: Internal Revenue Service, Treasury.

ACTION: Notice of pubic hearing on proposed regulations.

SUMMARY: This document provides notice of a public hearing on proposed regulations relating to special periods of limitation with respect to partnership items of federally registered partnerships.

DATES: The public hearing will be held on March 23, 1983, beginning at 10:00 a.m. Outlines of oral comments must be delivered or mailed by March 14, 1983.

ADDRESS: The public hearing will be held in the I.R.S. Auditorium, Seventh Floor, 7400 Corridor, Internal Revenue Building, 1111 Constitution Avenue, NW., Washington, D.C. The requests to speak and outlines of oral comments should be submitted to the Commissioner of Internal Revenue, Attn: CC:LR:T (LR-204-78), Washington, D.C. 20224.

FOR FURTHER INFORMATION CONTACT: Charles Hayden of the Legislation and Regulations Division, Office of Chief Counsel, Internal Revenue Service, 1111 Constitution Avenue, NW., Washington, D.C. 20224, 202-566-3935, not a toll-free call.

SUPPLEMENTARY INFORMATION: The subject of the public hearing is proposed regulations under section 6501(o) of the Internal Revenue Code of 1954. The proposed regulations appear in the Proposed Rules section of this issue of the **Federal Register** (See FR Doc. 83-1133).

The rules of § 601.601(a)(3) of the "Statement of Procedural Rules" (26 CFR Part 601) shall apply with respect to the public hearing. Persons who have submitted written comments within the time prescribed in the notice of proposed rulemaking and also desire to present oral comments at the hearing on the proposed regulations should submit an outline of the oral comments to be presented at the hearing and the time they wish to devote to each subject by March 14, 1983.

Each speaker will be limited to 10 minutes for an oral presentation exclusive of time consumed by questions from the panel for the government and answers to these questions.

Because of controlled access restrictions, attendees cannot be admitted beyond the lobby of the Internal Revenue Building until 9:45 a.m.

An agenda showing the scheduling of the speakers will be made after outlines are received from the speakers. Copies of the agenda will be available free of charge at the hearing.

By direction of the Commissioner of Internal Revenue.

George H. Jelly,

Director, Legislation and Regulations Division.

[FR Doc. 83-1132 Filed 1-13-83; 8:45 am]

BILLING CODE 4830-01-M

26 CFR Part 1

[LR-77-80]

Tertiary Injectant Expenses

AGENCY: Internal Revenue Service, Treasury.

ACTION: Notice of proposed rulemaking.

SUMMARY: This document contains proposed regulations relating to the allowance of a deduction for tertiary injectant expenses. In general, tertiary injectants are used to enhance the recovery of oil from a crude oil reservoir by use of certain enumerated methods. Changes to the applicable tax law were made by the Crude Oil Windfall Profit Tax Act or 1980. The regulation would provide guidance to taxpayers using tertiary recovery methods for the enhanced recovery of oil.

DATE: Written comments and requests for a public hearing must be delivered or mailed by March 15, 1983. The amendments are proposed to be effective for taxable years beginning after December 31, 1979.

ADDRESS: Send comments and requests for a public hearing to: Commissioner of the Internal Revenue, Attention: CC: LR: T (LR-77-80), Washington, D.C. 20224.

FOR FURTHER INFORMATION CONTACT: David R. Haglund of the Legislation and Regulations Division, Office of the Chief Counsel, Internal Revenue Service, 1111 Constitution Avenue, NW., Washington, D.C. 20224 (Attention: CC:LR:T) (202-566-3459).

SUPPLEMENTARY INFORMATION:

Background

This document contains proposed amendments to the Income Tax Regulations (26 CFR Part 1) under section 193 of the Internal Revenue Code of 1954. These amendments are proposed to conform the regulations to section 251(a)(1) of the Crude Oil Windfall Profit Tax Act of 1980 (Pub. L. 96-223, 94 Stat. 286) and are to be issued under the authority contained in section 7805 of the Internal Revenue Code of 1954 (68A Stat. 917; 26 U.S.C. 7805).

Tertiary Injectant Expenses

In general, tertiary injectants are used to enhance the recovery of oil from a crude oil reservoir by use of certain enumerated methods. Before the enactment of section 193, tertiary injectant expenses were required to be capitalized if the expenditures increased or enhanced the value of the oil reservoir beyond the year of injection by augmenting the recoverable amount of hydrocarbons. Section 193 allows as a deduction from gross income an amount equal to the qualified tertiary injectant expenses of the taxpayer. The proposed regulations allow the deduction for the later of—(1) The taxable year in which the injectant is injected, or (2) The taxable year in which the expenses are paid or incurred.

Under section 193, the term "qualified tertiary injectant expense" means, in general, any cost paid or incurred for any tertiary injectant which is used as part of a tertiary recovery method. Section 193 does not allow a deduction, however, for expenses allocable to recoverable hydrocarbons in an injectant containing "more than an insignificant amount" of hydrocarbons. Establishing this standard has proved difficult. The proposed regulations provide that the special rule for recoverable hydrocarbons applies only if recoverable hydrocarbons constitute at least 25 percent of the value of the injectant. The Internal Revenue Service is particularly interested in comments on this proposed standard.

A tertiary recovery method is any method enumerated in paragraphs (c) (1) through (9) of § 212.78 of the June 1979 energy regulations. Under the proposed regulations a taxpayer may also use any method for which the taxpayer has obtained the approval of the Associate Chief Counsel (Technical) under section 4993(d)(1)(B) for purposes of chapter 45 of the Internal Revenue Code, any method which is approved in the regulations under section 4993(d)(1)(B), or any other method to provide tertiary enhanced recovery for which the taxpayer obtains the approval of the Associate Chief Counsel (Technical) for purposes of section 193.

Comments and Requests for a Public Hearing

Before adopting these proposed regulations, consideration will be given to any written comments that are submitted (preferably seven copies) to

the Commissioner of Internal Revenue. All comments will be available for public inspection and copying. A public hearing will be held upon written request to the Commissioner by any person who has submitted written comments. If a public hearing is held, notice of the time and place will be published in the Federal Register.

Regulatory Flexibility Act and Executive Order 12291

The Commissioner of Internal Revenue has determined that this proposed rule is not a major rule as defined in Executive Order 12291 and that a Regulatory Impact Analysis is therefore not required. Although this document is a notice of proposed rulemaking that solicits public comments, the Internal Revenue Service has concluded that the regulations proposed herein are interpretive and that the notice and public procedure requirements of 5 U.S.C. 553 do not apply. Accordingly, these proposed regulations do not constitute regulations subject to the Regulatory Flexibility Act (5 U.S.C. Chapter 6).

Drafting Information

The principal author of these proposed regulations was David R. Haglund of the Legislation and Regulations Division of the Office of the Chief Counsel, Internal Revenue Service. However, personnel from other offices of the Internal Revenue Service and Treasury Department participated in developing the regulations, both on matters of substance and style.

List of Subjects in 26 CFR 1.61–1—1.281–4

Income taxes, Taxable income, Deductions, Exemptions.

Proposed Amendments to the Regulations

PART 1—[AMENDED]

It is proposed to amend 26 CFR Part 1 by adding at the appropriate place the following new § 1.193–1:

§1.193–1 Deduction for tertiary injectant expenses.

(a) *In general.* Subject to the limitations and restrictions of paragraphs (c) and (d) of this section, there shall be allowed as a deduction from gross income an amount equal to the qualified tertiary injectant expenses of the taxpayer. This deduction is allowed for the later of—

(1) The taxable year in which the injectant is injected, or

(2) The taxable year in which the expenses are paid or incurred.

(b) *Definitions*—(1) *Qualified tertiary injectant expenses.* Except as otherwise provided in this section, the term "qualified tertiary injectant expense" means any cost paid or incurred for any tertiary injectant which is used as part of a tertiary recovery method.

(2) *Tertiary recovery method.* "Tertiary recovery method" means—

(i) Any method which is described in paragraphs (c) (1) through (9) of § 212.78 of the June 1979 energy regulations (as defined by section 4996 (b)(8)(C)),

(ii) Any method for which the taxpayer has obtained the approval of the Associate Chief Counsel (Technical) under section 4993(d)(1)(B) for purposes of Chapter 45 of the Internal Revenue Code

(iii) Any method which is approved in the regulations under section 4993(d)(1)(B), or

(iv) Any other method to provide tertiary enhanced recovery for which the taxpayer obtains the approval of the Associate Chief Counsel (Technical) for purposes of section 193.

(c) *Special rules for hydrocarbones*—(1) *In general.* If an injectant contains a significant amount of recoverable hydrocarbons, no deduction is allowed under section 193 or paragraph (a) of this section for expenses allocable to the recoverable hydrocarbon portion of an injectant. The hydrocarbons in an injectant are considered recoverable except to the extent that the taxpayer can demonstrate that the hydrocarbons are nonrecoverable.

(2) *Significant amount.* For purposes of section 193 and this section, an injectant contains a significant amount of recoverable hydrocarbons if recoverable hydrocarbons constitute at least 25 percent of the value of the injectant.

(3) *Hydrocarbon defined.* For purposes of section 193 and this section, the term hydrocarbon means natural gas and crude oil (which includes condensate from gas wells and oil recovered from other sources such as oil shale).

(d) *Application with other deductions.* No deduction shall be allowed under section 193 and this section for any expenditure—

(1) With respect to which the taxpayer has made an election under section 263(c) or

(2) With respect to which a deduction is allowed or allowable under any other provision of chapter 1 of the Code.

(e) *Examples.* The application of this section may be illustrated by the following examples:

Example (1). B, a calendar year taxpayer who uses the method of accounting, uses an approved tertiary recovery method for the enhanced recovery of crude oil from one of B's oil properties. During 1980, B pays $100x for tertiary injectants. B injects these materials as part of the recovery effort during 1981. B has not made any election under section 263(c) with respect to the expenditures for the injectants, and no section of chapter 1 of the Code other than section 193 allows a deduction for the expenditures. The hydrocarbon component of the injectants is 80 percent of the value of injectant and its allocable cost is $80x. B is unable to demonstrate that any portion of the hydrocarbon is nonrecoverable. Only the $20x allocable to the nonhydrocarbon component is deductible under section 193. B may claim the deduction only for 1981, the year of the injection.

Example (2). Assume the same facts as in example (1) except that through engineering studies B has shown that 70 percent of the hydrocarbon injected is nonrecoverable. The recoverable hydrocarbon component of the injectant is 24 percent (30 percent of 80 percent) of the value of the injectant. The injectant does not contain a significant amount of recoverable hydrocarbons. B may claim a deduction for the entire cost of the injectant, $100X, for taxable year 1981, the year of injection.

Roscoe L. Egger, Jr.,
Commissioner of the Internal Revenue.

[FR Doc. 83-1126 Filed 1-13-83; 8:45 am]
BILLING CODE 4830-01-M

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26 CFR Part 51

[LR-227-81]

Definition of Removed From the Premises

AGENCY: Internal Revenue Service, Treasury.

ACTION: Notice of proposed rulemaking.

SUMMARY: This document contains proposed regulations concerning the definition of "removed from the premises" for purposes of the windfall profit tax. Changes to the applicable tax law were made by the Crude Oil Windfall Profit Tax Act of 1980. The regulations would provide guidance for determining when domestic crude oil is removed from the premises for purposes of imposition of the tax imposed by section 4986.

DATES: Written comments and requests for public hearing must be delivered or mailed by March 15, 1983. For the proposed effective dates of these amendments see the discussion below.

ADDRESS: Send comments and requests for a public hearing to: Commissioner of Internal Revenue, Attention: CC:LR: T(LR-227-81), Washington, D.C. 20224.

FOR FURTHER INFORMATION CONTACT: Beverly A. Baughman of the Legislation

and Regulations Division, Office of the Chief Counsel, Internal Revenue Service, 1111 Constitution Ave., NW., Washington, D.C. 20224 (Attention: CC:LR:T) (202-556-3297).

SUPPLEMENTARY INFORMATION:

Background

On April 4, 1980, the **Federal Register** published temporary and proposed regulations (45 FR 23384, 23400) under section 4996 and others. The temporary regulations defined removed from the premises and were required to give guidance as to when the tax imposed by the Crude Oil Windfall Profit Tax Act of 1980 is triggered. These temporary and proposed regulations were further amended by Treasury Decision 7755 and an accompanying notice of proposed rulemaking, both published on January 19, 1981 (46 FR 4783, 4950). The proposed regulations were finalized by Treasury Decision 7844, published on November 5, 1982.

This document contains proposed amendments to § 51.4996-1 (d) of the Excise Tax Regulations (26 CFR Part 51), as promulgated by T.D. 7844. These proposed regulations are to be issued under the authority contained in sections 4997 and 7805 of the Internal Revenue Code of 1954 (94 Stat. 249 and 68A Stat. 917; 26 U.S.C. 4997 and 7805).

Explanation of Provisions

Section 4986 imposes an excise tax on the windfall profit from taxable crude oil when it is removed from the premises. Section 51.49961-1 (d) states that, with certain exceptions, removal from the premises occurs when crude oil is physically transported off the premises or is deemed to occur when crude oil is used, manufactured, or converted before it is considered removed. This document describes the exceptions to this general rule.

One exception treats as not removed from the premises crude oil that is injected into a well or used to power a production process or production equipment. To qualify for the exception such crude oil cannot leave the premises nor can it be subject to manufacture or conversion.

Another exception applies to crude oil that has not been manufactured, converted, sold, or exchanged and that is to be used as powerhouse fuel or injected into a well on a tract that is contiguous to the producing tract (or is in a group of tracts contiguous to the producing tract). Such crude oil may be transported from the producing tract or parcels of land in which the same persons hold 100 percent of the operating mineral interests without it being deemed removed. However, if any consideration is transferred to any holder of a mineral interest in the producing tract who does not hold an interest in the tract on which the crude oil is used, as compensation for the holder's interest in the transported oil, or if the holder of mineral interests in both tracts is not entitled to the same fractional share of production in both tracts, and any consideration (other than certain taxable crude oil) is transferred as compensation for the holder's larger interest in the transported oil, the number of barrels of crude oil whose constructive sales price equals the fair market value of the total consideration transferred shall be deemed removed.

For this purpose, contiguous is defined to require actual touching of the areas below the surface along a substantial common border that are subject to the right to produce crude oil. However, actual touching of the tracts or parcels of land on the surface is not required. For example, if a railroad right-of-way separates the tracts but the producer (or producers) who possess the right to produce in the areas on each side of the right-of-way also hold such interests in the area below the railroad right-of-way the tracts are contiguous.

Another exception allows crude oil in some instances to be transported from the premises to its first storage tank located less than 2 miles from the premises (or in the case of an offshore well, less than 10 miles from the point the crude oil comes on shore) without being considered removed. In order for this exception to apply the crude oil must have been sold, exchanged, manufactured, converted or had its volume measured for sale or exchange prior to the transportation. Removal will then generally be deemed to occur when the crude oil is sold, exchanged, manufactured, converted, measured for sale or exchange or withdrawn from its first storage facility. However, such crude oil that is transported to the storage tank but not deemed removed may be returned to the producing tract or parcel of land, or transported to tracts or parcels of land contiguous to the producing tract, and injected into a well or used to power a production process or production equipment, without triggering removal.

Effective Dates

These amendments to the final regulations are proposed to become effective with respect to all crude oil which under T.D. 7844, *supra*, is not considered to have been removed (or deemed removed) from the premises before the date that is 30 days after publication of final regulations pursuant to this notice of proposed rulemaking, except that paragraph (d)(2) of § 51.4996-1 is effective for oil removed (or deemed removed) after February 29, 1980, under T.D. 7844.

Special Analyses

The Commissioner of Internal Revenue has determined that this proposed rule is not a major rule as defined in Executive Order 12291 and that a Regulatory Impact Analysis is therefore not required.

Although this document is a notice of proposed rulemaking that solicits public comments, the Internal Revenue Service has concluded that the regulations proposed herein are interpretive and that the notice and public procedure requirements of 5 U.S.C. 553 do not apply. Accordingly, no Regulatory Flexibility Analysis is required by chapter 6 of title 5, United States Code.

Comments and Requests for a Public Hearing

Before adopting these proposed regulations, consideration will be given to any written comments that are submitted (preferably seven copies) to the Commissioner of Internal Revenue. All comments will be made available for public inspection and copying. A public hearing will be held upon written request of any person who has submitted written comments. If a public hearing is held, notice of the time and place will be published in the **Federal Register.**

Drafting Information

The principal author of these proposed regulations is Beverly A. Baughman of the Legislation and Regulations Division of the Office of Chief Counsel, Internal Revenue Service. However, personnel from other offices of the Internal Revenue Service and Treasury Department participated in developing these regulations both on matters of substance and style.

List of Subjects in 26 CFR Part 51

Excise Tax, Petroleum Crude Oil Windfall Profit Tax Act of 1980.

Proposed Amendments to the Regulations

PART 51—[AMENDED]

The proposed amendments to 26 CFR Part 51 revise paragraph (d) (2) and (3) of § 51.4996-1 to read as follows:

§ 51.4996-1 Definitions.

* * * * *

(d) *Removed from the premises; deemed removed.* * * *

(2) *Certain use not considered removal.* Crude oil that is produced and

then, without leaving the premises and without manufacture or conversion, injected into any well on the premises or used on the premises to power a production process (such as a tertiary injection process or a water flood), or production equipment (such as an artificial lift device) is not deemed removed from the premises. For purposes of the preceding sentence, crude oil is not treated as leaving the premises if it is transported to a storage facility and returned to the premises after storage without ever having been deemed removed pursuant to paragraph (d) (3) (ii) (B), (C), or (D) of this section.

(3) *Certain transportation not considered removal.* (i) Transportation of crude oil from the producing tract or parcel of land to a contiguous tract or parcel of land (or to a tract or parcel that is in a group of contiguous tracts or parcels that is contiguous to a producing tract or parcel) shall not be considered removal from the premises provided—

(A) That the crude oil has not been manufactured, converted, sold, or exchanged,

(B) That on a tract or parcel of land described in this sentence the crude oil either is used to power a production process or production equipment or is injected into a well, and

(C) That the same person or persons hold 100 percent of the operating mineral interests in each of the tracts or parcels of land.

However—

(D) In the case of a holder of a mineral interest in the tract or parcel of land that produced the crude oil who does not hold a mineral interest in the tract or parcel on which the crude oil is used, if any consideration is transferred to that holder as compensation for the holder's interest in the oil transported, or

(E) In the case of a holder of a mineral interest in the producing tract or parcel of land who also holds a mineral interest in the tract or parcel on which the crude oil is used that entitles that holder to a smaller share of production than the holder's share of production in the producing tract or parcel, if any consideration (other than taxable crude oil that is to be produced from the tracts or parcels of land in the same calendar quarter as that in which the oil is transported or in the immediately following calendar quarter)—is transferred to that holder as compensation for the holder's interest in the oil transported,

the number of barrels of crude oil whose constructive sales price (determined under the principles employed under section 613) equals the fair market value of the total consideration transferred shall be deemed removed. As used in this subdivision contiguous means actually touching along a substantial common border. There must be such actual touching below the surface of the areas that are subject to the right to produce crude oil, but physical touching of the tracts or parcels of land on the surface is not required. Thus, a road separating two tracts of land will not affect the contiguity of the tracts as long as the right to produce under the road is held by the same persons or persons who hold such rights in the tracts or parcels of land on each side of the road. In the case of crude oil which has been transported to a storage facility but which is not deemed removed pursuant to paragraph (d) (3) (ii) (B), (C), or (D) of this section transportation directly from the storage facility to a tract or parcel of land described in the subdivision shall not be deemed removal from the premises provided that such transportation would not have been considered removal from the premises if it had been directly to such tract or parcel from the producing premises. If crude oil not deemed removed pursuant to this subdivision is produced from a property from which more than one category of oil is produced, the crude oil that is injected or used to power a production process or production equipment shall be allocated among such categories in proportion to the production from that property in each such category that was removed from the premises during the immediately preceding quarter. For purposes of the preceding sentence, the categories of crude oil are tier 1 oil, tier 2 oil, newly discovered oil, tier 3 oil other than newly discovered oil, and exempt oil. The provisions of this paragraph may be illustrated by the following examples:

Example (1). Crude oil is transported from tract 1 where it was produced to contiguous tract 2 to power production equipment. A and B hold operating mineral interests in tracts 1 and 2 as indicated in the following table:

	Tract 1 (percent)	Tract 2 (percent)
A	80	45
B	20	55
	100	100

Additionally, C holds a royalty interest in tract 1 but not in tract 2. B agrees to pay A money to reflect the 35 percent (80% − 45%) difference in his operating mineral interests in tracts 1 and 2. A and B agree to pay C money for his royalty interest in the crude oil transported from tract 1. The number of barrels of crude oil whose constructive sales price equals the fair market value of the total consideration transferred to A and C is removed from the premises when it is transported from tract 1.

Example (2). C holds a 100% operating mineral interest in tract 3 and in tract 4. Tracts 3 and 4 are separated by a 100-foot wide area in which D railroad company holds a fee (including all mineral rights). Tracts 3 and 4 are not contiguous and, accordingly, crude oil is removed when it is transported from one of these tracts to the other.

(ii) This paragraph applies only to the transportation of crude oil away from the premises to its first storage facility. For purposes of the imposition of the windfall profit tax only, such transportation to such first storage facility located less than 2 miles from the premises (or, in the case of an offshore well, less than 10 miles from the point the crude oil comes on shore) shall not be considered removal from the premises provided it is done prior to manufacture, conversion, sale, exchange, or measurement of the volume of the crude oil in connection with its sale or exchange. In those cases where the crude oil arrives at such first storage facility without having been subjected to any of the activities described in the preceding sentence, the crude oil shall be deemed removed on the first date that any of the following occurs:

(A) Withdrawal of the crude oil from such first storage facility; or

(B) Sale or exchange of the crude oil; or

(C) Manufacture or conversion of the crude oil; or

(D) Measurement of the volume of the crude oil in connection with its sale or exchange (unless it is measured at a storage facility, in which case it shall be deemed removed on the date it is taken out of the storage facility).

For exceptions to this paragraph for crude oil returned to the tract or parcel of land from which it was produced or to a tract or parcel of land or group of tracts or parcels of land contiguous to the one on which it was produced, see paragraphs (d)(2) and (d)(3)(i) of this section, respectively.

Roscoe L. Egger, Jr.,

Commissioner of Internal Revenue.

[FR Doc. 83-1129 Filed 1-13-83; 8:45 am]

BILLING CODE 4830-01-M

26 CFR Part 301

[LR-204-78]

Special Periods of Limitation With Respect to Partnership Items of Federally Registered Partnerships

AGENCY: Internal Revenue Service, Treasury.

ACTION: Notice of proposed rulemaking.

SUMMARY: This document contains proposed regulations relating to the special periods of limitation for assessing a deficiency, and for filing a claim for credit or refund of any overpayment, attributable to a partnership item of a federally registered partnership. Changes to the applicable tax law were made by the Revenue Act of 1978. The regulations would provide the necessary guidance to the public to comply with the law.

DATES: Written comments must be delivered or mailed by March 15, 1983. A public hearing on this notice of proposed rulemaking will be held on March 23, 1983 for further information, see the notice of public hearing published elsewhere in this issue of the **Federal Register**. The amendments are proposed to be effective for partnership items arising in partnership taxable years beginning after December 31, 1978 and before September 4, 1982.

ADDRESS: Send comments and requests for a public hearing to: Commissioner of Internal Revenue, Attention: CC:LR:T (LR-204-78), Washington, D.C. 20224.

FOR FURTHER INFORMATION CONTACT: Donald W. Stevenson of the Legislation and Regulations Division, Office of the Chief Counsel, Internal Revenue Service, 1111 Constitution Avenue, NW., Washington, D.C. 20224 (Attention: CC:LR:T) (202-566-3297).

SUPPLEMENTARY INFORMATION:

Background

This document contains proposed amendments to the Regulations on Procedure and Administration (26 CFR Part 301) under sections 6501(o) and 6511(g) of the Internal Revenue Code of 1954 (as they read before the enactment of the Tax Equity and Fiscal Responsibility Act of 1982). These amendments are proposed to conform the regulations to amendments made to the Code by section 212 of the Revenue Act of 1978 (92 Stat. 2818) and section 102(a)(2) (A) and (B) of the Technical Corrections Act of 1979 (94 Stat. 208). The amendments are to be issued under the authority contained in section 6501(o) (as it read before the enactment of the Tax Equity and Fiscal Responsibility Act of 1982) and 7805 of the Internal Revenue Code of 1954 (92 Stat. 2818, 26 U.S.C. 6501(o); 68A Stat. 917, 26 U.S.C. 7805).

Section 402(c) (5) and (7) of the Tax Equity and Fiscal Responsibility Act of 1982 (96 Stat. 667) amended Code sections 6501(o) and 6511(g) and removed the special provisions for federally registered partnerships. The amendments made by section 402 of that Act are generally effective for partnership taxable years beginning after September 3, 1982. Section 407(a)(3) of that Act provides for earlier application of those amendments in certain circumstances. The regulations proposed in this document will not apply to any partnership taxable year with respect to which the amendments made by section 402 of that Act are effective.

Period for Assessing Deficiency Attributable to Partnership Items

Code section 6501(o) (as it read before the enactment of the Tax Equity and Fiscal Responsibility Act of 1982) provides that the period for assessing an income tax deficiency attributable to any partnership item of a federally registered partnership shall not expire before the later of (1) the date which is 4 years after the date in which the item arose is filed or (2), if the name or address of the person against whom the assessment is sought does not appear on the return, the date which is 1 year after such information is fully disclosed. The proposed regulations explain the application of this full disclosure rule in the case of "pass through" partners. A federally registered partnership is any partnership the interests in which have been offered for sale in an offering required to be registered with the Securities and Exchange Commission, or any partnership which is or has been subject to annual reporting requirements of the Securities and Exchange Commission, relating to protection of investors in the partnership.

Code section 6501(o)(2) (as it read before the enactment of the Tax Equity and Fiscal Responsibility Act of 1982) defines a partnership item as any item required to be taken into account under the partnership provisions of the Code to the extent that the regulations designate the item as one that is more appropriately determined at the partnership level than at the partner level. The term also includes any other item to the extent that that other item is affected by an item designated in the regulations. The proposed regulations identify items that the Service deems more appropriately determined at the partnership level than at the partner level.

The proposed regulations also explain how the partnership may designate who may extend by agreement the period for assessing a deficiency attributable to any partnership item. Any general partner may execute an agreement with the Service to extend the period of limitation with respect to all partners unless the partnership has notified the Internal Revenue Service in writing that that partner lacks the authority to do so. The partnership may, by filing a written statement with the Service, authorize persons other than general partners to execute agreements to extend the period for assessing such deficiencies.

Period for Filing Claims for Credit or Refund

Code section 6511(g) (as it read before the enactment of the Tax Equity and Fiscal Responsibility Act of 1982) provides that the period for filing a claim for credit or refund of any income tax overpayment attributable to any partnership item of a federally registered partnership shall not expire before the date which is 4 years after the date prescribed by law for filing the partnership return for the partnership taxable year in which the item, arose. If the taxpayer or a person authorized to act on behalf of the partnership consents to extend the period for assessing a deficiency with respect to partnership items arising in a partnership taxable year, the refund period with respect to those items shall not expire before the date 6 months after the expiration of the extension.

Special Analyses

The Commissioner of Internal Revenue has determined that this proposed rule is not a major rule as defined in Exective Order 12291 and that a Regulatory Impact Analysis is therefore not required.

Although this document is a notice of proposed rulemaking which solicits public comment, the Internal Revenue Service has concluded that the regulations proposed herein are interpretative and that the notice and public comment requirements of 5 U.S.C. 553 do not apply. Accordingly, these proposed regulations do not constitute regulations subject to the Regulatory Flexibility Act (5 U.S.C. chapter 6).

Comments and Requests for a Public Hearing

Before these proposed regulations are adopted, consideration will be given to any written comments that are submitted (preferably seven copies) to the Commissioner of Internal Revenue. All comments will be available for public inspection and copying. A public hearing will be held on March 23, 1983.

For further information about the public hearing see the notice of hearing that appears elsewhere in this issue of the **Federal Register**.

Drafting Information

The principal author of these proposed regulations was Donald W. Stevenson of the Legislation and Regulations Division, Office of the Chief Counsel, Internal Revenue Service. However, personnel from other offices of the Internal Revenue Service and Treasury Department participated in developing the regulations, both on matters of substance and style.

List of Subjects in 26 CFR Part 301

Administrative practice and procedure, Bankruptcy, Courts, Crime, Employment taxes, Estate taxes, Excise taxes, Gift taxes, Income taxes, Investigations, Law enforcement, Partnership item, Penalties, Pensions, Statistics, Taxes, Disclosure of information, and Filing requirements.

Proposed Amendments to the Regulations

PART 301—[AMENDED]

The proposed amendments to 26 CFR Part 301 are as follows:

Paragraph 1. New §§ 301.6501(o)-2 and 301.6501(o)-3 are added to read as follows:

§ 301.6501(o)-2 Special rules for partnership items of federally registered partnerships.

(a) *In general.* In the case of any tax imposed by subtitle A with respect to any person, the period for assessing a deficiency attributable to any partnership item of a federally registered partnership shall not expire before the later of—

(1) The date which is 4 years after the date on which the return of the federally registered partnership for the partnership taxable year in which the item arose is filed (or, if later, the date prescribed for filing the return), or

(2) If the name or address of the person against whom the assessment is sought does not appear on the return of the federally registered partnership, the date which is 1 year after the date on which a satisfactory identifying statement is furnished in writing to the director of the service center with which the partnership return is filed. A satisfactory identifying statement is a written statement providing the name, address, and taxpayer identification number of both the partner and the partnership. The statement shall note the partnership taxable year for which the statement is furnished.

(b) *"Pass through" entity as partner.* In the case of a partnership having a "pass through" entity (*i.e.*, partnership, electing small business corporation (as defined in section 1371(b)), trust, estate, or nominee) as a partner, the 1 year period described in paragraph (a)(2) of this section shall not begin with respect to the person to be assessed until the chain of ownership linking the taxpayer with the federally registered partnership in which the item originally arose is fully disclosed.

Example. Partnership U, a federally registered partnership, has two partners, Partnerships W and X. The partners of W are A and B, who are individuals, and T, a trust whose beneficiaries are individuals C and D. The partners of X are E, an individual, and Partnership Y whose partners are individuals F, G, and H. U and X properly disclose the identity of their partners. W, however, discloses the identity of only A and B, and Y discloses the identity of only F and G. The period of limitation described in paragraph (a) of this section for items attributable to U does not expire with respect to T, C, D, and H until one year after the chain of ownership linking these taxpayers with U is fully disclosed.

(c) *Federally registered partnership*—(1) *In general.* With respect to any partnership taxable year, a federally registered partnership is any partnership—

(i) Interests in which have been offered for sale at any time during the taxable year or a prior taxable year in an offering required to be registered with the Securities and Exchange Commission, or

(ii) Which, at any time during the taxable year or a prior taxable year, was subject to the annual reporting requirements of the Securities and Exchange Commission which relate to the protection of investors in the partnership.

For purposes of the preceding sentence an interest is "offered for sale" when it is the subject of an "offer for sale" as that term is used in section 2 of the Securities Act of 1933 (15 U.S.C. 77b).

(2) *Certain reporting requirements not taken into account.* A requirement to file reports with the Securities and Exchange Commission for any purpose other than to protect investors does not cause the partnership to be treated as a federally registered partnership. For example, a brokerage firm organized as a partnership is not a federally registered partnership merely because it files reports required by the Commission for regulatory purposes.

(d) *Extension by agreement*—(1) *In general.* Any general partner of a federally registered partnership (or any other person authorized by the partnership) may, prior to the expiration of the limitation period described in paragraph (a) of this section, extend the period for assessing a deficiency attributable to a partnership item for any period of time agreed upon in writing. The extension shall become effective when the agreement has been executed by the district director or the service center director and shall be binding on all persons whose liability for tax imposed by subtitle A is affected in whole or in part by partnership items flowing from that partnership.

(2) *Authorization of other persons.* The partnership may authorize persons other than the general partners to extend the period of limitation for assessing a deficiency attributable to a partnership item. This authorization shall be in writing, shall clearly identify the person being authorized and the action being authorized, and shall be signed by all the general partners. The authorization shall become effective when filed with the district director and shall remain in effect until a written revocation signed as provided in the preceding sentence is filed.

(3) *Removing authority of general partners.* A partnership wishing to deny to some or all of the general partners the authority to execute an agreement extending the period of limitation for assessment may do so by submitting a written statement to that effect. The statement shall either identify the partners exclusively authorized to execute such an agreement or declare that one or more named partners or all partners lack the authority to execute such an agreement. The statement shall be signed by all the general partners. The statement shall become effective when filed with the district director and shall remain in effect until a statement revoking or superseding it and signed as provided in the preceding sentence is filed.

(e) *Special period of limitation with respect to carryback of net operating loss, capital, loss, etc.* The provisions of section 6501(o) must also be taken into account in applying the various special periods of limitation prescribed in sections 6501(h), (i) and (j). Thus, to the extent that a carryback is attributable to a partnership item of a federally registered partnership, the period for assessing a deficiency attributable to that carryback shall not expire before the date determined under paragraph (a) of this section with respect to the partnership taxable year in which the item arose.

(f) *Otherwise applicable limitation period.* The special provisions of section 6501(o) and this section do not terminate any otherwise applicable period for assessing a deficiency. Thus, the fact that more than 4 years have elapsed since the filing of the partnership return for the year in issue does not prevent

assessment against a partner based on partnership items if an otherwise applicable period of limitation for the partner has not yet expired.

Example. Partnership V files its return for the taxable year ending December 31, 1980, on April 15, 1981. A, a partner in Partnership V, agrees to extend the assessment period for A's taxable year ending December 31, 1980, until September 30, 1985. The partnership does not agree to any extension under section 6501(o)(3) so that the period for assessing a deficiency attributable to partnership items could expire on April 15, 1985. A deficiency may be assessed against A for 1980 at any time prior to October 1, 1985, even if that deficiency is based on partnership items.

(g) *Effective date.* This section and § 301.6501(o)–3 are effective generally for partnership items arising in partnership taxable years beginning after December 31, 1978 and before September 4, 1982. This section shall not apply, however, to any partnership taxable year with respect to which the amendments made to Code section 6501(o) by section 402 of the Tax Equity and Fiscal Responsibility Act of 1982 are effective. See section 407(a)(3) of that Act.

§ 301.6501(o)–3 Partnership items.

(a) *Partnership item defined.* For purposes of section 6501(o) (as it read before the enactment of the Tax Equity and Fiscal Responsibility Act of 1982), § 301.6501(o)–2, and § 301.6511(g)–1, the term "partnership item" means——

(1) Any item required to be taken into account for the partnership taxable year under any provision of subchapter K of chapter 1 of the Code, to the extent that the item is designated in paragraph (b) of this section as more appropriately determined at the partnership level than at the partner level, and

(2) Any other item to the extent affected by an item described in paragraph (b) of this section.

The items described in paragraph (a)(2) of this section include items related to the partnership (for example, a partner's basis in the partnership interest) as well as more general items whose computation may be affected by changes to items described in paragraph (b) of this section (for example, adjusted gross income, self-employment tax, income averaging, medical deduction, and charitable contribution deduction).

(b) *Items more appropriately determined at the partnership level.* The following items which are required to be taken into account for the taxable year of a partnership under subchapter K of chapter 1 of the Code are more appropriately determined at the partnership level than at the partner level:

(1) The partnership aggregate and each partner's share of each of the following:

(i) Items of income, gain, loss, deduction, or credit of the partnership;

(ii) Expenditures by the partnership not deductible in computing its taxable income (for example, foreign taxes and charitable contributions);

(iii) Items of the partnership which may be tax preference items under section 57(a) for any partner;

(iv) Income of the partnership exempt from tax;

(v) Partnership liabilities (including determinations with respect to the amount of the liabilities, whether the liabilities are nonrecourse, and changes from the preceding taxable year); and

(vi) Other amounts with respect to partnership investments, transactions, and operations necessary to enable partners to compute—

(A) The credit provide by section 38;

(B) Recapture under section 47 of the credit provided by section 38,

(C) Their amounts at risk in any activity to which section 465 applies, and

(D) The depletion allowance under section 613A with respect to oil and gas wells;

(2) Guaranteed payments;

(3) Optional adjustments to the basis of partnership property pursuant to an election under section 754 (including necessary preliminary determinations, such as the determination of a transferee partner's basis in a partnership interest); and

(4) To the extent that the determination can be made from determinations that are necessary at the partnership level with respect to an amount, the character of an amount, or the precentage interest of a partner in the partnership for purposes of the partnership books ad records or for purposes of furnishing information to a partner—

(i) Contributions to the partnership;

(ii) Distributions from the partnership;

(iii) Amounts to be taken into account by a partner dealing with the partnership in a transaction to which section 707(a) applies (including the application of section 707(b));

(iv) The application to the distributee partner of section 751(b); and

(v) The application to the transferor partner of section 751(a).

(c) *Illustrations.* This paragraph (c) illustrates the provisions of paragraph (b)(4) of this section. The factors enumerated are not exhaustive; there may be additional partnership-level determinations with respect to a determination listed in paragraph (b)(4) of this section.

(1) *Contributions.* For purposes of its books and records, or for purposes of furnishing information to a partner, the partnership needs to determine:

(i) The character of an amount received from a partner (for example, whether it is a contribution, a loan, or a repayment of a loan);

(ii) The amount of money contributed by a partner;

(iii) The applicability of the investment company rules of section 721(b) with respect to a contribution; and

(iv) The basis to the partnership of contributed property.

To the extent that a determination with respect to a contribution can be made from these and similar partnership-level determinations, therefore, the determination is more appropriately made at the partnership level. To the extent that that determination requires other information, however, that determination is more appropriately made at the partner level. For example, it may be necessary to determine whether the contribution of the property causes recapture from the contributing partner of the credit provided under section 38 in certain circumstances in which that determination is irrelevant to the partnership.

(2) *Distribution.* For purposes of its books and records, or for purposes of furnishing information to a partner, the partnership needs to determine:

(i) The character of an amount transferred to a partner (for example, whether it is a distribution, a loan, or a repayment of a loan);

(ii) The amount of money distributed to a partner;

(iii) The adjusted basis to the partnership of distributed property; and

(iv) The character of partnership property (for example, whether an item is inventory or a capital asset).

To the extent that a determination with respect to a distribution can be made from these and similar partnership-level determinations, therefore, the determination is more appropriately made at the partnership level. To the extent that that determination requires other information, however, that determination is more appropriately made at the partner level. Such other information would include certain factors used in determining the partner's basis for the partnership interest, such as the amount that the partner paid to acquire the partnership interest from a transferor partner if that transfer was not covered by an election under section 754.

(3) *Transactions to which section 707(a) applies.* For purposes of its books and records, the partnership needs to determine:

(i) The amount transferred from the partnership to a partner or from a partner to the partnership in any transaction to which section 707(a) applies;

(ii) The character of such an amount (for example, whether or not it is a loan; in the case of amounts paid over time for the purchase of an asset, what portion is interest); and

(iii) The percentage of the capital interests and profits interests in the partnership owned by each partner.

To the extent that a determination with respect to a transaction to which section 707(a) applies can be made from these and similar partnership-level determinations, therefore, that determination is more appropriately made at the partnership level. To the extent that the determination requires other information, however, that determination is more appropriately made at the partner level. Examples of such other information are the cost to the partner of goods sold to the partnership and the extent to which the partner may be treated under section 267(c) as the constructive owner of a capital or profits interest actually owned by another.

(4) *Application of section 751.* For purposes of its books and records, or for purposes of furnishing information to a partner for use in applying section 751, the partnership needs to determine:

(i) The fair market value and adjusted basis of the partnership's—

(A) Unrealized receivables (within the meaning of section 751(c)),

(B) Substantially appreciated inventory (within the meaning of section 751(d)), and

(C) Other property;

(ii) A partner's share of each of the classes of assets described in paragraph (c)(3)(i) of this section; and

(iii) Whether a distribution to a partner is a disproportionate distribution subject to section 751(b).

To the extent that a determination with respect to the application of section 751 can be made from these and similar partnership-level determinations, therefore, that determination is more appropriately made at the partnership level. To the extent that the determination requires other information, however, that determination is more appropriately made at the partner level. An example of such other information is the amount realized by a partner on the sale of a partnership interest.

Par. 2. A new § 301.6511(g)-1 is added to read as follows:

§ 301.6511(g)-1 Special rule for partnership items of federally registered partnerships.

(a) *In general.* In the case of any tax imposed by subtitle A with respect to any person, the period for filing a claim for credit or refund of any overpayment attributable to any partnership item of a federally registered partnership shall not expire before the later of—

(1) The date which is 4 years after the date prescribed by law (including extensions thereof) for filing the partnership return for the partnership taxable year in which the item arose, or

(2) If the taxpayer or a general partner or a person authorized to act on behalf of the partnership, as provided in § 301.6501(o)-2(d), consents to extend the period for assessing a deficiency attributable to the partnership item before the date specified in paragraph (a)(1) of this section, the date 6 months after the expiration of the extension.

(b) *Limits on amount of credit or refund not applicable.* In the case of a claim for credit or refund of any income tax overpayment attributable to any partnership item of a federally registered partnership, the limitations provided in section 6511(b) (2) and (c) shall not apply if the claim is filed within the period described in paragraph (a) of this section.

(c) *Special periods of limitation with respect to carryback of net operating loss, capital loss, etc.* The provisions of section 6511(g) must also be taken into account in applying the various special periods of limitation prescribed in section 6511(d). Thus, to the extent that a carryback is attributable to a partnership item of a federally registered partnership, the period for filing a claim for credit or refund of an overpayment attributable to that carryback shall not expire before the date determined under paragraph (a) of this section with respect to the partnership taxable year in which the item arose.

(d) *Definitions.* For purposes of this section, the terms "partnership item" and "federally registered partnership" have the same meaning as such terms have when used in section 6501(o), § 301.6501(o)-2(c), and § 301.6501(o)-3.

(e) *Effective date.* The provisions of this section are effective generally for partnership items arising in partnership taxable years beginning after December 31, 1978 and before September 4, 1982. This section shall not apply, however, to any partnership taxable year with respect to which the amendments made to Code section 6511(g) by section 402 of the Tax Equity and Fiscal Responsibility Act of 1982 are effective. See section 407(a)(3) of that Act.

Roscoe L Egger, Jr.,

Commissioner of Internal Revenue.

[FR Doc. 83-1133 Filed 1-13-83; 8:45 am]

BILLING CODE 4830-01-M

DEPARTMENT OF THE INTERIOR

Minerals Management Service

30 CFR Parts 211, 221, 231, 250, and 270

Decision Not To Propose Rulemaking Establishing Procedures for Mineral Royalty Reporting of and Paying on Leases on Federal Lands, Outer Continental Shelf (OCS) Lands, and Indian Lands

AGENCY: Minerals Management Service (MMS), Interior.

ACTION: Notice of decision not to propose rulemaking.

SUMMARY: On April 18, 1982 (47 FR 18132), and May 27, 1982 (47 FR 23185), the Minerals Management Service sought comments on a proposal to develop and implement an alternate, voluntary reporting and paying procedure for mineral royalties due from leases on Federal lands, Outer Continental Shelf (OCS) lands, and Indian lands. Because of the comments and for other considerations, MMS has decided not to propose a rulemaking on the voluntary reporting and paying procedure.

FOR FURTHER INFORMATION CONTACT: Mr. Orie L. Kelm, (703) 860-7511 (FTS 928 7511).

SUPPLEMENTARY INFORMATION: MMS was proposing to implement a procedure that would allow payors to report and pay royalties on the last day of the second month following the production month. This proposed rulemaking was a recommendation of the Commission on Fiscal Accountability of the Nation's Energy Resources. After reviewing the comments and considering other material that has been developed, MMS has determined that there are legal and administrative problems associated with changing the reporting and paying procedures. Therefore, MMS does not propose to issue a rulemaking on establishing revised reporting and paying procedures at this time.

List of Subjects in 30 CFR Parts 211, 221, 231, 250, and 270

Minerals royalty accounting, Payment methods, Royalty accounting.

Dated: January 12, 1983.

Orie L. Kelm,

Deputy Associate Director for Royalty Management.

[FR Doc. 83-1210 Filed 1-13-83; 8:45 am]

BILLING CODE 4310-MR-M

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Parts 35, 120, and 131

[WH-FRL 2286.5]

Water Quality Standards

AGENCY: Environmental Protection Agency.

ACTION: Extension of comment period.

SUMMARY: On Friday, October 29, 1982, the Environmental Protection Agency published in the **Federal Register** (47 FR 49234) a proposed rule governing water quality standards activities outlined in Section 303(c) of the Clean Water Act. In response to numerous requests, the comment period on the proposed rule is extended from January 27, 1983, to February 10, 1983, to allow commenters additional time to review the proposed rule and develop comments.

DATES: Comments must be submitted on or before February 10, 1983.

FOR FURTHER INFORMATION CONTACT: Comments on the proposed water quality standards regulation should be directed to: David K. Sabock, Criteria and Standards Division (WH-585), Office of Water Regulations and Standards, U.S. Environmental Protection Agency, 401 M Street, SW., Washington, D.C. 20460; (202) 245-3042.

Dated: January 10, 1983.

Frederic A. Eidsness, Jr.,

Assistant Administrator for Water (WH-556).

[FR Doc. 83-1209 Filed 1-13-83; 8:45 am]

BILLING CODE 6560-50-M

40 CFR Part 403

[W-5-FRL 2284-7]

Ohio's Application to Administer the National Pollutant Discharge Elimination System (NPDES) Pretreatment Program

AGENCY: Environmental Protection Agency.

ACTION: Proposed rule; notice of application.

SUMMARY: In a letter dated December 20, 1982, Mr. Wayne S. Nichols, director of the Ohio Environmental Protection Agency, requested approval of the State of Ohio Pretreatment Porgram, and submitted a signed statement from the Ohio Attorney General that the State of Ohio has the necessary authority, together with a signed revision to the NPDES Memorandum of Agreement, along with a description of how the State proposes to operate the program. The U.S. EPA Regional Counsel has reviewed the Attorney General Statement and has determined that the State of Ohio has legal authority to implement an NPDES Pretreatment Program. This notice provides for a comment period on Ohio's request. Under U.S. EPA regulations the Administrator shall approve or disapprove this request after taking into consideration all comments received.

DATES: To be considered comments must be received on or before February 15, 1983.

Interested persons may also request a public hearing on the State's request. If there is a significant public interest expressed in the comments, U.S. EPA will schedule such a hearing. In the event U.S. EPA determines to hold a public hearing prior notice of the date, time and location of such a hearing will be given. All requests for a public hearing must be submitted on or before the expiration of the comment period.

ADDRESS: Comments should be addressed to: U.S. EPA, Region V, 230 South Dearborn Street, Chicago, Illinois, 60604, Attention: Robert R. Robichaud, Permits Section (5WQP).

FOR FURTHER INFORMATION CONTACT: Ms. Lorraine C. Kosik, NPDES Permits Section (5WQP), U.S. EPA, Region V, 230 South Dearborn Street, Chicago, Illinois, 60604; (312) 353-2098.

SUPPLEMENTARY INFORMATION: On June 26, 1978, the United States Environmental Protection Agency (U.S. EPA) promulgated the general Pretreatment Regulations (40 CFR Part 403). Amendments to the General Pretreatment Regulations were promulgated on January 28, 1981. These regulations, mandated by the Clean Water Act of 1977 (Pub. L. 95-217), govern the control of industrial wastes introduced into Publicly Owned Treatment Works (POTWs), commonly referred to as municipal sewage treatment plants. The objectives of the regulations are to: (1) Prevent introduction of pollutants into POTWs which will interfere with plant operations and/or disposal or use of municipal sludges; (2) prevent introduction of pollutants into POTWs which will pass through treatment works in unacceptable amounts to receiving waters; and, (3) improve the feasibility of recycling and reclaiming municipal and industrial wastewaters and sludges.

The State of Ohio received NPDES permit authority on March 11, 1974. One of the keystones of the industrial waste control program as set forth in the general Pretreatment Regulations is the establishment of Pretreatment Programs as a supplement to the existing State National Pollutant Discharge Elimination System (NPDES) permit program. In order to be approved, a request for State Pretreatment Program approval must demonstrate that the State has legal authority, procedures, available funding, and qualified personnel to implement a State Pretreatment Program as specified in § 403.10 of the Regulations. Generally, local Pretreatment Programs will be the primary vehicle for administering, applying and enforcing Federal Pretreatment Standards for Industrial Users of POTWs. States will be required to apply and enforce Pretreatment Standards directly against industries that discharge to POTWs where local programs are not required or have not been developed.

The Administrator's decision to approve or disapprove the proposed pretreatment program will be based on a determination of whether the proposed program meets the requirements of the Clean Water Act and 40 CFR Part 403 and on the comments received.

The Ohio submission may be reviewed by the public at the State of Ohio Environmental Protection Agency, 361 E. Broad Street, P.O. Box 1049, Columbus, Ohio, 43216, and at the U.S. EPA office in Chicago at the address appearing at the beginning of this Notice. Copies of the submittal may also be obtained (at a cost of 20 cents a page) from these offices.

List of Subjects in 40 CFR Part 403

Confidential business information, Reporting and recordkeeping requirements, Waste treatment and disposal, and Water pollution control.

Dated: January 4, 1983.

Valdas V. Adamkus,

Regional Administrator, Region V.

[FR Doc. 83-617 Filed 1-13-83; 8:45 am]

BILLING CODE 6560-50-M

40 CFR Part 468

[OW-FRL-2283-5]

Copper Forming Point Source Category; Effluent Limitations Guidlines, Pretreatment Standards and New Source Performance Standards; Correction

AGENCY: Environmental Protection Agency.

ACTION: Correction of proposed rule; extension of comment period.

SUMMARY: This document corrects the proposed limitations and standards for the Copper Forming Point Source Category that appeared in the **Federal Register** on Friday, November 12, 1982, (47 FR 51278).

DATES: Comments on this proposal must be submitted by February 14, 1983.

ADDRESSES: Send comments to Mr. David Pepson, Effluent Guidelines Division (WH-552), U. S. Environmental Protection Agency, 401 M Street, S.W., Washington, D.C. 20460. Attention: Copper Forming Rules. Technical information and copies of technical documents may be obtained from the National Information Service, Springfield, Virginia 22161 (703/487-4600), or from Mr. David Pepson, Effluent Guidelines Division, U.S. Environmental Protection Agency, 401 M Street, S.W., Washington, D.C. 20460 or call 202/382-7157. The supporting information and all comments on this proposal will be available for inspection and copying at the EPA Public Information Reference Unit, Room 2402 (Rear) (EPA Library). The EPA public information regulation (40 CFR Part 2) provides that a reasonable fee may be charged for copying.

FOR FURTHER INFORMATION CONTACT: Mr. Ernst P. Hall (202/382-7126) or Mr. David Pepson (202/382-7157), Effluent Guidelines Division (WH-552), U.S. Environmental Protection agency, 401 M Street SW., Washington, D.C. 20460.

SUPPLEMENTARY INFORMATION: These proposed regulations are supported by three major documents available from EPA. Analytical methods are discussed in Sampling and Analysis Procedures for Screening of Industrial Effluents for Priority Pollutants. EPA's technical conclusions are detailed in the Development Document for Effluent Limitations Guidelines and Standards for the Copper Forming Point Source Category. The Agency's economic analysis is found in Economic Impact Analysis of Effluent Limitations Guidelines and Standards for the Copper Forming Industry.

Organization of This Notice

I. Introduction
II. Summary of Corrections
III. Extension of Comment Period

I. Introduction

On November 12, 1982 EPA published proposed effluent limitations guidelines and standards for the copper forming point source category, 47 FR 51278. This notice of proposed rulemaking contained a number of errors. All of these errors are identified below. Some of the corrections are due to typographic errors. In other cases, EPA inadvertently published limitations and standards not based on the regulatory control options and flows which were selected by the Administrator. Accordingly, we are correcting these limitations and standards. The changes made today are corrections only to the numerical limitations and standards; the flow and technology bases are identical to those discussed in the preamble to the proposed regulation and in the technical development document entitled *Development Document for Effluent Limitations Guidelines and Standards for the Copper Forming Point Source Category.*

II. Summary of Corrections

In the proposed rule which appeared in the **Federal Register** on Friday, November 12, 1982, 47 FR 51278, several definitions were omitted from 468.02, Specialized Definitions on page 51290. These definitions are added in this notice.

EPA published an incorrect definition of off-kilogram at § 468.02(b) of the proposed rule. The definition is corrected in this notice. The definition as corrected is consistent with the definition as it appears on page 68 of the development document and with the use of the term throughout the development of this proposed rule.

As a result of the corrections made today to § 468.02, the definition of "Total Toxic Organics (TTO)" now appears at § 468.02(r) instead of § 468.02(a). The definition is identical to the one which appears in the **Federal Register** on November 12, 1982 (47 FR 51290).

The BAT effluent limitations guidelines for cold rolling spent lubricant which appear at § 468.11(b) in the **Federal Register** on November 12, 1982 on page 51291 are incorrect due to an error made by the Agency. EPA used an incorrect regulatory flow when computing effluent limitations for this process wastewater stream. The correct regulatory flow is described in Section IX of the development document on page 419. The technology basis is identical to that discussed at 47 FR 51283 and in Section IX of the development document.

The BAT effluent limitations guidelines for cold rolling spent lubricant which appear at § 468.12(b) in the **Federal Register** on November 12, 1982 on page 51292 are incorrect due to an error made by the Agency. EPA used an incorrect regulatory flow when computing effluent limitations for this process wastewater stream. The correct regulatory flow is described in Section X of the development document on page 435. The technology basis is identical to that discussed at 47 FR 51283 to 51284 and in Section X of the development document.

There is a typographical error which appears at § 468.12(e) in the **Federal Register** on November 12, 1982 on page 51292. The monthly average value for nickel reported for Extrusion Heat Treatment BAT Effluent Limitations which reads 0.00020 mg/kg is corrected to read 0.0020 mg/kg.

There is a typographical error which appears at § 468.12(k) in the **Federal Register** on November 12, 1982 on page 51292. The title which reads "Subpart A—Pickling Rinse BAT Effluent Limitations" is corrected to read "Subpart A—Pickling Bath BAT Effluent Limitations".

The new source performance standards for cold rolling spent lubricant which apear at § 468.13(b) in the **Federal Register** on November 12, 1982 on page 51293 are incorrect due to an error made by the Agency. EPA used an incorrect regulatory flow when computing effulent standards for this process wastewater stream. The correct regulatory flow is described in Section XI of the development document on page 453. The technology basis is identical to that discussed at 47 FR 51284 and in Section XI of the development document.

There is a typographical error which appears at § 468.13(d) in the **Federal Register** on November 12, 1982 on page 51293. The value reported for Solution Heat Treatment NSPS for the maximum for any one day for the pollutant zinc which reads 0.066 mg/kg is corrected to read 0.66 mg/kg.

The new source performance standards for extrusion heat treatment which appear at § 468.13(e) in the **Federal Register** on November 12, 1982 on page 51293 are incorrect due to an error made by the Agency. EPA used an incorrect regulatory flow when computing effluent standards for this process wastewater stream. The correct regulatory flow is described in Section XI of the development document on page 453. The technology basis is identical to that discussed at 47 FR 51284 and in Section XI of the development document.

This notice corrects numerical errors that appear in § 468.14 pertaining to pretreatment standards for existing sources (PSES). The standards which appear at 47 FR 51294 to 51295 (§ 468.14)

are incorrect for all wastewater streams due to errors made by the Agency. The numerical standards for PSES were published from an option considered but not selected for proposal as the basis for PSES. The standards as corrected are based on the proposed selected technology which is discussed in 47 FR 15284 and the flow for each waste stream which is discussed in the development document on pages 435 and 464.

The pretreatment standards for existing sources for cold rolling spent lubricant which apear at § 468.14(b) in the **Federal Register** on November 12, 1982 on page 51294 are incorrect due to an error made by the Agency. EPA used an incorrect regulatory flow when computing effluent standards for this process wastewater stream. The correct regulatory flow is described in Section XII of the development document on page 464. The technology basis is identical to that discussed at 47 FR 51294 to 51295 and in Section XII of the development document.

This notice also corrects numerical errors that appear in § 468.15 pertaining to pretreatment standards for new sources (PSNS). The standards which appear at 47 FR 51295 to 51296 (§ 468.15) are incorrect for all wastewater streams because the Agency inadvertently included errant numerical standards for total toxic organics (TTO) for PSNS. The technology basis for the proposed PSNS is identical to that discussed at 47 FR 15285 and in the development document on pages 465 and 466.

The pretreatment standards for new sources for cold rolling spent lubricant which appear at § 468.15(b) in the **Federal Register** on November 12, 1982 on page 51295 are incorrect due to an error made by the Agency. EPA used an incorrect regulatory flow when computing effluent standards for this process wastewater stream. The correct regulatory flow is described in Section XII of the development document on page 465. The flow basis is identical to that discussed at 47 FR 51285 and in Section XII of the development document.

The pretreatment standards for new sources for extrusion heat treatment which appear at § 468.15(e) in the **Federal Register** on November 12, 1982 on page 51296 are incorrect due to an error made by the Agency. EPA used an incorrect regulatory flow when computing effluent standards for this process wastewater stream. The correct regulatory flow is described in Section XII of the development document on page 465. The technology basis is identical to that discussed at 47 FR 51285 and in Section XII of the development document.

The pretreatment standards for new sources for pickling rinse which appear at 468.15(j) in the **Federal Register** on November 12, 1982 on page 51296 are incorrect due to an error made by the Agency. EPA used an incorrect regulatory flow when computing effluent standards for this process wastewater stream. The correct regulatory flow is described in Section XII of the development document on page 465. The technology basis is identical to that discussed at 47 FR 51285 and in Section XII of the development document.

III. Extension of Comment Period

The Agency is extending the comment period for this proposal to ensure that interested persons have sufficient time to review and comment on the proposed rule as corrected by this notice. The deadline for all comments pertaining to the material published at 47 FR 51278 on November 12, 1982 and the corrections made today, is February 14, 1983.

Dated: January 4, 1983.

Rebecca Hanmer,
Acting Assistant Administrator for Water.

PART 468—CORRECTED

The following corrections are made to **Federal Register** document OW-FRL-2230-5 appearing on 47 FR 51278 (November 12, 1982).

1. 40 CFR § 468.02 which appears on page 51290 is corrected to read as follows:

§ 468.02 Specialized definitions.

In addition to the definitions set forth in 40 CFR Part 401 and the chemical analysis methods in 40 CFR Part 136, the following definitions apply to this part:

(a) The term "alkaline cleaning bath" shall mean a bath consisting of an alkaline cleaning solution through which a workpiece is processed.

(b) The term "alkaline cleaning rinse" shall mean a rinse following an alkaline cleaning bath through which a workpiece is processed. A rinse consisting of a series of rinse tanks is considered as a single rinse.

(c) The term "annealing with oil" shall mean the use of an oil or oil-water mixture to quench a workpiece as it passes from an annealing furnace.

(d) The term "annealing with water" shall mean the use of a water spray or bath to quench a workpiece as it passes from an annealing furnace.

(e) The term "cold rolling" shall mean the process of rolling a workpiece below the recrystallization temperature of the copper or copper alloy.

(f) The term "drawing" shall mean pulling the workpiece through a die or succession of dies to reduce the diameter or alter its shape.

(g) The term "extrusion" shall mean the application of pressure to a copper workpiece, forcing the copper to flow through a die orifice.

(h) The term "extrusion heat treatment" shall mean the spray application of water to a workpiece immediately following extrusion for the purpose of heat treatment.

(i) The term "heat treatment" shall mean the application or removal of heat to a workpiece to change the physical properties of the metal.

(j) The term "hot rolling" shall mean the process of rolling a workpiece above the recrystallization temperature of the copper or copper alloy.

(k) The term "pickling bath" shall mean any chemical bath (other than alkaline cleaning) through which a workpiece is processed.

(l) The term "pickling fume scrubber" shall mean the process of using an air pollution control device to remove particulates and fumes from air above a pickling bath by entraining the pollutants in water.

(m) The term "pickling rinse" shall mean a rinse, other than an alkaline cleaning rinse through which a workpiece is processed. A rinse consisting of a series of rinse tanks is considered as a single rinse.

(n) The term "off-kilogram (off-pound)" shall mean the mass of copper or copper alloy removed from a forming operation or associated surface or heat treatment operation at the end of a process cycle for transfer to a different process or machine.

(o) The term "rolling" shall mean the reduction in the thickness or diameter of a workpiece by passing it between rollers.

(p) The term "solution heat treatment" shall mean the process introducing a workpiece into a quench bath for the purpose of heat treatment following rolling, drawing or extrusion.

(q) The term "spent lubricant" shall mean water or an oil-water mixture which is used in forming operations to reduce friction, heat and wear and ultimately discharged.

(r) The term "Total Toxic Organics (TTO)" shall mean the sum of the masses or concentrations of each of the following toxic organic compounds which is found at a concentration greater than 0.010 mg/l.

Benzene
1,1,1-Trichloroethane

Chloroform
2,6-Dinitrotoluene
Ethylbenzene
Methylene Chloride
Napthalene
N-Nitrosodiphenylamine
Anthracene
Phenanthrene
Toluene
Trichloroethylene

§ 468.11 [Corrected]

2. 40 CFR 468.11 (b) which appears on page 51291 is corrected to read as follows:

* * * * *

(b) Supart A—Cold Rolling Spent Lubricants BPT Effluent Limitations.

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	Metric units—mg/kg of copper cold rolled	
	English units—pounds per 1 million lbs of copper cold rolled	
Chromium	0.16	0.065
Copper	0.72	0.38
Lead	0.057	0.050
Nickle	0.54	0.38
Zinc	0.51	0.22
Oil and grease	7.58	4.55
TSS	15.54	7.58
pH	(1)	(1)

[1] Within the range of 7.5 to 10.0 at all times.

§ 468.12 [Corrected]

3. 40 CFR 468.12(b) which appears on page 51292 is corrected to read as follows:

* * * * *

(b) Subpart A—Cold Rolling Spent Lubricants BAT Effluent Limitations.

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	Metric units—mg/kg of copper cold rolled	
	English units—pounds per 1 million lbs of copper cold rolled	
Chromium	0.16	0.65
Copper	0.72	0.38
Lead	0.057	0.050
Nickel	0.54	0.38
Zinc	0.51	0.22

4. In 40 CFR 468.12(e) which appears on page 51292 the maximum monthly average effluent limitation for nickel of "0.00020 mg/kg" is corrected to read 0.0020 mg/kg."

5. In 40 CFR 468.12(k) which appears on pages 51292 through 51293 "Subpart A—Pickling Rinse BAT Effluent Limitations" is corrected to read "Subpart A—Pickling Bath BAT Effluent Limitations."

§ 468.13 [Corrected]

6. 40 CFR 468.13(b) which appears on page 51293 is corrected to read as follows:

* * * * *

(b) Subpart A—Cold Rolling Spent Lubricant NSPS.

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	Metric units—mg/kg of copper cold rolled	
	English units—pounds per 1 million lbs of copper cold rolled	
Chromium	0.14	0.057
Copper	0.49	0.23
Lead	0.038	0.034
Nickel	0.21	0.14
Zinc	0.36	0.16
Oil and grease	3.79	3.79
TSS	5.69	4.54
pH	(1)	(1)

[1] Within the range of 7.5 to 10.0 at all times.

7. In 40 CFR 468.13(c) which appears on page 51293 the maximum for any one day effluent limitation for zinc of "0.066 mg/kg" corrected to read "0.66 mg/kg."

8. 40 CFR 468.13(e) which appears on page 51293 is corrected to read as follows:

* * * * *

(e) Subpart A—Extrusion Heat Treatment NSPS.

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	Metric units—mg/kg of copper heat treated on an extrusion press	
	English units—pounds per 1 million lbs of copper heat treated on an extrusion press	
Chromium	0.00074	0.00030
Copper	0.0026	0.0012
Lead	0.00020	0.00018
Nickel	0.0011	0.00074
Zinc	0.0021	0.00084
Oil and grease	0.020	0.020
TSS	0.030	0.022
pH	(1)	(1)

[1] Within the range of 7.5 to 10.0 at all times.

9. 40 CFR 468.14 Pretreatment standards for existing sources (PSES) which appear on pages 51294 to 51295 is corrected to read as follows:

§ 468.14 Pretreatment standards for existing sources (PSES)

Except as provided in 40 CFR Parts 403.7 and 403.13, any existing source subject to this subpart which introduces pollutants into a publicly owned treatment works must comply with 40 CFR Part 403 and achieve the following pretreatment standards for existing sources. The mass of wastewater pollutants in each of the following copper forming process wastewater streams introduced into a POTW shall not exceed the following values:

(a) Subpart A—Hot Rolling Spent Lubricant PSES.

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	Metric units—mg/kg of copper hot rolled	
	English units—pounds per 1 million lbs of copper hot rolled	
Chromium	0.044	0.018
Copper	0.20	0.11
Lead	0.016	0.014
Nickel	0.15	0.11
Zinc	0.14	0.058
TTO	0.032	0.025
Oil & grease (for alternate monitoring)	2.06	1.24

(b) Subpart A—Cold Rolling Spent Lubricant PSES.

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	Metric units—mg/kg of copper cold rolled	
	English units—pounds per 1 million lbs of copper cold rolled	
Chromium	0.16	0.065
Copper	0.72	0.38
Lead	0.057	0.050
Nickel	0.54	0.38
Zinc	0.51	0.22
TTO	0.12	0.091
Oil & grease (for alternate monitoring)	7.58	4.55

(c) Subpart A—Drawing Spent Lubricant PSES.

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	Metric units—mg/kg of copper drawn	
	English units—pounds per 1 million lbs of copper drawn	
Chromium	0	0
Copper	0	0
Lead	0	0
Nickel	0	0
Zinc	0	0
TTO	0	0
Oil & grease (for alternate monitoring)	0	0

(d) Subpart A—Solution Heat Treatment PSES.

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	Metric units—mg/kg of copper treated	
	English units—pounds per 1 million lbs of copper treated	
Chromium	0.27	0.11
Copper	1.23	0.65
Lead	0.097	0.064
Nickel	0.91	0.65
Zinc	0.86	0.36
TTO	0.20	0.16
Oil & grease (for alternate monitoring)	12.92	7.75

(e) Subpart A—Extrusion Heat Treatment PSES.

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	Metric units—mg/kg of copper heat treated on an extrusion press	
	English units—pounds per 1 million lbs of copper heat treated on an extrusion press	
Chromium	0.00084	0.00034
Copper	0.0038	0.0020
Lead	0.00030	0.00026
Nickel	0.0038	0.0020
Zinc	0.0027	0.0012
TTO	0.00062	0.00048
Oil & grease (for alternate monitoring)	0.040	0.024

(f) Subpart A—Annealing with Water PSES.

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	Metric units—mg/kg of copper annealed	
	English units—pounds per 1 million lbs of copper annealed	
Chromium	0.52	0.21
Copper	2.36	1.24
Lead	0.19	0.16
Nickel	1.75	1.24
Zinc	1.65	0.70
TTO	0.38	0.30
Oil & grease (for alternate monitoring)	24.80	14.88

(g) Subpart A—Annealing with Oil PSES.

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	Metric units—mg/kg of copper annealed	
	English units—pounds per 1 million lbs of copper annealed	
Chromium	0	0
Copper	0	0
Lead	0	0
Nickel	0	0
Zinc	0	0
TTO	0	0
Oil and grease (for alternate monitoring)	0	0

(h) Subpart A—Alkaline Cleaning Rinse PSES.

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	Metric units—mg/kg of copper alkaline cleaned	
	English units—pounds per 1 million lbs of copper alkaline cleaned	
Chromium	1.77	0.72
Copper	8.01	4.21
Lead	0.63	0.55
Nickel	5.94	4.21
Zinc	5.60	2.38
TTO	1.31	1.01
Oil and grease (for alternate monitoring)	84.28	50.57

(i) Subpart A—Alkaline Cleaning Bath PSES.

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	Metric units—mg/kg of copper alkaline cleaned	
	English units—pounds per 1 million lbs of copper alkaline cleaned	
Chromium	0.020	0.0080
Copper	0.089	0.047
Lead	0.0071	0.0061
Nickel	0.066	0.047
Zinc	0.062	0.026
TTO	0.014	0.011
Oil and grease (for alternate monitoring)	0.93	0.56

(j) Subpart A—Pickling Rinse PSES.

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	Metric units—mg/kg of copper pickled	
	English units—pounds per 1 million lbs of copper pickled	
Chromium	0.55	0.22
Copper	2.48	1.31
Lead	0.20	0.17
Nickel	1.84	1.31
Zinc	1.74	0.73
TTO	0.41	0.31
Oil & grease (for alternate monitoring	26.12	15.67

(k) Subpart A—Pickling Bath PSES.

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	Metric units—mg/kg of copper pickled	
	English units—pounds per 1 million lbs of copper pickled	
Chromium	0.049	0.020
Copper	0.22	0.12
Lead	0.018	0.015
Nickel	0.17	0.12
Zinc	0.16	0.065
TTO	0.036	0.028
Oil and grease (for alternate monitoring	2.32	1.39

(l) Subpart A—Pickling Fume Scrubber PSES.

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	Metric units—mg/kg of copper pickled	
	English units—pounds per 1 million lbs of copper pickled	
Chromium	0.26	0.11
Copper	0.88	0.63
Lead	1.19	0.63
Nickel	0.094	0.062
Zinc	0.83	0.35
TTO	0.19	0.15
Oil and grease (for alternate monitoring	12.51	7.51

§ 468.15 [Corrected]

10. In 40 CFR 468.15(a) which appears on page 51295 the maximum for any one day and the maximum monthly average for the pollutant parameter "TTO" pretreatment standard of "0.051 mg/kg" is corrected to read "0.022 mg/kg."

11. 40 CFR 468.15(b) which appears on page 51295 is corrected to read as follows:

* * * * *

(b) Subpart A—Cold Rolling Spent Lubricant PSNS.

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	Metric units—mg/kg of copper cold rolled	
	English units— pounds per 1 million lbs of copper cold rolled	
Chromium	0.14	0.057
Copper	0.49	0.23
Lead	0.038	0.034
Nickel	0.21	0.14
Zinc	0.39	0.16
TTO	0.08	0.06
Oil and Grease (for alternate monitoring)	3.79	3.79

12. In 40 CFR 468.15(d) which appears on page 51296 the maximum for any one day and the maximum monthly average pretreatment standard for the pollutant

parameter "TTO" of "0.32 mg/kg" is corrected to read "0.14 mg/kg."

13. 40 CFR 468.15(e) which appears on page 51296 is corrected to read as follows:

(e) Subpart A—Extrusion Heat Treatment PSNS.

Pollutant or pollutant property	Maximum For Any 1 Day	Maximum for monthly average
	Metric units—mg/kg of copper heat treated on an extrusion press	
	English units—pounds per 1 million lbs of copper heat treated on an extrusion press	
Chromium	0.00074	0.00030
Copper	0.0026	0.0012
Lead	0.00020	0.00018
Nickel	0.0011	0.00074
Zinc	0.0021	0.0084
TTO	0.00042	0.00042
Oil and Grease (for alternate monitoring)	0.020	0.020

14. In 40 CFR 468.15(f) which appears on page 51296 the maximum for any one day and the maximum monthly average pretreatment standard for the pollutant parameter "TTO" of "0.62 mg/kg" is corrected to read "0.26 mg/kg."

15. In 40 CFR 468.15(h) which appears on page 51296 the maximum for any one day and the maximum monthly average pretreatment standard for the pollutant parameter "TTO" of "2.11 mg/kg" is corrected to read "0.89 mg/kg."

16. In 40 CFR 468.15(i) which appears on page 51296 the maximum for any one day and the maximum monthly average pretreatment standard for the pollutant parameter "TTO" of "0.24 mg/kg" is corrected to read "0.0099 mg/kg."

17. 40 CFR 468.15(j) which appears on page 51296 is corrected to read as follows:

* * * * *

(j) Subpart A—Pickling Rinse PSNS.

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	Metric Units—mg/kg of copper pickled	
	English Units—pounds per 1 million lbs of copper pickled	
Chromium	0.22	0.088
Copper	0.75	0.36
Lead	0.059	0.053
Nickel	0.032	0.22
Zinc	0.60	0.25
TTO	0.12	0.12
Oil and Grease (for alternate monitoring)	5.85	5.85

18. In 40 CFR 468.15(k) which appears on page 51296 the maximum for any one day and the maximum monthly average pretreatment standard for the pollutant parameter "TTO" of "0.059 mg/kg" is corrected to read "0.024 mg/kg."

19. In 40 CFR 468.15(l) which appears on page 51296 the maximum for any one day and the maximum monthly average pretreatment standard for the pollutant parameter "TTO" of "0.032 mg/kg" is corrected to read "0.13 mg/kg."

[FR Doc. 83-997 Filed 1-13-83; 8:45 am]

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DEPARTMENT OF HEALTH AND HUMAN SERVICES

Office of the Secretary

41 CFR Part 3-3

Selection of Offerors for Negotiation and Award

AGENCY: Office of the Secretary, HHS.

ACTION: Proposed rule.

SUMMARY: The Office of the Secretary, Department of Health and Human Services is proposing to amend its procurement regulations by revising an existing subpart on the selection of offerors for negotiation and award. The proposed revisions clarify and simplify the source selection process and will result in reduced administrative burden. This revision is also consistent with the requirements to simplify the procurement process in accordance with Executive Order 12352 of March 17, 1982 on Federal Procurement Reforms.

DATE: Comments must be received by February 14, 1983.

ADDRESS: Any person or organization wishing to submit data, views, or comments pertaining to the proposed regulations may do so by filing them with Norman Audi, Division of Procurement Policy, OPAP-OPAL-OASMB-OS, Room 539H, Hubert H. Humphrey Building, 200 Independence Avenue, SW., Washington, D.C. 20201; (202-245-6154).

FOR FURTHER INFORMATION CONTACT: Norman Audi (202) 245-6154.

SUPPLEMENTARY INFORMATION: The proposed subpart is a revision of an existing regulation. It provides policy, procedures, and guidance to program and procurement personnel regarding the evaluation and selection process for competitively negotiated procurements. Specific major changes are: (1) Detailed guidance as to the roles of the contracting officer, project officer, and technical evaluation panel. This will enable Government personnel to have a clearer understanding of the responsibilities of all participants in the evaluation process; (2) Contracting Officer discretion on use of a technical evaluation panel for procurements not exceeding $250,000 and requiring panels only for procurements exceeding $250,000. This will result in a reduction of administrative costs and procurement lead-time for many low dollar non-complex procurements which are susceptible to only a project officer review and evaluation; (3) More specific guidance on the determination of the competitive range. This will enable the contracting officer to better ascertain which proposals should be included in the competitive range; and (4) Authorization to negotiate only with the selected source in limited circumstances which would not affect the selection decision. This will allow minor touch up negotiations with the successful offeror without requiring another request for best and final offers from the other offerors in the competitive range when they no longer have a chance of receiving the award. This will result in savings to both offerors and the Government. Offerors will not be asked to prepare revised proposals when they no longer have a chance of winning and the Government will not have to evaluate additional proposals when the successful proposal already has been selected.

List of Subjects in 41 CFR Part 3-3

Government procurement.

It is proposed to amend 41 CFR Chapter 3 in the manner set forth below.

Dated: December 28, 1982.

Henry G. Kirschenmann, Jr.,

Deputy Assistant Secretary for Procurement, Assistance and Logistics.

Under Part 3-3, it is proposed to revise Subpart 3-3.51 to read as follows:

PART 3-3—PROCUREMENT BY NEGOTIATION

* * * * *

Subpart 3-3.51—Selection of Offerors for Negotiation and Award

Sec.

3-3.5100 Scope of subpart.
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3-3.5108-2 Convening the technical evaluation panel.
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3-3.5115 Source selection decision.
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3-3.5117 Post negotiation, contract preparation, and award.
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* * * * *

Subpart 3-3.51—Selection of Offerors for Negotiation and Award

§ 3-3.5100 Scope of subpart.

This subpart establishes policies and procedures concerning the source selection process for the procurement of personal property and nonpersonal services. It elaborates on the guidance provided in § 1-3.805.

§ 3-3.5101 Definitions.

(a) "Clarification," as used in this subpart, means communication with an offeror for the sole purpose of eliminating minor irregularities, informalities, or apparent clerical mistakes in the offeror's proposal. It is achieved by explanation or substantiation, either in response to contracting officer inquiry or as initiated by the offeror. Unlike discussion, clarification does not give the offeror an opportunity to revise or modify its proposal.

(b) "Deficiency," as used in this subpart, means any part of a proposal that fails to satisfy the requirements of the Department.

(c) "Discussion," as used in this subpart, means any oral or written communication between the contracting officer and an offeror that involves information essential for determining the acceptability of a proposal as submitted or provides the offeror an opportunity to revise or modify its proposal.

§ 3-3.5102 Applicability.

This subpart applies to all competitively negotiated procurements in excess of $10,000 except for:

(a) Architect-engineer services (see §§ 1-4.10 and 3-4.10); and

(b) Contracts to be awarded to the Small Business Administration pursuant to section 8 (a) of the Small Business Act (see §§ 1-7.713 and 3-1.713).

§ 3-3.5103 Integrity of the source selection process.

(a) The source selection process shall be conducted in accordance with standards and procedures that:

(1) Insure fair and impartial treatment of all offerors: and

(2) Insure the selection of sources whose performance is expected to best meet the requirements or objectives of the request for proposals at a reasonable price or cost.

(b) Personnel participating in the evaluation process must not discuss or reveal information concerning the evaluations except to an individual participating in the same evaluation proceedings, and then only to the extent that the information is required in connection with the proceedings. Divulging information during the evaluation, selection, and negotiation phases of the procurement to offerors or to personnel not having a need to know could jeopardize the resultant award. Therefore, the contracting officer must instruct personnel participating in the evaluations to observe these restrictions and assure that all personnel understand that unauthorized disclosure of information, no matter how innocent, could compromise the procurement process and is prohibited (see § 1-3.805-1(b)).

(c) Discussions with offerors relative to any aspect of the procurement shall be conducted only by the contracting officer or his/her authorized representative within the contracting office.

§ 3-3.5104 Technical evaluation plan

(a) A technical evaluation plan may be required by the contracting officer, at his/her discretion, when a procurement is sufficiently complex as to warrent a formal plan.

(b) The techical evaluation plan should include at least the following:

(1) A list of technical evaluation panel members, their organizations as well as a list of their major consulting clients (if applicable), their qualification, and curricula vitas (if available);

(2) A justification for using non-Government technical evaluation panel members (Justification is not required if non-Government evaluators will be used in accordance with standard procuring activity procedures or policies);

(3) A statement that there is no apparent or actual conflict of interest regarding any panel member;

(4) A copy of each rating sheet, approved by the contracting officer, to be used to assure consistency with the evaluation criteria; and

(5) A brief description of the general evaluation approach.

(c) The technical evaluation plan must be signed by an official within the program office in a position at least one level above the project officer or in accordance with procuring activity procedures.

(d) The technical evaluation plan should be submitted to the contracting officer for review and approval before the solicitation is issued. The contracting officer shall make sure that the principle factors relating to the evaluation are reflected in the evaluation criteria when conducting the review of the plan.

§ 3-3.5105 Changes in Government requirements.

(a) When, either before or after receipt of proposals, the Government changes, relaxes, increases, or otherwise modifies its requirements, the contracting officer shall issue a written amendment to the solicitation. However, when time is of the essence, oral advice of changes may be given if the changes involved are not complex and all firms to be notified (see paragraph (b), below) are notified as near to the same time as possible. The contracting officer shall make a record of the oral advice and promptly confirm the oral advice by a written amendment to the solicitation.

(b) In deciding which firms to notify of a change, the contracting officer shall consider the stage in the procurement cycle at which the change occurs and the magnitude of the change, as follows:

(1) If proposals are not yet due, the amendment shall be sent to all firms that have received a solicitation.

(2) If the time for receipt of proposals has passed but proposals have not yet been evaluated, the amendment shall be sent only to the responding offerors.

(3) If the competitive range has been established, only those offerors within the competitive range shall be sent the amendment.

(4) If a change is so substantial that it warrants complete revision of a solicitation, the contracting officer shall cancel the original solicitation and issue a new one, regardless of the stage of the procurement. The new solicitation shall be synopsized and issued to all forms originally solicited as well as to any firms added to the original list.

(c) If the proposal considered to be most advantageous to the Government involves a departure from the stated requirements, the contracting officer shall provide all offerors an opportunity to submit new or amended proposals on

the basis of the revised requirements; *provided*, that this can be done without revealing to the other offerors the solution proposed in the original departure or any other information that is entitled to protection.

(d) The decision to issue an amendment, or cancel and reissue a solicitation, is the responsibility of the contracting officer.

§ 3-3.5106 Standard for evaluation of proposals.

The evaluation criteria included in the solicitation serve as the standard against which all proposals are evaluated. Prospective offerors rely upon the evaluation criteria in the solicitation in developing proposals and they must be assured that the evaluation is conducted in accordance with those criteria. All personnel involved in the evaluation process must make sure that the evaluation criteria contained in the solicitation are the *only* criteria used in conducting the evaluation. See §§ 3-3.5503(f) and 3-3.5511 for detailed guidance on evaluation criteria.

§ 3-3.5107 Technical evaluation panel.

§ 3-3.5107-1 General.

(a) A technical evaluation panel is required for all procurements applicable to this subpart which are expected to exceed $250,000. The contracting officer, at his/her discretion, may require a technical evaluation panel for procurements not exceeding $250,000 based on the complexity of the procurement.

(b) The technical evaluation process requires careful and deliberate consideration as to the size, composition, expertise, and function of the technical evaluation panel (see § 3-3.5005(b)(14)). The efforts of the panel can result in success or failure of the procurement.

§ 3-3.5107-2 Role of the project officer.

(a) The project officer is the contracting officer's technical representative for the procurement action. The project officer may be a voting member of the technical evaluation panel and may also serve as the chairperson of the panel unless he/she is prohibited by law or procuring activity procedures from serving on the panel.

(b) The project officer is responsible for recommending panel members who are knowlegeable of the technical aspects of the proceurment and who are competent to identify strengths and weaknesses of the various proposals. The program training requirements specified in § 3-1.454 must be adhered to when selecting prospective panel members.

(c) The project officer should make efforts to ensure that persons possessing expertise and experience in addressing issues relative to sex, race, national origin, and handicapped discrimination be included as panel members in procurements which address those issues. The intent is to balance the composition of the panel so that qualified and concerned individuals may provide insight to other panel members regarding ideas and approaches to be taken in the evaluation of proposals.

(d) The project officer is to submit the recommended list of panel members to an official within the program office in a position at least one level above the project officer or in accordance with procuring activity procedures. This official will review the recommendations, appoint the panel members and select the chairperson.

(e) It is the responsibility of the project officer to arrange for adequate and secure working space for the panel.

§ 3-3.5107-3 Role of the contracting officer.

(a) The contracting officer is the Department's official representative having delegated procurement authority to enter into and administer contracts. The term "contracting officer," as used in this subpart, may be the contracting officer or his/her designated representative within the contracting office.

(b) The contracting officer shall not serve as a member of the technical evaluation panel but should be available to:

(1) Address the initial meeting of the technical evaluation panel (see § 3-3.5108-2);

(2) Provide assistance to the evaluators as required; and

(3) Assure that the scores adequately reflect the written technical evaluation report comments (see § 3-3.5108-5).

§ 3-3.5107-4 Conflicts of interest.

(a) If a panel member has an apparent or real conflict of interest related to a proposal under evaluation, he/she shall not serve on the technical evaluation panel and shall be replaced with another evaluator. If a suitable replacement is not available, the panel shall perform the review with one less evaluator.

(b) For the purposes of this subpart, conflicts of interest are defined in the Department's Standards of Conduct set forth in 45 CFR 73 which incorporates 5 CFR 737, Post Employment Conflict of Interest. The Standards of Conduct shall be applicable to both in-house personnel and outside evaluators serving on the technical evaluation panel.

§ 3-3.5107-5 Continuity of evaluation process.

(a) The technical evaluation panel is responsible for evaluating the original proposals, making recommendations to the chairperson regarding clarifications and deficiencies of proposals, and, if required by the contracting officer, assisting the contracting officer during discussions and negotiations, and reviewing supplemental, revised and/or "best and final" offers. To the extent possible, the same evaluators should be available throughout the entire evaluation and selcetion process to assure continuity and consistency in the treatment of proposals. However, the following are some examples of circumstances when it would not be necessary for the technical evaluation panel to evaluate any revised proposals submitted during the procurement:

(1) The answers to the questions do not have a substantial impact on the proposal (see § 3-3.5111(a));

(2) The "best and final" offers are not materially different from the original proposals; or

(3) The rankings of the offerors are not affected because the revisions to the proposals are relatively minor.

(b) The chairperson, with the concurrence of the contracting officer, may decide not to have the panel evaluate the revised proposals. Whenever this decision is made, it must be fully documented by the chairperson and approved by the contracting officer.

(c) When technical evaluation panel meetings are considered necessary by the contracting officer the attendance of evaluators is mandatory. When the chairperson determines that an evaluator's failure to attend the meetings is prejudicial to the evaluation, the chairperson may replace the individual after discussing the situation with the contracting officer and obtaining his/her concurrence and the approval of the program official responsible for appointing the panel members (see § 3-3.5107-2(d)).

(d) Whenever continuity of the evaluation process is not possible, and either new evaluators are selected or a reduced panel is decided upon, each proposal which is being reviewed at any stage of the procurement should be reviewed at that stage by all members of the revised panel unless it is impractical to do so because of the receipt of an unusually large number of proposals.

§ 3-3.5107-6 Use of outside evaluators.

(a) The technical evaluation panel shall be composed of Government employees except that outside evaluators may be used when expertise is required which is not available within the Government, or as required by law (see § 3-1.353(f)).

(b) The National Institutes of Health (NIH) and the Alcohol, Drug Abuse and Mental Health Administration (ADAMHA) are required to have a peer review of research and development contracts in accordance with Public Law (Pub. L.) 93-352 as amended by Pub. L. 94-63; 42 U.S.C. 289 l-4.

§ 3-3.5108 Evaluation of technical proposals.

§ 3-3.5108-1 Receipt of proposals.

(a) After the closing date set by the solicitation for the receipt of proposals, the contracting officer will forward the technical proposals to the project officer or chairperson for evaluation by means of a transmittal memorandum. The business proposals will be retained by the contracting officer for evaluation (see § 3-3.5109).

(b) The transmittal memorandum to the chairperson should include at least the following:

(1) A list, by name, of the organizations submitting proposals;

(2) A reference to § 3-3.5103 on the need to preserve the integrity of the source selection process;

(3) A requirement for a technical evaluation report in accordance with § 3-3.5108-5; and

(4) The establishment of a date for receipt of the technical evaluation report.

§ 3-3.5108-2 Convening the technical evaluation panel.

(a) Normally the technical evaluation panel will convene to evaluate the proposals. However, there may be situations when the contracting officer determines it is not feasible or practicable for the panel to convene. Whenever this decision is made, care must be taken to assure that the technical review is closely monitored to produce acceptable results. The procedures for handling and disclosing proposals outside the Government for evaluation purposes is set forth in § 3-1.353(e).

(b) When a panel is convened, the chairperson is responsible for the control of the technical proposals provided to him/her by the contracting officer for use during the evaluation process. The chairperson will generally distribute the technical proposals at the initial panel meeting and will establish procedures for securing the proposals whenever they are not being evaluated to insure the confidentiality of the proposals. After the evaluation is complete, all proposals must be accounted for by returning to the contracting officer, destruction, or filing in an appropriate manner to maintain the confidential nature of the data.

(c) The contracting officer should address the initial meeting of the panel and state the basic groundrules for conducting the evaluation. The contracting officer shall provide written guidance to the panel if he/she is unable to attend the initial panel meeting. The guidance should include:

(1) Explanation of conflicts of interest (see § 3-3.5107-4);

(2) The necessity to reread and understand the solicitation especially the statement of work and evaluation criteria, prior to reading the proposals;

(3) The need for evaluators to restrict the review to only the solicitation and the contents of the technical proposals;

(4) The need for each evaluator to review all the proposals;

(5) The need to watch for ambiguities, inconsistencies, errors, and deficiencies which should be surfaced during the evaluation process;

(6) An explanation of the evaluation process and what will be expected of the evaluators throughout the process;

(7) The need for the evaluators to be aware of the requirement to have complete written documentation of the individual strengths and weaknesses which affect the scoring of the proposals; and

(8) An instruction directing the evaluators that, until the award is made, information concerning the procurement must not be disclosed to any person not directly involved in the evaluation process.

§ 3-3.5108-3 Clarifications.

Normally, clarifications of proposals can be made when discussions are conducted with all offerors in the competitive range. However, there are instances when the contracting officer may find it necessary to make inquiry of an offeror for the sole purpose of eliminating minor irregularities, informalities, or apparent clerical mistakes in the proposal. The contracting officer shall assure that the clarifications are in writing. Such inquiry of and clarification furnished in writing by such offeror shall not be considered to constitute "discussions" within the meaning of § 3-3. 5101(c) and shall not necessitate any inquiry of other offerors. However, if clarification results in an offeror revising its proposal or would in any way prejudice the interest of other offerors, the information should be returned to the offeror without being evaluated or discussions should be conducted with all offerors which have not been eliminated from the competition.

§ 3-3.5108-4 Rating and ranking of proposals.

The evaluators will individually read each proposal and describe tentative strengths, weaknesses and develop preliminary scores in relation to each evaluation criterion set forth in the solicitation using the rating sheets either in the technical evaluation plan or approved by the contracting officer when a technical evaluation plan is not required. (See § 3-3.5104(b)). After this has been accomplished, the evaluators should discuss in detail the individual strengths and weaknesses described by each evaluator and, if possible, arrive at a common understanding of the major strengths and weaknesses and the potential for correcting each offeror's weakness(es). Each evaluator will individually rate (score) each proposal, and then the technical evaluation panel will collectively rank the proposals. Generally, but depending on the rating plan employed, ranking will be accomplished by totaling the numerical scores assigned by each evaluator to the evaluation criteria and developing an average rating for each offeror. The evaluators should then identify each proposal as either acceptable or unacceptable. Predetermined cutoff scores shall not be employed.

§ 3-3.5108-5 Technical evaluation report.

A technical evaluation report shall be prepared and furnished to the contracting officer by the chairperson and maintained as a permanent record in the contract file. The report must reflect the ranking of the proposals and identify each proposal as acceptable or unacceptable in accordance with § 3-3.5108-4. The report must also include a narrative evaluation specifying the strengths and weaknesses of each proposal, a copy of each rating sheet, and any reservations, qualifications, or areas to be addressed that might bear upon the selection of sources for negotiation and award. Concrete technical reasons supporting a determination of unacceptability with regard to any proposal must be included. The report should also include specific points and questions which are to be raised in discussions or negotiations.

§ 3-3.5109 Evaluation of business proposals.

(a) Concurrently with the evaluation of the technical proposals, the

contracting officer shall begin the evaluation of the business proposals. The contracting officer must adhere to the requirements for cost or price analysis included in §§ 1-3.807 and 3-3.807-2 for each business proposal in the competitive range. An audit report may be required in accordance with §§ 1-3.809 and 3-3.809. The contracting officer must exercise judgment in determining the extent of analysis in each case depending on the amount of the proposal, the technical complexity and related cost or price, and cost realism. The contracting officer should request the project officer to analyze such items as: the number of labor hours proposed for various labor categories; the mix of labor hours and categories of labor in relation to the technical requirements of the project; the kinds and quantities of material, equipment, and supplies; types, numbers, and hours/days of proposed consultants; logic of proposed subcontracting; analysis of the travel proposed including number of trips, locations, purpose, and travelers; and kinds and quantities of data processing. The project officer shall provide his/her opinion as to whether these elements are necessary and reasonable for efficient contract performance. Exceptions to proposed elements shall be supported by adequate rationale to allow for effective negotiations. The contracting officer should also request the assistance of a cost/price analyst when considered necessary. In all cases, the negotiation memorandum (see § 3-50.3) must include the rationale used in determining that the price or cost is fair and reasonable.

(b) The contracting officer must appraise the management capability of the offeror to perform the required work in a timely manner. In making this appraisal, the contracting officer should consider factors such as the offeror's management organization, past performance, reputation for reliability, availability of the required facilities, and cost controls. This information is to be used by the contracting officer to determine the offeror's responsibility.

§ 3-3.5110 Competitive range.

(a) The contracting officer shall determine which proposals are in the competitive range for the purpose of conducting written or oral discussions. The competitive range shall be determined on the basis of price or cost, technical and other salient factors that were stated in the solicitation and shall include all proposals which have a reasonable chance of being selected for award. A proposal must be included in the competitive range unless there is no real possibility that it can be improved to the point where it becomes the *most* acceptable. When there is a reasonable doubt as to whether a proposal should be included in the competitive range, the proposal shall included.

(b) In certain circumstances, when deciding which proposals should be included in the competitive range, the contracting officer may request that the technical evaluation panel review the cost or price data. Typical situations which may necessitate this review include a suspected "buy-in," large differences in cost or price among the proposals, proposals receiving high technical ratings which have relatively high costs, and proposals receiving low technical ratings which have relatively low costs. The resultant comparison of cost or price to technical factors and the determination of cost or price realism should assist the contracting officer in deciding which proposals are to be included in the competitive range.

(c) All determinations regarding the inclusion or exclusion of proposals in the competitive range must be completely documented, including the salient reasons for the determinations, and set forth in the negotiation memorandum (see § 3-50.301(i)).

(d) Some of the factors which the contracting officer should consider in determining the competitive range are:

(1) The relative importance of cost or price as compared to technical factors in accordance with the solicitation provisions required in § 3-3.5511-4(c).

(2) The susceptibility of significantly reducing a proposal with an unreasonably high price or cost without undermining the technical merit if the offeror otherwise has a reasonable chance to receive an award; and

(3) The likelihood of reducing cost or price of a proposal which exceeds the Government's requirements.

(e) The contracting officer shall conduct a thorough review of the technical evaluation report to be assured that:

(1) All determinations of unacceptability are supported by concrete and comprehensive statements that are factual and convincing and are consistent with the evaluation criteria set forth in the solicitation. Every statement should be reviewed carefully to eliminate any doubts as to the unacceptability of a proposal;

(2) All recommendations to exclude proposals from the competitive range are supported by persuasive rationale and sufficient facts to substantiate a judgment that meaningful discussions are not possible or there is no reasonable chance of the proposal being selected for award;

(3) Those cases where only one organization is found to be technically acceptable are fully scrutinized; and

(4) Unacceptable proposals contain "information" deficiencies which are so material as to preclude any possibility of upgrading the proposal to a competitive level except through major revisions and additions which would be tantamount to the submission of another proposal.

§ 3-3.5111 Preparation for discussions.

(a) The contracting officer and project officer should discuss the uncertainties and/or deficiencies that are included in the technical evaluation report for each proposal in the competitive range. Technical questions should be developed by the project officer and/or the technical evaluation panel and should be included in the technical evaluation report. The management and cost or price questions should be prepared by the contracting officer with assistance from the project officer and/or panel as required. The method of requesting offerors in the competitive range to submit the additional information will vary depending on the complexity of the questions, the extent of additional information requested, the time needed to analyze the responses, and the time frame for making the award. However, to the extent practicable, all questions and answers should be in writing. Each offeror in the competitive range shall be given an equitable period of time for preparation of responses to questions to the extent practicable.

(b) The questions should be developed so as to disclose the ambiguities, uncertainties, and deficiencies of the offeror (see § 3-3.5112(b)(2)).

§ 3-3.5112 Written or oral discussions.

(a) The contracting officer, with the support of personnel who evaluated the technical proposals, and, if necessary, cost analysts, attorneys, etc., must conduct written or oral discussions with all offerors within the competitive range, except that this requirement need not apply to the exceptions in § 1-3.805-1(a). The content and extent of the discussions is a matter of the contracting officer's judgment, based on the particular facts of each procurement.

(b) The contracting officer shall:

(1) Control all discussions;

(2) Advise the offeror of deficiencies in its proposal so that the offeror is given an opportunity to satisfy fully the Government's requirements;

(3) Attempt to resolve any uncertainties concerning the technical proposal and other terms and conditions of the proposal;

(4) Resolve any suspected mistakes by calling them to the offeror's attention as specifically as possible without disclosing information concerning other offerors' proposals or the evaluation process; and

(5) Provide the offeror a reasonable opportunity to submit any cost or price, technical, or other revisions to its proposal that may result from the discussions.

(c) The contracting officer and other Government personnel shall not engage in the following:

(1) Technical leveling (i.e., helping any offeror to bring its proposal up to the level of other proposals through successive rounds of discussion by pointing out weaknesses resulting from the offeror's lack of diligence, competence, or inventiveness in preparing the proposal);

(2) Technical transfusion (i.e., Government disclosure of technical information pertaining to a proposal that results in improvement of a competing proposal); or

(3) Auction techniques, such as the following:

(i) Indicating to an offeror a price that it must meet to obtain further consideration;

(ii) Advising an offeror of its price standing relative to another offeror (however, it is permissible to inform an offeror that its price is considered by the Government to be too high or too low); and

(iii) Otherwise furnishing information about other offerors' prices.

(d) Careful judgment must be exercised in determining the extent of discussions. In some cases, more than one round of discussions with all the offerors within the competitive range may be required. The time available, the expense and administrative limitations, and the complexity, size, and significance of the procurement should all be considered in deciding on the type, duration, and depth of the discussions.

§ 3-3.5113 Request for best and final offers.

At the conclusion of discussions with all offerors in the competitive range a final, common cutoff date, which allows a reasonable opportunity for submission of written "best and final" offers must be established and all offerors in the competitive range so notified. If oral notification is given, it must be confirmed in writing. The written notification must include the following information:

(a) Discussions have been concluded;

(b) Offerors are being given an opportunity to sumit a "best and final" offer;

(c) The offer is subject to both the "Late Proposals, Modifications of Proposals, and Withdrawals of Proposals" provision of the solicitation, and the requirements of § 1-3.805-1(b);

(d) Any "best and final" offers received after the time and date established for receipt of offers shall be handled in accordance with §§ 1-3.802-1 and 1-3.802-2, as applicable;

(e) The confirmation of a prior offer should be specifically stated as a final offer; and

(f) All revisions to former offers should be submitted on Optional Form 59, Contract Pricing Proposal, or Optional Form 60, Contract Pricing Proposal (Research and Development), as applicable, and should be fully documented.

§ 3-3.5114 Evaluation of best and final offers.

"Best and final" offers are subject to a final evaluation of price or cost and other salient factors by the contracting officer and project officer with assistance from a cost/price analyst, and an evaluation of technical factors by the technical evaluation panel, as necessary. Proposals may be technically rescored and reranked by the technical evaluation panel and a technical evaluation report prepared. To the extent practicable, the evaluation shall be performed by the same evaluators who reviewed the original proposals.

§ 3-3.5115 Source selection decision.

After the close of discussions and evaluation of "best and final" offers, the contracting officer will select for award the offeror whose proposal offers the greatest advantage to the Government, price and other factors considered and/or in accordance with the evaluation criteria set forth in the solicitation.

§ 3-3.5116 Negotiation with the selected source.

(a) After selection of the successful proposal, a limited negotation with the selected offeror may be conducted if deemed necessary. However, no factor which could have any effect on the selection process may be introduced into the negotiation after the common cut-off date for receipt of best and final offers. The negotiation shall not in any way prejudice the competitive interests or right of the unsuccessful offerors. Negotiation with the selected offeror shall be restricted to definitizing the final agreement on terms and conditions; e.g., assuming none of these factors were involved in the selection process, negotiation could include such topics as payment provisions, patent rights, rights in data, property provisions, labor rates, indirect cost rates, and fees. Prior to conducting the limited negotiation, the contracting officer shall approve a written determination citing both the specific issues to be discussed and the rationale showing that the negotiations shall not have any effect on the selection process.

(b) Caution must be exercised by the contracting officer to insure that the negotiation is not used to change the requirement contained in the solicitation, nor to make any other changes which would impact on the source selection decision. Whenever a material change occurs in the requirements as a result of the negotiation, the competition must be reopened and all offerors submitting "best and final" offers must be given an opportunity to resubmit proposals based on the revised requirements. Whenever there is a question as to whether a change is material, the contracting officer should obtain the advice of technical personnel and legal counsel before reopening the competition. Significant changes in the offeror's cost proposal may also necessitate a reopening of competition if such changes alter the factors involved in the original selection process.

(c) Should negotiations beyond those specified in (a) above be required for any reason, discussions must be reopened with all offerors submitting "best and final" offers.

(d) Upon completion of the negotiation, the contracting officer should obtain a confirmation letter from the successful offeror which includes any revisions to the technical proposal, the agreed to price or cost, and, as applicable, a certificate of current cost or pricing data.

§ 3-3.5117 Post-negotiation, contract preparation, and award.

(a) The contracting officer must perform the following actions after negotiations have been completed:

(1) Prepare the negotiation memorandum in accordance with Subpart 3-50.3;

(2) Prepare the contract containing all agreed to terms and conditions and clauses required by law or regulation;

(3) Include in the contract file the pertinent documents referenced in § 3-1.313-51; and

(4) Obtain the appropriate approval of proposed contract awards in accordance

with Subpart 3-50.1 and procuring activity procedures.

(b) After receiving the required approvals, the contract should be transmitted to the prospective contractor for signature. The prospective contractor must be informed that the contract is not effective until accepted by the contracting officer.

(c) The contract shall not be issued until the finance office certifies that the funds are available for obligation.

§ 3-3.5118 Notification and debriefing of unsuccessful offerors.

Unsuccessful offerors will be notified, and debriefed at their request, in accordance with § 3-3.103.

§ 3-3.5119 Post-award orientation of contractors.

FPR Subpart 1-1.18 prescribes policies and procedures regarding the post-award orientation of contractors. To the extent practicable, contracting officers should utilize letters to accomplish post-award orientation objectives (see § 1-1.1806). A post-award orientation conference should be arranged only when letters cannot resolve key issues.

(5 U.S.C. 301; 40 U.S.C. 486(c))

[FR Doc. 83-248 Filed 1-13-83; 8:45 am]

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Notices

Federal Register
Vol. 48, No. 10
Friday, January 14, 1983

This section of the FEDERAL REGISTER contains documents other than rules or proposed rules that are applicable to the public. Notices of hearings and investigations, committee meetings, agency decisions and rulings, delegations of authority, filing of petitions and applications and agency statements of organization and functions are examples of documents appearing in this section.

ADVISORY COUNCIL ON HISTORIC PRESERVATION

Programmatic Memorandum of Agreement Regarding Transfer of 26,740.66 Acres of Land From Federal Ownership to the State of Montana

AGENCY: Advisory Council on Historic Preservation.

ACTION: Notice.

SUMMARY: The Advisory Council on Historic Preservation proposes to execute a Programmatic Memorandum of Agreement pursuant to § 800.8 of the Council's regulations, "Protection of Historic and Cultural Properties" (36 CFR Part 800), with the Bureau of Land Management, Department of the Interior, and the Montana State Historic Preservation Officer, providing for the management of historic properties and lands to be transferred to the State of Montana. The proposed Programmatic Memorandum of Agreement will establish mechanisms by which historic properties will be identified, evaluated, and managed/protected in order to meet the requirements of Section 106 of the National Historic Preservation Act (16 U.S.C. 470f).

DATE: Comments due: February 14, 1983.

ADDRESS: Executive Director, Advisory Council on Historic Preservation, Western Division of Project Review, 730 Simms Street, Room 450, Golden, Colorado 80401.

Dated: January 10, 1983.

Thomas F. King,

Acting Executive Director.

[FR Doc. 83-1026 Filed 1-13-83 8:45 am]

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DEPARTMENT OF AGRICULTURE

Agricultural Stabilization and Conservation Service

Flue-Cured Tobacco; 1983-84 National Marketing Quota for Flue-Cured Tobacco

AGENCY: Agricultural Stabilization and Conservation Service.

ACTION: Notice of determination of 1983-84 marketing quota.

SUMMARY: The purpose of this notice is to announce determinations with respect to the 1983 crop of flue-cured tobacco in accordance with the Agricultural Adjustment Act of 1938, as amended. In addition to other determinations, the Secretary of Agriculture has determined that the 1983 marketing quota for flue-cured tobacco shall be 910 million pounds, 10 percent below last year's quota. The Secretary is required by statute to announce the 1983 marketing quota by December 1, 1982. The Secretary has also determined that the national acreage allotment for flue-cured tobacco shall be 457,516.34 acres. This notice also proclaims that marketing quotas will be in effect for flue-cured tobacco for three marketing years beginning July 1, 1983. A referendum of producers of flue-cured tobacco will be held on December 16, 1982, to determine whether they favor or oppose such quotas for the three year period.

EFFECTIVE DATE: December 1, 1982.

FOR FURTHER INFORMATION CONTACT: Robert L. Tarczy, Agricultural Economist, Analysis Division, ASCS, Room 3736-South Building, P.O. Box 2415, Washington, D.C. 20013, (202) 447-5187. The Final Regulatory Impact Analysis describing the options considered in developing this notice and the impact of implementing each option is available on request from Robert L. Tarczy.

SUPPLEMENTARY INFORMATION: This notice has been reviewed under USDA procedures established in accordance with Executive Order 12291 and Secretary's Memorandum No. 1512-1 and has been classified "not major." This action has been classified "not major" since implementation of these determinations will not result in: (1) An annual effect on the economy of $100 million or more, (2) a major increase in costs or prices for consumers, individual industries, Federal, State or local governments, or geographical region, or (3) significant adverse effects on competition, employment, investment, productivity, innovation, or the ability of United States-based enterprises to compete with foreign-based enterprises in domestic or export markets.

The title and number of the Federal Assistance Program that this notice applies to are: Title—Commodity Loan and Purchases; Number 10.051, as set forth in the Catalog of Federal Domestic Assistance.

It has been determined that the Regulatory Flexibility Act is not applicable to this notice since the Agricultural Stabilization and Conservation Service (ASCS) is not required by 5 U.S.C. 553 or any provision of law to publish a notice of proposed rulemaking with respect to the subject matter of this notice.

This notice of determination is issued in accordance with the Agricultural Adjustment Act of 1938, as amended, (hereinafter referred to as the "1938 Act") in order to announce for the 1983 marketing year for flue-cured tobacco the following:

1. The amount of the reserve supply level;
2. The amount of the total supply;
3. The amount of the national marketing quota;
4. The national average yield goal;
5. The national acreage allotment;
6. The national acreage reserve
   A. For establishing acreage allotments for new farms, and
   B. For making corrections and adjusting inequities in old farms;
7. The national acreage factor; and
8. The national yield factor.

The 1982-83 marketing year is the last of the three consecutive years for which marketing quotas, previously proclaimed on an acreage-poundage basis, will be in effect. Section 317(d) of the 1938 Act, (U.S.C. 1341c(d)) provides that the Secretary shall proclaim marketing quotas for flue-cured tobacco on either an acreage basis or an acreage-poundage basis for the 1983-84, 1984-85, and 1985-86 marketing years, whichever the Secretary determines would result in a more effective quota. It has been determined that, in view of the better supply control resulting from the acreage-poundage quota program beginning in 1965, a more effective quota would result by continuing marketing quotas on an acreage-poundage basis.

The determinations by the Secretary set forth in this notice have been made on the basis of the latest available statistics of the Federal Government, and after due consideration of data, views, and recommendations received from flue-cured tobacco producers and others pursuant to a proposed Notice of Determination (47 FR 38954) which was published on September 3, 1982.

Discussion

During the comment period, 39 written responses were received from farmers, members of the trade including associations, and farm groups. Of the 30 respondents who commented on the level of the 1983 quota, 24 recommended that the quota remain unchanged from the 1982 level. The other 6 who commented on the quota level recommended quotas ranging from a 50 percent increase to a 15 percent decrease in quota. A majority of those who wanted the quota to remain unchanged were willing to maintain the 1983 price support level at the 1982 level.

In addition, two meetings were held for interested persons to give their views orally. The vast majority of these individuals favored the same level of price support and the same amount of the marketing quota for the 1983 marketing year as were applicable to the 1982 marketing year. Because the total supply is significantly above the reserve supply level and those supplies are well distributed among the grades, the Secretary is reducing the flue-cured tobacco marketing quota by 10 percent for the 1983 marketing year.

Section 317(a)(1) of the 1938 Act (7 U.S.C. 1314c(a)(1)) provides, in part, that for flue-cured tobacco, the national marketing quota for a marketing year is the amount of flue-cured tobacco produced in the United States which the Secretary estimates will be utilized during the marketing year in the United States and will be exported during the marketing year, adjusted upward or downward in such amount as the Secretary determines is desirable for the purpose of maintaining an adequate supply or for effecting an orderly reduction of supplies to the reserve supply level. The 1938 Act further provides that any such downward adjustment shall not exceed 15 percent of such estimated utilization and exports.

The "reserve supply level" is defined in section 301(b)(14)(B) of the 1938 Act as the normal supply plus 5 percent thereof, to assure a supply adequate to meet domestic consumption and export needs in years of drought, flood, or other adverse conditions, as well as in years of plenty.

The "normal supply" is defined in section 301(b)(10)(B) of the 1938 Act as a normal year's domestic consumption and exports, plus 175 percent of a normal year's domestic consumption and 65 percent of a normal year's exports as an allowance for normal carryover.

A "normal year's domestic consumption" is defined in Section 301(b)(11)(B) of the 1938 Act as the yearly average quantity of tobacco produced in the United States and consumed in the United States during the 10 marketing years immediately preceding the marketing year in which such consumption is determined, adjusted for current trends in such consumption.

A "normal year's exports" is defined in Section 301(b)(12) of the 1938 Act as the yearly average quantity of tobacco produced in the United States which was exported from the United States during the 10 marketing years immediately preceding the marketing year in which such exports are determined, adjusted for current trends in such exports.

The yearly average domestic consumption of flue-cured tobacco during the 10 marketing years preceding the 1982–83 marketing year was 610 million pounds, and the yearly average exports during such period amounted to 539 million pounds. Exports have fluctuated within a relatively narrow range with no predominate trends while domestic consumption has shown a downward trend. Accordingly, a normal year's exports equals the 10 year average while a normal year's domestic consumption has been established at 560 million pounds. These normal year's consumption and exports result in a reserve supply level for flue-cured tobacco of 2,550 million pounds.

"Total supply" is defined in Section 301(b)(16)(B) of the 1938 Act as the carryover at the beginning of the marketing year (July 1) plus the estimated production in the United States during the calendar year in which the marketing year begins.

The carryover of flue-cured tobacco in the inventories of manufacturers and dealers, including Commodity Credit Corporation (CCC) loan stocks, amounted to 2,145 million pounds, farm sales weight on July 1, 1982.

The 1982 crop marketings of flue-cured tobacco are currently estimated at 990 million pounds. The sum of the carryover of flue-cured tobacco plus the 1982 crop marketings totals 3,135 million pounds and represents the total supply of flue-cured tobacco for the 1982–83 marketing year. This amount exceeds the reserve supply level by 585 million pounds.

It is estimated that 495 million pounds of flue-cured tobacco will be utilized in the United States during the 1983–84 marketing year and 505 million pounds will be exported. Because the total supply is substantially in excess of the reserve supply level, it is deemed desirable to make a downward adjustment of 90 million pounds from the estimated utilization in order to determine the 1983 flue-cured tobacco marketing quota. Accordingly, the national marketing quota for flue-cured tobacco for the marketing year beginning July 1, 1983, is determined to be 910 million pounds.

Section 203 of the No Net Cost Tobacco Program Act of 1982 amended section 317(a) of the 1938 Act (7 U.S.C. 1314c(a)) to provide that the national average yield goal shall be adjusted for 1983 and at 5 year intervals thereafter to the past 5 year's national average yield. The national average yield for the 1977–81 marketing years is 1,989 pounds per acre. Accordingly, it has been determined that the national average yield goal for the 1983–1984 marketing year will be 1,989 pounds per acre.

Section 203 of the No Net Cost Tobacco Program Act also amended the 1938 Act to further provide that the farm acreage allotment and preliminary farm yield for each farm shall be adjusted for 1983 and at 5 year intervals therafter to reflect increases or decreases in the past 5 year's county average yield per acre. This county adjustment factor is based on the ratio of the county average yield for each county during the 5 year base period 1959–63 to the moving county average yield for each county during the 5 year period 1977–81.

The average county adjustment factor for the entire flue-cured belt is 1.1074. In an effort to avoid severe changes in farm acreage allotments due to abnormal conditions, the county adjustment factors were limited to a minimum of 1.00 and a maximum of 1.35.

The county adjustment factor established shall simultaneously be applied to the preliminary farm yield and the farm acreage allotment of each farm, leaving the preliminary farm marketing quota identical to the preliminary farm marketing quota which would have existed, except for rounding.

In accordance with section 317(a)(3) of the 1938 Act (7 U.S.C. 1314c(a)(3)) the national acreage allotment for the 1983 crop of flue-cured tobacco is determined to be 457,516.34 acres, which is the result of dividing the national marketing quota by the national average yield goal.

In accordance with section 317(e) of the 1938 Act (7 U.S.C. 1314c(e)) the Secretary is authorized to establish a national reserve, from the national acreage allotment, in an amount equivalent to not more than 1 percent of the national acreage allotment for the purpose of making corrections in farm acreage allotments, adjusting for inequities and for establishing allotments for new farms. The Secretary has determined that a national reserve for the 1983 crop of flue-cured tobacco of 200 acres is adequate for these purposes.

It has been determined that types 11, 12, 13, and 14 shall constitute one kind of tobacco for the 1983–84, 1984–85, and 1985–86 marketing years. It has been determined also that no substantial difference exists in the usage or market outlets for any one or more of the types of flue-cured tobacco.

On December 1, 1982, the Secretary announced by press release the determinations with respect to the 1983 crop of flue-cured tobacco which are set forth herein. The purpose of this document is to affirm those determinations. Thus, it is hereby determined that no further public rulemaking is required with respect to the following determinations:

Determinations

Proclamation of National Marketing Quotas

Since the 1982–83 marketing year is the last of 3 consecutive marketing years for which marketing quotas previously proclaimed will be in effect for flue-cured tobacco, a national marketing quota for such kind of tobacco for each of the 3 marketing years beginning July 1, 1983, July 1, 1984, and July 1, 1985 is hereby proclaimed.

Method and Period for Holding Referendum

It is hereby determined that a referendum will be conducted at polling places on December 16, 1982. If more than 66⅔ percent of those voting favor quotas, then quotas will be in effect for the next three marketing years beginning July 1, 1983.

Determinations 1983–84 Marketing Year

For flue-cured tobacco for the marketing year beginning July 1, 1983:

(a) *Reserve supply level.* The reserve supply level is determined to be 2,550 million pounds based upon a normal year's domestic consumption of 560 million pounds and a normal year's exports of 539 million pounds.

(b) *National marketing quota.* A national quota on an acreage-poundage basis for the marketing year beginning July 1, 1983 is determined to be 910 million pounds. This quota is based on an estimated consumption in the United States in such marketing year of 495 million pounds and estimated exports in such marketing year of 505 million pounds, with a 90 million pound downward adjustment in order to effect an orderly reduction of supplies toward the reserve supply level.

(c) *National average yield goal.* The national average yield goal is determined to be 1,989 pounds. This goal is based on the 5 year national average yield for the 1977–81 marketing years.

(d) *National acreage allotment.* The national acreage allotment on an acreage-poundage basis is determined to be 457,516.34 acres. This allotment is determined by dividing the national marketing quota of 910 million pounds by the national average yield goal of 1,989 pounds.

(e) *National reserve.* The national reserve for making corrections and adjusting inequities in old farm areage allotments and for establishing allotments for new farms is determined to be 200 acres.

(f) *National acreage factor.* The national acreage factor is determined to be .9268.

(g) *National yield factor.* The national yield factor is determined and announced to be .9020.

(Secs. 301, 313, 317, 375, 52 Stat. 38, 47, 66, as amended, 79 Stat. 66 (7 U.S.C. 1301, 1313, 1314c, 1375))

Signed at Washington, D.C. on January 6, 1983.

Everett Rank,

Administrator, Agricultural Stabilization and Conservation Service.

[FR Doc. 83-837 Filed 1-13-83; 8:45 am]

BILLING CODE 3410-05-M

Animal and Plant Health Inspection Service

[Docket No. 83-002]

Designated Qualified Person (DQP) Program

AGENCY: Animal and Plant Health Inspection Service, USDA.

ACTION: Notice of public meeting.

SUMMARY: This document announces a public meeting to discuss the Designated Qualified Person (DQP) Program which is conducted under authority of the Horse Protection Act of 1970.

DATE: The meeting will be held from 10:00 a.m. to 4:00 p.m. on Wednesday, February 16, 1983.

ADDRESSES: The meeting will be held at the University of Maryland Adult Education Center, Room 0123, corner of University Boulevard and Adelphi Road, College Park, MD 20742. Written comments should be submitted to Dr. Richard L. Rissler, Acting Assistant Director, Animal Health Programs, Room 747, Federal Building, 6505 Belcrest Road, Hyattsville, MD 20782.

FOR FURTHER INFORMATION CONTACT: Dr. Richard L. Rissler, Acting Assistant Director, Animal Health Programs, Room 747, Federal Building, 6505 Belcrest Road, Hyattsville, MD 20782, (301) 436–5286.

SUPPLEMENTARY INFORMATION: The purpose of the public meeting is to obtain comments concerning whether the Designated Qualified Person (DQP) program under the horse protection regulations (9 CFR Part 11) is effectively carrying out its intended purposes under the Horse Protection Act of 1970 (15 U.S.C. 1821 et seq.).

The horse protection regulations provide that a DQP is a person whose has been licensed as a DQP by a horse industry organization or association having a DQP program certified by the U.S. Department of Agriculture and who may be appointed and delegated authority by the management of any horse show, horse exhibition, horse sale, or horse auction under section 4 of the Horse Protection Act of 1970 (15 U.S.C. 1823) to detect or diagnose horses which are sore or to otherwise inspect horses and any records pertaining to such horses for the purposes of enforcing the Act. Six horse industry organizations or associations have DQP programs certified by the Department.

Public Meeting

A representative of the Animal and Plant Health Inspection Service will preside at the meeting. Any interested person may appear and be heard in person, by attorney, or by other representative.

The meeting will begin at 10 a.m. and is scheduled to end at 4 p.m. local time. However, the meeting may be terminated at any time after it begins if all of those persons desiring an opportunity to speak have been heard. Persons who wish to speak are requested to register with the presiding officer prior to the meeting. The premeeting registration will be

conducted at the location of the meeting from 9 a.m. to 10 a.m. Those registered persons will be heard in the order of their registration. However, any other persons who wish to speak at the meeting will be afforded such opportunity after the registered persons have been heard.

If the number of preregistered persons and other participants in attendance at the meeting warrants it the presiding officer may limit the time for each presentation in order to allow everyone wishing to speak the opportunity to be heard.

Written Comments

Persons who wish to submit written comments in lieu of making comments at the public meeting should submit their written comments to the person and address specified under the heading "**ADDRESSES.**"

Done at Washington, D.C. this 10th day of January 1983.

K. R. Hook,

Acting Deputy Administrator, Veterinary Services, Animal and Plant Health Inspection Service.

[FR Doc. 83-1066 Filed 1-11-83; 3:45 pm]

BILLING CODE 3410-34-M

Packers and Stockyards Administration

Posted Stockyards

Pursuant to the authority delegated under the Packers and Stockyards Act, 1921, as amended (7 U.S.C. 181 et seq.), it was ascertained that the livestock markets named below were stockyards within the definition of that term contained in section 302 of the Act, as amended (7 U.S.C. 202), and notice was given to the owners and to the public by posting notices at the stockyards are required by said section 302, on the respective dates specified below.

Facility No., name, and location of stockyard	Date of posting
NM-119 The Auction Company, Bernalillo, New Mexico.	October 22, 1982.

Done at Washington, D.C., this 10th day of January, 1983.

Jack W. Brinckmeyer,

Chief, Financial Protection Branch, Livestock Marketing Division.

[FR Doc. 83-1065 Filed 1-13-83; 8:45 am]

BILLING CODE 3410-02-M

Proposed Posting of Stockyards

The Chief, Financial Protection Branch, Packers and Stockyards Administration, United States Department of Agriculture, has information that the livestock markets named below are stockyards as defined in section 302 of the Packers and Stockyards Act, 1921, as amended (7 U.S.C. 202), and should be made subject to the provisions of the Act.

UT-116 Basin Livestock Market, Inc., Roosevelt, Utah

Notice is hereby given, therefore, that the said Chief, pursuant to authority delegated under the Packers and Stockyrds Act, as amended (7 U.S.C. 181 et seq.), proposes to designate the stockyards named above as posted stockyards subject to the provisions of the Act as provided in section 302 thereof.

Any person who wished to submit written data, views, or arguments concerning the proposed designation, may do so by filing them with the Chief, Financial Protection Branch, Packers and Stockyards Administration, United States Department of Agriculture, Washington, D.C. 20250, by January 31, 1983.

All written submissions made pursuant to this notice shall be made available for public inspection in the office of the Chief of the Financial Protection Branch during normal business hours.

Done at Washington, D.C., this 10th day January, 1983.

Jack W. Brinckmeyer,

Chief, Financial Protection Branch, Livestock Marketing Division.

[FR Doc. 83-1066 Filed 1-13-83; 8:45 am]

BILLING CODE 3410-02-M

Soil Conservation Service

Lovelock Watershed, Nevada; Deauthorize Federal Funding

AGENCY: Soil Conservation Service, USDA.

ACTION: Notice of intent to deauthorize Federal funding.

SUMMARY: Pursuant to the Watershed Protection and Flood Prevention Act, Public Law 83-566, and the Soil Conservation Service Guidelines (7 CFR 622), the Soil Conservation Service gives notice of the intent to deauthorize Federal funding for the Lovelock Watershed project, Pershing County, Nevada.

FOR FURTHER INFORMATION CONTACT: Gerald Thola, State Conservationist, Soil Conservation Service, P.O. Box 4850, Reno, Nevada 89505, telephone (702) 784-5863.

SUPPLEMENTARY INFORMATION: A determination has been made by Gerald Thola that the proposed works of improvement for the Lovelock Watershed project will not be installed. The sponsoring local organizations have concurred in this determination and agree that Federal funding should be deauthorized for the project. Information regarding this determination may be obtained from Gerald Thola, State Conservationist, at the above address and telephone number.

No administrative action on implementation of the proposed deauthorization will be taken until 60 days after the date of this publication in the **Federal Register.**

Dated: December 22, 1982.

Gerald Thola,

State Conservationist.

[FR Doc. 83-961 Filed 1-13-83; 8:45 am]

BILLING CODE 3410-16-M

CIVIL AERONAUTICS BOARD

Applications for Certificates of Public Convenience and Necessity and Foreign Air Carrier Permits Filed Under Subpart Q of the Board's Procedural Regulations (See, 14 CFR 302.1701 et seq.); Week Ended January 7, 1983.

Subpart Q Applications

The due date for answers, conforming application, or motions to modify scope are set forth below for each application. Following the answer period the Board may process the application by expedited procedures. Such procedures may consist of the adoption of a show-cause order, a tentative order, or in appropriate cases a final order without further proceedings.

Date filed	Docket No.	Description
January 3, 1983	41197	Kodiak Western Alaska Airlines, Inc., c/o Richard P. Taylor, Steptoe & Johnson, 1250 Connecticut Avenue, N.W., Washington, D.C. 20036. Application of Kodiak Western Alaska Airlines, Inc. pursuant to Section 401 of the Act and Subpart Q of the Board's Procedural Regulations applies for a certificate of public convenience and necessity to engage in charter air transportation within the State of Alaska and/or certain waiver relief. Conforming Applications, Motions to Modify Scope, and Answers may be filed by January 31, 1983.
January 3, 1983	41198	Evergreen International Airlines, Inc., c/o Richard P. Taylor, Steptoe & Johnson, 1250 Connecticut Avenue, N.W., Washington, D.C. 20036. Application of Evergreen International Airlines, Inc. pursuant to Section 401 of the Act and Subpart Q of the Board's Procedural Regulations applies for an amended certificate of public convenience and necessity to engage in interstate charter air transportation within the State of Alaska. Conforming Applications, Motions to Modify Scope, and Answers may be filed by January 31, 1983.
January 3, 1983	41199	Evergreen Helicopters of Alaska, Inc., c/o Richard P. Taylor, Steptoe & Johnson, 1250 Connecticut Avenue, N.W., Washington, D.C. 20036. Application of Evergreen Helicopters of Alaska, Inc. pursuant to section 401 of the Act and Subpart Q of the Board's Procedural Regulations applies for a certificate of public convenience and necessity to engage in interstate charter air transportation within the State of Alaska. Conforming Applications, Motions to Modify Scope, and Answers may be filed by January 31, 1983.
January 6, 1983	41205	Mountain Pacific Airways, Inc., c/o Robert E. Shelton, Jr., Hangar 10, 7355 S. Peoria St., Englewood, Colorado 80112. Application of Mountain Pacific Airways, Inc. pursuant to Section 401(d)(3) of the Act and Subpart Q of the Board's Procedural Regulations requests issuance of a Certificate of Public Convenience and Necessity which would authorize it to engage in charter interstate air transportation of passengers, property, and mail. Conforming Applications, Motions to Modify Scope, and Answers may be filed by February 3, 1983.
January 6, 1983	41056	Aero-Chago, S. A., c/o Andrew T. A. Macdonald, Wilmer, Cutler & Pickering, 1666 K Street, N.W., Washington, D.C. 20006. Supplement to and Completion of the Application of Aero-Chago, S.A., for a Foreign Air Carrier Permit pursuant to Subpart Q of the Board's Procedural Regulations and Order 82-11-1. Answers may be filed by February 3, 1983.
January 7, 1983	41208	Fleming International Airways, Inc., c/o Allan W. Markham, Suite 400, 4801 Massachusetts Ave., N.W., Washington, D.C. 20016. Application of Fleming International Airways, Inc. pursuant to Section 401(d)(3) of the Act and Subpart Q of the Board's Procedural Regulations requests a certificate of public convenience and necessity to engage in interstate charter air transportation of property and mail. Conforming Applications, Motions to Modify Scope, and Answers may be filed by February 4, 1983.
January 7, 1983	41209	Fleming International Airways, Inc., c/o Allan W. Markham, Suite 400, 4801 Massachusetts Ave., N.W., Washington, D.C. 20016. Application of Fleming International Airways, Inc. pursuant to Section 401(d)(3) of the Act and Subpart Q of the Board's Procedural Regulations requests a certificate of public convenience and necessity to engage in foreign charter air transportation of property and mail as follows: Between any point in any State of the United States or the District of Columbia or any territory or possession of the United States, and a. Any point in Canada; b. Any point in Mexico; c. Any point in Jamaica, the Bahama Islands, Bermuda, Haiti, the Dominican Republic, Trinidad, Aruba, the Leeward and Windward Islands, and any other foreign place in the Gulf of Mexico or the Caribbean Sea; d. Any point in Central or South America; and e. Any point in Australasia, Indonesia, or Asia as far west as longitude 70 degrees east via a transpacific routing. Conforming Applications, Motions to Modify Scope, and Answers may be filed by February 4, 1983.
January 7, 1983	41211	Capitol Air, Inc., c/o Fred D. Thompson, 1919 Pennsylvania Avenue, N.W., Suite 650, Washington, D.C. 20006. Application of Capitol Air, Inc. pursuant to section 401 of the Act and Subpart Q of the Board's Procedural Regulations applies for an amendment of its existing certificate of public convenience and necessity over Route 191-F, or for a new certificate, sufficient to authorize air transportation of persons, property, and mail as follows: Between San Juan and the co-terminal points Montreal/Toronto, Canada. Conforming Applications, Motions to Modify Scope, and Answers may be filed by February 4, 1983.
January 7, 1983	41212	Arrow Airways, Inc., c/o Lawrence D. Wasko, Seamon, Wasko and Ozment, 1211 Connecticut Avenue, N.W., Suite 300, Washington, D.C. 20036. Application of Arrow Airways, Inc. pursuant to Section 401 of the Act and Subpart Q of the Board's Procedural Regulations requests a certificate of public convenience and necessity to engage in scheduled foreign air transportation of persons, property and mail as follows: Between a point or points in the United States and Manila, Republic of the Philippines. Conforming Applications, Motions to Modify Scope, and Answers may be filed by February 4, 1983.
January 7, 1983	41213	Interamerica Airlines, Inc., c/o James M. Burger, Shaw, Pittman, Potts & Trowbridge, Suite 900 South, 1800 M Street, N.W., Washington, D.C. 20036. Application of Interamerica Airlines, Inc. pursuant to Section 401(d)(3) of the Act and Subpart Q of the Board's Procedural Regulations applies for a certificate of public convenience and necessity to engage in interstate and overseas charter air transportation of persons, property, and mail between the following points: Between any point in any State of the United States or the District of Columbia or any territory or possession of the United States and any other point in any State of the United States or the District of Columbia or any territory or possession of the United States. Conforming Applications, Motions to Modify Scope, and Answers may be filed by February 4, 1983.
January 7, 1983	41214	Interamerica Airlines, Inc., c/o James M. Burger, Shaw, Pittman, Potts & Trowbridge, Suite 900 South, 1800 M Street, N.W., Washington, D.C. 20036. Application of Interamerica Airlines, Inc. pursuant to Section 401 of the Act and Subpart Q of the Board's Procedural Regulations applies for a certificate of public convenience and necessity to engage in foreign charter air transportation of persons, property and mail as follows: Between any point in any State of the United States or the District of Columbia or any territory or possession of the United States and: (a) any point in Canada; (b) any point in Mexico; and (c) any point in Jamaica, the Bahama Islands, Bermuda, Haiti, the Dominican Republic, Trinidad, Aruba, the Leeward and Windward Islands, and any other place in the Gulf of Mexico or the Caribbean Sea. Conforming Applications, Motions to Modify Scope, and Answers may be filed by Feburary 4, 1983.
January 7, 1983	41215	Japan Air Lines Company, Ltd., c/o Laurance A. Short, Short, Klein & Karas, 1101 Thirteenth Street, N.W. Suite 303, Washington, D.C. 20007. Application of Japan Air Lines Company, Ltd. pursuant to Section 402 of the Act and Subpart Q of the Board's Procedural Regulations requests that its foreign air carrier permit be amended so as to authorize JAL to engage in foreign air transportation of persons, property and mail between Tokyo, Japan, the intermediate point Seattle, Washington and the terminal point Chicago, Illinois and between Tokyo, Japan, the intermediate point Los Angeles, California and the coterminal points Sao Paulo and Rio de Janeiro, Brazil. Answers may be filed by February 4, 1983.

Phyllis T. Kaylor,
Secretary.

[FR Doc. 83-1108 Filed 1-13-83; 8:45 am]

BILLING CODE 6320-01-M

[Docket 41207; Order 83-1-18]

Computer Reservations Systems; Report to Congress; Order Requesting Comments

Adopted by the Civil Aeronautics Board at its office in Washington, D.C. on the 6th day of January, 1983.

On December 18, 1982 the President signed into law H.R. 7019 (Public Law 97-369). The Conference Report accompanying that legislation provides that the Civil Aeronautics Board and the Department of Justice are directed to conduct a study of the computer reservations systems which are leased to travel agents by the airlines and to determine the effects on competition and any antitrust implications which may exist.

We have decided to provide interested persons with an opportunity to file their comments and any information they believe would be useful to us in considering the issues Congress has asked us to address. This

action is prompted by the fact that we have already received expressions of interest or requests for an opportunity to comment from air carriers and travel agent groups.

Congress has directed that we, in close cooperation with the Department of Justice, should investigate the following:

1. Lease costs to travel agents and any conditions of the lease which may inhibit competition;

2. Charges to other airlines in order to co-host the system with the airline which offers the system for lease; whether these charges discriminate against other airlines; and whether these charges are designed to inhibit competition and violate anti-trust laws; and

3. The display of the schedules and the fares of those air carriers which co-host the system and those carriers which do not host the system and whether these displays unfairly discriminate against either of those class of carriers.

Interested persons may submit any information they believe will be useful to us in preparing our report, as well as concise argument on the issues. Whenever possible, parties should attempt to support arguments with specific facts to support their views on the competitive consequences of various computer reservations systems. However, we do not believe it would be useful for parties to submit voluminous documentation that would be of marginal benefit.

Interested persons should submit their comments by January 28, 1983. We cannot guarantee that comments or reply comments received after that day will be considered. Finally, we have not, by providing an opportunity for public input created a formal proceeding, subject to either the adjudicative or rulemaking requirements of our procedural rules.

Accordingly

1. Interested persons are directed to file in Docket 41207, their comments on the issues set forth above, by January 28, 1983; and

2. This order shall be published in the **Federal Register.**

By the Civil Aeronautics Board.

Phyllis T. Kaylor,

Secretary.

[FR Doc. 83-1106 Filed 1-13-83; 8:45 am]

BILLING CODE 6320-01-M

[Docket 40915; Order 83-1-28]

Pan American World Airways, Inc. et al.; Order

Adopted by the Civil Aeronautics Board at its office in Washington, D.C. on the 10th day of January, 1983.

On August 11, 1982, Pan American World Airways, Inc. (Pan Am) filed a complaint against British Airways (BA). The complaint stated that BA had adopted discriminatory policies against Pan Am by requiring Pan Am to pay prorates for beyond-London European interline traffic substantially higher than the prorates BA applies to all other carriers for the same transportation. Pan Am argued that this discriminatory policy of BA warranted relief under sections 9 [1] and 23 [2] of the International Air Transportation Competition Act of 1979, and it requested that we suspend BA's tariffs offering through fares beyond London.

On December 30, 1982, Pan Am filed a motion requesting dismissal of its complaint. In support of its motion, Pan Am states that it has reached agreement with British Airways on the division of interline revenues from Pan Am-BA connecting services between the United States and Europe commencing December 15, 1982. Pan Am adds that the interruption of its transatlantic sales on BA has been halted and that these sales have resumed. Pan Am says finally that it regards its agreement with BA as a negotiated settlement of the issues raised in its complaint and that it does not wish to pursue its remedies under the Federal Aviation Act or the International Air Transportation Fair Competitive Practices Act.

We shall grant Pan Am's motion to dismiss.[3] We have previously deferred action in this proceeding in order to provide the parties an opportunity to resolve the issues raised by the complaint through negotiations.[4] A negotiated settlement has been achieved and Pan American no longer seeks the imposition of sanctions. In these circumstances, the public interest is best served by terminating this proceeding. Consequently, we conclude that dismissal is consistent with the public interest.

Accordingly,

1. We dismiss the complaint of Pan American World Airways, Inc. in Docket 40915;

2. We reserve the right to amend or revoke this order at any time without hearing; and

3. We shall serve this order upon Pan American World Airways, Inc.; British Airways; Trans World Airlines, Inc.; the Ambassador of the United Kingdom in Washington, D.C.; and the United States Departments of State and Transportation.

We shall publish this order in the **Federal Register.**

By the Civil Aeronautics Board.

Phyllis T. Kaylor,

Secretary.

[FR Doc. 83-1107 Filed 1-13-83; 8:45 am]

BILLING CODE 6320-01-M

[1] Section 402(f) of the Federal Aviation Act of 1958, as amended.

[2] Section 2 of the International Air Transportation Fair Competitive Practices Act of 1974, as amended.

[3] Since we do not regard our action as prejudicial to any party, we are acting on Pan Am's motion without awaiting the prescribed period for answers.

[4] Orders 82-12-51, 82-11-55, and 82-10-44.

DEPARTMENT OF COMMERCE

International Trade Administration

Harvard University et al.; Consolidated Decision on Applications for Duty-Free Entry of Scientific Articles

Correction

In FR Doc. 83-504 beginning on page 853, in the issue of Friday, January 7, 1983, on page 854, in the first column, the last paragraph, the first line should read "Docket No. 82-00014. Applicant:".

BILLING CODE 1505-01-M

[A-425-077, A-427-078, A-428-082]

Sugar From France, Belgium, and the Federal Republic of Germany; Final Results of Administrative Review of Antidumping Finding

AGENCY: International Trade Administration, Commerce.

ACTION: Notice of final results of administrative review of antidumping finding.

SUMMARY: On November 10, 1982, the Department of Commerce published the preliminary results of its administrative review of the antidumping finding on sugar from France, Belgium, and the Federal Republic of Germany. The review covered the thirteen known exporters and third-country resellers of this merchandise to the United States and the period June 1, 1981 through May 31, 1982. There were no known shipments of this merchandise to the United States during the period and there are no known unliquidated entries.

Interested parties were given an opportunity to submit oral or written comments on the preliminary results. We received no comments. On the basis of our review, the final results of the

review are the same as those contained in the preliminary results.

EFFECTIVE DATE: January 14, 1983.

FOR FURTHER INFORMATION CONTACT: Arthur N. DuBois or Susan Crawford, Office of Compliance, International Trade Administration, U.S. Department of Commerce, Washington, D.C. 20230, telephone: (202) 377-3601.

SUPPLEMENTARY INFORMATION:

Background

On June 13, 1979, the Treasury Department published in the **Federal Register** a dumping finding with respect to sugar from France, Belgium, and the Federal Republic of Germany (T.D. 79-167, 44 FR 33878). On November 10, 1982, the Department of Commerce ("the Department") published in the **Federal Register** (47 FR 50936) the preliminary results of its last administrative review of the finding. The Department has now completed that review.

Scope of the Review

Imports coverd by the review are shipments of sugar, both raw and refined, currently classifiable under item numbers 155.2025, 155.2045, and 155.3000 of the Tariff Schedules of the United States Annotated.

The review covers the thirteen known exporters and third-country resellers of French, Belgian, and West German sugar to the United States and the period June 1, 1981 through May 31, 1982. There were no known shipments of this merchandise to the United States during the period and there are no known unliquidated entries.

Final Results of the Review

Interested parties were invited to comment on the preliminary results. The Department received no written comments or requests for disclosure or a hearing. On the basis of our review, the final results of the review are the same as those presented in the preliminary results of review.

As provided for in § 353.48(b) of the Commerce Regulations, a cash deposit of estimated antidumping duties of 102 percent, 103 percent, and 121 percent shall be required on all shipments of French, Belgian, and West German sugar, respectively, entered, or withdrawn from warehouse, for consumption on or after the date of publication of this notice. These deposit requirements shall remain in effect until publication of the final results of our next administrative review. The Department intends to conduct the next administrative review by the end of June 1984. The Department encourages interested parties to review the public record and submit applications for protective orders, if desired, as early as possible after the Department's receipt of the information during the next administrative review.

This administrative review and notice are in accordance with section 751(a)(1) of the Tariff Act of 1930 (19 U.S.C. 1675 (a)(1)) and § 353.53 of the Commerce Regulations (19 CFR 353.53).

Gary N. Horlick,

Deputy Assistant Secretary for Import Administration.

January 10, 1983.

[FR Doc. 83-1061 Filed 1-13-83; 8:45 am]

BILLING CODE 3510-25-M

Office of the Secretary

Agency Forms Under Review by the Office of Management and Budget (OMB)

DOC has submitted to OMB for clearance the following proposals for the collection of information under the provisions of the Paperwork Reduction Act (44 U.S.C. Chapter 35).

Agency: Bureau of the Census.
Title: Questionnaire for Building Permit Official.
Form Number: Agency—SOC-903; OMB—0607-0125.
Type of Request: Revision.
Burden: 850 respondents; 212 reporting hours.
Needs and Uses: Through the use of this questionnaire, Census field interviewers obtain information on operating procedures from building permit offices selected for the Surveys of Construction (SOC). This information enables the interviewers to knowledgeably review and list building permits in a manner compatible with data submitted to Census on Form C404, "Report of Building Permits Issued and Local Public Construction." Information collected is used to execute SOC and is not tabulated or published.
Affected Public: Local government building permit officials.
Frequency: Other.
Respondent's Obligation: Voluntary.
OMB Desk Officer: Timothy Sprehe, 395-4814.

Agency: Bureau of the Census.
Title: 1982 Census of Manufactures Supplemental Form Textile Machinery in Place.
Form Number: Agency—MC-22Z.
Type of Request: New.
Burden: 5,500 respondents; 5,500 reporting hours.
Needs and Uses: This survey provides the only information on textile machinery in place in factories. Data are used to monitor the modernization of textile plants, to determine current capacity, to analyze and forecast long-term changes in textile product and textile machinery industries, and to study the effect of imports.
Affected Public: Textile manufacturers.
Frequency: Nonrecurring.
Respondent's Obligation: Mandatory.
OMB Desk Officer: Timothy Sprehe, 395-4814.

Agency: Bureau of the Census.
Title: Housing Unit Coverage Studies/Duplicative Check—1980 Decennial Census Evaluation.
Form Number(s): Agency—D-8101; OMB—0607-0365.
Type of Request: New.
Burden: 675 respondents; 115 reporting hours.
Needs and Uses: The Duplicate Check Followup Study will provide national and regional estimates of the rate at which occupied housing units were overenumerated in the 1980 Decennial Census.
Affected Public: Persons occupying, or knowledgeable of, housing units identified as possible duplicates in the 1980 Decennial Census.
Frequency: Nonrecurring.
Respondent's Obligation: Mandatory.
OMB Desk Officer: Timothy Sprehe, 395-4814.

Agency: Bureau of the Census.
Title: Survey of Income and Program Participation (Pretest-Wave 2).
Form Number(s): Agency—4200X; OMB—None.
Type of Request: New.
Burden: 300 respondents; 100 reporting hours.
Needs and Uses: Information collected will be used to determine the distribution of income received directly as money or indirectly as in-kind benefits, and the effect of tax and transfer programs on this distribution. The survey is designed to provide data on a continuing basis so that levels of economic well-being and changes in these levels can be measured over time.
Affected Public: Households in the city of Atlanta, Georgia.
Frequency: Other (Pretest).
Respondent's Obligation: Voluntary.
OMB Desk Officer: Timothy Sprehe, 395-4814.

Agency: Bureau of the Census.
Title: Men's, Women's, Misses', and Juniors' Selected Apparel.
Form Number(s): Agency—M23I; OMB—None.
Type of Request: New.
Burden: 900 respondents; 2,700 reporting hours.

Needs and Uses: Data will be used by industry and government analysts to monitor the effect of imports on the domestic apparel industry. The numerous bilateral agreements in effect and the Multifiber Arrangement limit imports if market disruptions occur, and these monthly data will be used to determine if there are market disruptions.

Affected Public: Manufacturers and jobbers of men's and women's apparel.

Frequency: Monthly.

Respondent's Obligation: Voluntary.

OMB Desk Officer: Timothy Sprehe, 395-4814.

Agency: Bureau of the Census.

Title: Current Trade Report.

Form Number(s): Agency—B-300(SR); OMB—0607-0190.

Type of Request: Revision.

Burden: 33,600 responses; 5,040 reporting hours.

Needs and Uses: The Monthly Wholesale Trade Survey is used to measure monthly wholesale sales, inventory and stock/sales ratios. Information received by the Bureau of the Census indicates that the data have significant application to the needs of the public and other government agencies.

Affected Public: Merchant wholesalers.

Frequency: Monthly.

Respondent's Obligation: Voluntary.

OMB Desk Officer: Timothy Sprehe, 395-4814.

Agency: Bureau of the Census.

Title: Business and Professional Classification Report.

Form Number(s): Agency—B-625; OMB—0607-0189.

Burden: 44,500 respondents; 11,125 reporting hours.

Needs and Uses: This form is used to canvas firms which have been assigned Federal employer identification (EI) numbers. Using this procedure the monthly retail and wholesale surveys and the annual survey are updated for new firms entering business.

Affected Public: Business and professional firms obtaining new EI numbers.

Frequency: Nonrecurring.

Respondent's Obligation: Voluntary.

OMB Desk Officer: Timothy Sprehe, 395-4814.

Agency: Bureau of the Census.

Title: 1982 Census of Agriculture Nonrespondent Sample Survey.

Form Number(s): Agency—82-A-46; OMB—None.

Type of Request: New.

Burden: 10,000 respondents; 2,000 reporting hours.

Needs and Uses: The nonrespondent sample survey will be used to provide state estimates of the number of forms included in the mail list nonresponse universe for the 1982 Census of Agriculture. The estimates will be used in the nonrespondent adjustment procedure to adjust state and county statistics to represent the nonrespondent farms.

Affected Public: Farm and ranch operators and persons associated with agriculture.

Frequency: Nonrecurring.

Respondent's Obligation: Mandatory.

OMB Desk Officer: Timothy Sprehe, 395-4814.

Agency: National Oceanic and Atmospheric Administration.

Title: Fishermen's Guaranty Fund.

Form Number(s): Agency—NOAA 88-25; OMB—0648-0095.

Type of Request: Extension.

Burden: 250 respondents, 1,000 reporting hours.

Needs and Uses: This information is used to establish a Guaranty Agreement, and when a claim is filed pursuant to the Agreement, to establish the amount of compensation to U.S. commercial fishermen whose gear, vessel and/or catch was seized by a foreign government under specific circumstances.

Affected Public: U.S. commercial fishermen.

Frequency: On occasion.

Respondent's Obligation: Required to obtain or retain benefit.

OMB Desk Officer: Ken Allen, 395-3785.

Copies of the above information collection proposals can be obtained by calling or writing DOC Clearance Officer, Edward Michals (202) 377-4217, Department of Commerce, Room 6622, 14th and Constitution Avenue, NW., Washington, D.C. 20230.

Written comments and recommendations for the proposed information collections should be sent to the respective OMB Desk Officer, Room 3235, New Executive Office Building, Washington, D.C. 20503.

Edward Michals,

Departmental Clearance Officer.

[FR Doc. 83-1100 Filed 1-13-83; 8:45 am]

BILLING CODE 3510-CW-M

COMMITTEE FOR THE IMPLEMENTATION OF TEXTILE AGREEMENTS

Exempting Down and Feather-Filled Apparel Produced or Manufactured in Thailand From the Export Visa Requirement

January 11, 1983.

AGENCY: Committee for the Implementation of Textile Agreements.

ACTION: Exempting until further notice cotton and man-made fiber down and feather-filled apparel in Categories 353, 354, 653, and 654, produced or manufactured in Thailand, from the export visa requirement which became effective on December 1, 1982 for goods exported on and after that date. A description of the textile categories in terms of T.S.U.S.A. numbers was published in the **Federal Register** on December 13, 1982 (47 FR 55709).

SUMMARY: The Bilateral Cotton, Wool, and Man-Made Fiber Textile Agreement of October 4, 1978, as amended and extended, between the Governments of the United States and Thailand, does not include coverage of down and feather-filled apparel in Categories 353, 354, 653, and 654; therefore, export visas should not be required for these goods until such time as they are subject to the agreement.

EFFECTIVE DATE: January 14, 1983.

FOR FURTHER INFORMATION CONTACT: Gordana Slijepcevic, International Trade Specialist, Office of Textiles and Apparel, U.S. Department of Commerce, Washington, D.C. 20230 (202/377-4212).

SUPPLEMENTARY INFORMATION: On October 20, 1982 a notice dated October 14, 1982 was published in the Federal **Register** (47 FR 46732), which established an export visa requirement for cotton, wool, and man-made fiber textile and apparel products in Categories 300-369, 400-469, and 600-669, produced or manufactured in Thailand exported on and after December 1, 1982. Down and feather-filled apparel of cotton and man-made fibers in Categories 353, 354, 653, and 654 are not covered by the existing bilateral agreement and should be exempt from the visa requirement. Accordingly, in the letter published below, the Chairman of the Committee for the Implementation of Textile Agreements directs the Commissioner of Customs to exempt apparel products in

these categories from the export visa requirement until further notice.

Paul T. O'Day,

Acting Chairman, Committee for the Implementation of Textile Agreements.

Commissioner of Customs,

Department of the Treasury, Washington, D.C.

Dear Mr. Commissioner: This letter amends, but does not cancel, the directive of October 14, 1982, which established an export visa requirement for cotton, wool, and man-made fiber textile products in Categories 300–369, 400–469, and 600–669, produced or manufactured in Thailand and exported on and after December 1, 1982.

Effective on January 14, 1983 and until further notice, export visas shall not be required for cotton and man-made fiber textile products in Categories 353, 354, 653 and 654, produced or manufactured in Thailand, regardless of the date of export.

A description of the textile categories in terms of T.S.U.S.A. numbers was published in the **Federal Register** on December 13, 1982 (47 FR 55709).

The actions taken with respect to the Government of Thailand and with respect to imports of cotton and man-made fiber textile products from Thailand have been determined by the Committee for the Implementation of Textile Agreements to involve foreign affairs functions of the United States. Therefore, these directions to the Commissioner of Customs, which are necessary for the implementation of such actions, fall within the foreign affairs exception to the rule-making provisions of 5 U.S.C. 553. This letter will be published in the **Federal Register.**

Sincerely,

Paul T. O'Day,

Acting Chairman, Committee for the Implementation of Textile Agreements.

[FR Doc. 83-1101 Filed 1-13-83; 8:45 am]

BILLING CODE 3510-25-M

DEPARTMENT OF DEFENSE

Foreign Assistance: Determination

Pursuant to section 515(c)(1) of the Foreign Assistance Act of 1961 relating to overseas management of assistance and sales programs, and in accordance with the authority delegated by Executive Order 12163 and redelegated on February 12 and February 24, 1972, to the Director, Defense Security Assistance Agency, Philip C. Gast, Lieutenant General, USAF, Director, Defense Security Assistance Agency, has determined that United States national interests require that more than six members of the Armed Forces be assigned under section 515 of that Act to carry out international security assistance programs in El Salvador, and therefore waives the limitation that the number of members of the Armed Force assigned to a foreign country under section 515 of that Act may not exceed six unless specifically authorized by the Congress.

The increase from six to eleven in the total number of military personnel authorized for the United States Military Group (USMILGP), El Salvador, shall be effective 30 days after the date on which this determination is reported to the Committee on Foreign Relations of the Senate and the Committee on Foreign Affairs of the House of Representatives.

Dated: January 7, 1983.

M. S. Healy,

OSD Federal Register Liaison Officer, Department of Defense.

[FR Doc. 83-1051 Filed 1-13-83; 8:45 am]

BILLING CODE 3810-01-M

DEPARTMENT OF EDUCATION

Office for Civil Rights

Final Annual Operating Plan for Fiscal Year 1983

AGENCY: Department of Education.

ACTION: Notice of final annual operating plan for fiscal year 1983.

SUMMARY: The Office for Civil Rights (OCR) issues its Annual Operating Plan (AOP) for Fiscal Year 1983. The AOP describes the activities that OCR plans to conduct in FY 1983 with respect to compliance and enforcement, technical assistance, and program management.

FOR FURTHER INFORMATION CONTACT: Thomas E. Esterly, Acting Director, Planning and Compliance Operations Service, Office for Civil Rights, Department of Education, (RM. 5074, Switzer Bldg.), 400 Maryland Avenue, SW., Washington, D.C. 20202. Telephone: (202) 245-0301.

SUPPLEMENTARY INFORMATION: The proposed Annual Operating Plan (AOP) for the Office for Civil Rights (OCR) for FY 1983 was published in the **Federal Register** on October 19, 1982, (47 FR 46561–46565) with invitation to comment. A summary of the comments received and the Secretary's response to those comments is included below.

Comment. OCR should include, in its AOP, projections for the allocations of its resources during FY 1983.

Response. No change is made. In the most recent AOPs, OCR included projections for the use of its investigative staff which were not accurate in forecasting the actual use of resources. It is apparent that unpredictable factors, such as court decisions and public awareness, have such an impact on OCR's complaint workload that forecasting, in a national document, assignments of investigative staff time to accomplish specific activities has not proven to be a useful OCR management tool. This year, for that reason, OCR decided not to include projections in the AOP. OCR's compliance program is coordinated by the Assistant Secretary for Civil Rights and integrates regional activities into a national program.

Comment. To assure consistency in policy implementation and general effectiveness in the management of OCR's compliance program, OCR should set standards for regional performance and should then monitor regional adherence to the standards. These standards and systems for evaluating regional performance should be discussed in the AOP.

Response. No change is necessary. The Assistant Secretary for Civil Rights recognizes the importance of ensuring the consistency of policy implementation and general effectiveness of the OCR compliance program. For this reason, he has issued criteria for compliance review site nominations by the Regional Directors. As noted in the proposed AOP, the Assistant Secretary will monitor and evaluate regional implementation of their responsibilities. OCR's management information system has been improved to include tracking regional implementation of such compliance program initiatives as predetermination settlements and Early Complaint Resolution. Caseloads, time frames, and measurements of productivity will continue to be tracked and evaluated. The quality of case work will continue to be evaluated by the Quality Assurance unit.

Comment. OCR needs to prepare regional office staff for increased responsibilities in the OCR compliance program.

Response. No chance is necessary. The training of OCR's investigative staff is an on-going activity, as noted in the proposed AOP. OCR believes that the combination of training, policy guidance and operations standards that is being provided to the regional OCR offices by the Assistant Secretary for Civil Rights is the appropriate preparation for the expanded regional role.

Comment. The proposed AOP deceives the public by making false statements about its resources. Specifically, the AOP's statement that the activities planned for FY 1983 are "consistent with the FY 1983 budget request as it exists at the time this plan is being prepared" is false.

Response. No change is necessary. The statement regarding OCR's resources is accurate. Under the Federal budget system, all Federal agencies

propose and negotiate their operating budgets. The commenter noted disparities in OCR's budget request by referencing documents prepared at different stages and different time periods in the budget process (i.e., contrasting OCR's original proposal and the proposal after review and clearance by the Office of Management and Budget). OCR's FY 1983 AOP is consistent with the agency's official budget *request* made to Congress and is consistent with P.L. 97-377 under which OCR is presently operating.

Comment. Inconsistent with OCR's FY 1983 budget and its discussion of the budget in the AOP, OCR's staff is declining and not being replaced. The authorized level is 1026 and the November 1982 on-board staff was 943.

Response. No change is necessary. It is true that the November full time permanent staff level in OCR was 943. The 1026 was the *requested* full time permanent staffing for FY 1983 contained in the request made to Congress. OCR developed this AOP consistent with the request made to Congress.

Comment. The proposed AOP fails to mention case-processing time frames contained in the 1977 *Adams* Consent Order.

Response. No change is necessary. The AOP includes the statement "As in previous years, each regional OCR director will be responsible for timely fulfillment of OCR's obligations in complaint investigations and compliance reviews." This commitment is meant to include fulfillment of the order, as well as all of OCR's obligations regarding its compliance program.

Comment. If OCR's pre-determination settlements are to follow the requirements set forth by the Assistant Secretary for Civil Rights in a July 1982 memorandum to the 10 regional OCR directors, then the final FY 1983 AOP should reference this guidance.

Response. No change is necessary. The July 1982 directive represents OCR's procedures for pre-determination settlements. Specifically, all letters of findings to recipients will state the violation(s) and the corrective action(s) being taken.

Comment. Pre-determination settlements should include the complainant in the negotiations and settlement.

Response. No change is necessary. In all settlements, pre- and post-determination, OCR's purpose is to negotiate settlements that remedy discrimination and ensure that a violation of a Federal civil rights law has been corrected. To the extent that a complainant can help OCR achieve this purpose, his/her assistance and cooperation are welcomed.

Comment. Pre-determination settlements shift the emphasis from the elimination of discrimination to settlement.

Response. No change is necessary. As stated in the proposed AOP, pre-determination settlements will meet statutory requirements. That is, as in the past, when recipients of Federal financial assistance are found in violation of the statutes OCR enforces, the violation must be corrected for the recipient to continue to receive the Federal assistance.

Comment. OCR should be prepared to issue a cause letter of findings (LOF) if pre-determination negotiations fail.

Response. No change is necessary. OCR follows its procedures for investigating and documenting findings for those cases where pre-determination settlements are being attempted. Therefore, OCR will issue an LOF if the pre-determination negotiations fail.

Comment. The assessment of Early Complaint Resolution (ECR) included in the proposed AOP was based on too small a sample to anticipate that it will improve OCR's handling of cases.

Response. No change is necessary. The numbers included in the proposed AOP regarding ECR were taken from the first three months of implementing ECR and, as such, do reflect a small sample. Nevertheless, OCR expects that the use of ECR will continue to expand and will improve its handling of cases.

Comment. OCR limits its discussion of monitoring activities to the implementation of pre-determination settlements. OCR needs to monitor remedial action plans as well.

Response. No change is necessary. The proposed AOP does explain that OCR will be monitoring remedial action plans and lists two examples: *Adams* Higher Education (for approximately 260 institutions) and approximately 50 Title VI *Lau* plans.

Comment. While the proposed AOP states that OCR's management program includes conducting surveys and date collection, it does not specify what surveys will be pursued.

Response. No change is necessary. Annual data collection will be continued in FY 1983 for monitoring implementation of statewide higher education desegregation and for monitoring compliance activities in the big city school district (New York City). There is only one biennial survey, the Higher Education General Information Survey (HEGIS) of Earned Degrees (2300-2.1), that is being conducted during FY 1983. Other biennial surveys (e.g., HEGIS Student Enrollment—2300-2.3; Employment at Higher Education Institutions—EEO 6; Elementary and Secondary School Civil Rights Survey, District Summary—ED-101 and Individual School Report—ED-102) are conducted during even-numbered fiscal years.

Comment. For FY 1983, OCR proposes to drop school segregation from its list of compliance review issues and add a new issue regarding within school district comparability—discriminatory delivery of services. These changes suggest a willingness to tolerate "separate-but-equal" schools.

Response. A change is made. It certainly was not OCR's intention to indicate a willingness to tolerate "separate-but-equal" schools. As clarified in Table 2 of the final AOP, it is OCR's intention to expand its review of school districts with disproportionately minority schools beyond a veview for illegal segregation. Under the new issue, there will be an initial inquiry to determine if a district's disproportionate minority schools are the product of unlawful segregation. If no illegal segregation exists, then the issue of equal educational opportunity will be investigated.

Comment. The proposed AOP limited the compliance review issues regarding employment to sex discrimination. Please explain why race and disability employment discrimination were excluded from the issue.

Response. A change is made. Table 2 of the final AOP has been revised to include discrimination based on race, national origin, and/or handicap in the compliance review issues regarding employment.

Comment. OCR had included postsecondary intercollegiate athletics reviews to tis proposed compliance reviews issues for FY 1983. OCR is urged to resolve the 223 intercollegiate athletics compliants pending as of June 30, 1982, prior to initiating compliance reviews on that issue.

Response. No change is necessary. It is OCR's intention, in those regions when there are pending intercollegiate complaints, to resolve the complaints first. The number 223 cited in the comment is incorrect. There were 60 intercollegiate athletic complaints pending as of June 30, 1982.

Comment. Commenters, particularly at the State and local levels, complimented OCR for its proposed technical assistance program. There were other comments, however, which stated that OCR, through its technical assistance activities, is seeking to devolve itself of its enforcement

responsibilities under the civil rights statutes in favor of State and local action.

Response. No change is necessary. OCR believes that through improved technical assistance activities it can strengthen civil rights compliance activities at the State and local levels, not weaken them at the Federal level. OCR, in its coordination with State agencies, has no intention of transferring its enforcement responsibilities. The cooperative activities between OCR and State authorities referred to in the AOP concern sharing information, collaborative technical assistance activities where State and Federal statutes are similar, joint compliance reviews of Education Department (ED) recipients, sharing data for monitoring purposes, lessening duplication of effort, and reducing the time it takes to remedy discrimination.

Comment. The AOP should delineate how OCR will coordinate the delivery of technical assistance with other providers of civil rights technical assistance within the Education Department.

Response. A change is made. The final AOP states that OCR will coordinate its delivery of technical assistance with other agencies within the Education Department which provide civil rights technical assistance. OCR has underway coordination discussions with these agencies.

Comment. OCR is placing greater emphasis on technical assistance, yet its resources for providing both contract and non-contract technical assistance have diminished. OCR's intention to use enforcement staff to provide technical assistance will adversely affect compliance and monitoring activities.

Response. No change is necessary. The number of complaints received by OCR is not within OCR's control. To the extent that OCR receives many complaints, there will be fewer resources available for technical assistance. The Assistance Secretary for Civil Rights recognizes the importance of technical assistance and is committed to provide as much technical assistance as possible, based on OCR's complaint demand.

Comment. The AOP should indicate what proportion of resources will go to technical assistance.

Response. No change is necessary. The proposed AOP does indicate that, on average, a regional office will devote seven percent of its staff resources to technical assistance activities and that the major portion of these activities will address the same issues covered by compliance reviews and identified in Table 2. Beyond this, each regional office will have the flexibility and commensurate responsibility to serve the specific needs of the beneficiaries and recipient institutions located within its geographic area. Often, these specific needs are not identified until a request for technical assistance is made or a complaint investigation or compliance review is conducted.

Comment. Expanding the State role in civil rights enforcement is premature when OCR has done little to assure the success of the one existing Federally imposed State civil rights compliance program, implementation of the States' Methods of Administration (MOA) for enforcing the 1979 OCR guidelines for vocational education.

Response. No change is necessary. OCR has taken important steps to assure that the MOA process for vocational education is working. Teams from all 50 States and four territories have been trained to conduct desk audits and compliance reviews and have been provided compliance manuals detailing proper investigative procedures. Regional OCR staff have conducted on-site reviews to determine whether State and territorial agencies have satisfactorily implemented the commitments made in their MOAs.

Comment. OCR has included compliance reviews of vocational education subrecipients under the heading of "Monitoring Activities" when this is clearly a compliance review issue and is so listed in Table 2.

Response. No change is necessary. The statement under "monitoring Activities" concerning vocational education refers to OCR's evaluating the performance of the 50 States and four territories in implementing the civil rights commitments made in their individual Methods of Administration. The inclusion of vocational education in Table 2 indicates that this is one of the issues OCR will consider for compliance reviews conducted by OCR regional staff.

Comment. Identification of States with laws substantially equivalent to Federal civil rights laws and with the capacity to undertake civil rights compliance activities was already done in the SRI International Report, *Finding the Common Demoninator: The Capacity of State Agencies to Assist the HEW Office for Civil Rights*, September 1979.

Response. A change is made. The SRI report contained general references to some States which appear to have statutes similar to the Federal statutes OCR enforces. However, since it was not the purpose of the report, there was no legal review of the substantial equivalence of those State Laws. As revised in the the final AOP, OCR is no longer considering for FY 1983 the option related to identifying State civil rights laws that are substantially equivalent to Federal laws.

Comment. The AOP should identify the compliance issues on which OCR is prepared to provide technical assistance and any plans to develop these capabilities in FY 1983.

Response. No change is necessary. As noted in the proposed AOP, during FY 1983, OCR will be prepared to provide technical assistance on the compliance issues listed in Table 2.

Comment. More emphasis should be placed on providing technical assistance on sex discrimination and double and triple discrimination encountered by minority and handicapped women.

Response. No change is necessary. A goal in OCR's FY 1983 technical assistance program is to expand the program to include Titles VI and IX issues. This already has been accomplished in several regions on a limited basis. The expansion into Titles VI and IX issues will enable double and triple discrimination to be addressed more fully.

I. Introduction

The basic purpose of the Office for Civil Rights (OCR) is to ensure that no person is unlawfully discriminated against by recipients of federal education funds in the delivery of services or the provision of benefits on the basis of race, national origin, sex, handicap, or age. The jurisdictional authorities under which OCR operates include Title VI of the Civil Rights Act of 1964, Title IX of the Education Amendments of 1972, Section 504 of the Rehabilitation Act of 1973, and the Age Discrimination Act of 1975.

Covered under these authorities are 50 State education agencies, 16,000 local school systems, 3,200 colleges and universities, 10,000 proprietary institutions, 55 State rehabilitation agencies and their sub-recipients, as well as other institutions such as libraries and museums which receive financial assistance from the Department of Education (ED). The job of protecting the civil rights of 12 million minority group members, 4 million handicapped persons and 26 million women who attend elementary and secondary schools or postsecondary institutions receiving Federal financial assistance, rest almost exclusively with OCR.

OCR's strategy to ensure compliance with Federal civil rights statutes involves two basic types of activities: compliance activities and technical assistance activities. Nearly all of OCR's

compliance activities (complaint investigations, compliance reviews, Title VI *Lau* plan monitoring, and monitoring State higher education systems desegregation) are required by various statutes, regulations and court orders. OCR has discretion, however, as to where it will conduct its compliance review activities and what issues those reviews will cover. For the most part, OCR concentrates these investigative activities on those recipients, primarily identified by OCR civil rights compliance survey data, which are believed to be in noncompliance with major civil rights requirements.

OCR is unable to investigate the policies and practices of all the recipients of Federal financial assistance under its jurisdiction. Therefore, through the transfer of information, material and skills, OCR encourages recipients to comply voluntarily with the law and instructs beneficiaries of their rights under Federal civil rights statutes.

However, where voluntary compliance cannot be achieved, OCR will engage in whatever enforcement activity necessary to bring an end to the discriminatory conduct. OCR staff activities and contracted programs have been the major components used by OCR to deliver technical assistance in conjunction with the efforts of other Education Department program staff.

The following narrative and tables describe the activities that OCR plans for FY 1983.

II. Compliance and Enforcement Activities

OCR's compliance and enforcement responsibilities are divided into three general categories: Complaint investigations, compliance reviews and monitoring activities.

A. Complaint Investigations

The primary enforcement activity is the investigation and resolution of complaints alleging discrimination. Each timely, written complaint must be resolved in accordance with established procedures and time frames.

OCR received 1,840 and closed 2,267 complaints during FY 1982. Alleged discrimination against handicapped persons was the basis in approximately 47 percent of complaint receipts, with race and sex complaints following in order of frequency. The largest number of complaints was filed against elementary and secondary schools. Almost 69 percent of complaints in FY 1982 involved issues of service delivery to students; the remaining complaints involved various employment issues.

Although recent court decisions related to the statutes OCR enforces may have an impact on the number and type of complaints received during FY 1983, it is expected that the complaint workload will not vary significantly in type or number from the FY 1982 complaint workload. OCR had a pending caseload of 1,152 complaints as of September 30, 1982.

One initiative to improve OCR's handling of complaints which was implemented during FY 1982 and will be continued in FY 1983, is Early Complaint Resolution (ECR). ECR is a method for the parties themselves in a complaint to resolve the issues raised in the complaint prior to the initiation of an OCR investigation. During the first three months of implementing ECR, 95 percent of the complaints in which the parties agreed to mediation prior to an OCR investigation was resolved. The average duration for this process was 22 days.

Another initiative implemented in FY 1982 to improve OCR's case handling was the pre-determination settlement. This initiative, which is applicable to complaints and to compliance reviews, also will be continued in FY 1983. In the pre-determination settlement, OCR and the recipients of Federal assistance attempt to reach settlements in the early stages rather than waiting for the issuance of the findings. All settlement agreements resulting from this approach are confirmed in writing by the issuance of a letter to the recipient which satisfies the applicable statutory requirements and which includes all the remedies that will be implemented by the recipient. OCR then monitors the implementation of the remedies by the recipient.

B. Compliance Reviews

Compliance reviews differ from complaint investigations in that OCR has some discretion in selecting the issues and institutions for review. In FY 1982, OCR initiated compliance reviews of 208 recipients and closed 241 reviews. Table 1 shows the compliance review starts in FY 1982 by issue. The number of compliance reviews initiated in FY 1982 greatly exceeded the projections in the FY 1982 Annual Operating Plan (AOP). The FY 1982 AOP assumed there would be 72 compliance review starts during FY 1982. At the end of FY 1982, 136 compliance reviews were carried over into FY 1983.

For FY 1983, OCR will broaden its listing of compliance review issues to asure that the widest coverage against the various types of discrimination will be provided. Table 2 shows the general issues to be included in the FY 1983 compliance review program and provides a brief description of the issues. OCR relies on survey data and other available information in selecting the sites for compliance reviews. The ability to select the issues and the sites for compliance reviews enables OCR to balance the compliance program by jurisdiction and geographically, and to identify and then remedy discrimination that may not be addressed through complaints.

Because of the varied civil rights needs throughout the country, each of the 10 regional offices will develop and submit to the Assistant Secretary for Civil Rights for approval its own compliance review program for FY 1983.

C. Monitoring Activities

In FY 1983, OCR will increase its monitoring of remedies or corrective actions being taken by recipients. As explained above, OCR monitors the implementation of pre-determination settlements and evaluates the results.

OCR will pursue other monitoring activities in FY 1983 which include reviewing the compliance activities of 56 States and four territories concerning the civil rights compliance of their vocational education sub-recipients.

OCR also monitors the implementation of remedial plans by recipients found in violation of the civil rights laws. This type of monitoring includes *Adams* higher education desegregation and *Lau* plan monitoring.

- *Adams* Higher Education Desegregation Plan Monitoring—in FY 1983 OCR will be monitoring implementation of higher education desegregation plans by approximately 260 institutions of higher education in 11 States.
- Title VI *Lau* Plan Monitoring—OCR is required to monitor the implementation of Title VI *Lau* plans by recipients. In FY 1983, OCR will be monitoring implementation of approximately 50 Title VI *Lau* plans.

III. Technical Assistance Activities

Over 20,000 education institutions which receive Federal financial assistance must comply with a number of complex civil rights requirements. Because of the number of recipient institutions involved, OCR is unable to investigate the policies or practices of each recipient.

The role of the Federal Government in enforcing civil rights can be greatly enhanced through efforts to assist and support State and local governments and other ED recipients in achieving compliance. Technical assistance is, therefore, vital.

This approach allows OCR not only to reach those recipients that may be subject to a complaint investigation or a compliance review but also allows OCR to address specific problem areas that may be of concern to a number of institutions and assist them in a very positive way to comply with the law.

OCR has developed a number of programs to increase the amount and impact of technical assistance provided. The major portion of these technical assistance activities will address the same issues covered by compliance reviews.

In FY 1983, OCR will explore ways to increase the involvement of States in civil rights compliance activities. To this end, OCR will undertake the following activities:

• Work with State education and human rights agencies responsible for compliance and enforcement to explore cooperative activities that will reduce duplicative efforts and improve OCR's efficiency.

• Promote cost-effective voluntary compliance by close coordination of OCR's technical assistance activities with those of other ED agencies delivering civil rights technical assistance.

• Design its technical assistance training program to increase the States' and local education agencies' (LEAs) capacity to undertake civil rights activities.

Technical assistance training topics are identified through analyses of OCR and other data and through consultations with staff of other ED program offices. ED recipient and beneficiary groups are also consulted. To date, OCR has provided technical assistance primarily through workshops and through the development and distribution of technical assistance materials. During FY 1983, OCR will increase its outreach activities to ED recipient and beneficiary groups, both to identify technical assistance needs and to identify new techniques for providing technical assistance. OCR's regional staff will continue to provide technical assistance initiatives that reflect unique regional characteristics, priorities and resources. In providing this assistance, each Regional Technical Assistance Staff (RTAS) combines workshops and on-site consultations with telephone and written responses to address recipient and beneficiary needs for assistance. Other OCR technical assistance outreach activities will involve collecting and disseminating published information about model solutions to civil rights problems.

IV. Program Management Activities

In order to carry out effectively its compliance, enforcement and technical assistance activities, OCR conducts a comprehensive legal, management and evaluation program that includes:

—Formulating regulations, policies and investigation manuals;

—Providing technical guidance on complaints and compliance reviews referred from regional offices;

—Conducting hearings before Administrative Law Judges on the compliance of Federal financial recipients with civil rights requirements;

—Meeting with school district representatives, college and university officials, complainants and civil rights groups to discuss OCR activities;

—Conducting OCR surveys and data collection projects to obtain information on recipients and beneficiary populations;

—Operating a data base management system to assure that complaint and compliance review processing time frames are met;

—Providing training to imvestigators and legal staff;

—Coordinating the delivery of Title VI and Title IX technical assistance to State education agencies (SEAs) and local education agencies (LEAs) with Title IV-funded providers;

—Conducting systematic on-site reviews of technical assistance contractors' activities; and

—Directing and monitoring the implementation of Regional Technical Assistance workplans.

V. Summary

The planning for OCR's FY 1983 compliance, enforcement and technical assistance program will become more regionally focused than in FY 1982. As in previous years, each Regional Director will be responsible for timely fulfilment of OCR's obligations in complaint investigations and compliance reviews. In addition, in FY 1983, under the guidance of the Assistant Secretary for Civil Rights, the OCR Regional Director will have a continuing role in planning the region's overall program. This program, primarily through nominating compliance review sites for approval by the Assistant Secretary for Civil Rights and through providing technical assistance, will reflect a balance in the commitment of OCR resources to each of the civil rights jurisdictions and in the geographic area serviced by a regional office.

Table 3 presents a national profile of OCR's 10 regional offices, by general functions and the approximate percentage of full-time equivalency (FTE) staff assigned to the functions. Regional variations from the national profile will be influenced by such considerations as the number of complaints involving elementary/secondary institutions as contrasted to complaints involving postsecondary institutions or the number of requests for technical assistance by recipients. It may be, therefore, that no two regional compliance programs will be identical or will replicate OCR's national profile.

In FY 1983, the Assistant Secretary will monitor each region's compliance program to ensure its efficiency and effectiveness in implementing OCR's national program.

TABLE 1.—COMPLIANCE REVIEW STARTS BY ISSUE OCT. 1, 1981, TO SEPT. 30, 1982

Elementary and secondary	Review starts
Issues	
Within School Discrimination	54
Vocational Education	23
Special Purpose Schools	7
Unserved Special Education	28
School Segregation	1
Services to LEP children	11
Joint Issue: Vocational Education and Unserved Special Education	2
Joint Issue: Within School Discrimination and Unserved Special Education	1
Postsecondary Issues	
Program Accessibility	12
Graduate Admissions	25
Vocational Education	28
Student Services	16

TABLE 2.—FISCAL YEAR 1983 COMPLIANCE REVIEW ISSUES

(Elementary and Secondary Education)

Issue	Issue description
Within School Discrimination: Classroom Assignments, Tracking and Ability Grouping, Special and Physical Education and Secondary School Athletics.	Discriminatory assignment of students on the basis of race, national origin, sex and/or handicap to courses (including industrial arts and home economics), classrooms, special programs, ability groups, and physical education programs. (Special programs would include those for the educable mentally retarded as well as those for the gifted or talented, e.g., advanced mathematics or science.) This issue also would cover biased counseling and appraisals of students as well as unequal opportunities involving athletics.
Vocational Education: Access, Admissions and Job Placement.	Discrimination on the basis of race, national origin, sex and/or handicap in vocational and education programs, courses and apprentice training.

TABLE 2.—FISCAL YEAR 1983 COMPLIANCE REVIEW ISSUES—Continued

[Elementary and Secondary Education]

Issue	Issue description
Special Purpose Schools: Placement, Referral, Program Availability and Least Restrictive Environment.	Discrimination in admissions, accessibility, programs and services, treatment or employment in State administered special purpose schools on the basis of race, national origin, sex and/or handicap.
Unserved Special Education	Discrimination in the provision of free and appropriate education on the basis of handicap.
Identification of and Services to Limited-English-Proficient (LEP) Children.	Discrimination in the provision of education services to non-English-speaking (NES) or limited-English-proficient (LEP) children.
School Discipline: Expulsions and Suspensions.	Discriminatory disciplinary treatment of students on the basis of race, national origin, sex and/or handicap.
Employment	Discrimination on the basis of race, national origin, sex and/or handicap in matters related to employment such as selection, promotion, compensation and termination.
Within District Comparability—Discriminatory Delivery of Services.	In districts having schools that are disproportionately minority, discrimination on the basis of race and national origin in the provision of educational services and benefits among schools (e.g., limited course offerings, less qualified staff). There will be an initial inquiry to determine if a district's disproportionately minority schools are the product of unlawful segregation. If no illegal segregation exists, then the issue of equal educational opportunity will be investigated.

Postsecondary Eduation

Program Accessibility for the Handicapped.	Lack of program accessibility and accommodation for handicapped students in postsecondary institution programs.
Admissions	Discrimination on the basis of sex, race and/or national origin in admissions to undergraduate, graduate and professional schools.

TABLE 2.—FISCAL YEAR 1983 COMPLIANCE REVIEW ISSUES—Continued

[Elementary and Secondary Education]

Issue	Issue description
Intercollegiate Athletics	Discrimination on the basis of sex in athletic financial assistance or athletic financial assistance and overall program comparability.
Vocational Education: Access, Admissions and Job Placement.	Discrimination on the basis of race, national origin, sex and/or handicap in vocational education programs and courses.
Student Services	Discrimination on the basis of race, national origin, sex and/or handicap as applicable in the provision of services such as financial aid, housing, special programs for minorities, counseling and tutorial services, auxiliary aids and/or student employment and placement services.
Vocational Rehabilitation Services.	Discrimination in the provision of services and benefits to individuals on the basis of handicap, sex, race and/or national origin.
Employment	Discrimination on the basis of race, national origin, sex and/or handicap in matters related to employment such as selection, promotion, compensation and termination.

TABLE Three.—NATIONAL PROFILE OF OCR REGIONAL OFFICES

Function	Approximate percentage FTE staff (percent)
Compliance and Enforcement:	
● Elementary and Secondary Education	43
● Postsecondary Education	27
● Technical Assistance	7
Compliance Support:	
● Management	4
● Administrative	7
● Legal	12

Dated: January 10, 1983.

T. H. Bell,

Secretary of Education.

[FR Doc. 83-1063 Filed 1-13-83; 8:45 am]

BILLING CODE 4000-01-M

DEPARTMENT OF ENERGY

Federal Energy Regulatory Commission

[Volume 803]

Determinations by Jurisdictional Agencies Under the Natural Gas Policy Act of 1978

Issued: January 10, 1983.

JD NO	JA DKT	API NO	D	SEC(1)	SEC(2)	WELL NAME	FIELD NAME	PROD	PURCHASER
LOUISIANA OFFICE OF CONSERVATION									
-AMOCO PRODUCTION CO			RECEIVED:	12/01/82	JA: LA				
8311825	82-3360	1706320053	107-DP			DAVIDSON-BUCKEL#1 16700 TUSC RA SUH	LOCKHART CROSSING	1825.0	SOUTHERN NATURAL
-BENNIE EVANS			RECEIVED:	12/01/82	JA: LA				
8311799	82-2507	1708320650	103			FULLER #1	BIG CREEK	211.7	MICHIGAN WISCONSI
-CHEVRON U S A INC			RECEIVED:	12/01/82	JA: LA				
8311627	82-2648	1712120128	107-DP			D OLIVER #3 19,100* TUSC RA SUO	PROFIT ISLAND	4380.0	TEXAS EASTERN TRA
-CRYSTAL OIL AND LAND COMPANY			RECEIVED:	12/01/82	JA: LA				
8311819	82-1121	1701724159	107-TF			CLEMENTS #5	NORTH MISSIONARY LAKE	1058.5	ARKANSAS LOUISIAN
-EXXON CORPORATION			RECEIVED:	12/01/82	JA: LA				
8311818	82-1140	1705721900	103			EXXON FEE #56	BULLY CAMP	30.0	TENNESSEE GAS PIP
-GUERNSEY PETROLEUM CORPORATION			RECEIVED:	12/01/82	JA: LA				
8311817	82-3392	1703121838	103			INTERNATIONAL PAPER CO C 6	BRUSHY BAYOU	144.0	TENNESSEE GAS PIP
8311790	82-3394	1703121725	103			IPCO "C"-1	BRUSHY BAYOU	72.0	TENNESSEE GAS PIP
8311816	82-3393	1703121768	103			IPCO "C"-3	BRUSHY BAYOU	108.0	TENNESSEE GAS PIP
-H E SUTTON			RECEIVED:	12/01/82	JA: LA				
8311812	82-3409	1708120364	103			MARTIN TIMBER CO #2	MADDEN BRANCH	170.5	TEXAS EASTERN TRA
-HENRY GOODRICH D/B/A GOODRICH OIL C			RECEIVED:	12/01/82	JA: LA				
8311824	82-3386	1704920188	103			STUBBLEFIELD #1	HODGE	365.0	ARKANSAS LOUISIAN
-IMC EXPLORATION COMPANY			RECEIVED:	12/01/82	JA: LA				
8311822	82-2603	1711123456	108			FROST #84	MONROE	18.0	IMC PIPELINE CO I
8311821	82-2604	1711123486	108			OLIN GAS TRANSMISSION CO #83	MONROE	21.0	IMC PIPELINE CO I
8311857	82-2605	1711123431	108			OLIN GAS TRANSMISSION CO #87	MONROE	21.0	IMC PIPELINE CO I
8311856	82-2606	1711123437	108			OLIN GAS TRANSMISSION CO #88	MONROE	21.0	IMC PIPELINE CO I
8311855	82-2607	1711123438	108			OLIN GAS TRANSMISSION CO #89	MONROE	15.0	IMC PIPELINE CO I
-LINVILLE NATURAL GAS CO INC			RECEIVED:	12/01/82	JA: LA				
8311854	82-2609	1711123541	103			A R CROW #5	MONROE	0.0	IMC PIPELINE CO I
-MARATHON OIL COMPANY			RECEIVED:	12/01/82	JA: LA				
8311800	82-1367	1711920336	103			MOC MARSHALL #1 CVSU	COTTON VALLEY	584.0	UNITED GAS PIPE L
-MARSHALL EXPLORATION INC			RECEIVED:	12/01/82	JA: LA				
8311813	82-3408	1703121869	103			FRANK MATTHEWS "A" #4	BENSON	300.0	SABINE-DESOTO PIP
-MID LOUISIANA GAS COMPANY			RECEIVED:	12/01/82	JA: LA				
8311804	82-2572	1711123652	103			MLGC FEE GAS #1123	MONROE GAS FIELD	21.9	MID LOUISIANA GAS
8311805	82-2571	1711123653	103			MLGC FEE GAS #1124	MONROE GAS FIELD	21.9	MID LOUISIANA GAS
8311848	82-2592	1711123654	103			MLGC FEE GAS #1125	MONROE GAS	28.8	MID LOUISIANA GAS
8311833	82-2641	1711123655	103			MLGC FEE GAS #1126	MONROE GAS FIELD	25.9	MID LOUISIANA GAS
8311845	82-2593	1711123656	103			MLGC FEE GAS #1127	MONROE GAS FIELD	28.1	MID LOUISIANA GAS
8311832	82-2642	1711123657	103			MLGC FEE GAS #1128	MONROE GAS FIELD	28.8	MID LOUISIANA GAS
8311844	82-2594	1711123718	103			MLGC FEE GAS #1129	MONROE GAS FIELD	28.8	MID LOUISIANA GAS
8311796	82-2570	1711123665	103			MLGC FEE GAS #1132	MONROE GAS FIELD	21.9	MID LOUISIANA GAS
8311797	82-2569	1711123667	103			MLGC FEE GAS #1136	MONROE GAS	21.9	MID LOUISIANA GAS
8311803	82-2573	1711123668	103			MLGC FEE GAS #1137	MONROE GAS FIELD	21.9	MID LOUISIANA GAS

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JD NO	JA DKT	API NO	D	SEC(1)	SEC(2)	WELL NAME	FIELD NAME	PROD	PURCHASER
8311802	82-2574	1711123680		103		MLGC FEE GAS #1138	MONROE GAS	21.9	MID LOUISIANA GAS
8311801	82-2575	1711123681		103		MLGC FEE GAS #1139	MONROE GAS FIELD	21.9	MID LOUISIANA GAS
8311811	82-2576	1711123682		103		MLGC FEE GAS #1140	MONROE GAS	21.9	MID LOUISIANA GAS
8311798	82-2568	1711123696		103		MLGC FEE GAS #1141	MONROE GAS FIELD	21.9	MID LOUISIANA GAS
8311831	82-2643	1711123728		103		MLGC FEE GAS #1144	MONROE GAS	27.4	MID LOUISIANA GAS
8311830	82-2644	1711123738		103		MLGC FEE GAS #1147	MONROE GAS	28.1	MID LOUISIANA GAS
8311829	82-2645	1711123731		103		MLGC FEE GAS #1148	MONROE GAS FIELD	24.8	MID LOUISIANA GAS
8311810	82-2577	1711123683		103		MLGC FEE GAS #1151	MONROE GAS	21.9	MID LOUISIANA GAS
8311843	82-2595	1711123775		103		MLGC FEE GAS #1157	MONROE GAS FIELD	27.0	MID LOUISIANA GAS
8311842	82-2596	1711123777		103		MLGC FEE GAS #1159	MONROE GAS FIELD	25.9	MID LOUISIANA GAS
8311841	82-2597	1711123778		103		MLGC FEE GAS #1160	MONROE GAS FIELD	21.6	MID LOUISIANA GAS
8311809	82-2578	1711123702		103		MLGC FEE GAS #1161	MONROE GAS FIELD	21.9	MID LOUISIANA GAS
8311808	82-2579	1711123703		103		MLGC FEE GAS #1162	MONROE GAS FIELD	21.9	MID LOUISIANA GAS
8311828	82-2646	1711123816		103		MLGC FEE GAS #1179	MONROE GAS FIELD	26.3	MID LOUISIANA GAS
8311853	82-2610	1711123815		103		MLGC FEE GAS #1180	MONROE GAS FIELD	29.2	MID LOUISIANA GAS
8311852	82-2611	1711123817		103		MLGC FEE GAS #1181	MONROE GAS	28.1	MID LOUISIANA GAS
8311851	82-2637	1711123818		103		MLGC FEE GAS #1182	MONROE GAS FIELD	27.4	MID LOUISIANA GAS
8311850	82-2638	1711123819		103		MLGC FEE GAS #1183	MONROE GAS FIELD	29.9	MID LOUISIANA GAS
8311849	82-2639	1711123820		103		MLGC FEE GAS #1184	MONROE GAS FIELD	27.7	MID LOUISIANA GAS
8311840	82-2598	1711123835		103		MLGC FEE GAS #1188	MONROE GAS FIELD	31.7	MID LOUISIANA GAS
8311823	82-2599	1711123836		103		MLGC FEE GAS #1189	MONROE GAS FIELD	31.3	MID LOUISIANA GAS
8311848	82-2640	1711123863		103		MLGC FEE GAS #1198	MONROE GAS	26.3	MID LOUISIANA GAS
-MOSBACHER PRODUCTION CO				RECEIVED:	12/01/82	JA: LA			
8311789	82-3400	1701921063		102-2		ROBERT L COLEMAN #1	STACKPOLE ISLAND	352.0	
-PAR EXPLORATION CO				RECEIVED:	12/01/82	JA: LA			
8311826	82-3280	1706721131		108		MARY MCENERY #3	MONROE 6824	0.0	MID LOUISIANA GAS
-PHILLIPS PETROLEUM COMPANY				RECEIVED:	12/01/82	JA: LA			
8311647	82-2591	1701320218		108		MARY MERRITT D #1 HOSS A SUCC	WEST BRYCELAND	21.0	LOUISIANA GAS PUR
-PRIMOS PRODUCTION CO				RECEIVED:	12/01/82	JA: LA			
8311836	82-2588	1711122994		108		PETRO-LEWIS FROST LUMBER #55	MONROE GAS FIELD	15.5	PETRO-LEWIS FUNDS
8311835	82-2589	1711122995		108		PETRO-LEWIS FROST LUMBER #56	MONROE GAS FIELD	15.5	PETRO-LEWIS FUNDS
8311634	82-2590	1711123428		108		PETRO-LEWIS FROST LUMBER #78	MONROE GAS FIELD	4.9	PETRO-LEWIS FUNDS
8311837	82-2587	1706721121		108		TENSAS DELTA C-8	MONROE	13.1	UNITED GAS PIPELI
-PRIMOS-PENNZOIL JV				RECEIVED:	12/01/82	JA: LA			
8311792	82-2583	1711121901		108		C WHEELER #1	MONROE	11.6	UNITED GAS PIPE L
8311791	82-2584	1711122667		108		C WHEELER #2	MONROE	18.2	UNITED GAS PIPE L
8311793	82-2582	1706721350		108		GEORGIA PACIFIC C #14	MONROE	9.4	UNITED GAS PIPE L
8311806	82-2581	1706721353		108		GEORGIA PACIFIC C #7	MONROE	9.4	UNITED GAS PIPE L
8311838	82-2586	1711122693		108		HOLLOWAY #1	MONROE	19.5	UNITED GAS PIPE L
8311839	82-2585	1711122668		108		MARY D WHEELER #1	MONROE	12.3	UNITED GAS PIPE L
8311807	82-2580	1711121896		108		STANCIE #2	MONROE	19.7	UNITED GAS PIPE L
-ROSS & GLENN PETROLEUM INC				RECEIVED:	12/01/82	JA: LA			
8311795	82-0809	1703120821		103		F C BAGLEY #1 HOSS SU-2	BETHANY-LONGSTREET	182.5	TEXAS EASTERN TRA
8311820	82-0811	1703121321		103		K PECK #1 HOSS SU-A	BETHANY-LONGSTREET	180.0	ARKANSAS LOUISIAN
8311794	82-0810	1703121051		103		W H BAGLEY JR #2 HOSS SU-6	BETHANY-LONGSTREET	109.0	UNITED GAS PIPE L
-TEXACO INC				RECEIVED:	12/01/82	JA: LA			
8311814	82-0610	1770920242		103		SL 340 RABBIT ISLAND #192 10000 SDY	RABBIT ISLAND	255.5	KAISER ALUMINUM &
-TEXAS PRODUCTION CORP				RECEIVED:	12/01/82	JA: LA			
8311815	82-0254	1706120265		103		MARTIN "J" #1 HOSS L SUG	SIMSBORO	40.2	DELHI GAS PIPELIN

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TEXAS RAILROAD COMMISSION

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-AEC OIL & GAS RECEIVED: 12/02/82 JA: TX

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JD NO	JA CKT	API NO	D	SEC(1)	SEC(2)	WELL NAME	FIELD NAME	PROD	PURCHASER
8312025	F-78-59476	4242900000		102-4		O TOMLIN 70 #4 RRC ID#101835	CHALKER (CONGLOMERATE	340.0	WARREN PETROLEUM
-ALCORN PRODUCTION CO				RECEIVED:		12/02/82 JA: TX			
8312023	F-01-59463	4217731249		102-4		WELLS #1	CHRISTIAN (6800)	0.0	TIPPERARY CORP
-AMERADA HESS CORPORATION				RECEIVED:		12/02/82 JA: TX			
8311943	F-8A-056918	4216500000		108		MANN GAS UNIT #1	SEMINOLE	20.6	PIONEER NATURAL G
-AMOCO PRODUCTION CO				RECEIVED:		12/02/82 JA: TX			
8311898	F-08-053787	4210330711		108		ELL LONG #13-U	BLOCK 27 (TUBB)	23.3	DELHI GAS PIPELIN
8312082	F-10-60297	4248330771		103		H B TAYLOR JR #2	THORNDIKE (ATOKA)	100.0	MICHIGAN WISCONSI
8312083	F-10-60298	4229530823		103		HOCKING UNIT #2	FOLLETT (MORROW)	100.0	INTERNORTH INC
8311908	F-06-054428	4207330450		102-4		TEMPLE EASTEX GAS UNIT #2	WHITE OAK CREEK (TRAV	330.0	TEXAS UTILITIES F
8312042	F-03-59951	4224500244		108		TREADAWAY LAND COMPANY #9	BEAUMONT WEST (MIOCEN	5.3	AMOCO GAS CO
-ANDOVER OIL COMPANY				RECEIVED:		12/02/82 JA: TX			
8311962	F-06-057577	4220330792		103	107-TF	SAM B HALL GAS UNIT #1 WELL #1	WOODLAWN S W (COTTON	0.0	INTRASTATE GATHER
-ARCO OIL AND GAS COMPANY				RECEIVED:		12/02/82 JA: TX			
8311892	F-04-052560	4221531213		102-4		ARCADIA GUERRA #7	SAN SALVADOR (7750)	94.0	TENNESSEE GAS PIP
-AMERICAN TRADING & PRODUCTION CORP				RECEIVED:		12/02/82 JA: TX			
8312019	F-08-59394	4230130270		107-DP		ARNO GAS UNIT #2	MOORE-HOOPER (ATOKA)	730.0	INTRATEX GAS CO
-BEN HOGAN				RECEIVED:		12/02/82 JA: TX			
8312030	F-78-59556	4209331024		103		HAYNES "A" #1	MITTIE (MARBLE FALLS)	73.0	SOUTHWESTERN GAS
8312031	F-78-59557	4209331038		103		THOMPSON #1	MITTIE (MARBLE FALLS)	74.0	SOUTHWESTERN GAS
-BILL FORNEY INC				RECEIVED:		12/02/82 JA: TX			
8312092	F-02-60325	4212331247		103		MEIDER #1 R R C I D #101107	HENZE (LULING)	250.0	HOUSTON PIPELINE
-BLUE JAY EXPLORATION CO				RECEIVED:		12/02/82 JA: TX			
8311887	F-02-051620	4246900000		102-4	103	STURM #1	BATTLE (VICKSBURG 2ND	200.0	HOUSTON PIPELINE
-BOW VALLEY PETROLEUM INC				RECEIVED:		12/02/82 JA: TX			
8311879	F-03-050485	4231330344		102-2		WIESE GAS UNIT 1-C	NORTH ZULCH	0.0	LONE STAR GAS CO
-BRAMMER ENGINEERING INC				RECEIVED:		12/02/82 JA: TX			
8312008	F-06-059047	4220330987		102-4		BOYD-NELSON UNIT - #1	HARLETON NE (PETTIT)	90.0	TEJAS-SW TWO
-BROTHERTON PRODUCTION CO				RECEIVED:		12/02/82 JA: TX			
8311911	F-7C-054573	4210500000		103		UNIVERSITY 10 #1	FARMER (SAN ANDRES)	0.0	INTER NORTH INC
8311910	F-7C-054572	4238300000		103		UNIVERSITY 11 #1	FARMER (SAN ANDRES)	0.0	INTER NORTH INC
-BURNETT CORPORATION				RECEIVED:		12/02/82 JA: TX			
8311878	F-10-049005	4206530994		103		BURNETT 2-122	WEST PANHANDLE	150.0	PANHANDLE EASTERN
-C. J. WOFFORD				RECEIVED:		12/02/82 JA: TX			
8311926	F-02-055679	4212331219		102-4		C ARNOLD #2	DOEHRMANN (CARRIZO)	225.0	LONE STAR GAS CO
8311927	F-02-055687	4202531851		102-4		SOUTH TEXAS CHILDREN'S HOME #1	MINERAL NORTH (9750)	128.0	TEXAS EASTERN TRA
-C-K RESOURCES INC				RECEIVED:		12/02/82 JA: TX			
8312144	F-04-60522	4227331700		102-4		HENRY LEHMAN #1-C ID NO 10093	RICARDO E (JAY SD)	26.0	HOUSTON PIPE LINE
8312143	F-04-60521	4227331700		102-4		HENRY LEHMAN #1T ID NO 10080	RICARDO E (MENGLE)	27.0	HOUSTON PIPE LINE
-CA-TEX PETROLEUM INC				RECEIVED:		12/02/82 JA: TX			
8312095	F-09-60332	4250335948		102-2		C K GARVEY "C" #3	YOUNG COUNTY REGULAR	0.0	MID-STATE GAS COR
-CHAMPLIN PETROLEUM COMPANY				RECEIVED:		12/02/82 JA: TX			
8311897	F-03-053692	4204100000		102-2		CHARLES PATRANELLA #1	KURTEN	0.0	FERGUSON CROSSING
8311976	F-03-058115	4204100000		102-2		PAULINE GRANT #1	WILDCAT	0.0	FERGUSON CROSSING
8311873	F-03-047414	4270430203		102-2	103	STATE TRACT 438-L #1-L	BRAZOS BLK 409-L (RB	0.0	
8311882	F-04-051044	4235531991		102-4	103	TEXON ROYALTY CO #7-U	STRATTON (F-31-12)	2441.0	TENNESSEE GAS PIP
-CHARLES H BENTLEY				RECEIVED:		12/02/82 JA: TX			
8312056	F-09-60146	4250300000		108		IOLA HAZELTON #1	GRAHAM SOUTH (CADDO)	0.5	LONE STAR GAS CO
8312055	F-09-60145	4250336043		103		IOLA HAZELTON #2	GRAHAM SOUTH (CADDO)	21.0	LONE STAR GAS CO
-CHESTER R UPHAM JR				RECEIVED:		12/02/82 JA: TX			
8311864	F-78-040198	4236300000		103		HERMAN CARR ESTATE #3		0.0	
-CITIES SERVICE COMPANY				RECEIVED:		12/02/82 JA: TX			
8312045	F-03-60008	4218500000		102-4		BUTLER "B" #1 (087401)	PLANTERSVILLE (MIDWAY	328.0	CAMPEON PIPE LINE

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JO NO	JA DKT	API NO	D	SEC(1)	SEC(2)	WELL NAME	FIELD NAME	PRGD	PURCHASER
-CLAYTON W WILLIAMS JR				RECEIVED:	12/02/82	JA: TX			
8311886	F-06-051582	4236500000		103		A N TAYLOR #1	J G S (TRAVIS PK "C")	0.0	VALERO TRANSMISSI
-COCKRELL OIL CORP				RECEIVED:	12/02/82	JA: TX			
8311901	F-02-053946	4228531586		102-4		MARY BORCHERS #1	NORTH CHICOLETE CREEK	120.0	TEXAS EASTERN TRA
-COLA PETROLEUM INC				RECEIVED:	12/02/82	JA: TX			
8311876	F-10-047445	4248330671		108		STRICKLAND #1	EAST PANHANDLE	0.0	TRANSWESTERN PIPE
8311874	F-10-047443	4248330749		108		STRICKLAND #2	EAST PANHANDLE	0.0	TRANSWESTERN PIPE
8311875	F-10-047444	4248330727		108		STRICKLAND A1	EAST PANHANDLE	0.0	TRANSWESTERN PIPE
-CONOCO INC				RECEIVED:	12/02/82	JA: TX			
8312117	F-8A-60428	4207931523		103		CONOCO DEAN UNIT #133 ID #60106	SLAUGHTER	0.0	AMOCO PRODUCTION
-CONVEST ENERGY CORP				RECEIVED:	12/02/82	JA: TX			
8311858	F-8A-023743	4226302374		102-2		WAYNE WILLIAMS #3A 63480	POLLAN (CANYON)	0.0	EL PASO NATURAL G
8311859	F-8A-024740	4226302474		102-2		WAYNE WILLIAMS #4A 63480	POLLAN (CANYON)	0.0	EL PASO NATURAL G
-COURSON OIL & GAS INC				RECEIVED:	12/02/82	JA: TX			
8311890	F-10-051826	4235731195		103		HERNDON 1-662	DUDE WILSON (MARMATON	110.0	TRANSWESTERN PIPE
8311905	F-10-054194	4235731252		103		HERNDON 2-662 C	DUDE WILSON (CLEVELAN	90.0	TRANSWESTERN PIPE
8311904	F-10-054193	4235731252		103		HERNDON 2-662 T	DUDE WILSON (NOVI LIM	95.0	TRANSWESTERN PIPE
8312029	F-10-59555	4235731281		103		JOYCE 1-659C	DUDE WILSON (CLEVELAN	70.0	INTER NORTH INC
8312028	F-10-59554	4235731281		103		JOYCE 1-659T	DUDE WILSON (NOVI LIM	60.0	INTER NORTH INC
-D L WHITAKER OIL CO				RECEIVED:	12/02/82	JA: TX			
8311971	F-7B-057989	4244732774		102-4		KEETER "B" #12	KEETER	176.0	H S T GATHERING C
-DALLAS TRUST CO				RECEIVED:	12/02/82	JA: TX			
8311964	F-7B-057663	4236332936		102-4	103	SPARKS "A" #2	NEW SALEM (CONGL)	205.9	INTRASTATE GATHER
-DAVIS OIL COMPANY				RECEIVED:	12/02/82	JA: TX			
8312069	F-7C-60228	4209500000		102-4		JUDY OWENS #1	S W PAINT ROCK (GARDN	400.0	LONE STAR GAS CO
8312068	F-7C-60226	4209530618		102-4		JUDY OWENS #2	S W PAINT ROCK (GARDN	400.0	LONE STAR GAS CO
-DISCOVERY OPERATING INC				RECEIVED:	12/02/82	JA: TX			
8312118	F-7C-60429	4241331221		102-4	103	PAGE #3	HELEN (WOLFCAMP)	45.4	INTER NORTH INC
-DONALD BIRGE				RECEIVED:	12/02/82	JA: TX			
8312041	F-09-59948	4207700000		102-4		B J FULGHAM #2	LAZY DAWN (4100) FIEL	27.4	FAGADAU ENERGY CO
-EL PASO NATURAL GAS COMPANY				RECEIVED:	12/02/82	JA: TX			
8312129	F-7C-60467	4243519194		108		BERGER GAS UNIT #1	SONORA (CANYON UPPER)	22.0	EL PASO NATURAL G
8312128	F-7C-60461	4243519208		108		DEBERRY A #3	SONORA CANYON UPPER	22.0	EL PASO NATURAL G
8312127	F-10-60460	4208726180		108		MCDOWELL #6	PANHANDLE EAST	18.6	EL PASO NATURAL G
-ENERGETICS INC				RECEIVED:	12/02/82	JA: TX			
8311891	F-03-052286	4214931085		102-2		F C YOUNG #1	GIDDINGS AUSTIN CHALK	12.0	PHILLIPS PETROLEU
-ENERGY RESERVES GROUP INC				RECEIVED:	12/02/82	JA: TX			
8312090	F-7C-60308	4243500000		108		W A MIERS #2	SONORA	20.9	INTERNORTH INC
8312078	F-7C-60283	4243500000		108		W A MIERS #6	SONORA	17.4	INTERNORTH INC
-ENERGY-AGRI PRODUCTS INC				RECEIVED:	12/02/82	JA: TX			
8312074	F-10-60258	4206531142		103		BOBBITT #3 (ID#05070)	PANHANDLE CARSON	50.0	GETTY OIL CO
-ENSERCH EXPLORATION INC				RECEIVED:	12/02/82	JA: TX			
8311963	F-8A-057609	4210130330		103		B J BROWNING #1	PROVIDENCE	0.0	NEGOTIATING
8311933	F-05-056107	4221300000		103		BEN MCGEE #3	TRI-CITIES	375.0	LONE STAR GAS CO
8311900	F-09-053815	4219700000		103		BILL NEAL 321 #1	DEAD DOG	0.0	
-ENSOURCE INC				RECEIVED:	12/02/82	JA: TX			
8311871	F-7B-046723	4236731449		103		C W CHAPMAN #1	LAZY BEND GAS (STRAWN	159.1	TEXAS UTILITIES F
-ENTERPRISE ENERGY CORP				RECEIVED:	12/02/82	JA: TX			
8311941	F-09-056868	4223700000		103		C MIDDLEBROOKS #2	LUCKY RIDGE SW	321.2	NATURAL GAS PIPE
-EQUITABLE PETROLEUM CORP				RECEIVED:	12/02/82	JA: TX			
8312013	F-08-59212	4210931622		102-4		BATEMAN #1	MARSH SOUTH (DELAWARE	127.0	
8312015	F-08-59220	4238931263		102-4		GRACE LYONS #1	MARSH SOUTH (DELAWARE	36.5	
-EXXON CORPORATION				RECEIVED:	12/02/82	JA: TX			

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JD NO	JA DKT	API NO	D	SEC(1)	SEC(2)	WELL NAME	FIELD NAME	PROD	PURCHASER
8311974	F-06-058099	4236531282		103	107-TF	ALMA ANDERSON (CFEC #410) #3	CARTHAGE (COTTON VALL	650.0	TEJAS GAS CORP
8312049	F-08-60041	4222732728		103		DOUTHIT UNIT #141	HOWARD-GLASSCOCK	1.0	PHILLIPS PETROLEU
8312050	F-08-60043	4222732724		103		DOUTHIT UNIT #213	HOWARD-GLASSCOCK	1.0	PHILLIPS PETROLEU
8312048	F-08-60039	4222732723		103		DOUTHIT UNIT #214	HOWARD-GLASSCOCK	1.0	PHILLIPS PETROLEU
8312046	F-06-60030	4245930527		102-4	107-TF	GLADEWATER GAS UNIT #9 #1	GLADEWATER (HAYNESVIL	365.0	DELHI GAS PIPELIN
8312047	F-06-60037	4245930516		102-4	107-TF	GLADEWATER GAS UNIT 12 #1	GLADEWATER (HAYNESVIL	1168.0	TEJAS GAS CORP
8312021	F-06-59438	4236531397		102-3	107-TF	J C BROWN (CFEC 531) #3	CARTHAGE (COTTON VALL	440.0	TEJAS GAS CORP
8312079	F-04-60289	4227331353		102-4		K R ALAZAN 328-F (100931)	HINOJOSA (F-20)	329.0	ARMCO STEEL CORP
8311931	F-03-056095	4247300000		103		KATY GAS FIELD UNIT 1 W-50	KATY (FIRST WILCOX)	1460.0	ARMCO STEEL CORP
8311940	F-04-056807	4224730404		102-4		MRS A M K BASS 34 (ID PENDING)	KELSEY DEEP (ZONE 20-	280.0	TRUNKLINE GAS CO
8312060	F-8A-60189	4216532393		103		ROBERTSON CLEARFORK UNIT #1001	ROBERTSON N (CLEARFOR	15.0	PHILLIPS PETROLEU
8312061	F-8A-60190	4216532397		103		ROBERTSON CLEARFORK UNIT #1011	ROBERTSON N (CLEARFOR	15.0	PHILLIPS PETROLEU
8311989	F-8A-058525	4216532350		103		ROBERTSON CLEARFORK UNIT #3203	ROBERTSON N (CLEARFOR	15.0	PHILLIPS PETROLEU
8312005	F-8A-59130	4216532349		103		ROBERTSON CLEARFORK UNIT #3303	ROBERTSON N (CLEARFOR	15.0	PHILLIPS PETROLEU
8312059	F-8A-60188	4216532388		103		ROBERTSON CLEARFORK UNIT #9901	ROBERTSON N (CLEARFOR	15.0	PHILLIPS PETROLEU
8312073	F-04-6025	4226130675		102-4		SANTA FE RANCH-JULIAN PAS 27 100461	STILLMAN NE (J-40)	599.0	ARMCO STEEL CORP
8311929	F-06-055864	4234730646		103	107-TF	TRAWICK GAS UNIT #5 #4	TRAWICK (COTTON VALLE	250.0	ARMCO STEEL CORP
-FARGO TRADING CO INC				RECEIVED:	12/02/82	JA: TX			
8311977	F-04-058185	4248900000		102-4		YTURRIA CATTLE COMPANY #2-A	LA SARA	0.0	TENNESSEE GAS PIP
-FRAC INC				RECEIVED:	12/02/82	JA: NM			
8312094	F-08-60331	4200333329		103		UNIVERSITY "18" #3 #27312	GOLDSMITH N (SAN ANDR	7.6	PHILLIPS PETROLEU
-FRANK CASS				RECEIVED:	12/02/82	JA: TX			
8311949	F-7C-056984	4238332228		103		MAUD BRANCH S F 13721 #1	SPRABERRY (TREND AREA	42.0	EL PASO NATURAL G
-GARY D TURNER DBA TURNER PROPERTIES				RECEIVED:	12/02/82	JA: TX			
8311956	F-7C-057320	4208131053		103		TURNER PROPERTIES - TUBB #5	JAMESON (STRAWN)	1000.0	SUN GAS CO
8311955	F-7C-057319	4208130998		103		TURNER PROPERTIES REED #3	JAMESON (STRAWN)	1200.0	SUN GAS CO
8311954	F-7C-057318	4208130999		103		TURNER PROPERTIES TUBB #4	JAMESON (STRAWN)	750.0	SUN GAS CO
-GAS DEVELOPMENT CORP				RECEIVED:	12/02/82	JA: TX			
8311920	F-7C-055358	4243531362		108		MILDRED CAUTHORN "19" WELL #2	JO NELL (CANYON D)	16.4	INTER NORTH INC
-GENERAL AMERICAN OIL COMPANY OF TEX				RECEIVED:	12/02/82	JA: TX			
8312098	F-08-60383	4210332981		103		UNIVERSITY SEC 8 WELL #7	DUNE	20.0	
-GEORGE L ROUSSEAU				RECEIVED:	12/02/82	JA: TX			
8312016	F-03-5923	4205132195		102-4		ROBERT POWELL #3	WILLARD (NAVARRO) FIE	0.0	FERGUSON CROSSING
-GILLRING OIL CO				RECEIVED:	12/02/82	JA: TX			
8311966	F-04-057887	4235532018		102-4		SIMMONS & PERRY #1	BRAYTON NORTH	803.0	
-GOLDKING PRODUCTION COMPANY				RECEIVED:	12/02/82	JA: TX			
8311988	F-03-058474	4229131477		102-4		FIRST CITY NATIONAL BANK & TRUST #1	RAYWOOD	421.0	LONE STAR GAS CO
-GRACE PETROLEUM CORPORATION				RECEIVED:	12/02/82	JA: TX			
8311872	F-05-046775	4228930426		102-4	107-TF	DAVIDSON GAS UNIT #1	BEAR GRASS	0.0	DELHI GAS PIPELIN
8312130	F-05-60475	4216130438		103		RAWLS #1	TEAGUE TOWNSITE	0.0	LONE STAR GAS CO
-GULF OIL CORPORATION				RECEIVED:	12/02/82	JA: TX			
8311983	F-8A-058329	4207900573		108		DUGGAN SLAUGHTER UNIT #21C	SLAUGHTER	5.4	AMOCO PRODUCTION
-H & S OPERATING COMPANY				RECEIVED:	12/02/82	JA: TX			
8311957	F-09-057360	4223734550		103		MARY SEWELL #1	JACKSBORO E (CONGLOME	120.0	LONE STAR GAS CO
-H P PINNELL TRUSTEE				RECEIVED:	12/02/82	JA: TX			
8311975	F-04-058110	4248930696		102-4	103	EL SAUZ RANCH NOPAL #7	ARROYO COLORADO NORTH	164.0	NATURAL GAS PIPEL
-HANSON MINERALS CO				RECEIVED:	12/02/82	JA: TX			
8312054	F-02-60121	4229733183		102-4		MEIDER GAS UNIT #1	COQUAT (MASSIVE 8600)	275.0	TEXAS EASTERN TRA
8311951	F-02-057102	4212331241		102-4		RUSCHHAUPT GAS UNIT #2	MEYERSVILLE SE (YEGUA	182.5	TEXAS EASTERN TRA
-HANVEY PRODUCTION CO				RECEIVED:	12/02/82	JA: TX			
8312149	F-78-60539	4213333652		102-4		HANVEY CROSS "A" #1 (100655)	ADRIENNE (DUFFER)	207.0	ODESSA NATURAL CO
-HARKINS & COMPANY				RECEIVED:	12/02/82	JA: TX			
8311896	F-04-053524	4213135780		102-4	103	HERBST-TOREL #5	HERBST-WILCOX (TOREL)	1095.0	VALERO TRANSMISSI

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JD NO	JA DKT	API NO	D	SEC(1)	SEC(2)	WELL NAME	FIELD NAME	PROD	PURCHASER
-HARRIS R FENDER				RECEIVED:		12/02/82 JA: TX			
8312120	F-06-60433	4242330576		102-4		FENDER FEE #2	DRISKELL LAKE (RODESS	38.0	LONE STAR GAS CO
-HARRISON INTERESTS LTD				RECEIVED:		12/02/82 JA: TX			
8312134	F-7C-60489	4210530925		107-TF		JOE TOM DAVIDSON JR #2	DAVIDSON RANCH (PENN	40.0	INTRATEX GAS CO
-HAT 4 PETROLEUM INC				RECEIVED:		12/02/82 JA: TX			
8312138	F-10-60510	4235731288		103		FROMMELT STAR #1 (ID#05193)	FARNSWORTH-CONNER (DE	20.0	PHILLIPS PETROLEU
-HENRY ENERGY CORP				RECEIVED:		12/02/82 JA: TX			
8311934	F-78-056370	4236700000		102-4		DOUGLASS #2	DOUGLASS (STRAWN) - P	35.0	SOUTHWESTERN GAS
-HERD PRODUCING COMPANY INC				RECEIVED:		12/02/82 JA: TX			
8312091	F-03-60309	4228731289		102-2		BREDTHAUER #4	GIDDINGS (AUSTIN CHAL	81.0	TEXAS UTILITIES F
8311991	F-05-058587	4229330496		102-4	103	W W BARNETT #1 RRC #091547	OLETHA SW (TRAVIS PEA	204.0	TEXAS UTILITIES F
-HERITAGE OPERATING CO INC				RECEIVED:		12/02/82 JA: TX			
8312043	F-03-59960	4208900000		102-4		KAECHELE #1A	CHESTERVILLE SOUTHEAS	0.0	SEAGULL PIPELINE
-HILTY INTERESTS INC				RECEIVED:		12/02/82 JA: TX			
8312017	F-02-59360	4229733009		102-4		SANGER HEIRS #1 API #4229733009		2.0	INTRASTATE GATHER
-HNG OIL COMPANY				RECEIVED:		12/02/82 JA: TX			
8312009	F-04-59177	4250531504		103		SERAPIO VELA HEIRS #4	ROLETA (7283)	456.0	HOUSTON PIPE LINE
-INDIAN WELLS OIL CO				RECEIVED:		12/02/82 JA: TX			
8311979	F-7C-058187	4223531945		102-2		PROBANDT 4-3	PROBANDT	0.0	CRA INC
8311978	F-7C-058186	4223531944		102-2		PROBANDT 4-4	PROBANDT (CANYON)	0.0	CRA INC
-INEXCO OIL COMPANY				RECEIVED:		12/02/82 JA: TX			
8311915	F-04-054815	4221531110		102-4		CHRISTIAN ESTATE #1 WELL	GUADALUPE V-2	329.0	UNITED GAS PIPELI
8311945	F-04-056939	4270230171		102-4		STATE TRACT 794-L #1	BLOCK 794-L (FRIO)	730.0	TENNGASCO GAS GAT
8311946	F-04-056940	4270230173		102-4		STATE TRACT 794-L SW/4 #1-A	BLOCK 794-L (FRIO)	1825.0	TENNGASCO GAS GAT
-INTERNATIONAL OIL & GAS CORP				RECEIVED:		12/02/82 JA: TX			
8311922	F-7C-055461	4210533712		102-4	103	VERNON B COX STATE #4	DUDLEY EAST (DEVONIAN	0.0	INTRASTATE GATHER
8311921	F-7C-055460	4210533717		102-4	103	VERNON B COX STATE "A" #3	DUDLEY EAST (DEVONIAN	35.0	INTRASTATE GATHER
-INVESTEK INC				RECEIVED:		12/02/82 JA: TX			
8312065	F-09-60204	4207700000		102-4		TALLY A#4	TALLY (CONGLOMERATE)	178.0	TUFCO
-J M HUBER CORPORATION				RECEIVED:		12/02/82 JA: TX			
8312093	F-10-60330	4234130827		103		PRITCHARD "C" #7	PANHANDLE	47.0	COLORADO INTERSTA
-J R PETROLEUM				RECEIVED:		12/02/82 JA: TX			
8311917	F-78-054872	4241734568		102-4		NEWTON #1	BATTLECREEK (CONGLOME	19.2	LONE STAR GAS CO
-JACKSON EXPLORATION INC				RECEIVED:		12/02/82 JA: TX			
8311937	F-08-056664	4211531681		103		KOGER #2	SULPHUR DRAW	14.0	ADOBE OIL & GAS C
-JAMES K ANDERSON INC				RECEIVED:		12/02/82 JA: TX			
8312044	F-7C-59999	4239932398		103		LESZCYNSKI #2	FRITZESS (ODOM)	110.0	LONE STAR GAS CO
-JOHN H YOUNG INC				RECEIVED:		12/02/82 JA: TX			
8311973	F-03-058081	4214931380		102-2		RAUSCH	GIDDINGS (EDWARDS GAS	125.0	CLAJON GAS CO
-JUMAS OIL PART CORP				RECEIVED:		12/02/82 JA: TX			
8312051	F-09-60057	4249731182		103		GRIFFETH #1	WISE KENT (HAM SAND)	61.4	LONE STAR GAS CO
-KAISER-FRANCIS OIL COMPANY				RECEIVED:		12/02/82 JA: TX			
8311868	F-10-044468	4235700000		108-ER		O'DELL A #1	PERRYTON WEST	14.0	NORTHERN NATURAL
-KEITH D GRAHAM				RECEIVED:		12/02/82 JA: TX			
8312097	F-03-60343	4204130773		102-2		LOCKE UNIT #1-15874	BRYAN N (GEORGETOWN)	118.6	FERGUSON CROSSING
-KERR-MCGEE CORPORATION				RECEIVED:		12/02/82 JA: TX			
8311919	F-10-055255	4221131433		103		MARY JONES #7	HEMPHILL (GRANITE WAS	319.0	WESTSTAR TRANSMIS
8311881	F-10-050781	4221131276		103		PETREE 22 #6	HEMPHILL (GRANITE WAS	15.0	PIONEER NATURAL G
-KILROY CO OF TEXAS				RECEIVED:		12/02/82 JA: TX			
8311948	F-03-056983	4220131106		102-4		BUSHNELL R L UNIT #1	FAIRBANKS (6520 COCKF	164.0	UNITED TEXAS TRAN
-KIM PETROLEUM CO INC				RECEIVED:		12/02/82 JA: TX			
8312058	F-10-60183	4217931244		103		HUSTED #1	PANHANDLE GRAY COUNTY	72.0	CABOT PIPELINE CO
-KLAUSE & KLAUS OIL CO				RECEIVED:		12/02/82 JA: TX			

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JD NO	JA DKT	API NO	D	SEC(1)	SEC(2)	WELL NAME	FIELD NAME	PROD	PURCHASER
8312119	F-10-60431	4206531070		103		O'NEAL "B" (03066) #2	PANHANDLE CARSON COUN	43.0	GETTY OIL CO
-KLH OIL & GAS INC				RECEIVED:	12/02/82	JA: TX			
8311912	F-7B-054708	4204933146		102-4		TABER RANCH -A- #102	WILDCAT	51.0	ODESSA NATURAL CO
-L R SPRADLING				RECEIVED:	12/02/82	JA: TX			
8312121	F-10-60438	4234100000		103		BROWN #7 05015	PANHANDLE	75.0	PANHANDLE EASTERN
8312133	F-10-60483	4234100000		103		BROWN NO 6 05015	PANHANDLE	75.0	PANHANDLE EASTERN
-L TEXAS PETROLEUM INC				RECEIVED:	12/02/82	JA: TX			
8312024	F-04-59464	4204700000		103		MESTENA OIL & GAS #2-B	SCOTT & HOPPER (6900)	0.0	VALERO INTERSTATE
-LA ACEITE ENERGY INC				RECEIVED:	12/02/82	JA: TX			
8312070	F-7B-60249	4205933005		102-4		WILLIAMS "2973" #1 (18045)	PUTNAM N (CADDO 3250)	5.0	LONE STAR GAS CO
-LANDRUM OPERATING CO INC				RECEIVED:	12/02/82	JA: TX			
8312039	F-09-59921	4233731953		103		KEMP #1	SUNSET (CONGLOMERATE)	73.0	LONE STAR GAS CO
-LEE BROTHERS OIL & GAS PRODUCTION				RECEIVED:	12/02/82	JA: TX			
8311861	F-7B-033047	4213300000		103		J A RUTHERFORD #1 (16517)	EASTLAND COUNTY REGUL	2.0	ODESSA NATURAL CO
-M BRAD BENNETT INC & RKH LTD				RECEIVED:	12/02/82	JA: TX			
8311958	F-08-057403	4238931274		102-4 103		COLLIE STATE #1	COLLIE (DELAWARE)	25.5	INTRATEX GAS CO
8311982	F-08-058293	4247532645		102-4		MOBIL #1	COLLIE (DELAWARE)	73.0	INTRATEX GAS CO
-MADERA R F				RECEIVED:	12/02/82	JA: TX			
8311903	F-7B-054097	4213333549		103		KISER #4	CARBON (CADDO)	50.0	NORTHERN NATURAL
-MAGNUM RESOURCES INC				RECEIVED:	12/02/82	JA: TX			
8312148	F-09-60538	4250334707		103		NESBITT D-1 21607	YOUNG COUNTY REGULAR	8.0	SUN GAS TRANSMISS
-MAJOR EXPLORATION INC				RECEIVED:	12/02/82	JA: TX			
8311939	F-01-056801	4216332075		103		ALLERKAMP #1	PEARSALL FIELD (SAN M	0.0	VALERO TRANSMISSI
-MAY PETROLEUM INC				RECEIVED:	12/02/82	JA: TX			
8312099	F-7C-60384	4238332206		103		ROCKER "B" 41-1	SPRABERRY (TREND AREA	0.0	INTERNORTH INC
-MAYNARD OIL COMPANY				RECEIVED:	12/02/82	JA: TX			
8311907	F-03-054411	4205132214		102-4		L L TATUM #6	CALDWELL (AUSTIN CHAL	185.0	FERGUSON CROSSING
-MCALESTER FUEL COMPANY				RECEIVED:	12/02/82	JA: TX			
8311930	F-02-055941	4246931906		102-4		J KORNFUEHRER EST #2	MISSION VALLEY (WILCO	144.0	TRANSCONTINENTAL
-MCBRAYER OIL CORP				RECEIVED:	12/02/82	JA: TX			
8312052	F-06-60077	4245930525		103	107-TF	JAMES W BARBER #2	ROSEWOOD (COTTON VALL	180.7	WESTERN GAS CORP
-MCCANN CORP				RECEIVED:	12/02/82	JA: TX			
8311863	F-08-039093	4222700000		102-3 103		READ A #3	COAHOMA N (FUSSEL)	130.0	GETTY OIL CO
-MCCORD EXPLORATION				RECEIVED:	12/02/82	JA: TX			
8311902	F-04-054050	4240900000		102-4		ROUNTREE #1	PLYMOUTH FIELD	275.0	HOUSTON PIPELINE
-MEYER OIL CO INC				RECEIVED:	12/02/82	JA: TX			
8311883	F-10-051569	4206530878		103		CRUTCHFIELD #2	PANHANDLE	42.0	INTERNORTH INC
8311884	F-10-051570	4206530877		103		CRUTCHFIELD #3	PANHANDLE	45.0	INTERNORTH INC
8311885	F-10-051571	4206530876		103		CRUTCHFIELD #4	PANHANDLE	40.0	INTERNORTH INC
-MITCHELL ENERGY CORPORATION.				RECEIVED:	12/02/82	JA: TX			
8311862	F-09-037979	4223700000		108-ER		J R HALSELL #3 21187	ARCO (CONGLOMERATE)	2.6	SOUTHWESTERN GAS
8312032	F-09-59640	4249700000		108		W A KINDLE #1 #028714	BOONSVILLE (BEND CONG	13.4	NATURAL GAS PIPEL
-MOBIL PRDG TEXAS & NEW MEXICO INC				RECEIVED:	12/02/82	JA: TX			
8311997	F-03-059017	4219931390		102-4		PICA INVESTMENT VENTURE #2	SOUR LAKE E (YEGUA LO	654.4	TRANSCONTINENTAL
8312104	F-08-60399	4200333240		103		SHAFTER LAKE SAN ANDRES UNIT #307	SHAFTER LAKE SAN ANDR	0.4	PHILLIPS PETROLEU
8312115	F-08-60411	4200333243		103		SHAFTER LAKE SAN ANDRES UNIT #311	SHAFTER LAKE SAN ANDR	0.4	PHILLIPS PETROLEU
8312107	F-08-60402	4200333244		103		SHAFTER LAKE SAN ANDRES UNIT #313	SHAFTER LAKE SAN ANDR	0.4	PHILLIPS PETROLEU
-MUSTANG EXPLORATION CO INC				RECEIVED:	12/02/82	JA: TX			
8312003	F-03-59111	4214931360		102-2		HEGAR #1-A	GIDDINGS (AUSTIN CHAL	180.0	PHILLIPS PETROLEU
-NEUMIN PRODUCTION CO				RECEIVED:	12/02/82	JA: TX			
8311928	F-02-055816	4205731180		102-4		STATE TRACT 226 WELL #1	APPLING POINT	438.0	ALUMINUM CO OF AM
8312040	F-02-59943	4205731178		102-4		STATE TRACT 26 #4	LAVACA BAY (F-46)	1095.0	ALUMINUM CO OF AM
-NORTH STAR PETROLEUM CORPORATION				RECEIVED:	12/02/82	JA: TX			

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JD NO	JA DKT	API NO	D	SEC(1)	SEC(2)	WELL NAME	FIELD NAME	PROD	PURCHASER
8312072	F-10-60253	4223300000		108		NORTH AMERICAN SANFORD #4 (02517)	PANHANDLE	14.0	PANHANDLE PRODUCI
-ORLA PETCO INC				RECEIVED:		12/02/82 JA: TX			
8311895	F-08-053253	4210931554		102-4	103	HYLAND #1	GERALDINE (DELAWARE 3	109.5	TEXACO INC
-PANHANDLE ENERGY CORP				RECEIVED:		12/02/82 JA: TX			
8312100	F-10-60393	4217931252		103		KEN #1 (ID #05191)	PANHANDLE GRAY	60.0	GETTY OIL CO
8312101	F-10-60394	4217900000		103		KEN #2 (ID #05191)	PANHANDLE GRAY	50.0	GETTY OIL CO
8312102	F-10-60395	4217931253		103		KEN #4 (ID #05191)	PANHANDLE GRAY	50.0	GETTY OIL COMPANY
8312103	F-10-60396	4217931184		103		MICHAEL #1 (ID #05172)	PANHANDLE GRAY	50.0	GETTY OIL CO
-PED OIL CORP				RECEIVED:		12/02/82 JA: TX			
8311894	F-08-053112	4222700000		102-4		FLANAGAN #A-1	RED DRAW (FUSSELMAN)	76.6	PHILLIPS PETROLEU
-PEND OREILLE OIL & GAS CO				RECEIVED:		12/02/82 JA: TX			
8312076	F-02-60260	4229733174		102-4		J W MCCLELLAND GAS UNIT #1	LIMES (WILCOX 9900)	730.0	HOUSTON PIPELINE
8312075	F-02-60259	4229732993		102-4		L L BENNETT GAS UNIT #1	LIMES (WILCOX 9900)	1095.0	HOUSTON PIPELINE
-PENNZOIL PRODUCING COMPANY				RECEIVED:		12/02/82 JA: TX			
8311947	F-04-056978	4235531295		103		CLARA DRISCOLL #A-15-D	AGUA DULCE (ELLIFF)	95.0	UNITED GAS PIPE L
8311972	F-04-058021	4250531543		102-4		SALVADOR GARCIA #2	EL GRULLO (7,040*)	71.0	TRANSCO
-PETRO-LEWIS CORPORATION				RECEIVED:		12/02/82 JA: TX			
8311960	F-02-057476	4228531620		103		W A CARNES #2-C	YOAKUM	72.6	LONE STAR GAS CO
8311959	F-02-057475	4228531620		103		W A CARNES #2-T	YOAKUM	55.9	LONE STAR GAS CO
-PETROLEUM TECHNICAL SERVICES CO				RECEIVED:		12/02/82 JA: TX			
8312116	F-08-60414	4210332977		103		TOM COWDEN #6	LEA (SAN ANDRES)	2.5	WARREN PETROLEUM
-PETRUS OPERATING CO INC				RECEIVED:		12/02/82 JA: TX			
8311889	F-03-051798	4228700000		102-2		HIELSCHER "A" #1	GIDDINGS (BUDA) FIELD	0.0	PERRY GAS CO
-PHILLIPS PETROLEUM COMPANY				RECEIVED:		12/02/82 JA: TX			
8312147	F-10-60531	4219500000		108		ALEXANDER B #1	TEXAS HUGOTON- DOLOMI	0.0	MICHIGAN WISCONSI
8312146	F-10-60528	4217900000		108		PHIL-PAMPA UNIT #7-6	PANHANDLE GRAY	0.0	GETTY OIL CO
-PYRON EXPLORATION & DRILLING CORP				RECEIVED:		12/02/82 JA: TX			
8311877	F-09-048662	4250335654		102-4		PRIDEAUX #2	MARKLEY S MARBLE FALL	365.0	SOUTHWESTERN GAS
-R E KIBBE				RECEIVED:		12/02/82 JA: TX			
8311999	F-04-059046	4224900000		108		ISHAM #5	PREMONT (MURCHISON)	14.6	TRUNKLINE GAS CO
8312001	F-04-059050	4224900000		108		ISHAM #6	PREMONT (SINGER 3100)	15.9	TRUNKLINE GAS CO
-R H ENGELKE				RECEIVED:		12/02/82 JA: TX			
8311870	F-03-046566	4248132169		103		HLAVINKA WILLIAM J #1	HUNGERFORD N (3300)	620.5	TENNESSEE GAS PIP
-R H SIEGFRIED				RECEIVED:		12/02/82 JA: TX			
8311998	F-09-059031	4249700000		103		R L MORRIS "A" #29	CHICO WEST (CADDO CON	50.0	NATURAL GAS PIPEL
-RAILHEAD ENERGY CO				RECEIVED:		12/02/82 JA: TX			
8311913	F-7B-054739	4236732194		103		MARGARET H RITCHEY	GRANT (STRAWN LOWER)	90.0	LONE STAR GAS CO
-REPUBLIC OIL & GAS CORP				RECEIVED:		12/02/82 JA: TX			
8311918	F-02-055023	4229732990		102-4	103	O L BELL #1	RAMIRENA (3150*) NORT	175.0	VALLEY GAS TRANSM
-RETAMCO INC				RECEIVED:		12/02/82 JA: TX			
8312002	F-01-59102	4250731652		102-4		ELLA CAPPS #8	BEAR SALT (OLMOS)	35.6	INTER NORTH INC
8312006	F-04-59153	4247933251		102-4	107-TF	ROSS #1	VAGUILLAS RANCH (WILC	410.0	
-RICHARD B BERRY				RECEIVED:		12/02/82 JA: TX			
8312067	F-7B-60216	4242933209		103		PRITCHARD #1	STEPHENS COUNTY REGUL	4.0	LONE STAR GAS CO
-RICHARD D ATKINS				RECEIVED:		12/02/82 JA: TX			
8311992	F-7B-058634	4236300000		102-4		APPLING #1	KESSLER (3980)	150.0	LIQUID ENERGY COR
-RICKS EXPLORATION CO				RECEIVED:		12/02/82 JA: TX			
8311994	F-10-058947	4235731137		102-4		SANTA FE 1087-A	RICKS (MORROW UP)	72.0	PRODUCERS GAS CO
-RIDGE OIL CO				RECEIVED:		12/02/82 JA: TX			
8311970	F-7B-057964	4242933254		102-4	103	BILLY TOM #1	RANGER NW (MARBLE FAL	81.0	COMPRESSOR RENTAL
8312012	F-7B-59192	4242933341		102-4	103	COFFMAN #2	RANGER NW (MARBLE FAL	23.4	COMPRESSOR RENTAL
8311986	F-7B-058398	4242933307		102-4	103	GLENN #1	RANGER NW (MARBLE FAL	90.0	COMPRESSOR RENTAL
8311936	F-7B-056476	4242933125		102-4	103	J P BOOLES ESTATE #1	RANGER NW (MARBLE FAL	64.8	COMPRESSOR RENTAL

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JD NO	JA DKT	API NO	D	SEC(1)	SEC(2)	WELL NAME	FIELD NAME	PROD	PURCHASER
8311984	F-7B-058395	4213334062		102-4	103	LUCILLE BARBER #1	RANGER NW (MARBLE FAL	27.0	COMPRESSOR RENTAL
8311968	F-7B-057960	4242933129		102-4	103	MCBAY #1	RANGER NW (MARBLE FAL	57.6	COMPRESSOR RENTAL
8311985	F-7B-058396	4242933279		102-4	103	OXFORD #1	RANGER NW (MARBLE FAL	21.6	COMPRESSOR RENTAL
8312011	F-7B-59191	4242933124		102-4	103	T FLOURNEY #1	RANGER NW (MARBLE FAL	22.3	COMPRESSOR RENTAL
8311969	F-7B-057961	4213334043		102-4	103	THOMAS #1	RANGER NW (MARBLE FAL	30.2	COMPRESSOR RENTAL
8311967	F-7B-057959	4213334042		102-4	103	WAGSTAFF #1	RANGER NW (MARBLE FAL	28.8	COMPRESSOR RENTAL
-RK PETROLEUM CORP				RECEIVED:		12/02/82 JA: TX			
8312077	F-08-60261	4231732578		103		R C STEWART #2 #21774	SPRABERRY/TREND AREA	73.0	INTERNORTH INC
-ROME EXPLORATION CO INC				RECEIVED:		12/02/82 JA: TX			
8311866	F-01-044349	4250731358		102-4		L LYLES #2	LYLES RANCH	36.0	ESPERANZA PIPE LI
8311867	F-01-044350	4250731482		102-4		L LYLES #5	LYLES RANCH	36.0	ESPERANZA PIPE LI
8311869	F-01-044518	4250731582		102-4		LYLES #8	LYLES RANCH	36.0	ESPERANZA TRANSMI
-ROOSTH & GENECOV PRODUCTION CO				RECEIVED:		12/02/82 JA: TX			
8312004	F-06-59112	4242330591		102-4		HARRISON EVERHART #3	PHILLIP LIVELY SURVEY	306.0	EAST TEXAS PRODUC
-ROY E KIMSEY				RECEIVED:		12/02/82 JA: TX			
8311906	F-08-054345	4238931233		107-DP		LINDSAY "326" #1	PEC REEVES (DEVONIAN)	73.0	
-S R G OIL CORP				RECEIVED:		12/02/82 JA: TX			
8312053	F-7B-60100	4209331023		103		G BINGHAM #1	MITTIE (MARBLE FALLS)	267.0	LONE STAR GAS CO
-SABINE PRODUCTION COMPANY				RECEIVED:		12/02/82 JA: TX			
8311996	F-08-059014	4231700000		103		MABEE A #2		0.0	
8311995	F-08-059013	4231700000		103		MABEE B-3 #6		0.0	
-SALURIA OPERATING CO				RECEIVED:		12/02/82 JA: TX			
8311938	F-02-056707	4225530804		102-4		JAMES FOSTER #1	MALO DOMINGO	100.0	DOW PIPELINE CO
-SAMEDAN OIL CORPORATION				RECEIVED:		12/02/82 JA: TX			
8311899	F-04-053795	4227300000		102-2		STATE TRACT 934-S #E-2	SAMEDAN FRIO	1000.0	EL PASO NATURAL G
-SANCHEZ-OBRIEN OIL & GAS CORP				RECEIVED:		12/02/82 JA: TX			
8311925		4207131338		102-4		B B ROGERS #2 WELL #1	WHITES BAYOU S (TX WA	0.0	UNITED TEXAS TRAN
-SANDEFER OIL & GAS INC				RECEIVED:		12/02/82 JA: TX			
8311932	F-02-056100	4229732706		102-4		J R LYNE #2	TEXAM (11,550")	365.0	HOUSTON PIPE LINE
-SANDEFER PETROLEUM CO				RECEIVED:		12/02/82 JA: TX			
8311990	F-04-058571	4235531987		102-4		J L BLUNTZER	AGUA DULCE (8550")	600.0	HOUSTON PIPE LINE
-SCANDRILL INC				RECEIVED:		12/02/82 JA: TX			
8311980	F-09-058202	4223734583		102-4	103	H J RICHARDS "A" #2		91.2	LONE STAR GAS CO
8312035	F-09-59910	4223734661		103		PEMBERTON #8	JACK COUNTY REGULAR	73.0	LONE STAR GAS CO
8312014	F-09-59214	4250336195		103		SCAN-KING "J" #1	YOUNG COUNTY REGULAR	31.2	
-SEAGO OIL INC				RECEIVED:		12/02/82 JA: TX			
8311888	F-7C-051647	4239932213		102-2	103	RUSSELL #3	BALLINGER WEST (GARDN	274.0	LONE STAR GAS CO
8311987	F-7C-058403	4239932478		102-2		RUSSELL #4	BALLINGER WEST (JENNI	360.0	LONE STAR GAS CO
-SHELL OIL CO				RECEIVED:		12/02/82 JA: TX			
8311935	F-04-056373	4221531224		103		A A MCALLEN #78	MCALLEN RANCH (VICKSB	350.6	VALERO INTERSTATE
-SMILE ENERGY INC				RECEIVED:		12/02/82 JA: TX			
8312057	F-7B-60167	4213332741		102-4		DILLINDER #D-1	DESDEMONA N (CONGL)	18.0	NORTHERN GAS PROD
-SOHIO PETROLEUM CO				RECEIVED:		12/02/82 JA: TX			
8312071	F-7C-60250	4238332312		103		E G CAUBLE "A" #6	CALVIN (DEAN)	0.0	EL PASO NATURAL G
-SOUTHLAND ROYALTY CO				RECEIVED:		12/02/82 JA: TX			
8312026	F-08-59477	4222732757		103		MCKINNON #2	FLORAC	1.0	ODESSA NATURAL CO
8312081	F-7C-60295	4238330574		108		ONA WELLS "B" #2	CALVIN DEAN	7.3	UNION TEXAS PETRO
-STAHL PETROLEUM CO				RECEIVED:		12/02/82 JA: TX			
8312033	F-10-59691	4217900000		108		FLORENCE JOHNSON #3	PANHANDLE GRAY	0.0	PHILLIPS PETROLEU
-STEVE STAMPER				RECEIVED:		12/02/82 JA: TX			
8312038	F-09-59914	4223700000		103		B B SIMPSON #1	BRYSON EAST	175.2	LONE STAR GAS CO
8312037	F-09-59913	4223700000		103		BOAZ #1	BRYSON EAST	54.8	LONE STAR GAS CO
8312036	F-09-59912	4223734990		103		BOAZ #2	BRYSON EAST	127.8	LONE STAR GAS CO

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JD NO	JA DKT	API NO	D	SEC(1)	SEC(2)	WELL NAME	FIELD NAME	PROD	PURCHASER
-SUN EXPLORATION & PRODUCTION CO				RECEIVED:	12/02/82	JA: TX			
8312125	F-7C-60448	4289500000		108		ARMOR-CAFFEY #1L	SPECK SOUTH (STRAWN C	9.0	LONE STAR GAS CO
8312088	F-01-60306	4212732349		103		BIG WELLS (SAN MIGUEL) UNIT #1030	BIG WELLS (SAN MIGUEL	0.4	HOUSTON PIPE LINE
8311944	F-03-056936	4232100000		108		BRAHAM -C- #25L	SUGAR VALLEY	8.0	HOUSTON PIPE LINE
8311914	F-09-054775	4223700000		108		DURHAM A-3 GAS UT #4	BOONSVILLE (BEND CONG	14.0	LONE STAR GAS CO
8311923	F-08-055596	4213500000		108		E GOLDSMITH SAN ANDRES UT #24-3	GOLDSMITH EAST (SAN A	2.0	PHILLIPS PETROLEU
8312124	F-01-60446	4250731578		103		ERIN BAIN JONES #3	PEARSALL (AUSTIN CHAL	0.4	HOUSTON PIPE LINE
8312126	F-04-60453	4242731359		103		GARCIA L & L "A" #31	GARCIA	76.0	TRANSCONTINENTAL
8312089	F-03-60307	4248100000		108		HENDERSON-STOVALL GAS UNIT #1-U	WHARCO SHILLING (WILC	21.0	TEXAS EASTERN TRA
8311981	F-04-058222	4213136037		102-4		L WIEDERKEHR #203	GOVERNMENT WELLS NORT	95.8	VALERO INTERSTATE
8311952	F-04-057116	4242731497		102-4		REILLY GAS UNIT #4	REILLY	414.0	
8312123	F-08-60444	4233531946		103		V T MCCABE #41	JAMESON N (ODOM)	40.0	LONE STAR GAS CO
8312122	F-08-60443	4233531763		103		V T MCCABE "B" #33	JAMESON NORTH (STRAWN	12.0	LONE STAR GAS CO
8312022	F-04-59445	4224731443		102-4		WEIL BROS #45	WEIL SOUTH	6.0	
-SUPERIOR OIL CO				RECEIVED:	12/02/82	JA: TX			
8311924	F-03-055616	4205132273		102-2 103		C F SUPAK #1	GIDDINGS (AUSTIN CHAL	0.0	CLAJON GAS CO
8311953	F-03-057166	4228731279		102-2 103		SHELLY BRANCH UNIT #3 WELL #1	GIDDINGS	0.0	PERRY PIPELINE CO
8312008	F-7C-59159	4210533723		107-TF		UNIVERSITY 22-31 WELL #1	UNIVERSITY 31 (STRAWN	0.0	SOUTHWESTERN GAS
8312007	F-7C-59158	4210533715		107-TF		UNIVERSITY 23-31 #1	UNIVERSITY 31 (STRAWN	0.0	SOUTHWESTERN GAS
8311893	F-02-052795	4228531640		102-2	107-TF	V E RHODES GAS UN #1 WELL #3	WORD N (EDWARDS)	0.0	
-SWEETWATER DRILLING CO INC				RECEIVED:	12/02/82	JA: TX			
8311865	F-7B-040739	4241733396		103		BRUNO BROOKS #1 (17159)	MORAN S E (DUFFER)	48.0	LONE STAR GAS CO
-TAYLOR OPERATING COMPANY				RECEIVED:	12/02/82	JA: TX			
8312027	F-09-59551	4223700000		103		NEWMAN #1 (20056)	JACK COUNTY REGULAR	51.1	SOUTHWESTERN GAS
8312034	F-09-59740	4249700000		108		R H NOBLES "A" #1 (077797)	BOONSVILLE (BEND CONG	28.0	NATURAL GAS PIPE
8311909	F-7B-054502	4222100000		108		PAWLS #1 (082249)	MCINTOSH (STRAWN)	36.0	SOUTHWESTERN GAS
-TEMPLETON ENERGY INC				RECEIVED:	12/02/82	JA: TX			
8311961	F-04-057571	4224931529		103		FITZSIMMONS #3	BEN BOLT W (4700' SAN	110.0	VALERO TRANSMISSI
-TENNECO OIL COMPANY				RECEIVED:	12/02/82	JA: TX			
8312137	F-8A-60498	4250132115		103		CENTRAL GLORIETA UNIT #60	PRENTICE	0.0	AMOCO PRODUCTION
8312136	F-8A-60497	4250132114		103		CENTRAL GLORIETA UNIT #61	PRENTICE	0.0	AMOCO PRODUCTION
8311993	F-08-058735	4231732427		103		MCWHORTER #1	N Y Y SHRAWN LIME	0.0	
8312135	F-8A-60496	4250132239		103		PRENTICE 6700 CLEARFORD UT #1121	PRENTICE (6700' CLEAR	0.0	AMOCO PRODUCTION
8311950	F-8A-057035	4250132230		103		PRENTICE CLEARFORK UNIT #1306	PRENTICE (6700')	0.0	AMOCO PRODUCTION
-TEXACO INC				RECEIVED:	12/02/82	JA: TX			
8312145	F-09-60524	4218100000		108		FRANK WRIGHT #1	BIG MINERAL SE (V SAN	18.9	UNION TEXAS PETRO
8312084	F-10-60299	4235700000		108		M R WRIGHT #1	SPICER (MARMATON)	0.8	PHILLIPS PETROLEU
8312085	F-10-60300	4235700000		108		M R WRIGHT #2	SPICER (MARMATON)	1.4	PHILLIPS PETROLEU
8312087	F-10-60302	4235700000		108		M R WRIGHT #3	SPICER (MARMATON)	0.8	PHILLIPS PETROLEU
8312086	F-10-60301	4235700000		108		M R WRIGHT #4	SPICER (MARMATON)	0.8	PHILLIPS PETROLEU
-THOMPSON J CLEO & JAMES CLEO JR				RECEIVED:	12/02/82	JA: TX			
8312063	F-7C-60194	4210500000		108		THOMPSON FEE #4	OZONA (CANYON SAND)	11.0	EL PASO NATURAL G
8312062	F-7C-60193	4210500000		108		THOMPSON FEE #5	OZONA (CANYON SAND)	11.0	EL PASO NATURAL G
8312064	F-7C-60195	4210500000		108		THOMPSON FEE #9	OZONA (CANYON SAND)	10.0	EL PASO NATURAL G
8311880	F-7C-050624	4210533117		107-TF		UNIVERSITY 21 #1	UNIVERSITY 31 (STRAWN	277.0	PHILLIPS PETROLEU
-TOM MCGEE CORP				RECEIVED:	12/02/82	JA: TX			
8311942	F-10-056913	4235730948		103		GRAHAM #1	CAMBRIDGE (ATOKA)	109.5	DIAMOND SHAMROCK
-TRINITY EXPLORATION CO				RECEIVED:	12/02/82	JA: TX			
8312018	F-7B-59383	4213334193		102-4		B L WHITE #1	T E C (CADDO)	424.0	ODESSA NATURAL CO
-TXO PRODUCTION CORP				RECEIVED:	12/02/82	JA: TX			
8312020	F-7B-59435	4241734711		102-4		WALKER-BUCKLER 72 #3	ROCKWELL (GARDNER)	200.0	DELHI GAS PIPELIN
-U S OPERATING INC				RECEIVED:	12/02/82	JA: TX			
8311916	F-03-054870	4228731140		103		STELLA #1	GIDDINGS (AUSTIN CHAL	0.0	PERRY PIPELINE CO

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JD NO	JA CKT	API NO	D	SEC(1)	SEC(2)	WELL NAME	FIELD NAME	PROD	PURCHASER
-UNION TEXAS PETROLEUM				RECEIVED:	12/02/82	JA: TX			
8312132	F-7C-60479	4223531905		102-2		SUGG "2" #1	ANDREW A (CANYON)	111.6	FARMLAND INDUSTRI
8312131	F-7C-60477	4223531906		102-2		SUGG "20" #1	ANDREW A (CANYON)	225.0	FARMLAND INDUSTRI
-VESTOIL INC				RECEIVED:	12/02/82	JA: TX			
8312096	F-03-60333	4229100000		103		E B PICKETT/DEVINE #8	SOUTH LIBERTY	0.0	UNITED TEXAS TRAN
-W J WHITT				RECEIVED:	12/02/82	JA: TX			
8312142	F-7B-60518	4204933173		102-4		4-W RANCH "A" #10 (18645)	DUDLEY (CADDO)	48.0	EL PASO HYDROCARB
8312139	F-7B-60515	4204933096		102-4		4-W RANCH "A" #2 (18645)	DUDLEY (CADDO)	7.0	EL PASO HYDROCARB
8312140	F-7B-60516	4204933170		102-4		4-W RANCH "A" #7 (18645)	DUDLEY (CADDO)	29.0	EL PASO HYDROCARB
8312141	F-7B-60517	4204933172		102-4		4-W RANCH "A" #9 (18645)	DUDLEY (CADDO)	29.0	EL PASO HYDROCARB
-WAGNER & BROWN				RECEIVED:	12/02/82	JA: TX			
8312080	F-08-60292	4243131178		103		HILDEBRAND #50-20	CONGER (PENN)	123.8	TEXAS UTILITIES F
8312106	F-08-60401	4217331292		102-4		MORROW #1-13	MUSTANG (ATOKA)	87.5	
-WAINOCO OIL & GAS CO				RECEIVED:	12/02/82	JA: TX			
8312010	F-04-59189	4240931323		103		AMERICAN NATL BANK OF AUSTIN G U #1	BRANNON (HERRON LO)	0.0	TEXAS EASTERN TRA
-WARREN PETR CO A DIV OF GULF OIL CO				RECEIVED:	12/02/82	JA: TX			
8312113	F-08-60408	4210332941		103		M B MCKNIGHT #127	SAND HILLS (MCKNIGHT)	12.4	EL PASO NATURAL G
8312111	F-08-60406	4210332940		103		M B MCKNIGHT #128	SAND HILLS (MCKNIGHT)	45.9	EL PASO NATURAL G
8312112	F-08-60407	4210332943		103		M F HENDERSON #169	WADDELL	8.3	EL PASO NATURAL G
8312114	F-08-60409	4210332942		103		M F HENDERSON #170	WADDELL	13.3	EL PASO NATURAL G
8312108	F-08-60403	4210332961		103		P J LEA #136	LEA (SAN ANDRES)	7.4	EL PASO NATURAL G
8312110	F-08-60405	4210332770		103		W A ESTES #114	PHOENIX (SILURIAN)	56.5	EL PASO NATURAL G
8312105	F-08-60400	4210332830		103		W N WADDELL #1225	SAND HILLS (JUDKINS)	19.6	EL PASO NATURAL G
8312109	F-08-60404	4210332863		103		W N WADDELL #1238	SAND HILLS (JUDKINS)	114.5	EL PASO NATURAL G
-WILLIAM PERLMAN				RECEIVED:	12/02/82	JA: TX			
8311860	F-7C-027529	4243532361		103		FIELDS 56-1 91528	SAWYER (WOLFCAMP)	0.0	EL PASO NATURAL G
-WY-VEL CORP				RECEIVED:	12/02/82	JA: TX			
8312066	F-10-60206	4217931183		103		O'NEAL (05037) #38	PANHANDLE	40.2	GETTY OIL CO
-ZERO CORP OF TEXAS				RECEIVED:	12/02/82	JA: TX			
8311965	F-04-057753	4213135790		103		WENDT #1	GOVERNMENT WELLS NORT	20.0	TENNESSEE GAS PIP

SOURCE DATA FOR THIS NOTICE IS AVAILABLE ON MAGNETIC TAPE FROM THE NATIONAL TECHNICAL INFORMATION SERVICE (NTIS). FOR INFORMATION, CONTACT STUART WEISMAN (NTIS) AT (703) 487-4808, 5285 PORT ROYAL RD, SPRINGFIELD, VA 22161, OR SANDRA SPEAR (FERC) (202) 357-8681.

BILLING CODE 6717-01-C

The above notices of determination were received from the indicated jurisdictional agencies by the Federal Energy Regulatory Commission pursuant to the Natural Gas Policy Act of 1978 and 18 CFR 274.104. Negative determinations are indicated by a "D" before the section code. Estimated annual production (PROD) is in million cubic feet (MMCF). An (^) before the Control (JD) number denotes additional purchasers listed at the end of the notice.

The applications for determination are available for inspection except to the extent such material is confidential under 18 CFR 275.206, at the Commission's Division of Public Information, Room 1000, 825 North Capitol St., Washington, D.C. Persons objecting to any of these determinations may, in accordance with 18 CFR 275.203 and 275.204, file a protest with the Commission within fifteen days after publication of notice in the **Federal Register.**

Categories within each NGPA section are indicated by the following codes:

Section 102-1: New OCS lease
- 102-2: New well (2.5 mile rule)
- 103-3: New well (1000 ft rule)
- 102-4: New onshore reservoir
- 102-5: New reservoir on old OCS lease

Section 107-DP: 15,000 feet or deeper
- 107-GB: Geopressured brine
- 107-CS: Coal seams
- 107-DV: Devonian shale
- 107-PE: Production enhancement
- 107-TF: New tight formation
- 107-RT: Recompletion tight formation

Section 108: Stripper well
- 108-SA: Seasonally affected
- 108-ER: Enhanced recovery
- 108-PB: Pressure buildup

Kenneth F. Plumb,

Secretary.

[FR Doc. 83-1037 Filed 1-13-83; 8:45 am]

BILLING CODE 6717-01-M

Determinations by Jurisdictional Agencies Under the Natural Gas Policy Act of 1978

Issued: January 10, 1983.

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JD NO   JA DKT        API NO      D SEC(1) SEC(2) WELL NAME                          FIELD NAME            PROD   PURCHASER
-----   ------        ------      - ------ ------ ---------                          ----------            ----   ---------
*************************************************************************************
  CALIFORNIA DEPARTMENT OF CONSERVATION
*************************************************************************************
-CHALLENGER MINERALS INC              RECEIVED:  12/02/82    JA: CA
 8312234  82-4-0191    0402965814   102-4          KIMMEL #55-32                     WEST BELLEVUE          0.0 PACIFIC LIGHTING
 8312236  82-4-0192    0402965545   102-4          LOVEGREN #62-32                   WEST BELLEVUE          0.0 PACIFIC LIGHTING
 8312235  82-40193     0402965146   102-4          WILLIAMS #74X-32                  WEST BELLEVUE          0.0 PACIFIC LIGHTING
-ENERGETICS INC                       RECEIVED:  12/02/82    JA: CA
 8312233  62-2-0006    0411121168   102-2          DEL MAR RANCH #32-35              WILDCAT              105.0 PACIFIC LIGHTING
-PETRO-LEWIS CORPORATION              RECEIVED:  12/02/82    JA: CA
 8312237  82-4-0189    0402966539   103            KING 88L-19                       SOUTH BELRIDGE         0.0 MOBIL OIL CORP
-TENNECO OIL COMPANY                  RECEIVED:  12/02/82    JA: CA
 8312238  82-4-0190    0402967101   103            YOWLUMNE UNIT "B" 23X-3           YOWLUMNE              22.0 ARCO OIL & GAS CO
*************************************************************************************
  KANSAS CORPORATION COMMISSION
*************************************************************************************
-ATTICA GAS VENTURE CORP              RECEIVED:  12/01/82    JA: KS
 8312222  K-82-0086    1507720756   103            ATTICA GAS VENTURE - UNIT #1      SULLIVAN EXT         300.0 PEOPLES NATURAL G
-CINCO EXPLORATION COMPANY            RECEIVED:  12/01/82    JA: KS
 8312218  K-81-1239    1512920468   103            ROGER G FOX #1                    CNE/4 SEC 28-T33S-R43  1.8 COLORADO INTERSTA
-CONTINENTAL ENERGY                   RECEIVED:  12/01/82    JA: KS
 8312219  K-81-1191    1506900000   103            RENICK #2                         HUGOTON              346.0 INTER NORTH INC
-FRONTIER OIL CO                      RECEIVED:  12/03/82    JA: KS
 8312229  K-80-0242    1516520427   108-ER         GIESICK #1                                             0.0 KANSAS NEBRASKA N
-KANSAS NATURAL GAS INC               RECEIVED:  12/01/82    JA: KS
 8312221  K-82-0204    1509320719   103            CRIST #2-CG-1                     PANOMA - COUNCIL GROV  100.0 KANSAS-NEBRASKA N
 8312220  K-82-0205    1509320720   103            CRIST #2-CG-12                    PANOMA - COUNCIL GROV  100.0 KANSAS-NEBRASKA N
-NORTHERN NATURAL GAS PRODUCING CO    RECEIVED:  12/01/82    JA: KS
 8312217  K-82-0136    1505520486   103            BROWN #6 UNIT #7                  PANOMA COUNCIL GROVE    70.0 INTER NORTH INC
*************************************************************************************
  MICHIGAN DEPARTMENT OF NATURAL RESOURCES
*************************************************************************************
-SUN EXPL. & PROD. CO. - HOUSTON      RECEIVED:  12/03/82    JA: MI
 8312232               2111333851 D 103            NORWICH UNIT #4-98                NORWICH                16.0 DOW CHEMICAL CO
 8312231               2114332952 D 103            NORWICH UNIT #6-12                NORWICH                 6.4 DOW CHEMICAL CO
 8312230               2114333681   103            NORWICH UNIT #6-15                NORWICH                 1.0 DOW CHEMICAL CO
-SUN EXPLORATION & PRODUCTION CO      RECEIVED:  12/01/82    JA: MI
 8312216               2107335252   103            MCCLINTIC #1                      MT PLEASANT             9.8
*************************************************************************************
  MONTANA BOARD OF OIL & GAS CONSERVATION
*************************************************************************************
-MIDLANDS GAS CORPORATION             RECEIVED:  12/03/82    JA: MT
 8312227  11-82-267    2507121483   108            HELLIE 1 1160                     WILDCAT               22.0 KANSAS-NEBRASKA N
*************************************************************************************
  NEBRASKA OIL & GAS CONSERVATION COMMISSION
*************************************************************************************
-BEREN CORPORATION                    RECEIVED:  12/03/82    JA: NB
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JD NO	JA DKT	API NO	D	SEC(1)	SEC(2)	WELL NAME	FIELD NAME	PROD	PURCHASER
8312226		2603322061		103		CORK #4	SOUTHWEST SIDNEY	2.5	KANSAS-NEBRASKA N
8312224		2603321898		103		DAY #1	SOUTHWEST SIDNEY	6.5	KANSAS-NEBRASKA N
8312225		2603322062		103		DAY #2	SOUTHWEST SIDNEY	9.0	KANSAS-NEBRASKA N
OKLAHOMA CORPORATION COMMISSION									
-J T OIL CO			RECEIVED:	12/02/82		JA: OK			
8312228	18562	3504321415		102-4		BRADY #2-2		547.5	PANHANDLE EASTERN
PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL RESOURCES									
-ADOBE OIL & GAS CORPORATION			RECEIVED:	12/01/82		JA: PA			
8312150	18041	3706522634		103		LITTLE LEO CORP "E" #1	PUNXSUTAWNEY	22.0	COLUMBIA GAS TRAN
8312151	17827	3706522295		108		MARTHA A WALTENBAUGH #1	WHITESBURG	8.7	INDUSTRIAL ENERGY
-ANGERMAN ASSOCIATES INC			RECEIVED:	12/01/82		JA: PA			
8312152	17660	3706326976		103		E S BROWN #2 - IND-26976	W PENNA - UPPER DEVON	20.0	PEOPLES NATURAL G
8312153	17661	3706327051		103		HELEN L HOUSEHOLDER #3 - IND-27051	W PENNA - UPPER DEVON	25.0	PEOPLES NATURAL G
-APPALACHIAN ENERGY INC			RECEIVED:	12/01/82		JA: PA			
8312155	18132	3704920616		108		JACK RAYMOND #1 AE-46	UPPER DEVONIAN SANDS	30.0	COLUMBIA GAS TRAN
8312154	18131	3704920553		108		RAYMOND QUERREVELD #1 AE-27	UPPER DEVONIAN SANDS	5.3	COLUMBIA GAS TRAN
-BEACH ENERGY & DEVELOPMENT CO			RECEIVED:	12/01/82		JA: PA			
8312156	16882	3706522567		103		N P #1	HEATHVILLE GAS FIELD	24.0	NATIONAL FUEL GAS
8312157	16883	3706522565		103		N P #2	HEATHVILLE GAS FIELD	36.0	NATIONAL FUEL GAS
-CONSOLIDATED GAS SUPPLY CORPORATION			RECEIVED:	12/01/82		JA: PA			
8312161	17536	3702320055		102-4		EMPORIUM WATER CO WN-1313	LUMBER	2.0	GENERAL SYSTEM PU
8312160	17535	3703320546		102-4		GRAMPIAN (HARRIS ETAL) WN-1353	BLOOM	7.0	GENERAL SYSTEM PU
8312158	17533	3706326898		102-2		JOHN GEORGE WN-1817	GREEN	27.0	GENERAL SYSTEM PU
8312166	18084	3703321390		103		JOS D TONKIN WN-1914	BURNSIDE	4.0	GENERAL SYSTEM PU
8312162	17038	3706326948		103		MOLLIE MOCK WN-1906	MONTGOMERY TOWNSHIP	115.0	GENERAL SYSTEM PU
8312164	18081	3703321350		103		PAUL FULTON WN-1889	BURNSIDE	45.0	GENERAL SYSTEM PU
8312159	17534	3703320596		102-4		RALPH J KORB #1 WN-1483	BLOOM	5.0	GENERAL SYSTEM PU
8312163	17832	3706327088		103		ROBERT J SMITH #2 WN-1904	GREEN	30.0	GENERAL SYSTEM PU
8312165	18083	3703321401		103		THELMA STEWART WN-1911	BURNSIDE	408.0	GENERAL SYSTEM PU
-FELMONT OIL CORPORATION			RECEIVED:	12/01/82		JA: PA			
8312167	17961	3702120045		102-4		LANTZY #1 F-315	DRISCOLL HOLLOW	0.0	COLUMBIA GAS TRAN
-FOX OIL & GAS INC			RECEIVED:	12/01/82		JA: PA			
8312168	17998	3706326899		102-4		GILBERT SIMMONS #3 271	CHERRY HILL TOWNSHIP	25.5	COLUMBIA GAS TRAN
8312169	17997	3706326899		103		GILBERT SIMMONS #3 271	CHERRY HILL TOWNSHIP	25.5	COLUMBIA GAS TRAN
-HANLEY & BIRD			RECEIVED:	12/01/82		JA: PA			
8312170	17542	3706522710		103		R MCKISSICK #1 SHB-8 SN1710	GASTOWN	41.2	T W PHILLIPS GAS
8312171	17545	3706522573		103		ZIMMERMAN BROS #1 SN1708	BROOKVILLE	25.6	NATIONAL FUEL GAS
-J & J ENTERPRISES INC			RECEIVED:	12/01/82		JA: PA			
8312173	15491	3706327014		103		JOHN MCCOY #1 (108A)	GREEN	0.0	CONSOLIDATED GAS
8312172	17046	3706327020		103		TWO LICK VALLEY ROD & GUN CLUB #1	GREEN	0.0	CONSOLIDATED GAS
-KALTSAS OIL CO			RECEIVED:	12/01/82		JA: PA			
8312174	15487	3704921754		103		JAMES G HOPKINS #2	NORTH EAST	40.0	COLUMBIA GAS TRAN
8312175	17970	3704921754		107-TF		JAMES G HOPKINS #2	NORTH EAST FIELD HORN	40.0	COLUMBIA GAS TRAN
-KEYSTONE ENERGY OIL & GAS PRODUCTIO			RECEIVED:	12/01/82		JA: PA			
8312176	17970	3706326767		103		KUNKLE #3	THOMAS KUNKLE	89.5	T W PHILLIPS GAS
-MAYS GAS & COAL CO			RECEIVED:	12/01/82		JA: PA			
8312177	18093	3703100000		108		DEVONIAN/BRADFORD SAND	CLARION	0.0	PEOPLES NATURAL G
8312178	18094	3703100000		108		DEVONIAN/BRADFORD SAND	CLARION	0.0	PEOPLES NATURAL G
-MITCHELL ENERGY CORPORATION			RECEIVED:	12/01/82		JA: PA			

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JD NO	JA DKT	API NO	D	SEC(1)	SEC(2)	WELL NAME	FIELD NAME	PROD	PURCHASER
8312179	17747	3703920410		103		FEJES UNIT #1	NEW LEBANON (MEDINA &	411.0	COLUMBIA GAS TRAN
8312180	17748	3703920410		107-TF		FEJES UNIT #1	NEW LEBANON (MEDINA &	410.0	COLUMBIA GAS TRAN
-NORTHWEST NATURAL GAS CO				RECEIVED:	12/01/82	JA: PA			
8312181	10927	3704921429		103		JOSEPH & JOSEPHINE GLAVIC #2	CONNEAUT	0.0	NATIONAL FUEL DIS
8312182	10921	3704921429		107-TF		JOSEPH & JOSEPHINE GLAVIC #2	CONNEAUT	0.0	NATIONAL FUEL DIS
-PETROLEUM PIPE & SUPPLY CO INC				RECEIVED:	12/01/82	JA: PA			
8312183	16775	3706327073		103		ARTHUR J HALL #1	SOUTH MAHONING	25.0	
-PHILLIPS PRODUCTION CO				RECEIVED:	12/01/82	JA: PA			
8312184	18095	3703321137		102-2		CURTIS J BARRETT #1	GREENWOOD	35.0	
-POI ENERGY INC				RECEIVED:	12/01/82	JA: PA			
8312203	15378	3712329736		107-TF		K NICHOLS #1	ELDRED	35.0	COLUMBIA GAS TRAN
-REX-HIDE REALTY INC				RECEIVED:	12/01/82	JA: PA			
8312204	17957	3706327090		103		RALPH D CRUSAN #2	CONEMAUGH	45.0	
-S T JOINT VENTURE - 81-B				RECEIVED:	12/01/82	JA: PA			
8312207	17230	3733213380		102-2		HIMES #1	JORDAN	25.0	COLUMBIA GAS TRAN
8312208	17910	3706522649		103		NORTH-KOPPENHAVER #1		25.0	T W PHILLIPS GAS
8312209	18126	3706522421		103		PACHETTI #2	WINSLOW	25.0	NATIONAL FUEL GAS
8312206	17227	3703321385		102-2		WITHEROW #1	FERGUSON	25.0	COLUMBIA GAS TRAN
-S T JOINT VENTURE B1A				RECEIVED:	12/01/82	JA: PA			
8312205	17229	3703321776		102-2		SWISSTOCK #1	JORDAN	25.0	COLUMBIA GAS TRAN
-T W PHILLIPS GAS & OIL CO				RECEIVED:	12/01/82	JA: PA			
8312197	18117	3712920188		108		A ALVIN STEWART #1-26A	LOWER BURRELL	2.4	T W PHILLIPS GAS
8312200	18120	3712900000		108		A T MILLER #1	UPPER BURRELL	2.6	T W PHILLIPS GAS
8312188	18108	3706321580		108		ALVIN S MACNEIL #1	BUFFINGTON	2.3	T W PHILLIPS GAS
8312193	18113	3706300000		108		B R WILLIAMS #1	PINE	0.7	T W PHILLIPS GAS
8312191	18111	3706300000		108		CHARLIE VEHOVIC #1	PINE	0.5	T W PHILLIPS GAS
8312192	18112	3706300000		108		G A WEILAND #1	PINE	0.4	T W PHILLIPS GAS
8312189	18109	3706300000		108		HAZEL MEAGHER #1	BUFFINGTON	0.9	T W PHILLIPS GAS
8312198	18118	3712900000		108		J H MCCRADY SR #1	UPPER BURRELL	0.8	T W PHILLIPS GAS
8312187	18107	3706300000		108		J H STEWART #2	BRUSH VALLEY	1.2	T W PHILLIPS GAS
8312186	18106	3706300000		108		J HARRY STEWART #1	BRUSH VALLEY	0.9	T W PHILLIPS GAS
8312190	18110	3706300000		108		J N YOUNG #1	BUFFINGTON	1.1	T W PHILLIPS GAS
8312201	18121	3712900000		108		JOHN WALDSMITH HRS #1	UPPER BURRELL	3.0	T W PHILLIPS GAS
8312195	18115	3706300000		108		M A MACK #1	EAST WHEATFIELD	2.2	T W PHILLIPS GAS
8312185	18105	3706300000		108		MARGARET J & S QUAY OVERDORFF #1	BRUSH VALLEY	1.7	T W PHILLIPS GAS
8312199	18119	3712900000		108		MRS MAUDE MCWILLIAMS #1	UPPER BURRELL	3.8	T W PHILLIPS GAS
8312202	18122	3712900000		108		ROBERT C WILSON #2	UPPER BURRELL	8.4	T W PHILLIPS GAS
8312196	18116	3712900000		108		SAMUEL ROSS #1	LOWER BURRELL	2.0	T W PHILLIPS GAS
8312194	18114	3706300000		108		WILMORE COAL COMPANY #1	PINE	0.4	T W PHILLIPS GAS
-UNION DRILLING INC				RECEIVED:	12/01/82	JA: PA			
8312215	17497	3706326931		103		DALE E EMPFIELD #1 0772	CHERRYHILL TOWNSHIP	0.0	COLUMBIA GAS TRAN
8312212	17494	3706336750		103		EDWARD & CHARLES MEARS #6 0771	CHERRYHILL TOWNSHIP	0.0	COLUMBIA GAS TRAN
8312211	17493	3706326769		103		GILBERT ZILNER #2 0770	CHERRYHILL TOWNSHIP	0.0	COLUMBIA GAS TRAN
8312214	17496	3706326749		103		HARRY LUCAS #1 0774	CHERRYHILL TOWNSHIP	0.0	COLUMBIA GAS TRAN
8312213	17495	3706326808		103		HARRY LUCAS #2 0777	CHERRYHILL TOWNSHIP	0.0	COLUMBIA GAS TRAN
8312210	17395	3706326163		102-2		HARVEY BROWN #2 0638	CHERRYHILL TOWNSHIP	0.0	COLUMBIA GAS TRAN
**********									
** DEPARTMENT OF THE INTERIOR, MINERALS MANAGEMENT SERVICE, METAIRIE,LA									
**********									
-CHEVRON U S A INC				RECEIVED:	11/30/82	JA: CA 3			
8312223	G2-2695	0470640303		102-5		OCS-G-3137 #A-8	VERMILLION	3285.0	COLUMBIA GAS TRAN

SOURCE DATA FOR THIS NOTICE IS AVAILABLE ON MAGNETIC TAPE FROM THE NATIONAL TECHNICAL INFORMATION SERVICE (NTIS). FOR INFORMATION, CONTACT STUART WEISMAN (NTIS) AT (703) 487-4808, 5285 PORT ROYAL RD, SPRINGFIELD, VA 22161, OR SANDRA SPEAR (FERC) (202) 357-8681.

Kenneth F. Plumb,

Secretary.

[FR Doc. 83-1038 Filed 1-13-83; 8:45 am]

BILLING CODE 6717-01-C

[Volume 805]

Determinations by Jurisdictional Agencies Under the Natural Gas Policy Act of 1978

Issued: January 10, 1983.

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 JD NO   JA CKT        API NO      D SEC(1) SEC(2) WELL NAME                                FIELD NAME          PROD   PURCHASER
 -----   ------        ------      - ------ ------ ---------                                ----------          ----   ---------
*************************************************************************
   LOUISIANA OFFICE OF CONSERVATION
*************************************************************************
-EDWIN L COX                        RECEIVED:  12/03/82    JA: LA
 8312383  81-2805      1700120764   102-4          HENSGENS #1 HAYES RB SUA             ELLIS                146.0 LOUISIANA GAS SYS
-GENERAL AMERICAN OIL COMPANY OF TEX RECEIVED:  12/03/82    JA: LA
 8312372  81-2571      1702321515   103            CAMERON PARISH SCHOOL BOARD #26      JOHNSON BAYOU         75.0 TRANSCONTINENTAL
-GREAT SOUTHERN OIL & GAS CO INC    RECEIVED:  12/03/82    JA: LA
 8312389  81-2762      1701920807   103            CARLIN #1 10540 RA VUA               SOUTH BELL CITY      220.0 LOUISIANA GAS SYS
-HARVEY BROYLES                     RECEIVED:  12/03/82    JA: LA
 8312390  82-0307      1701320362   102-4          POOLE #2 BR-OZ RB SUA                BEAR CREEK           135.0 LOUISIANA GAS PUR
-INDEPENDENT EXPLORATION CO         RECEIVED:  12/03/82    JA: LA
 8312385  82-0233      1711321162   102-4          MARK BROUSSARD #2                    ERATH FIELD          328.0 LOUISIANA INTRAST
-LADD PETROLEUM CORPORATION         RECEIVED:  12/03/82    JA: LA
 8312374  82-0347      1771120238   102-4          STATE LEASE #7607 #1                 POINT AU FER         119.4 LOUISIANA INTRAST
-PLACID OIL COMPANY                 RECEIVED:  12/03/82    JA: LA
 8312373  82-0330      1705922167   102-4          IPB LANEHART #1 B4 RA SUI            JENA AIRPORT           2.0
-POGO PRODUCING COMPANY             RECEIVED:  12/03/82    JA: LA
 8312387  81-2790      1701521559   102-2          ANTRIM TRUST #1                      ANTRIM               360.0 UNITED GAS PIPE L
-REMUDA OIL & GAS CO                RECEIVED:  12/03/82    JA: LA
 8312375  81-2532      1703121011   103            MARTIN TIMBER CO #1                  GROGAN                64.6 LUMAR GAS GATHERI
-TEXACO INC                         RECEIVED:  12/03/82    JA: LA
 8312379  81-2565      1710922055   103            LB U-34 51 VU-34                     LAKE BARRE             5.0 KAISER ALUMINUM &
 8312378  82-2727      1710922235   103            LB U39 #27 LB LM 2 SU                LAKE BARRE            50.0 KAISER ALUMINUM &
 8312377  82-0165      1705721711   102-4          LL&E GOLDEN MEADOW 224               GOLDEN MEADOW          1.0 KAISER ALUMINUM &
 8312381  81-2559      1710922164   103            LP U-13 75 VUM                       LAKE PELTO           365.0 KAISER ALUMINUM &
 8312376  81-2562      1700720237   103            P R NORMAN B-8 LIEB 5 RB SUA         GRAND BAYOU         1605.0 KAISER ALUMINUM &
 8312388  82-0371      1707522331   103            SL 335 DDC U1 #106 VUA               DELTA DUCK CLUB        5.0 FREEPORT SULPHUR
 8312386  81-2776      1710121080   103            SL 341 9 BAL SU                      BATEMAN LAKE           8.4 CITY OF MORGAN CI
-WEAVER EXPLORATION CO              RECEIVED:  12/03/82    JA: LA
 8312380  82-0402      1710922251   102-4          CONTINENTAL LAND & FUR CO INC #3-D   ST PAUL BAYOU        100.0 TRANSCONTINENTAL
-WHELESS INDUSTRIES INC             RECEIVED:  12/03/82    JA: LA
 8312392  81-2822      1702720696   102-4          G F REEDER #1 WHELE-PEL SMK A RASUA  EAST DYKESVILLE      500.0 UNITED GAS PIPE L
 8312391  82-0280      1702720799   107-TF         GUY LEWIS #1 WHELE-PELT SMK C RASUB  EAST DYKESVILLE      500.0 UNITED GAS PIPE L
 8312384  82-0282      1702720824   102-2  107-TF  GUY LEWIS #2 WHELE-PELT SMK C RASUC  EAST DYKESVILLE      200.0 UNITED GAS PIPELI
-WILLIAMS EXPLORATION COMPANY       RECEIVED:  12/03/82    JA: LA
 8312382  81-2803      1710922366   102-4          S C COLLINS #1-D                     LAPEYROUSE          1283.0
*************************************************************************
   OHIO DEPARTMENT OF NATURAL RESOURCES
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-ALSID OIL & GAS DEVELOPMENT CO     RECEIVED:  12/02/82    JA: OH
 8312239               3409921022   107-TF         WEIZENECKER UNIT #1                  SMITH                 15.0
-ALTHEIRS OIL INC                   RECEIVED:  12/02/82    JA: OH
 8312240               3412724618   103    107-TF  ALTHEIRS #5                          SALT LICK TOWNSHIP     6.0 NICOFIBERS INC
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JD NO	JA DKT	API NO	D	SEC(1)	SEC(2)	WELL NAME	FIELD NAME	PROD	PURCHASER
-AMERICAN WELL MANAGEMENT COMPANY				RECEIVED: 12/02/82		JA: OH			
8312241		3416320405		107-TF		L FULLER #2	SWAN	2.0	COLUMBIA GAS TRAN
-B & B ENTERPRISES				RECEIVED: 12/02/82		JA: OH			
8312242		3411522911		103		PAVOL #1	MEIGSVILLE QUAD	1.0	COLUMBIA GAS TRAN
-BERMAN J SHAFER				RECEIVED: 12/02/82		JA: OH			
8312338		3410322774		107-TF		COX #1	WESTFIELD	7.5	COLUMBIA GAS TRAN
-BERRESFORD ENTERPRISES INC				RECEIVED: 12/02/82		JA: OH			
8312244		3411522283		103		KENT PLACE #1	CENTER	0.0	
8312245		3411522656		107-TF		RICHARD MINICH #1	DEERFIELD	0.0	
-BILL BLAIR INCORPORATED				RECEIVED: 12/02/82		JA: OH			
8312246		3402920891		103	107-TF	ACIERNI #1	HOMEWORTH	14.0	EAST OHIO GAS CO
8312247		3402926919		103	107-TF	ACIERNI #2	HOMEWORTH	14.0	EAST OHIO GAS CO
-BKK PROSPECTING LTD				RECEIVED: 12/02/82		JA: OH			
8312243		3416727202		107-DV		CLARK #1	SALEM	30.0	COLUMBIA GAS TRAN
-BRADEN DEVELOPMENT COMPANY				RECEIVED: 12/02/82		JA: OH			
8312250		3416726872		107-DV		ISAAC PUGH #2	LUDLOW	0.0	COLUMBIA GAS TRAN
-CARROLL RESOURCES				RECEIVED: 12/02/82		JA: OH			
8312252		3410322118		103		ROBERT STINE #2	HOMER	4.0	
8312251		3410322116		103		ROBERT STINE #3	HOMER	7.0	
-CAVENDISH PETROLEUM OF OHIO INC				RECEIVED: 12/02/82		JA: OH			
8312253		3411923933		108		OHIO POWER 20MD		0.0	EAST OHIO GAS CO
-CLARENCE K TUSSEL JR				RECEIVED: 12/02/82		JA: OH			
8312364		3400721998		103	107-TF	K BABCOCK #1	CHERRY VALLEY	30.0	
-CLARENCE SHERMAN				RECEIVED: 12/02/82		JA: OH			
8312339		3407521805		103	107-RT	ANDY L YODER #17	CLARK	3.7	COLUMBIA GAS TRAN
-CLINTON OIL CO				RECEIVED: 12/02/82		JA: OH			
8312254		3401320381		103		JEFFERIES #2	SOMERSET	10.0	
-CUYAHOGA EXPLORATION & DEVELOPMENT				RECEIVED: 12/02/82		JA: OH			
8312256		3411122900		107-DV		FRANK ROSE #1-13	WASHINGTON	20.2	
8312255		3411122886		107-DV		FRANK ROSE #2-13	WASHINGTON	24.1	
-DINERO OPERATING CO				RECEIVED: 12/02/82		JA: OH			
8312261		3411122568		103		CHRISTMAN #1	FRANKLIN	17.5	
8312257		3411122106		103		HARPER #1	MALAGA	39.4	
8312258		3411122515		103		HOLMES #1	CENTER	9.2	
8312259		3411122518		103		JACKSON #1	SUMMIT	13.2	
8312260		3411122519		103		WEST #1	WAYNE	26.3	
-DORAN & ASSOCIATES INC				RECEIVED: 12/02/82		JA: OH			
8312263		3408720297	D	107-DV		BENNIE BURCH #1	PERRY	12.0	COLUMBIA GAS TRAN
8312262		3408720284		107-DV		DORIS DINGUS #1	FAYETTE	12.0	COLUMBIA GAS TRAN
8312264		3408720309		107-DV		LARRY J PENNINGTON #1A	PERRY	12.0	COLUMBIA GAS TRAN
-ELKHEAD GAS & OIL COMPANY				RECEIVED: 12/02/82		JA: OH			
8312265		3407322719		103		STRAIT #4	HOCKING	10.0	COLUMBIA GAS TRAN
-ENTERPRISE ENERGY CORP				RECEIVED: 12/02/82		JA: OH			
8312266		3411522958		103	107-TF	FERGUSON #1A	MANCHESTER	36.5	TEXAS EASTERN TRA
-FORAKER PRODUCING COMPANY INC				RECEIVED: 12/02/82		JA: OH			
8312267		3412724703		107-TF		HAGAN REICHLEY #1	DEAVERTOWN	30.0	
-G W F CORP				RECEIVED: 12/02/82		JA: OH			
8312269		3400922450		103		NEWBANKS #2	CUTLER	8.0	
-GENERAL ELECTRIC CO				RECEIVED: 12/02/82		JA: OH			
8312270		3400721837		103	107-TF	RHOADS #2	CONNEAUT	30.0	EAST OHIO GAS CO
-GNC ENERGY CORP				RECEIVED: 12/02/82		JA: OH			
8312268		3411522703		107-TF		WM & CARROLL MOORE #2	MALTA	15.0	
-HERALD OIL & GAS CO				RECEIVED: 12/02/82		JA: OH			

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JD NO	JA DKT	API NO	D	SEC(1)	SEC(2)	WELL NAME	FIELD NAME	PROD	PURCHASER
8312275		3410522390		107-TF		CHARLES WITHEE #1	POMEROY	0.0	COLUMBIA GAS TRAN
8312277		3410522457		107-TF		LEWIS HUMPHREY #1	POMEROY	0.0	COLUMBIA GAS TRAN
8312274		3410522122		107-TF		RAY LITTLE #1	POMEROY	0.0	COLUMBIA GAS TRAN
8312276		3410522409		107-TF		ROMA CREMEANS #1	RUTLAND	0.0	COLUMBIA GAS TRAN
-HOOVER PRODUCING & OPERATING				RECEIVED:	12/02/82	JA: OH			
8312278		3408924460		103		G WRIGHT #2-A	PERRY	10.9	NATIONAL GAS & OI
-J D DRILLING CO				RECEIVED:	12/02/82	JA: OH			
8312279		3410521806		107-TF		ALBERT ROUSH #1	SALISBURY	4.0	COLUMBIA GAS TRAN
8312280		3410522017		107-TF		C D CORE #1	BEDFORD	3.0	COLUMBIA GAS TRAN
-JERRY MOORE INC				RECEIVED:	12/02/82	JA: OH			
8312290		3407523337		107-TF		HENRY M MILLER UNIT #1-6215	NEW BEDFORD	2.0	COLUMBIA GAS TRAN
8312291		3407523872		107-TF		JOHN D HERSHBERGER UNIT #1-16	NEW BEDFORD	2.0	COLUMBIA GAS TRAN
-L & M PETROLEUM INC				RECEIVED:	12/02/82	JA: OH			
8312281		3412725532		107-TF		EARL COFFMAN #3	PIKE	10.0	FORAKER GAS CO IN
8312282		3412725533		107-TF		EARL COFFMAN #4	PIKE	10.0	FORAKER GAS CO
-LAKE REGION OIL INC				RECEIVED:	12/02/82	JA: OH			
8312283		3403124737		103	107-TF	NORMAN FOGLE #1	KILLBUCK	10.0	COLUMBIA GAS TRAN
-LANDPROVEST INC				RECEIVED:	12/02/82	JA: OH			
8312284		3405923245		107-TF		GRAHAM #1	INDIAN CAMP	25.0	COLUMBIA GAS TRAN
-LEVENGOOD OIL & GAS INC				RECEIVED:	12/02/82	JA: OH			
8312285		3407522225		103	107-TF	EUELL MILLER #1	CLARK	10.0	COLUMBIA GAS TRAN
8312286		3407522537		107-TF		GRAY-PATTERSON #1	CLARK	10.0	COLUMBIA GAS TRAN
-MEGA OIL CORP				RECEIVED:	12/02/82	JA: OH			
8312289		3408720336		107-TF		ENEAL & MERLE TAYLOR #1	MASON	12.0	COLUMBIA GAS TRAN
-MORGAN-PENNINGTON INC				RECEIVED:	12/02/82	JA: OH			
8312292		3415320811		107-TF		BALTIC #1	NORTON	18.3	EAST OHIO GAS CO
8312293		3415320812		107-TF		NEITZ-MCKOWN UNIT #1	NORTON	18.3	EAST OHIO GAS CO
8312294		3415320813		107-TF		STAVARZ #1	NORTON	20.0	EAST OHIO GAS CO
-MURPHY OIL CO				RECEIVED:	12/02/82	JA: OH			
8312295		3410521994		107-DV		IDA GEOGLEIN #1	HEMLOCK GROVE	7.3	COLUMBIA GAS TRAN
-NATIONAL PETROLEUM CORP				RECEIVED:	12/02/82	JA: OH			
8312304		3400722824		108		HUSTON #1		15.0	OHIO GAS CO
8312303		3400722676		108		ROBINSON-BENDER #4		15.0	OHIO GAS CO
8312300		3400720565		108		ROULSTON #3		15.0	OHIO GAS CO
8312301		3400720578		108		ROULSTON #4		15.0	OHIO GAS CO
8312299		3400720351		108		ROULSTON #5		15.0	OHIO GAS CO
8312302		3400720733		108		SMITH #2		15.0	OHIO GAS CO
-NEW FRONTIER EXPLORATION INC				RECEIVED:	12/02/82	JA: OH			
8312312		3410322563		103	107-TF	DAVID MCDONALD #1	SHARON	20.0	
8312315		3415123665		103	107-TF	DAVID WALTER #1	OSNABURG	22.0	
8312310		3406720433		103	107-TF	DUNLAP 1-A	NORTH	22.0	TENNECO OIL CO
8312309		3406720432		103	107-TF	DUNLAP-WHITEMAN UNIT #1	NORTH	20.0	TENNECO OIL CO
8312306		3403124459		103	107-TF	HAROLD THOMAS #2	WASHINGTON	18.0	COLUMBIA GAS TRAN
8312307		3403124612		103	107-TF	HARVEY VICKERS #3	VIRGINIA	18.0	COLUMBIA GAS TRAN
8312308		3403126413		103	107-TF	HARVEY VICKERS #5	COSHOCTON	18.0	COLUMBIA GAS TRAN
8312314		3413321447		103	107-TF	LAUBERT-RAINS-KIDIKAS UNIT #1	RANDOLPH	16.0	EAST OHIO GAS CO
8312305		3403124375		103	107-TF	M MARTIN #2	WASHINGTON	18.0	
8312311		3406720503		103	107-TF	PATRICIA MORRIS #1	FRANKLIN	20.0	TENNECO OIL CO
8312313		3410322795		103	107-TF	ROBERT BOWMAN #2	WADSWORTH	20.0	AMERICAN ENERGY S
-OS AIR INC				RECEIVED:	12/02/82	JA: OH			
8312316		3408520328		103	107-TF	OS AIR #1	MENTOR	40.0	
-OXFORD OIL CO				RECEIVED:	12/02/82	JA: OH			
8312317		3411925989		107-TF		EMMA MCKENZIE #5	HOPEWELL N-R	10.0	

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JD NO	JA DKT	API NO	D	SEC(1)	SEC(2)	WELL NAME	FIELD NAME	PROD	PURCHASER
-PENN-OHIO ENERGY CORP				RECEIVED: 12/02/82		JA: OH			
8312319		3405520334		107-TF		H & C MOSS GC-204	CLARIDON TOWNSHIP	30.0	EAST OHIO GAS CO
-PHOENIX NATIONAL PETROLEUM				RECEIVED: 12/02/82		JA: OH			
8312321		3415723436		103	107-TF	BURDETTE #2	RUSH	10.0	BARMET INDUSTRIES
8312320		3415723435		103	107-TF	TUSCO LAND COMPANY #3	RUSH	7.8	BARMET INDUSTRIES
-PONDEROSA OIL COMPANY				RECEIVED: 12/02/82		JA: OH			
8312325		3416922807		103	107-TF	ALBERT FATH #1	SUGAR CREEK	10.0	COLUMBIA GAS TRAN
8312326		3416923272		103	107-TF	DEAN R STERLING #1	SALT CREEK	12.0	COLUMBIA GAS TRAN
8312324		3407523893		107-TF		MABEL L FEIKERT #1	BERLIN	14.0	COLUMBIA GAS TRAN
8312322		3407523890		107-TF		WILLIAM P HERMAN #1	PRAIRIE	11.0	COLUMBIA GAS TRAN
8312323		3407523891		107-TF		WILLIAM P HERMAN #2	PRAIRIE	14.0	COLUMBIA GAS TRAN
-RIMCO OPERATING INC				RECEIVED: 12/02/82		JA: OH			
8312328		3416922344		103	107-TF	WEISER #2	CHESTER	12.0	COLUMBIA GAS TRAN
-RIVERLAND OIL INC				RECEIVED: 12/02/82		JA: OH			
8312329		3407522664		103		RIVERLAND - MAST #3	HOLMESVILLE FIELD	0.0	COLUMBIA GAS TRAN
-RPJ ENERGY FUND MANAGEMENT INC				RECEIVED: 12/02/82		JA: OH			
8312327		3405923117		107-TF		THOMPSON #1	BIRMINGHAM	50.0	
-SANDHILL ENERGY INC (OH)				RECEIVED: 12/02/82		JA: OH			
8312332		3416727251		103		CHARLES HALL #2	RAVEN ROCK	14.6	
8312331		3416727224		103		LONGFELLOW #6	GRANDVIEW	14.6	
8312330		3411122874		103		MANSFIELD #1	BENTON	27.3	
-SEIBERT OIL & GAS INC				RECEIVED: 12/02/82		JA: OH			
8312333		3413322932		107-TF		BAUM #1	KENT	25.0	COLUMBIA GAS OF O
-SENECA ENERGY CORP				RECEIVED: 12/02/82		JA: OH			
8312335		3403124881		107-TF		CONKLE #2	MILL CREEK	8.0	COLUMBIA GAS TRAN
8312334		3403124765		107-TF		CROFT #1		22.0	COLUMBIA GAS TRAN
8312337		3403124889		107-TF		O'MEARA #1	MILLCREEK	22.0	COLUMBIA GAS TRAN
8312336		3403124882		107-TF		SCOTT #1	CLARK	18.0	COLUMBIA GAS TRAN
-SMITH SHAFER SMITH (A PARTNERSHIP)				RECEIVED: 12/02/82		JA: OH			
8312340		3410322753		107-TF		DANIEL & NANCY MORROW #1	GRANGER	5.0	COLUMBIA GAS TRAN
8312341		3416923104		107-TF		MAYER #1	WAYNE	7.5	COLUMBIA GAS TRAN
-THE MUTUAL OIL & GAS COMPANY				RECEIVED: 12/02/82		JA: OH			
8312296		3411122762		103	107-DV	HINES #3M	FRANKLIN	11.0	COLUMBIA GAS TRAN
8312297		3411122764		103	107-DV	MCCONNELL #2M	FRANKLIN	15.0	COLUMBIA GAS TRAN
8312298		3411122903		103	107-TF	RUBEL-WYATT #2M	SUMMIT	8.0	COLUMBIA GAS TRAN
-TITAN ENERGY CORP				RECEIVED: 12/02/82		JA: OH			
8312361		3415522236		103	107-TF	O'BRIEN #1	BROOKFIELD	20.0	COLUMBIA GAS TRAN
-TOM BOYD INC				RECEIVED: 12/02/82		JA: OH			
8312248		3410521658		108		JOHN DEAN #1		2.2	COLUMBIA GAS TRAN
8312249		3410521678		108		JOHN DEAN #3		2.2	COLUMBIA GAS TRAN
-TOWNER PETROLEUM CO				RECEIVED: 12/02/82		JA: OH			
8312362		3405923354		103	107-TF	JOHNSON/C KEEFER #1	LONDONDERRY	27.0	TENNESSEE GAS PIP
8312363		3405923381		103		KUHN R #2	MADISON	23.0	
-UNITED PETROLEUM CORP				RECEIVED: 12/02/82		JA: OH			
8312365		3409920769		107-RT		HIPPLEY-TRUITT #1	GOSHEN	28.0	YANKEE RESOURCES
8312366		3409920786		107-RT		RUTHRAUFF #1	GOSHEN	28.0	YANKEE RESOURCES
8312367		3409920788		107-RT		RUTHRAUFF-WEINGART #1	GOSHEN	28.0	YANKEE RESOURCES
8312369		3415520538		108		TURON #7	FARMINGTON	0.0	AMERICAN ENERGY S
8312370		3415520561		108		TURON #8A	FARMINGTON	0.0	AMERICAN ENERGY S
8312368		3415520532		108		TURON #9	FARMINGTON	0.0	AMERICAN ENERGY S
-W H PATTON DRILLING CO				RECEIVED: 12/02/82		JA: OH			
8312318		3407523563		107-TF		JACK SKELLY #1	HARDY	0.0	
-W J LYDIC INC				RECEIVED: 12/02/82		JA: OH			

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JD NO	JA DKT	API NO	D	SEC(1)	SEC(2)	WELL NAME	FIELD NAME	PROD	PURCHASER
8312288		3411521791		103		GROVER TOWNSEND #1	CENTER	0.0	
8312287		3411521557		103		OSIE ROHRBAUGH #1	CENTER	0.0	
-WALLICK PETROLEUM CO				RECEIVED:	12/02/82	JA: OH			
8312371		3411925885		107-TF		WILLIAM WAGNER #1	CASS	10.0	NATIONAL GAS & OI
-WARREN R HAUGHT AGENT				RECEIVED:	12/02/82	JA: OH			
8312271		3416725124		107-DV		CROY LUMBER CO #1	NEWPORT TOWNSHIP SECT	2.5	COLUMBIA GAS TRAN
8312272		3416725197		107-DV		HAPPY F PLUMMER #4	NEWPORT TOWNSHIP SECT	4.0	COLUMBIA GAS TRAN
8312273		3416725224		107-DV		JACK E HOLLISTER #1	MARIETTA TOWNSHIP SEC	1.0	COLUMBIA GAS TRAN
-WILLIAM N TIPKA				RECEIVED:	12/02/82	JA: OH			
8312344		3410322561		103	107-TF	CARL MYERS #2	SHARON	0.0	BARTLO OIL & GAS
8312352		3415723373		107-TF		GEORGE BERKSHIRE #1A	WASHINGTON	6.0	COLUMBIA GAS TRAN
8312351		3415723358		107-TF		GEORGE BERKSHIRE #2	WASHINGTON	6.0	COLUMBIA GAS TRAN
8312349		3415723348		107-TF		GEORGE BERKSHIRE #3	WASHINGTON	18.0	COLUMBIA GAS TRAN
8312358		3415723505		107-TF		HUMPHREY #1	OXFORD	18.0	COLUMBIA GAS TRAN
8312343		3410322314		103	107-TF	JOHN MCCLELLAND #1	SHARON	36.0	BARTLO OIL & GAS
8312355		3415723452		107-TF		JOHN-BUTCHER UNIT #1	WASHINGTON	6.0	COLUMBIA GAS TRAN
8312354		3415723451		107-TF		MARLATT #1	WASHINGTON	10.0	COLUMBIA GAS TRAN
8312356		3415723453		107-TF		MCCORMICK #1	WASHINGTON	10.0	COLUMBIA GAS TRAN
8312359		3415723538		107-TF		MISKIMEN-BROWN UNIT #1	WASHINGTON	15.0	COLUMBIA GAS TRAN
8312345		3410322800		103	107-TF	SHARON ACRES #1A	SHARON	18.0	BARTLO OIL & GAS
8312357		3415723504		107-TF		STAHL-HART #1	OXFORD	6.0	COLUMBIA GAS TRAN
8312348		3415723345		107-TF		STEINER-HROMETZ #1	WASHINGTON	20.0	COLUMBIA GAS TRAN
8312360		3415723546		107-TF		STEINER-HROMETZ #2	WASHINGTON	20.0	COLUMBIA GAS TRAN
8312350		3415723349		107-TF		WALTER QUIGLEY #1	WASHINGTON	20.0	COLUMBIA GAS TRAN
8312353		3415723422		107-TF		WALTER QUIGLEY #1A	WASHINGTON	15.0	COLUMBIA GAS TRAN
8312347		3415722980		107-TF		WALTER QUIGLEY #1B	WASHINGTON	10.0	COLUMBIA GAS TRAN
8312346		3415722968		107-TF		WALTER QUIGLEY #2A	WASHINGTON	16.0	COLUMBIA GAS TRAN
8312342		3410322291		107-TF		WERSHING #1	HINCKLEY	30.0	COLUMBIA GAS OF O
** DEPARTMENT OF THE INTERIOR, MINERALS MANAGEMENT SERVICE, ALBUQUERQUE,NM									
-ALPHA TWENTY-ONE PRODUCTION CO				RECEIVED:	12/03/82	JA: NM 4			
8312394	NM 1187-82	3002527757		103		COLVIN FEDERAL #1	WILDCAT	90.0	EL PASO NATURAL G
-BEARTOOTH OIL & GAS CO				RECEIVED:	12/03/82	JA: NM 4			
8312413	NM-0896-82	3003922855		103		MINEL FEDERAL #3	BLANCO-MESA VERDE	90.0	SOUTHWEST GAS COR
-BRADLEY H KEYES				RECEIVED:	12/03/82	JA: NM 4			
8312433	NM 6026-81ER	3004506408		108-ER		YOCKEY #2	WEST KUTZ - PICTURED	4.0	EL PASO NATURAL G
-CONSOLIDATED OIL & GAS INC				RECEIVED:	12/03/82	JA: NM 4			
8312437	NM-1088-82	3003921511		108		HURON 1-A	BLANCO MESAVERDE	21.0	GAS CO OF NEW MEX
-CURTIS J LITTLE				RECEIVED:	12/03/82	JA: NM 4			
8312460	NM-1203-82	3003922700		107-TF		GREVEY #1	BALLARD PICTURED CLIF	25.0	EL PASO NATURAL G
8312443	NM-1206-82	3003922788		107-TF		GREVEY #2	BALLARD-PICTURED CLIF	25.0	EL PASO NATURAL G
8312461	NM-1202-82	3003922695		107-TF		SALAZAR #1	BALLARD PICTURED CLIF	25.0	EL PASO NATURAL G
8312442	NM-1207-82	3003922789		107-TF		SALAZAR #2	BALLARD-PICTURED CLIF	25.0	EL PASO NATURAL G
8312449	NM-1205-82	3003922861		107-TF		SALAZAR #3	SO BLANCO PC	25.0	EL PASO NATURAL G
8312450	NM-1204-82	3003922701		107-TF		WARREN #1	BALLARD PICTURED CLIF	25.0	EL PASO NATURAL G
8312441	NM-1208-82	3003922790		107-TF		WARREN #2	BALLARD PICTURED CLIF	25.0	EL PASO NATURAL G
-DEPCO INC				RECEIVED:	12/03/82	JA: NM 4			
8312436	NM 0949-82	3001524080		103		FEDERAL 384 #1	LOCO HILLS (Q GR S A)	17.0	PHILLIPS PETROLEU
-DOME PETROLEUM CORP				RECEIVED:	12/03/82	JA: NM 4			
8312396	NM 1152-82	3003922894		103		DOME FEDERAL 34-24-7 #3	ESCRITO-GALLUP	36.5	
-DOYLE HARTMAN OIL OPERATOR				RECEIVED:	12/03/82	JA: NM 4			
8312469	NM 1250-82	3002527838		103		FARNSWORTH FEDERAL #1	SCARBOROUGH (OIL)	15.0	EL PASO NATURAL G

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JD NO	JA DKT	API NO	D	SEC(1)	SEC(2)	WELL NAME	FIELD NAME	PROD	PURCHASER
-EL PASO NATURAL GAS COMPANY				RECEIVED: 12/03/82 JA: NM 4					
8312451	NM-1290-82	3003920252		108		CANYON LARGO UNIT #150	OTERO - CHACRA	22.0	EL PASO NATURAL G
8312402	NM-0391-82	3003920717		108		CANYON LARGO UNIT #191	BALLARD-PICTURED CLIF	4.0	EL PASO NATURAL G
8312446	NM 1315-82	3004521515		108		DAY #8	BLANCO - PICTURED CLI	18.0	EL PASO NATURAL G
8312414	NM-0455-82	3004509290		108		FLORANCE #3	BLANCO - PICTURED CLI	22.0	EL PASO NATURAL G
8312457	NM-1199-82	3004520819		108		GRAMBLING A #4	SOUTH BLANCO - PICTUR	20.0	EL PASO NATURAL G
8312395	NM-1185-82	3004520334		108		HOWELL #6	SOUTH BLANCO - PICTUR	20.0	EL PASO NATURAL G
8312459	NM-1293-82	3004520740		108		HUERFANO UNIT #131	BASIN - DAKOTA	21.0	EL PASO NATURAL G
8312424	NM 1184-82	3004520419		108		HUERFANO UNIT #190	BASIN DAKOTA	19.0	EL PASO NATURAL G
8312401	NM 0154-82PB	3004520608		108-PB		HUERFANO UNIT #201	BASIN/DAKOTA	24.0	EL PASO NATURAL G
8312452	NM-1287-82	3004520814		108		HUERFANO UNIT #219	BASIN - DAKOTA	18.0	EL PASO NATURAL G
8312456	NM-1294-82	3004506180		108		HUERFANO UNIT #82	WEST KUTZ - PICTURED	21.0	EL PASO NATURAL G
8312419	NM-1181-82	3004507064		108		MARTIN #5	FULCHER KUTZ - PICTUR	15.0	EL PASO NATURAL G
8312425	NM-1180-82	3004505564		108		MCMANUS #10	BALLARD - PICTURED CL	20.0	EL PASO NATURAL G
8312418	NM-1183-82	3003906859		108		SAN JUAN 27-5 UNIT #28 PC & MV	TAPACITO - PICTURED C	18.0	EL PASO NATURAL G
8312455	NM 1299-82	3003920574		108		SAN JUAN 28-6 UNIT #130	BASIN - DAKOTA	20.0	EL PASO NATURAL G
8312454	NM 1308-82	3003920584		108		SAN JUAN 28-6 UNIT #133	BASIN - DAKOTA	18.0	EL PASO NATURAL G
8312453	NM 1311-82	3003907292		108		SAN JUAN 28-6 UNIT #16	BLANCO - MESA VERDE	20.0	EL PASO NATURAL G
8312408	NM-0161-82PB	3003907808		108-PB		SAN JUAN 30-4 UNIT #14	EAST BLANCO - PICTURE	22.0	EL PASO NATURAL G
8312447	NM 1312-82	3003907879		108		SAN JUAN 30-6 UNIT #88	BLANCO - MESA VERDE	15.0	EL PASO NATURAL G
8312422	NM-1159-82	3004509207		108		STEWART #6	BASIN - DAKOTA	20.0	EL PASO NATURAL G
8312409	NM 0158-82PB	3003907012		108-PB		11 27-5 UNIT #10	BLANCO-MESAVERDE GAS	15.0	EL PASO NATURAL G
-EXXON CORPORATION				RECEIVED: 12/03/82 JA: NM 4					
8312435	NM-0994-82	3001524130		103		ALLEN FEDERAL #1	UNDESIGNATED - EAST R	13.0	
8312407	NM 1234-82	3001524047		103		YATES FEDERAL "C" #1	BURTON FLAT	138.0	
-FRASER INDUSTRIES INC				RECEIVED: 12/03/82 JA: NM 4					
8312420	NM 1224-82	3002527754		103		EXXON "A" FEDERAL #1 NM 29694	DOUBLE "X" DELAWARE	11.0	PHILLIPS PETROLEU
-GETTY OIL COMPANY				RECEIVED: 12/03/82 JA: NM 4					
8312406	NM-1226-82	3004506459		108		G R GENTLE #1	SOUTH BLANCO PICTURED	20.0	EL PASO NATURAL G
8312427	NM-1223-82	3004506772		108		J Q MARSHALL #1	SOUTH BLANCO PICTURED	19.0	EL PASO NATURAL G
8312404	NM-1228-82	3004513247		108		NEAH-VICTORIA #1	SOUTH BLANCO PICTURED	20.0	EL PASO NATURAL G
8312405	NM-1227-82	3004506876		108		NEAH-VICTORIA #2	SOUTH BLANCO PICTURED	20.0	EL PASO NATURAL G
-GULF OIL CORPORATION				RECEIVED: 12/03/82 JA: NM 4					
8312393	NM-1189-82	3002522489		108		M K STEWART #3	TEAGUE BLINEBRY	1.8	EL PASO NATURAL G
-JOHN E SCHALK				RECEIVED: 12/03/82 JA: NM 4					
8312423	NM-1128-82	3003921618		103		SCHALK 29-4 #6	GOBERNADOR PICTURED C	0.0	NORTHWEST PIPELIN
-KIMBELL OIL COMPANY				RECEIVED: 12/03/82 JA: NM 4					
8312468	NM 1253-82	3003922845		107-TF		FEDERAL COM A-5	BALLARD PICTURED CLIF	26.0	EL PASO NATURAL G
8312467	NM 1251-82	3003922724		107-TF		WARREN #5	BALLARD PICTURED CLIF	146.0	EL PASO NATURAL G
8312400	NM-1193-82	3003905714		108		WARREN FEDERAL #2	BASIN DAKOTA UNIT O S	15.6	EL PASO NATURAL G
-M R SCHALK				RECEIVED: 12/03/82 JA: NM 4					
8312439	NM-1080-82	3004525349		103		L C KELLY #1E	BASIN DAKOTA	0.0	EL PASO NATURAL G
8312438	NM-1081-82	3004525350		103		L C KELLY #2E	BASIN DAKOTA	0.0	EL PASO NATURAL G
-MCCLELLAN OIL CORPORATION				RECEIVED: 12/03/82 JA: NM 4					
8312445	NM-125982107	3000561650		102-4	107-TF	MCCLELLAN FEDERAL "MOC" #2 NM-36409	PECOS SLOPE (ABO)	91.2	TRANSWESTERN OIL
-MERRION OIL & GAS CORP				RECEIVED: 12/03/82 JA: NM 4					
8312403	NM 1223-82	3003922940		103		SALAZAR G #34-3	DEVILS FORK GALLUP	91.0	EL PASO NATURAL G
-MESA PETROLEUM CO				RECEIVED: 12/03/82 JA: NM 4					
8312462	NM 1245-82	3000561080		102-2	107-TF	CAROL FEDERAL #1	UNDESIGNATED ABO	306.0	
8312444	NM 1247-82	3000561117		102-2	107-TF	CHINA FEDERAL #4	UNDESIGNATED ABO	322.0	
8312448	NM 1242-82	3000561638		102-2	107-TF	CHINA FEDERAL #8	UNDESIGNATED ABO	671.0	
8312463	NM 1244 82	3000561533		102-2	107-TF	CRAWFORD FEDERAL COM #4	PECOS SLOPE ABO	86.0	
8312432	NM 1246-82	3000561630		102-2	107-TF	MARLEY FEDERAL #1	UNDESIGNATED ABO	50.0	

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JO NO	JA CKT	API NO	D	SEC(1)	SEC(2)	WELL NAME	FIELD NAME	PROD	PURCHASER
8312464	NM 1243-82	3000561617		102-2	107-TF	STURGEON FEDERAL COM #1	UNDESIGNATED PECOS S-	651.0	
-NORTHWEST PIPELINE CORPORATION				RECEIVED:	12/03/82	JA: NM 4			
8312470	NM-1280-82	3003921133		108		JICARILLA 93 #10	TAPACITO PICTURED CLI	0.0	NORTHWEST PIPELIN
8312399	NM-0155-82PB	3003907964		108-PB		ROSA #10	BLANCO MESAVERDE	18.3	EL PASO NATURAL G
8312410	NM-0157-82PB	3003907963		108-PB		ROSA UNIT #16	BLANCO MV	0.0	EL PASO NATURAL G
8312471	NM-1276-82	3003907567		108		SAN JUAN 29-5 UNIT #16	BLANCO MESAVERDE	22.0	NORTHWEST PIPELIN
8312398	NM 0156-82PB	3003907841		108-PB		SAN JUAN 30-5 UNIT 28X	BLANCO MESAVERDE	21.5	NORTHWEST PIPELIN
8312412	NM-0911-82	3004523686		108		SAN JUAN 32-7 #56	BASIN DAKOTA	0.0	NORTHWEST PIPELIN
8312434	NM-1059-82	3004510700		108		SAN JUAN 32-8 UNIT 16	BLANCO MESAVERDE	21.0	NORTHWEST PIPELIN
-PERRY R BASS				RECEIVED:	12/03/82	JA: NM 4			
8312465	NM 1262-82	3001523783		102-4		POKER LAKE UNIT #53	UNDESIGNATED MORROW	1000.0	NATURAL GAS PIPEL
-PHILLIPS PETROLEUM COMPANY				RECEIVED:	12/03/82	JA: NM 4			
8312473	NM-1285-82	3002506163		108		MEXICO #1 (LC 031621(B))	EUNICE MONUMENT (GB/S	4.0	WARREN PETROLEUM
8312472	NM-1286-82	3001521126		108		SANDY UNIT #1	NASH MORROW	9.0	EL PASO NATURAL G
-PREMIER PRODUCTION CO				RECEIVED:	12/03/82	JA: NM 4			
8312466	NM 1257-82	3001524125		103		YATES PREMIER FEDERAL #2	TURKEY TRACK SR QUEEN	20.0	PHILLIPS PETROLEU
-SOUTHLAND ROYALTY CO				RECEIVED:	12/03/82	JA: NM 4			
8312411	NM 1194-82	3004525332		103		GRENIER #13E	BASIN	144.0	SOUTHERN UNION GA
-WESTERN OIL AND MINERALS LIMITED				RECEIVED:	12/03/82	JA: NM 4			
8312421	NM-1191-82	3004506249		108		HAMMOND #7	SOUTH BLANCO PICTURED	11.0	EL PASO NATURAL G
8312415	NM-1196-82	3004506310		108		MARRON #1	SOUTH BLANCO PICTURED	20.0	EL PASO NATURAL G
8312397	NM-1150-82	3004522775		108		SNODGRASS #1	LARGO CHACRA	15.0	EL PASO NATURAL G
-WILLIAM A & EDWARD R HUDSON				RECEIVED:	12/03/82	JA: NM 4			
8312417	NM-1197-82	3001505409		108		PUCKETT "B" #19	MALJAMAR	0.4	PHILLIPS PETROLEU
-YATES PETROLEUM CORPORATION				RECEIVED:	12/03/82	JA: NM 4			
8312430	NM1233-82107	3000561485		102-2	107-TF	FEDERAL "HJ" 37	UND PECOS SLOPE ABO	0.0	TRANSWESTERN PIPE
8312429	NM1211-82107	3000561546		102-2	107-TF	GEORGE "QJ" FEDERAL #6	PECOS SLOPE ABO	0.0	TRANSWESTERN PIPE
8312440	NM-121082107	3000561457		102-2	107-TF	GRAFA "RW" FEDERAL #2	PECOS SLOPE ABO	0.0	TRANSWESTERN PIPE
8312426	NM 1213-82	3000561676		102-2	107-TF	MIKE HARVEY "TR" FED #1	PECOS SLOPE ABO	0.0	TRANSWESTERN PIPE
8312416	NM1195-82107	3000561564		102-2	107-TF	RITA "TZ" FEDERAL #1	UND ABO	0.0	TRANSWESTERN PIPE
8312428	NM 1212-82	3000561531		102-2	107-TF	SAVAGE "NI" FEDERAL #2	UND ABO	0.0	TRANSWESTERN PIPE
8312431	NM1232-82107	3000561560		102-2	107-TF	SOUTH ALKALI "LK" FEDERAL #4	PECOS SLOPE ABO	0.0	TRANSWESTERN PIPE
8312458	NM-119882107	3000561549		102-2	107-TF	THOMAS "LN" FEDERAL #5	PECOS SLOPE ABO	0.0	TRANSWESTERN PIPE

SOURCE DATA FOR THIS NOTICE IS AVAILABLE ON MAGNETIC TAPE FROM THE NATIONAL TECHNICAL INFORMATION SERVICE (NTIS). FOR INFORMATION, CONTACT STUART WEISMAN (NTIS) AT (703) 487-4808, 5285 PORT ROYAL RD, SPRINGFIELD, VA 22161, OR SANDRA SPEAR (FERC) (202) 357-8681.

BILLING CODE 6717-01-C

The above notices of determination were received from the indicated jurisdictional agencies by the Federal Energy Regulatory Commission pursuant to the Natural Gas Policy Act of 1978 and 10 CFR 274.104. Negative determinations are indicated by a "D" before the section code. Estimated annual production (PROD) is in million cubic feet (MMCF). An (*) before the Control (JD) number denotes additional purchasers listed at the end of the notice.

The applications for determination are available for inspection except to the extent such material is confidential under 18 CFR 275.206, at the Commission's Division of Public Information, Room 1000, 825 North Capitol St., Washington, D.C. Persons objecting to any of these determinations may, in accordance with 18 CFR 275.203 and 275.204, file a protest with the Commission within fifteen days after publication of notice in the **Federal Register.**

Categories within each NGPA section are indicated by the following codes:

Section 102-1: New OCS lease
102-2: New well (2.5 mile rule)
102-3: New well (1000 ft rule)
102-4: New onshore reservoir
102-5: New reservoir on old OCS lease
Section 107-DP: 15,000 feet or deeper
107-GB: Geopressured brine
107-CS: Coal seams
107-DV: Devonian shale
107-PE: Production enhancement
107-TF: New tight formation
107-RT: Recompletion tight formation
Section 108: Stripper well
108-SA: Seasonally affected
108-ER: Enhanced recovery
108-PB: Pressure buildup

Kenneth F. Plumb,
Secretary.

[FR Doc. 83-1139 Filed 1-12-83; 8:45 am]
BILLING CODE 6717-01-M

[Project No. 5600-001]

Springfield Utility Board; Surrender of Preliminary Permit

January 6, 1983.

Take notice that the Springfield Utility Board Permittee for the proposed Springfield Canal Power Project No. 5600, has requested that its preliminary permit be terminated. The permit was issued on March 31, 1982, and would have expired on August 31, 1982. The project would have been located on the Willamette River and the Middle Fork of the Willamette River in Lane County, Oregon.

The Permittee filed its request on November 22, 1982, and the surrender of the preliminary permit for Project No. 5600 is deemed accepted as of the date of this notice.

Kenneth F. Plumb,
Secretary.

[FR Doc. 83-1032 Filed 1-13-83; 8:45 am]
BILLING CODE 6717-01-M

[Project No. 5888-001]

Springfield Utility Board; Surrender of Preliminary Permit

January 6, 1983.

Take notice that Springfield Utility Board, Permittee for the proposed Wiley Power Project No. 5888, has requested that its preliminary permit be terminated. The preliminary permit was issued on June 7, 1982, and would have expired June 30, 1984. The project would have been located on Wiley Creek in Linn County, Oregon.

The Permittee filed its request on November 22, 1982, and the surrender of the preliminary permit for Project No. 5888 is deemed accepted as of the date of this notice.

Kenneth F. Plumb,
Secretary.

[FR Doc. 83-1033 Filed 1-13-83; 8:45 am]
BILLING CODE 6717-01-M

[Project No. 5887-001]

Springfield Utility Board; Surrender of Preliminary Permit

January 6, 1983.

Take notice that Springfield Utility Board, Permittee for the proposed North Power #2 Project No. 5887, has requested that its preliminary permit be terminated. The preliminary permit was issued on June 17, 1982, and would have expired June 30, 1985. The project would have been located on the North Fork of the Middle Fork of the Willamette River in Lane County, Oregon.

The Permittee filed its request on November 22, 1982, and the surrender of the preliminary permit for Project No. 5887 is deemed accepted as of the date of this notice.

Kenneth F. Plumb,
Secretary.

[FR Doc. 83-1034 Filed 1-13-83; 8:45 am]
BILLING CODE 6717-01-M

[Project No. 5002-001]

Springfield Utility Board; Surrender of Preliminary Permit

January 6, 1983.

Take notice that Springfield Utility Board (SUB), Permittee for the Cottage Grove Project No. 5502, has requested that its preliminary permit be terminated. The permit was issued on January 27, 1982, and would have expired on June 30, 1983. The project would have been located on the Willamette River (Cottage Grove Lake) in Lane County, Oregon.

SUB filed its request on November 22, 1982, and the surrender of the permit for Project No. 5502 is deemed accepted as of the date of this notice.

Kenneth F. Plumb,
Secretary.

[FR Doc. 83-1035 Filed 1-13-83; 8:45 am]
BILLING CODE 6717-01-M

[Project No. 6209-001]

Springfield Utility Board; Surrender of Preliminary Permit

January 6, 1983.

Take notice that Springfield Utility Board Permittee for the proposed Christy Creek Project No. 6209, has requested that its preliminary permit be terminated. The permit was issued on July 23, 1982, and would have expired on December 31, 1983. The project would have been located on Christy Creek in Lane County, Oregon.

The Permittee filed its request on November 22, 1982, and the surrender of the preliminary permit for Project No. 6209 is deemed accepted as of the date of this notice.

Kenneth F. Plumb,
Secretary.

[FR Doc. 83-1036 Filed 1-13-83; 8:45 am]
BILLING CODE 6717-01-M

[Docket No. ER83-197-000]

Missouri Power & Light Co.; Filing

January 10, 1983.

The filing Company submits the following:

Take notice that Missouri Power & Light Company (MPL) on December 20, 1982, tendered for filing proposed changes in its FERC Electric Service Tariffs, Rate Designation MESWR. The proposed changes would increase revenues from jurisdictional sales and service by $154,389 based on the twelve-month period ending September 30, 1982.

MPL states that its proposed increase in rates is due primarily to comply with provisions of the Economic Recovery Tax Act of 1981 (ERTA) and added plant and expenses which have occurred since the Company's last rate change.

MPL requests an effective date of December 31, 1982, and therefore requests waiver of the Commission's notice requirements.

A copy of the filing was served upon each of the six municipality wholesale customers and the Missouri Public Service Commission has been notified of the proposed tariff and rate schedule changes.

Any person desiring to be heard or to protest said filing should file a motion to intervene or protest with the Federal Energy Regulatory Commission, 825 North Capitol Street NE., Washington, D.C. 20426, in accordance with Rules 211 and 214 of the Commission's Rules of Practice and Procedure (18 CFR 385.211, 385.214). All such motions or protests should be filed on or before January 18, 1983. Protests will be considered by the Commission in determining the appropriate action to be taken, but will not serve to make protestants parties to the proceeding. Any person wishing to become a party must file a motion to intervene. Copies of this filing are on file with the Commission and are available for public inspection.

Kenneth F. Plumb,

Secretary.

[FR Doc. 83-1121 Filed 1-13-83; 8:45 am]

BILLING CODE 6717-01-M

[Docket Nos. ER78-507-000 and EL81-15-000]

Public Service Co. of Colorado; Refund Report

January 10, 1983.

The filing company submits the following:

Take notice that on December 27, 1982, Public Service Company of Colorado submitted for filing a refund report in accordance with the Commission's order dated November 18, 1982.

Any person desiring to be heard or to protest this filing should file comments with the Federal Energy Regulatory Commission, 825 North Capitol Street NE., Washington, D.C. 20426, on or before January 20, 1983. Comments will be considered by the Commission in determining the appropriate action to be taken. Copies of this filing are on file with the Commission and are available for public inspection.

Kenneth F. Plumb,

Secretary.

[FR Doc. 83-1122 Filed 1-13-83; 8:45 am]

BILLING CODE 6717-01-M

[Docket Nos. RP81-109-000 and RP82-37-000]

Texas Eastern Transmission Corp.; Informal Settlement Conference

January 10, 1983.

Take notice that an informal settlement conference on the matter of cash working capital in the above-captioned docket will be convened at 2:00 p.m., on January 17, 1983, at the offices of the Federal Energy Regulatory Commission, 825 North Capitol Street, NE., Washington, D.C. 20426, in a Commission meeting room to be announced.

All interested parties and Staff will be permitted to attend.

Kenneth F. Plumb,

Secretary.

[FR Doc. 83-1123 Filed 1-13-83; 8:45 am]

BILLING CODE 6717-01-M

ENVIRONMENTAL PROTECTION AGENCY

[ER-FRL-2274-2]

Agency Statements

Correction

In FR Doc. 82-34832 beginning on page 57335 in the issue of Thursday, December 23, 1982, make the following corrections:

1. Under Corps of Engineers, in the entry "EIS No. 820802," "MS" should read "KS". In the entry "EIS No. 820805", "DOE" should read "COE". In the entry "EIS No. 820797", "DOE" should read "COE".

2. Under Department of Transportations, delete the "s" in "Transportations" and in the entry "EIS No. 820796", "CI" should read "CT" and "Competition" should read "Completion". In the entry "EIS No. 820798", "Fernalillo" should read "Bernalillo".

3. Under Amended Notices, in the entry "EIS No. 820773", "Hachett" should read "Hackett".

BILLING CODE 1505-01-M

[OPTS-59109A, 59110A; TSH-FRL 2283-3]

Certain Chemicals; Approval of Test Marketing Exemption

AGENCY: Environmental Protection Agency (EPA).

ACTION: Notice

SUMMARY: This notice announces EPA's approval of TM-83-10, and TM-83-11, two applications for test marketing exemptions (TME) under section 5(h)(6) of the Toxic Substances Control Act (TSCA). The test marketing conditions are described below.

EFFECTIVE DATE: January 4, 1983.

FOR FURTHER INFORMATION CONTACT: Theodore Jones, Acting Chief, Notice Review Branch, Chemical Control Division (TS-794), Office of Toxic Substances, Environmental Protection Agency, Rm. E-204, 401 M St. SW., Washington, D.C. 20460, (202-382-3725).

SUPPLEMENTARY INFORMATION: Section 5(h)(1) of TSCA authorizes EPA to exempt persons from premanufacture notification (PMN) requirements and to permit them to manufacture or import new chemical substances for test marketing purposes if the Agency finds that the manufacture, processing, distribution in commerce, use and disposal of the substances for test marketing purposes will not present any unreasonable risk of injury to health or the environment. EPA may impose restrictions on test marketing activities.

EPA has determined that test marketing of the new chemical substances described below, under the conditions set out in the applications, and for the time periods specified below, will not persent any unreasonable risk of injury to health or the environment. Production volume, number of workers exposed to the new chemical, and the levels and duration of exposure must not exceed that specified in the applications. All other conditions described in the applications must be met. The following additional restrictions apply:

1. The applicant must maintain records of the date(s) of shipment(s) to each customer and the quantities supplied in each shipment, and must make these records available to EPA upon request.

2. A bill of lading accompanying each shipment must state that use of the substance is restricted to that approved in the TME.

TME 83-10

Date of Receipt: November 23, 1982.
Notice of Receipt: December 3, 1982 (47 FR 54538).
Applicant: Ciba Geigy Corporation.
Chemical: Dicarboxylic acid monoester.
Use: Contained use.
Import Volume: 200 kg.
Number of Customers: 1.
Worker Exposure: Potential exposure will be by the dermal and inhalation routes. At the processing site, a maximum of 2 workers will be potentially exposed for 2 hours/day for 3 days. During use in an industrial setting, a maximum of 6 workers will be potentially exposed for 8 hours/day for 20 days.
Test Marketing Period: 3 months.
Commencing on: January 4, 1983.

Risk Assessment: The TME substance should be absorbed by all routes of exposure. Based on analog data, the health concerns are that the substance may cause teratogenic and reproductive effects. Since the substance is imported, there will be no exposure during manufacture. The greatest potential for worker exposure will be during processing Approval is contingent upon the use of all protective equipment specified in the exemption application, in particular, the wearing of neoprene gloves and air supplied respirators. The Agency has concluded the period of exposure will be of short duration and that the protective equipment will minimize the potential for worker exposure. There will be no exposure to consumers from the TME substance. There are low concerns for environmental effects.
Public Comments: None.

TME 83-11

Date of Receipt: November 26, 1982.
Notice of Receipt: December 10, 1982 (47 FR 55517).
Applicant: Owens-Corning Fiberglas Corporation.
Chemical: Polyester Resin (Generic).
Use: Confidential.
Production Volume: Confidential.
Exposure Information: Potential for exposure for 3 employees during manufacturing and processing. During manufacture, the employees may be exposed during sampling for a maximum of 1 hour/day. There may be incidential exposure during processing for 8 hours/day.
Test Marketing Period: 45 days.
Commencing on: January 4, 1983.
Risk Assessment: Based on the type of polymer, molecular weight, and that the test market substance is not designed to be water soluble, no health or environmental concerns were identified. Exposure to workers and the environment is expected to be low.
Public Comments: None.

The Agency reserves the right to rescind approval of an exemption should any new information come to its attention which casts significant doubt on its finding that the test marketing activities will not present an unreasonable risk to health or the environment.

Dated: January 4, 1983.

Don R. Clay,

Director, Office of Toxic Substances.

[FR Doc. 83-712 Filed 1-13-83; 8:45 am]

BILLING CODE 6560-50-M

[ORD-FR-2285-4]

Ambient Air Monitoring Reference and Equivalent Methods; Receipt of Application for an Equivalent Method Determination

Notice is hereby given that on December 1, 1982, the Environmental Protection Agency received an application from the Department of Health and Environmental Sciences of the State of Montana to determine if their inductively coupled argon plasma optical emission spectrometry method for the determination of lead in suspended particulate matter collected from ambient air should be designated by the Administrator of the EPA as an equivalent method under 40 CFR Part 53 (40 FR 7049, 41 FR 11255, 44 FR 37916). If, after appropriate technical study, the Administrator determines that this method should be so designated, notice thereof will be given in a subsequent issue of the **Federal Register.**

Courtney Riordan,

Acting Assistant Administrator for Research and Development.

[FR Doc. 83-1029 Filed 1-13-83; 8:45 am]

BILLING CODE 6560-50-M

[OPTS-51449; TSH-FRL 2285-8]

Certain Chemicals Premanufacture Notices

AGENCY: Environmental Protection Agency (EPA).

ACTION: Notice.

SUMMARY: Section 5(a)(1) of the Toxic Substances Control Act (TSCA) requires any person who intends to manufacture or import a new chemical substance to submit a premanufacture notice (PMN) to EPA at least 90 days before manufacture or import commences. Statutory requirements for section 5(a)(1) premanufacture notices are discussed in EPA statements of interim policy published in the **Federal Register** of May 15, 1979 (44 FR 28558) and November 7, 1980 (45 FR 74378). This notice announces receipt of fourteen PMNs and provides a summary of each.

DATES: Close of Review Period:

PMN 83-351, 83-352, 83-353, 83-354 and 83-355, March 29, 1983.

PMN 83-356, 83-357, 83-358 83-359, 83-360, 83-361, 83-362, and 83-363, April 2, 1983.

PMN 83-364, April 5, 1983.

Written comments by:

PMN 83-351, 83-352, 83-353, 83-354 and 83-355, February 27, 1983.

PMN 83-356, 83-357, 83-358, 83-359 83-360, 83-361, 83-362 and 83-363, March 3, 1983.

PMN 83-364, March 6, 1983.

ADDRESS: Written comments, identified by the document control number "[OPTS-51449]" and the specific PMN number should be sent to: Document Control Officer (TS-793), Office of Pesticides and Toxic Substances, Environmental Protection Agency, Rm. E-409, 401 M St., SW., Washington, DC 20460, (202-382-3532).

FOR FURTHER INFORMATION CONTACT: Theodore Jones, Acting Chief, Notice Review Branch, Chemical Control Division (TS-794), Office of Toxic Substances, Environmental Protection Agency, Rm. E-216, 401 M St., SW., Washington, DC 20460, (202-382-3729).

SUPPLEMENTARY INFORMATION: The following notice contains information extracted from the non-confidential version of the submission provided by the manufacturer on the PMNs received by EPA. The complete non-confidential document is available in the Public Reading Room E-107.

PMN 83-351

Manufacturer. Confidential.

Chemical. (S) Polymer of trimethylol propane, ethylene glycol, adipic acid, phthalic anhydride.

Use/Production. (G) Open use. Prod. range: 10,000-22,000 kg/yr.

Toxicity Data. No data on the PMN substance submitted.

Exposure. Manufacture and disposal: dermal and inhalation, a total of 11 workers, up to 8 hrs/da, up to 14 da/yr.

Environmental Release/Disposal. Less than 10 kg/yr released to air. Disposal by biological treatment system and approved landfill.

PMN 83-352

Manufacturer. Confidential.

Chemical. (G) Aliphatic secondary naphthalene amine.

Use/Production. (G) Site-limited contained use. Prod. range: Confidential.

Toxicity Data. Ames Test: Negative.

Exposure. Manufacture and use: dermal, a total of 5 workers.

Environmental Release/Disposal. Less than 10 kg/yr released to land.

PMN 83-353

Manufacturer. Confidential.

Chemical. (G) Aliphatic secondary naphthalene amine.

Use/Production. (G) Site-limited contained use. Prod. range: Confidential.

Toxicity Data. Ames Test: Negative.

Exposure. Manufacture and use: dermal, a total of 5 workers.

Environmental Release/Disposal. Less than 10 kg/yr released to land.

PMN 83-354

Manufacturer. Confidential.

Chemical. (G) Aliphatic bis (secondary naphthalene amine).

Use/Production. (G) Site-limited contained use. Prod. range: Confidential.

Toxicity Data. Acute oral: <1,260 mg/kg; Ames Test: Positive.

Exposure. Manufacture and use: dermal, a total of 5 workers.

Environmental Release/Disposal. Less than 10 kg/yr released to land.

PMN 83-355

Manufacturer. Confidential.
Chemical. (G) Substituted aromatic secondary naphthalene amine.
Use/Production. (G) Site-limited contained use. Prod. range: Confidential.
Toxicity Data. Ames Test: Negative.
Exposure. Manufacture and use: dermal, a total of 5 workers.
Environmental Release/Disposal. Less than 10 kg/yr released to land.

PMN 83-356

Manufacturer. Confidential.
Chemical. (G) Substituted 1-aminoanthraquinone-2-sulfonic acid alkali metal salt.
Use/Production. Confidential. Prod. range: Confidential.
Toxicity Data. No data submitted.
Exposure. Manufacture: ingestion, dermal and eye, a total of 15 workers, up to 48 man/hrs/yr.
Environmental Release/Disposal. No release. Disposal by sewer.

PMN 83-357

Manufacturer. Essex Specialty Products.
Chemical. (G) Isocyanate functional polyurethane derived from reaction of diisocyanate, polymeric ether glycols, polymeric aliphatic polyester glycols.
Use/Production. (S) Industrial polymeric precursor and thermoplastic moldable elastomers or engineering resins. Prod. range: 50-250,000 kg/yr.
Toxicity Data. No data submitted.
Exposure. Manufacture and use: dermal, a total of 2 workers, up to 20 hrs/da, up to 60 da/yr.
Environmental Release/Disposal. No release.

PMN 83-358

Manufacturer. Confidential.
Chemical. (G) Alkoxy amine salt.
Use/Production. Confidential. Prod. range: Confidential.
Toxicity Data. No data submitted.
Exposure. Confidential.
Environmental Release/Disposal. Confidential. Disposal by onsite biological waste treatment.

PMN 83-359

Manufacturer. Confidential.
Chemical. (G) Polyurethane resin.
Use/Production. (G) Contained use. Prod. range: 450-10,000 kg/yr.
Toxicity Data. No data submitted.
Exposure. Manufacture, processing and use: dermal, a total of 47 workers, up to 8 hrs/da, up to 200 da/yr.
Environmental Release/Disposal. 10-1,000 kg/yr released to land.

PMN 83-360

Manufacturer. Confidential.
Chemical. (G) Polyester of aliphatic polyols, vegetable oil, and aromatic dibasic acid.
Use/Production. (S) Commercial foam polyol. Prod. range: 1,000,000-6,000,000 lbs/yr.
Toxicity Data. No data submitted.
Exposure. Manufacture, processing, use and disposal: Inhalation, a total of 8 workers, up to 8 hrs/da, up to 251 da/yr.
Environmental Release/Disposal. Less than 10 kg/yr released to air with 10-100 kg/yr to water, 8 hrs/da, 251 da/yr. Disposal by sewer.

PMN 83-361

Manufacturer. Confidential.
Chemical. (G) Fatty acid, phthalic, polyol polymer.
Use/Production. (G) Contained use. Prod. range: Confidential.
Toxicity Data. No data submitted.
Exposure. Minimal.
Environmental Release/Disposal. 10-100 kg/yr released to land. Disposal by incineration and approved landfill.

PMN 83-362

Importer. E. I. du Pont de Nemours & Company, Inc.
Chemical. (G) Vinyl acrylic copolymer.
Use/Import. Confidential. Import range: Confidential.
Toxicity Data. No data submitted.
Exposure. No data submitted.
Environmental Release/Disposal. No data submitted.

PMN 83-363

Manufacturer. E. I. du Pont de Nemours & Company, Inc.
Chemical. (G) Acrylic grafted copolymer.
Use/Production. Confidential. Prod. range: Confidential.
Toxicity Data. No data submitted.
Exposure. Manufacture: dermal and inhalation, a total of 4 workers, up to 24 hrs/da, up to 13.2 da/yr.
Environmental Release/Disposal. Minimal release. Disposal by incineration and approved landfill.

PMN 83-364

Manufacturer. The Upjohn Company.
Chemical. (S) Polymer of 1,1'-methylene-bis(4-isocyanato-benzene); 1,9-nonanedioic acid (azelaic); and 1,4-butanediol.
Use/Production. (S) Hydraulic seals, gasket and tubing. Prod. range: 1,000-50,000 kg/yr.
Toxicity Data. No data submitted.
Exposure. Manufacture, processing and disposal: dermal, a total of 25 workers, up to 8 hr/da, up to 90 da/yr.
Environmental Release/Disposal. Less than 10 kg/yr released to water with 100-1,000 kg/yr to land. Disposal by publicly owned treatment works (POTW).

Dated: January 7, 1983.

V. Paul Fuschini,

Acting Director, Management Support Division.

[FR Doc. 83-1024 Filed 1-13-83; 8:45 am]

BILLING CODE 6560-50-M

[ER-FRL-2285-7]

Availability of Environmental Impact Statements Filed January 3 Through January 7, 1983, Pursuant to 40 CFR Part 1506.9

RESPONSIBLE AGENCY: Office of Federal Activities, General Information (202) 382-5075 or 382-5076.

Corps of Engineers:
- EIS No. 830003, Final, COE, PA, Wyoming Valley Local Flood Protection Plan, Luzerne County, Due: February 14, 1983.

Department of the Interior:
- EIS No. 830005, Draft, IBR, CO, Lower Gunnison Basin Unit, Colorado River Salinity Control, Due: March 31, 1983.
- EIS No. 830002, Final, MMS, MXG, OCS Oil and Gas Lease Sales #72, #74 and #79, Gulf of Mexico Region, Due: February 14, 1983.
- EIS No. 830011, Final, NPS, NC, Cape Lookout National Seashore General Management Plan, Carteret Co., Due: February 14, 1983.

Department of Transportation:
- EIS No. 830000, Draft, FHW, OR, Alsea R. Bridge Repair/Replacement, OR Coast Hwy/US 101, Lincoln Co., Due: February 28, 1983.
- EIS No. 830004, Draft, FHW, CA, Harbor Freeway Corridor/I-110 Transitway Construction, Los Angeles Co., Due: March 14, 1983.
- EIS No. 830010, DSuppl, FHW, PA, I-78/LR-1045 Construction, US 22 to near Stones Throw Rd., Lehigh Co., Due: March 9, 1983.

Environmental Protection Agency:
- EIS No. 830008, Draft, EPA, TN, Blount County Wastewater Management Facilities, Grant, Blount County, Due: March 4, 1983.
- EIS No. 830009, Draft, EPA, REG, Petroleum Dry Cleaners Emissions, Standards of Performance, Due: February 28, 1983.
- EIS No. 830006, Final, EPA, SEV, ATL FL Jacksonville Harbor Ocean Dredged Material Disposal Site, Due: February 14, 1983.
- EIS No. 830007, DSuppl, EPA, FL, Duette Open Pit Phosphate Mine, C/O, NPDES Permit, Manatee County, Due: February 28, 1983.

Department of Agriculture:
- EIS No. 830001, Draft, SCS, WV, Piney Creek Watershed Flood Plan, Little Whitestick-Cranberry Creeks, Due: February 28, 1983.

Amended Notices:
EIS No. 740429, Draft, FWS, MA, Parker River Wilderness [1]
EIS No. 740476, Draft, FWS, AZ, Kofa Game Range Wilderness [1]
EIS No. 740730, Draft, FWS, MT, Charles M. Russel Wilderness [1]
EIS No. 740756, Draft, FWS, NV, Charles Sheldon Wilderness [1]
EIS No. 740998, Draft, NPS, UT, Arches National Park Wilderness [1]
EIS No. 741009, Draft, NPS, UT, Canyonlands National Park Wilderness [1]

Dated: January 11, 1983.

Paul C. Cahill,

Director, Office of Federal Activities.

[FR Doc. 83-1064 Filed 1-13-83; 8:45 am]

BILLING CODE 6560-50-M

THE PRESIDENT'S ECONOMIC POLICY ADVISORY BOARD

Meeting

January 24, 1983

The President's Economic Policy Advisory Board will meet on January 24, 1983, at the White House, Washington, D.C. from 9:00 am to 12:00 pm. The purpose of this meeting is to review and discuss:

(1) Management of Monetary Policy.
(2) Interaction of Fiscal and Monetary Policy with the Domestic Economy.
(3) U.S. Role in International Economy.

All agenda items concern matters listed in Section 552b(c) of Title 5, United States Code, specifically subparagraphs (1), (4), (8) and (9) thereof, and will be closed to the public.

For further information, please contact the Office of Policy Development, the White House, at (202) 456-6515.

Edwin L. Harper,

Assistant to the President for Policy Development.

[FR Doc. 83-1043 Filed 1-13-83; 8:45 am]

BILLING CODE 3195-01-M

FEDERAL RESERVE SYSTEM

Acquisition of Bank Shares by Bank Holding Companies

The companies listed in this notice have applied for the Board's approval under section 3(a)(3) of the Bank Holding Company Act (12 U.S.C. 1842(a)(3)) to acquire voting shares or assets of a bank. The factors that are considered in acting on the applications are set forth in section 3(c) of the Act (12 U.S.C. 1842(c)).

Each application may be inspected at the offices of the Board of Governors, or at the Federal Reserve Bank indicated for that application. With respect to each application, interested persons may express their views in writing to the address indicated for that application. Any comment on an application that requests a hearing must include a statement of why a written presentation would not suffice in lieu of a hearing, identifying specifically any questions of fact that are in dispute and summarizing the evidence that would be presented at a hearing.

A. **Federal Reserve Bank of Atlanta** (Robert E. Heck, Vice President) 104 Marietta Street, N.W., Atlanta, Georgia 30303:

1. *Sun Banks of Florida, Inc.*, Orlando, Florida; to acquire 100 percent of the voting shares or assets of The First National Bank of DeFuniak Springs, DeFuniak Springs, Florida. Comments on this application must be received not later than February 9, 1983.

B. **Federal Reserve Bank of Chicago** (Franklin D. Dreyer, Vice President) 230 South LaSalle Street, Chicago, Illinois 60690:

1. *Prairieland Bancorp., Inc.*, Bushnell, Illinois; to acquire 80 percent or more of the voting shares of Roseville State Bank, Roseville, Illinois. Comments on this application must be received not later than February 2, 1983.

Board of Governors of the Federal Reserve System, January 10, 1983.

James McAfee,

Associate Secretary of the Board.

[FR Doc. 83-1027 Filed 1-13-83; 8:45 am]

BILLING CODE 6210-01-M

Fidelcor, Inc.; Merger of Bank Holding Companies

Fidelcor, Inc., Rosemont, Pennsylvania, has applied for the Board's approval under section 3(a)(5) of the Bank Holding Company Act (12 U.S.C. 1842(a)(5)) to merge with Southeast National Bankshares of Pennsylvania, Malvern, Pennsylvania. The factors that are considered in acting on the application are set forth in section 3(c) of the Act (12 U.S.C. 1842(c)).

The application may be inspected at the offices of the Board of Governors or the Federal Reserve Bank of Philadelphia. Any person wishing to comment on the application should submit views in writing to the Secretary, Board of Governors of the Federal Reserve System, Washington, D.C. 20551, to be received not later than February 9, 1983. Any comment on an application that requests a hearing must include a statement of why a written presentation would not suffice in lieu of a hearing, identifying specifically any questions of fact that are in dispute and summarizing the evidence that would be presented at a hearing.

Board of Governors of the Federal Reserve System, January 10, 1983.

James McAfee,

Associate Secretary of the Board.

[FR Doc. 83-1025 Filed 1-13-83; 8:45 am]

BILLING CODE 6210-01-M

Formation of Bank Holding Companies

The companies listed in this notice have applied for the Board's approval under section 3(a)(1) of the Bank Holding Company Act (12 U.S.C. 1842(a)(1)) to become bank holding companies by acquiring voting shares or assets of a bank. The factors that are considered in acting on the applications are set forth in section 3(c) of the Act (12 U.S.C. 1842(c)).

Each application may be inspected at the offices of the Board of Governors, or at the Federal Reserve Bank indicated for that application. With respect to each application, interested persons may express their views in writing to the address indicated for that application. Any comment on an application that requests a hearing must include a statement of why a written presentation would not suffice in lieu of a hearing, identifying specifically any questions of fact that are in dispute and summarizing the evidence that would be presented at a hearing.

A. **Federal Reserve Bank of Atlanta** (Robert E. Heck, Vice President) 104 Marietta Street, N.W., Atlanta, Georgia 30303:

1. *First North Port Bancorp*, North Port, Florida; to become a bank holding company by acquiring 100 percent of the voting shares of North Port Bank, North Port, Florida. Comments on this application must be received not later than February 1, 1983.

B. **Federal Reserve Bank of Chicago** (Franklin D. Dreyer, Vice President) 230 South LaSalle Street, Chicago, Illinois 60690:

1. *First Merchants Corporation*, Muncie, Indiana; to become a bank holding company by acquiring 100 percent of the voting shares of the Merchants National Bank of Muncie, Muncie, Indiana. Comments on this application must be received not later than January 28, 1983.

2. *Francor Financial Inc.*, Wabash, Indiana; to become a bank holding company by acquiring 100 percent of the voting shares of Frances Slocum Bank and Trust Company, Wabash, Indiana. Comments on this application must be received not later than February 9, 1983.

[1] Officially withdrawn.

C. **Federal Reserve Bank of Minneapolis** (Bruce J. Hedblom, Vice President) 250 Marquette Avenue, Minneapolis, Minnesota 55480:

1. *Stephen Bancshares, Inc.*, Stephen, Minnesota; to become a bank holding company by acquiring 99 percent of the voting shares of Farmers State Bank of Stephen, Stephen, Minnesota. Comments on this application must be received not later than February 9, 1983.

D. **Federal Reserve Bank of Kansas City** (Thomas M. Hoenig, Vice President) 925 Grand Avenue, Kansas City, Missouri 64198:

1. *BOE Bancshares, Inc.*, Elgin, Oklahoma; to become a bank holding company by acquiring 98 percent of the voting shares of Bank of Elgin, Elgin, Oklahoma. Comments on this application must be received not later than February 9, 1983.

E. **Federal Reserve Bank of Dallas** (Anthony J. Montelaro, Vice President) 400 South Akard Street, Dallas, Texas 75222:

1. *Amarillo Western Bancshares, Inc.*, Amarillo, Texas; to become a bank holding company by acquiring 80 percent of the voting shares of Western National Bank, Amarillo, Texas. Comments on this application must be received not later than February 9, 1983.

2. *National Centerbanks, Inc.*, Dallas, Texas; to become a bank holding company by acquiring at least 80 percent of the voting shares of Centerbank, N.A., Dallas, Texas. Comments on this application must be received not later than February 9, 1983.

Board of Governors of the Federal Reserve System, January 10, 1983.

James McAfee,

Associate Secretary of the Board.

[FR Doc. 83-1026 Filed 1-13-83; 8:45 am]

BILLING CODE 6210-01-M

Utah Bancoporation; Continuation of Leasing of Personal Property and Sale of Credit-Related Insurance

Utah Bancorporation, Salt Lake City, has applied, pursuant to section 4(c)(8) of the Bank Holding Company Act (12 U.S.C. 1843(c)(8)) and 225.4(b)(2) of the Board's Regulation Y (12 CFR 225.4(b)(2)), for permission to continue to engage, through its subsidiary, Intermountain Thrift and Loan, Salt Lake City, Utah, in the following activities; (1) leasing of personal property in accordance with the limitations set forth in the Board's Regulation Y; and (2) acting as agent or broker in offices at which Intermountain is otherwise engaged in business with respect to credit life or disability insurance that is directly related to an extension of credit by Intermountain. These activities will continue to be performed from offices of Intermountain in Salt City, Utah, and Heber City, Utah, and the geographic areas to be served are the market areas surrounding these offices. Such activities have been specified by the Board in § 225.4(a) of Regulation Y as permissible for bank holding companies, subject to Board approval of individual proposals in accordance with the procedures of § 225.4(b).

Interested persons may express their views on the question whether consummation of the proposal can "reasonably be expected to produce benefits to the public, such as greater convenience, increased competition, or gains in eficiency, that outweigh possible adverse effects, such as undue concentration of resources, decreased or unfair competition, conflicts of interests, or unsound banking practices." Any request for a hearing on this question must be accompanied by a statement of the reasons a written presentation would not suffice in lieu of a hearing, identifying specifically any questions of fact that are in dispute, summarizing the evidence that would be presented at a hearing, and indicating how the party commenting would be aggrieved by approval of the proposal.

The application may be inspected at the offices of the Board of Governors or at the Federal Reserve Bank of San Francisco.

Any person wishing to comment on the application should submit views in writing to the Reserve Bank to be received not later than February 3, 1983.

Board of Governors of the Federal Reserve System, January 10, 1983.

James McAfee,

Associate Secretary of the Board.

[FR Doc. 83-1028 Filed 1-13-83; 8:45 am]

BILLING CODE 6210-01-M

GENERAL SERVICES ADMINISTRATION

Federal Property Resources Service

[Wildlife Order 149; 7-D-TX-664B and C]

Matagorda Island Air Force Range, Port O'Connor, Texas; Transfer of Property

Pursuant to section 2 of Pub. L. 537, 80th Congress, approved May 19, 1948 (16 U.S.C. 667c), notice is hereby given that:

1. By transfer letter from the General Services Administration dated December 8, 1982, the property, consisting of 19,003.33 acres of land improved with 39 buildings, known as the Matagorda Island Air Force Range, Port O'Connor, Texas (7-D-TX-664B and C), has been transferred to the Department of the Interior, U.S. Fish and Wildlife Service.

2. The above described property was conveyed for wildlife conservation in accordance with the provisions of section 1 of said Pub. L. 80-537 (16 U.S.C. 667b), as amended by Pub. L. 92-432.

Dated: December 16, 1982.

Earl E. Jones,

Acting Commissioner, Federal Property Resources Service.

[FR Doc. 83-466 Filed 1-13-83; 8:45 am]

BILLING CODE 6820-96-M

DEPARTMENT OF HEALTH AND HUMAN SERVICES

Food and Drug Administration

[Docket No. 82C-0396]

Baurs-Krey Associates, Inc.; Filing of Color Additive Petition

AGENCY: Food and Drug Administration.

ACTION: Notice.

SUMMARY: The Food and Drug Administration (FDA) is announcing that Baurs-Krey Associates, Inc., has filed a petition proposing that the color additive regulations be amended to provide for the safe use of D&C Green No. 6 in coloring contact lenses.

FOR FURTHER INFORMATION CONTACT: Garnett R. Higginbotham, Bureau of Foods (HFF-334), Food and Drug Administration, 200 C St. SW., Washington, DC 20204, 202-472-5690.

SUPPLEMENTARY INFORMATION: Under the Federal Food, Drug, and Cosmetic Act (sec. 706(b)(1), 74 Stat. 399-402 as amended (21 U.S.C. 376(b)(1))), notice is given that a petition, CAP 3C0171, has been filed by Baurs-Krey Associates, Inc., 630 Fifth Ave., New York, NY 10020, proposing that the color additive regulations be amended to provide for the safe use of D&C Green No. 6 in coloring contact lenses.

The potential environmental impact of this action is being reviewed. If the agency finds that an environmental impact statement is not required and this petition results in a regulation, the notice of availability of the agency's finding of no significant impact and the evidence supporting that finding will be published with the regulation in the **Federal Register** in accordance with 21 CFR 25.40(c) (proposed December 11, 1979; 44 FR 71742).

Dated: January 6, 1983.

Sanford A. Miller,

Director, Bureau of Foods.

[FR Doc. 83-877 Filed 1-13-83; 8:45 am]

BILLING CODE 4160-01-M

[Docket No. 82F-0386]

Brik Pak, Inc.; Filing of Food Additive Petition

AGENCY: Food and Drug Administration.

ACTION: Notice.

SUMMARY: The Food and Drug Administration (FDA) is announcing that Brik Pak, Inc., has filed a petition proposing to amend the food additive regulations to provide for the safe use of hydrogen peroxide solution as a sterilizing agent for polyethylene food-contact surfaces to include packaging commercially sterile alcoholic foods.

FOR FURTHER INFORMATION CONTACT: Blondell Anderson, Bureau of Foods (HFF-334), Food and Drug Administration, 200 C St. SW., Washington, DC 20204, 202-472-5740.

SUPPLEMENTARY INFORMATION: Under the Federal Food, Drug, and Cosmetic Act (sec. 409(b)(5), 72 Stat. 1786 (21 U.S.C. 348(b)(5))), notice is given that a petition (FAP 3B3687) has been filed by Brik Pak, Inc., 4885 Alpha Rd., Dallas, TX 75234, proposing that § 178.1005 *Hydrogen peroxide solution* (21 CFR 178.1005) be amended to provide for the safe use of hydrogen peroxide as a sterilizing agent for polyethylene food-contact surfaces to include packaging commercially sterile alcoholic foods.

The potential environmental impact of this action is being reviewed. If the agency finds that an environmental impact statement is not required and this petition results in a regulation, the notice of availability of the agency's finding of no significant impact and the evidence supporting that finding will be published with the regulation in the **Federal Register** in accordance with 21 CFR 25.40(c) (proposed December 11, 1979; 44 FR 71742).

Dated: January 6, 1983.

Sanford A. Miller,

Director, Bureau of Foods.

[FR Doc. 83-878 Filed 1-13-83; 8:45 am]

BILLING CODE 4160-01-M

[Docket No. 82N-0224]

Quality Assurance in Nuclear Medicine Facilities; Availability of Draft Recommendations

AGENCY: Food and Drug Administration.

ACTION: Notice.

SUMMARY: The Food and Drug Administration (FDA) announces the availability of draft recommendations on quality assurance programs in nuclear medicine facilities prepared by its Office of Radiological Health. In addition to the draft recommendations, FDA is making available background information, the agency's rationale for the recommendations, and its responses to comments that were received on a notice of intent to develop recommendations. Final recommendations, when developed, will be published as a technical report in the Office of Radiological Health radiation recommendation series.

DATE: Comments by April 14, 1983.

ADDRESSES: Requests for single copies of the draft document to: Phyllis Segal, National Center for Devices and Radiological Health (HFX-78), Food and Drug Administration, 5600 Fishers Lane, Rockville, Md. 20857, 301-443-2436. Written comments on the draft recommendations to the Dockets Management Branch (HFA-305), Food and Drug Administration, Rm. 4-62, 5600 Fishers Lane, Rockville, Md. 20857.

FOR FURTHER INFORMATION CONTACT: Phyllis Segal, National Center for Devices and Radiological Health (HFX-78), Food and Drug Administration, 5600 Fishers Lane, Rockville, MD 20857, 301-443-2436.

SUPPLEMENTARY INFORMATION: FDA is making available a draft document entitled, "Recommendations for Quality Assurance Programs in Nuclear Medicine Facilities." These draft recommendations, prepared by its Office of Radiological Health, are directed to all nuclear medicine facilities where radiopharmaceuticals are used for diagnosis or therapy or where in vitro assays involving radioactive materials are performed. "Quality assurance," as referred to in the draft document, means the use of planned, systematic actions that result in consistently high quality performance of all components of the nuclear medicine procedure, minimum ionizing radiation exposure to patients and personnel, and efficient use of resources.

In the **Federal Register** of August 17, 1979 (44 FR 48264), FDA published a notice of intent to develop recommendations for quality assurance in nuclear medicine and to codify the recommendations under Title 21, Chapter I, Subchapter J of the Code of Federal Regulations (CFR) (see Docket No. 79N-0147). The comments received in response to the notice generally supported the need for quality assurance programs and favored the development of recommendations. The agency, therefore, has decided to develop recommendations, which, if and when they are made final, do not need to be incorporated into the CFR but will be made a part of the radiation recommendation series issued by FDA's Office of Radiological Health. Therefore, elsewhere in this issue of the **Federal Register**, FDA is withdrawing the August 17, 1979 notice. To give the interested public an opportunity to participate in development of these recommendations, FDA is now making available the draft recommendations.

FDA invites and encourages interested persons to submit additional data and comment relating to quality assurance in nuclear medicine facilities. Single copies of the draft recommendations are available from the contact person at the address given above. Interested persons may, on or before April 14, 1983, submit to the Dockets Management Branch (address above), written comments regarding these draft recommendations. Comments received after April 14, 1983, may be considered, depending on the stage of development of any final recommendations. Two copies of any comments should be submitted, except that individuals may submit one copy. Comments should be identified with the docket number found in brackets in the heading of this document. The draft recommendations and received comments may be seen in the Dockets Management Branch between 9 a.m. and 4 p.m., Monday through Friday.

Dated January 6, 1983.

Mark Novitch,

Acting Commissioner of Food and Drugs.

[FR Doc. 83-882 Filed 1-13-83; 8:45 am]

BILLING CODE 4160-01-M

[Docket No. 82C-0397]

Syntex Ophthalmics; Filing of Color Additive Petition

AGENCY: Food and Drug Administration.

ACTION: Notice.

SUMMARY: The Food and Drug Administration (FDA) is announcing that Syntex Ophthalmics has filed a petition proposing that the color additive regulations be amended to provide for the safe use of D&C Green No. 6 in coloring contact lenses.

FOR FURTHER INFORMATION CONTACT: Garnett R. Higginbotham, Bureau of Foods (HFF-334), Food and Drug Administration, 200 C St. SW., Washington, DC 20204, 202-472-5690.

SUPPLEMENTARY INFORMATION: Under the Federal Food, Drug, and Cosmetic Act (sec. 706(b)(1), 74 Stat. 399–402 as amended (21 U.S.C. 376(b)(1))), notice is given that a petition, CAP 3C0172, has been filed by Syntex Ophthalmics, Inc., P.O. Box 39600, Phoenix, AZ 85069, proposing that the color additive regulations be amended to provide for the safe use of D&C Green No. 6 in coloring contact lenses.

The potential environmental impact of this action is being reviewed. If the agency finds that an environmental impact statement is not required and this petition results in a regulation, the notice of availability of the agency's finding of no significant impact and the evidence supporting that finding will be published with the regulation in the **Federal Register** in accordance with 21 CFR 25.40(c) (proposed December 11, 1979; 44 FR 71742).

Dated: January 6, 1983.

Sanford A. Miller

Director, Bureau of Foods.

[FR Doc. 83-876 Filed 1-13-83; 8:45 am]

BILLING CODE 4160-01-M

Technical Electronic Product Radiation Safety Standards Committee; Rechartering

AGENCY: Food and Drug Administration.

ACTION: Notice.

SUMMARY: Under the Federal Advisory Committee Act of October 6, 1972 (Pub. L. 92–463, 86 Stat. 770–776 (5 U.S.C. App. I)), the Food and Drug Administration (FDA) in announcing the rechartering of the Technical Electronic Product Radiation Safety Standards Committee by the Commissioner of Food and Drugs for an additional period of 2 years beyond December 24, 1982. The charter for this committee will expire December 24, 1984.

FOR FURTHER INFORMATION CONTACT: Richard L. Schmidt, Committee Management Office (HFA–306), Food and Drug Administration, 5600 Fishers Lane, Rockville, MD 20857, 301–443–2765.

Dated: January 6, 1983.

William F. Randolph,

Acting Associate Commissioner for Regulatory Affairs.

[FR Doc. 83-794 Filed 1-13-83; 8:45 am]

BILLING CODE 4160-01-M

Advisory Committees; Notice of Meetings

AGENCY: Food and Drug Administration.

ACTION: Notice.

SUMMARY: This notice announces forthcoming meetings of public advisory committees of the Food and Drug Administration (FDA). This notice also sets forth a summary of the procedures governing committee meetings and methods by which interested persons may participate in open public hearings conducted by the committees and is issued under section 10(a) (1) and (2) of the Federal Advisory Committee Act (Pub. L. 92–463, 86 Stat. 770–776 (5 U.S.C. App. I)), and FDA regulations (21 CFR Part 14) relating to advisory committees. The following advisory committee meetings are announced:

Arthritis Advisory Committee—Statistical Guidelines Subcommittee

Date, time, and place. February 3, 9 a.m., Conference Rm. G, Parklawn Bldg., 5600 Fishers Lane, Rockville, MD.

Type of meeting and contact person. Open public hearing, 9 a.m. to 10 a.m.; open committee discussion, 10 a.m. to 5 p.m.; Dotti Moore, National Center for Drugs and Biologics (HFN–150), Food and Drug Administration, 5600 Fishers Lane, Rockville, MD 20857, 301–443–5197.

General function of the committee. The committee reviews and evaluates available data on the safety and effectiveness of marketed and investigational prescription drugs for use in arthritic conditions.

Agenda—Open public hearing. Any interested persons may present data, information, or views, orally or in writing, on issues pending before the committee.

Open committee discussion. The subcommittee will discuss statistical guidelines which have been developed by FDA's Division of Biometrics.

Fertility and Maternal Health Drugs Advisory Committee

Date, time, and place. February 17, 9 a.m., Auditorium, Uniformed Services University of the Health Sciences, 4301 Jones Bridge Rd., Bethesda, MD.

Type of meeting and executive secretary. Open public hearing, 9 a.m. to 10 a.m.; open committee discussion, 10 a.m. to 5 p.m.; A. T. Gregoire, National Center for Drugs and Biologics (HFN–130), Food and Drug Administration, 5600 Fishers Lane, Rockville, MD 20857, 301–443–1869.

General function of the committee. The committee reviews and evaluates available data concerning the safety and effectiveness of marketed and investigational prescription drug products for use in obstetrics, gynecology, and contraception.

Agenda—Open public hearing. Interested persons requesting to present data, information, or views, orally or in writing, on issues pending before the committee should communicate with the committee executive secretary.

Open committee discussion. The committee will discuss: (1) The FDA Action report on previous committee recommendations, (2) Prostin 15/M (NDA 17–989) for Postpartum Hemorrhage, (3) committee discussion of Premenstrual Syndrome (PMS).

Panel on Review of Allergenic Extracts

Date, time, and place. February 18 and 19, 9 a.m., Rm. 115, Bldg. 29, 8800 Rockville Pike, Bethesda, MD.

Type of meeting and contract person. Open public hearing, February 18, 9 a.m. to 10 a.m.; open committee discussion, February 18, 10 a.m. to 5 p.m., February 19, 8:30 a.m. to 1:30 p.m.; Clay Sisk, National Center for Drugs and Biologics (HFN–6), Food and Drug Administration, 5600 Fishers Lane, Rockville, MD 20857, 301–443–5455.

General function of the committee. The committee reviews and evaluates data on the safety, effectiveness, and appropriate use of allergenic products intended for use in the diagnosis, prevention, or treatment of human diseases.

Agenda—Open public hearing. Any interested persons may present data, information, or views, orally or in writing, on issues pending before the committee.

Open committee discussion. The committee will continue the reevaluation of allergenic biological products previously classified in Category IIIA, the designation for those licensed biological products judged to have insufficient available data to classify as safe and effective, but which should remain licensed pending completion of further testing as provided in § 601.25(e) (21 CFR 601.25(e)). The products are being reclassified under the procedures described in the **Federal Register** of October 15, 1982 (47 FR 46138). The agenda will include a discussion of the safety of aluminum as an adjuvant in alum-precipitated allergenic extracts.

Orthopedic and Rehabilitation Device Section of the Surgical and Rehabilitation Devices Panel

Date, time, and place. February 24, 9 a.m., Rm. 503-529A, 200 Independence Ave. SW., Washington, DC.

Type of meeting and panel section leader. Open public hearing, 9 a.m. to 10 a.m.; open committee discussion, 10 a.m. to 5 p.m.; Robert E. Mansell, National Center for Devices and Radiological Health (HFK–410), Food and Drug

Administration, 8757 Georgia Ave., Silver Spring, MD 20910, 301-427-7238.

General function of the committee. The committee reviews and evaluates available data on the safety and effectiveness of devices currently in use and makes recommendations for their regulation.

Agenda—Open public hearing. Interested persons may present data, information, or views, orally or in writing, on issues pending before the committee. Those desiring to make formal presentations should notify the panel section leader before February 1, and submit a brief statement of the general nature of the evidence or arguments they wish to present, the names and addresses of proposed participants, and an indication of the approximate time required to make their comments.

Open committee discussion. The committee will discuss a premarket approval application for a muscle stimulation device used for the treatment of idiopathic scoliosis. The committee will also review a premarket approval application for polymethylmethacrylate bone cement.

Psychopharmacologic Drugs Advisory Committee

Date, time, and place. February 24 and 25, 9 a.m., Conference Rm. G, Parklawn Bldg., 5600 Fishers Lane, Rockville, MD.

Type of meeting and contract person. Open public hearing, February 24, 9 a.m. to 10 a.m.; open committee discussion, February 24, 10 a.m. to 5 p.m., February 25, 9 a.m. to 5 p.m.; Frederick J. Abramek, National Center for Drugs and Biologics (HFN-120), Food and Drug Administration, 5600 Fishers Lane, Rockville, MD 20857, 301-443-3800.

General function of the committee. The committee reviews and evaluates available data concerning the safety and effectiveness of marketed and investigational prescription drug products for use in the practice of psychiatry and related fields.

Agenda—Open public hearing. Interested persons may present data, information, or views, orally or in writing, on issues pending before the committee.

Open committee discussion. The committee will discuss the following: (1) The advisory committee process. (2) Office of Drugs advisory system file. (3) LSD as an adjunct to psychotherapy: Is further clinical testing reasonable and safe? (4) Principles for the description of antidepressant drug effects in drug labeling.

Cardiovascular and Renal Drugs Advisory Committee—Subcommittee for Revision of Anti-Anginal Guidelines

Date, time, and place. February 28, 9 a.m., Rm. A-2054, Uniformed Services University of the Health Sciences, 4301 Jones Bridge Rd., Bethesda, MD.

Type of meeting and contact person. Open public hearing, 9 a.m. to 10 a.m.; open committee discussion, 10 a.m. to 5 p.m.; Joan C. Standaert, National Center for Drugs and Biologics (HFN-110), Food and Drug Administration, 5600 Fishers Lane, Rockville, MD 20857, 301-443-4730.

General function of the committee. The committee reviews and evaluates available data concerning the safety and effectiveness of marketed and investigational prescription drug products for use in cardiovascular and renal disorders.

Agenda—Open public hearing. Any interested persons may present data, information, or views, orally or in writing, on issues pending before the committee.

Open committee discussion. The subcommittee will discuss possible revisions of published guidelines for use in the study of anti-anginal agents.

Toxicological Detection Systems and Quality Assurance Systems Subcommittees of the Science Advisory Board

Date, time, and place. February 28 and March 1, 9 a.m. Conference Rm., Bldg. 13, National Center for Toxicological Research, Jefferson, AR.

Type of meeting and contact person. Open public hearing, February 28, 9 a.m. to 10 a.m.; open committee discussion, February 28, 10 a.m. to 4:30 p.m., March 1, 9 a.m. to 2:30 p.m.; Lawrence W. Fishbein, National Center for Toxicological Research (HFT-30), Food and Drug Administration, Jefferson, AR 72079, 501-541-4528.

General function of the committee. To assist the Director, National Center for Toxicological Research, in establishing and implementing as well as advising on research and quality assurance programs that will assist the supporting agencies in fulfilling their regulatory responsibilities. The Board as a whole or under the subcommittee structure provides extra-agency review in ensuring that research and quality assurance programs at the National Center for Toxicological Research are scientifically sound and pertinent to toxicological problems.

Agenda—Open public hearing. Any interested persons may present data, information, or views, orally or in writing, on issues pending before the committee.

Agenda—Open committee discussion. The Subcommittee will hear reports and make recommendations on the following agenda items: (1) Overview of Center activities: short-, intermediate-, and long-term projects. (2) Individual indepth reviews of current research initiatives in all basic science areas. (3) Individual indepth reviews of current quality assurance systems. (4) Tours of individual laboratories: Divisions of Mutagenesis, Teratogenesis, Carcinogenesis, Microbiology/Molecular Biology, Chemistry, Pathology, and Office of Quality Assurance. (5) Evaluation and recommendations.

FDA public advisory committee meetings may have as many as four separable portions: (1) An open public hearing, (2) an open committee discussion, (3) a closed presentation of data, and (4) a closed committee deliberation. Every advisory committee meeting shall have an open public hearing portion. Whether or not it also includes any of the other three portions will depend upon the specific meeting involved. There are no closed portions for the meetings announced in this notice. The dates and times reserved for the open portions of each committee meeting are listed above.

The open public hearing portion of each meeting shall be at least 1 hour long unless public participation does not last that long. It is emphasized, however, that the 1 hour time limit for an open public hearing represents a minimum rather than a maximum time for public participation, and an open public hearing may last for whatever longer period the committee chairman determines will facilitate the committee's work.

Meetings of advisory committees shall be conducted, insofar as is practical, in accordance with the agenda published in this **Federal Register** notice. Changes in the agenda will be announced at the beginning of the open portion of a meeting.

Any interested person who wishes to be assured of the right to make an oral presentation at the open public hearing portion of a meeting shall inform the contact person listed above, either orally or in writing, prior to the meeting. Any person attending the hearing who does not in advance of the meeting request an opportunity to speak will be allowed to make an oral presentation at the hearing's conclusion, if time permits, at the chairman's discretion.

Persons interested in specific agenda items to be discussed in open session

may ascertain from the contact person the approximate time of discussion.

A list of committee members and summary minutes of meetings may be requested from the Dockets Management Branch (HFA-305), Food and Drug Administration, Rm. 4-62, 5600 Fishers Lane, Rockville, MD 20857, between 9 a.m. and 4 p.m., Monday through Friday. The FDA regulations relating to public advisory committees may be found in 21 CFR 14.

Dated: January 10, 1983.

William F. Randolph,

Acting Associate Commissioner for Regulatory Affairs.

[FR Doc. 83-1053 Filed 1-13-83; 8:45 am]

BILLING CODE 4160-01-M

Office of the Secretary

Agency Forms Submitted to the Office of Management and Budget for Clearance

Each Friday the Department of Health and Human Services (HHS) publishes a list of information collection packages it has submitted to the Office of Management and Budget (OMB) for clearance in compliance with the Paperwork Reduction Act (44 U.S.C. Chapter 35). The following are those packages submitted to OMB since the last list was last published on January 7.

Public Health Service

Food and Drug Administration

Subject: Good Manufacturing Practice for Medicated Premixes—Recordkeeping Requirements (0910-0139)—Extension/No Changes.

Respondents: Drug premix manufacturers.

Subject: Good Manufacturing Practice for Medicated Feeds—Recordkeeping Requirements (0910-0139)—Extension/No Changes.

Respondents: Commercial and in-farm medicated feed manufacturers.

Subject: Investigational Exemptions for New Animal Drugs (0910-0117)—Extension/No Changes.

Respondents: Pharmaceutical manufacturers and members of the medical profession.

OMB Desk Officer: Fay S. Iudicello.

Centers for Disease Control

Subject: Study of the Impact of Occupational Safety and Health Training Programs on the Supply and Demand for Occupational Safety and Health Professionals—New.

Respondents: Individuals and educational institutions.

OMB Desk Officer: Richard Eisinger.

Social Security Administration

Subject: Supplemental Security Income Mail Screener Survey Pretest (SSA-288)—New.

Respondents: Individuals or households.

Subject: Survey of Employment Services Programs for Refugees (ORR-8)—New.

Respondents: State or local governments and businesses or other institutions.

Subject: Report by Representative Payee (Institution) for Social Security Beneficiary (SSA-624)—Revision.

Respondents: Businesses or other institutions.

Subject: Report by Representative Payee (Individual) for Social Security Beneficiary (SSA-623)—Revision.

Respondents: Individuals or households.

OMB Desk Officer: Milo Sunderhauf.

Health Care Financing Administration

Subject: Request for Review of Medicare Part B Claim HCFA-1964)—Extension/No Changes.

Respondents: Medicare beneficiaries and health care providers.

Subject: Hospital, Skilled Nursing Facility and Health Care Complex Cost Report (HCFA-2552)—Revision.

Respondents: Hospitals, skilled nursing facilities, and health care complexes participating in Medicare.

OMB Desk Officer: Fay S. Iudicello.

Copies of the above information collection clearance packages can be obtained by calling the HHS Reports Clearance Officer on 202-245-6511.

Written comments and recommendations for the proposed information collections should be sent directly to both the HHS Reports Clearance Officer and the appropriate OMB Desk Officer designated above at the following addresses:

J. J. Strnad, HHS Reports Clearance Officer, Hubert H. Humphrey Building, Room 524-F, Washington, D.C. 20201

OMB Reports Management Branch, New Executive Office Building, Room 3208, Washington, D.C. 20503. Attn: (name of OMB Desk Officer).

Dated: January 10, 1983.

Dale W. Sopper,

Assistant Secretary for Management and Budget.

[FR Doc. 83-1059 Filed 1-13-83; 8:45 am]

BILLING CODE 4150-04-M

DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT

[Docket No. D-83-689]

Redelegation of Authority; Emergency Preparedness Functions

AGENCY: Office of the Secretary, HUD.

ACTION: Redelegation of authority.

SUMMARY: The Secretary of HUD is redelegating to the Assistant Secretary for Administration the emergency preparedness functions assigned to him under Executive Order 11490, as amended, and the disaster relief assistance functions vested in him under the Disaster Relief Act of 1974.

EFFECTIVE DATE: January 14, 1983.

FOR FURTHER INFORMATION CONTACT: Terrence F. Monihan, Director, Emergency Preparedness Staff, Department of Housing and Urban Development, Washington, D.C. 20410, 202-755-6020. This is not a toll free telephone number.

Redelegation of Authority

Section A. *Authority Redelegated.* The Assistant Secretary for Administration is redelegated the functions assigned to the Secretary of Housing and Urban Development by Executive Order 11490 (34 FR 17567, October 30, 1969), as amended, including the preparation of national emergency plans and the development of preparedness programs covering all aspects of housing, community facilities related to housing, and urban development.

Section B. *Effectuation.* Any emergency plans developed under the authority redelegated in Section A may be put into effect only if authorized by law enacted by the Congress or by order of the President.

Section C. *Authority Delegated.* The Assistant secretary for Administration is hereby delegated the authority vested in the Secretary of Housing and Urban Development as head of the agency, under the Disaster Relief Act of 1974, Pub. L. 93-288, as amended, 42 U.S.C. 5121 *et seq.*, to coordinate such disaster relief assistance and services as are required by the President or by the Director of the Federal Emergency Management Agency.

Section D. *Authority to Redelegate.* The Assistant Secretary is authorized to redelegate the authority described in Section A to any agencies or instrumentalities of the United States, and to officers and employees of the United States, and the authority described in Section C to employees of

the Department of Housing and Urban Development.

Section E. *Supersedure.* This delegation supersedes the delegation of authority published at 37 FR 3376, February 15, 1972.

(Section 3012 of E.O. 11490, 34 FR 17567, October 30, 1969; Section 7(d) of the Department of Housing and Urban Development Act, 42 U.S.C. 3535(d))

Dated: January 10, 1983.

Samuel R. Pierce, Jr.,

Secretary of Housing and Urban Development.

[FR Doc. 83-1117 Filed 1-13-83; 8:45 am]

BILLING CODE 4210-01-M

DEPARTMENT OF THE INTERIOR

Fish and Wildlife Service

Bolt Beranek & Newman, Inc.; Issuance of Permit for Marine Mammals

On November 1, 1982, a notice was published in the **Federal Register** (47 FR 49477), that an application had been filed with the Fish and Wildlife Service by Bolt Beranek and Newman, Inc., for a permit to take (Harass) sea otters (*Enhydra lutris*) from southern coastal California.

Notice is hereby given that on December 28, 1982, as authorized by the provisions of the Marine Mammal Protection Act of 1972 (16 U.S.C. 1361–1407), the Fish and Wildlife Service issued a permit PRT 2-9740, to Bolt Beranek and Newman, Inc., subject to certain conditions set forth therein.

The permit is available for public inspection during normal business hours at the Fish and Wildlife Service's Wildlife Service's Wildlife Permit Office in Room 601, 1000 N. Glebe Road, Arlington, Virginia.

Dated: January 11, 1983.

Larry LaRochelle,

Acting Chief, Branch of Permits, Federal Wildlife Permit Office.

[FR Doc. 83-1112 Filed 1-13-82; 8:45 am]

BILLING CODE 4310-55-M

Endangered Species Permit; Receipt of Applications

The applicants listed below wish to conduct certain activities with endangered species:

PRT 2-9898

Applicant: Charles Kegel, Bad Axe, MI

The applicant requests a permit to import on breeding loan one pair of Siberian tigers *(Panthera tigris altaica)*, two male and one female leopard cats *(Felis b. bengalensis)* and one pair of leopards *(P. pardus)* from Howletts Zoo Park, Port Lympne, England, for enhancement of propagation and scientific research.

PRT 2-9921

Applicant: George A. Allen, Jr., Salt Lake City, UT

The applicant requests a permit to import one female Palawan peacock pheasant *(Polyplectron emphanum)* from Harry Hardy, Burnaby, Canada, for enhancement of propagation. Humane care and treatment during transport, if applicable, has been indicated by the applicant.

Documents and other information submitted with these applications are available to the public during normal business hours in Room 601, 1000 N. Glebe Road, Arlington, Virginia, or by writing to the Director, U.S. Fish and Wildlife Service, WPO, P.O. Box 3654, Arlington, VA 22204.

Interested persons may comment on these applications within 30 days of the date of this publication by submitting written data, views, or arguments to the Director at the above address.

Dated: January 11, 1983.

Larry LaRochell,

Acting Chief, Branch of Permits, Federal Wildlife Permit Office, Fish and Wildlife Service.

[FR Doc. 83-1113 Filed 1-13-83; 8:45 am]

BILLING CODE 4310-55-M

Bureau of Land Management

[Group 635]

Arizona; Filing of Plats of Survey

1. Plats of survey of lands described below will be officially filed in the Arizona State Office, Phoenix, Arizona, effective at 7:45 a.m., on February 18, 1983.

Gila and Salt River Meridian, Arizona

T. 30 N., R. 19 W.,

A dependent resurvey of portions on the South boundary and subdivisional lines and the survey of a portion of the subdivisional lines of T. 30 N., R. 19 W.

Sec. 29;
Sec. 30, lots 1, 2, 3, 4, E½W½, E½;
Sec. 31, lots 1, 2, 3, 4, E½W½, E½;
Sec. 32.

The area aggregates 2,555.88 acres of land.

The land described above is located about six miles SSW of Temple Bar, Arizona, which is located on Lake Mead. The elevation varies from 2000 to 2350 feet above sea level. Many washes cross the area, draining in a N to NNW direction. The soil is very sandy and rocky throughout. The vegetation consists of creosote, Joshua trees, scattered yucca, cacti and sparse native grasses.

T. 30 No., R. 20 W.,

A dependent resurvey of a portion of the South boundary and the survey of a portion of the subdivisional lines of T. 30 N., R. 20 W.,

Secs. 24, 25, 35, and 36.

The areq aggregates 2,560.00 acres of land.

The land described above is located about six miles SW of Temple Bar, Arizona, which is located on Lake Mead. The terrain is mostly ridges oriented N and S and washes draining northerly. There are some steep slopes on the W sides of secs. 25 and 35. The elevation varies between 1900 and 2650 feet above sea level. The soil is mostly sandy and rocky.

2. A graded gravel road passes through both areas in a NE and SW direction connecting Temple Bar, Arizona, and U.S. Highway No. 93.

3. All rights to the State of Arizona to section 32 in T. 30 N., R. 19 W. and to section 36 in T. 30 N., R. 20 W., have been conveyed to the United States.

4. The lands described in paragraph 1 have been classified for State Indemnity Selection, and will not be subject to disposition under the General Land and Mining Laws, by reason of the official filing of the plats.

5. Inquiries concerning the lands should be addressed to the Arizona State Office, Bureau of Land Management, 2400 Valley Bank Center, Phoenix, Arizona 85073.

Dated: January 5, 1983.

Mario L. Lopez,

Chief, Branch of Lands and Minerals Operations.

[FR Doc. 83-1084 Filed 1-13-83; 8:45 am]

BILLING CODE 4310-84-M

California; Call for Applications for Wind Energy Development in the Tehachapi Pass; Correction

AGENCY: Bureau of Land Management, Interior.

ACTION: Notice. State of California; Call for Applications for Wind Energy Development in the Tehachapi Pass; Correction.

SUMMARY: The document corrects a notice of a proposed wind development on federal lands in the Tehachapi Pass area that appeared at page 56414 in the **Federal Register** of Thursday, December 16 (47 FR 56414).

The action is necessary to correct typographical errors in citations plus incorrect information.

DATES: Because of the corrections, the application time is extended to March 18, 1983.

FOR FURTHER INFORMATION CONTACT: Barbara Jackson, Realty Specialist, at (619) 446-4526.

The following corrections are made in FR Doc. 47-242 appearing on page 56414 in the issue of Thursday, December 16, 1982, near the top of column two, "the environmental document will be funded in accordance with 43 CFR 2803.1(a)(1) by the Bureau through appropriated funds." This is corrected to read "the environmental document will be funded in accordance with 43 CFR 2803.1-1(a)(1)."

Wesley Chambers,

Acting District Manager.

[FR Doc. 83-1086 Filed 1-13-83; 8:45 am]

BILLING CODE 4310-84-M

[Group 710]

California; Filing of Plat of Survey

January 4, 1983.

1. This plat of survey of the following described land will be officially filed in the California State Office, Sacramento, California immediately:

Mount Diablo Meridian, California

T. 20 N., R. 6 E.

2. The plat, representing the dependent resurvey of portions of the Fourth Standard Parallel North on the south boundary of Township 21 North, Range 6 East, and the subdivisional lines and the subdivision of section 5, Township 20 North, Range 6 East, Mount Diablo Meridian, California, for Group No. 710, was accepted March 12, 1982.

3. The plat will immediately become the basic record for describing the land for all authorized purposes. The plat has been placed in the open files and is available to the public for information only.

4. This survey was executed to meet certain administrative needs of this Bureau and the Bureau of Indian Affairs.

5. All inquiries relating to this land should be sent to the California State Office, Bureau of Land Management, Federal Office Building, 2800 Cottage Way, Room E-2841, Sacramento, California 95825.

Celia Anderson,

Acting Chief, Records and Information Section.

[FR Doc. 83-1074 Filed 1-13-83; 8:45 am]

BILLING CODE 4310-84-M

[Group 753]

California; Filing of Plat of Survey

January 4, 1983.

1. This plat of survey of the following described land will be officially filed in the California State Office, Sacramento, California immediately:

Mount Diablo Meridian, California

T. 20 N., R. 17 W.

2. The plat, representing the dependent resurvey of a portion of the north and east boundaries, and the corrective dependent resurvey of a portion of the east boundary, and a portion of the subdivisional lines and the corrective subdivision of section 1, Township 20 North, Range 17 West, Mount Diablo Meridian, California, for Group No. 753, was accepted March 11, 1982.

3. The plat will immediately become the basic record for describing the land for all authorized purposes. The plat has been placed in the open files and is available to the public for information only.

4. This survey was executed to meet certain administrative needs of this Bureau.

5. All inquiries relating to this land should be sent to the California State Office, Bureau of Land Management, Federal Office Building, 2800 Cottage Way, Room E-2841, Sacramento, California 95825.

Celia Anderson,

Acting Chief, Records and Information Section.

[FR Doc. 83-1075 Filed 1-13-83; 8:45 am]

BILLING CODE 4310-84-M

[Group 797]

California; Filing of Plat of Survey

January 4, 1983.

1. This plat of survey of the following described land will be officially filed in the California State Office, Sacramento, California immediately:

Mount Diablo Meridian, California

T. 6 N., R. 20 E.

2. This plat, representing the dependent resurvey of a portion of the subdivisional lines, a portion of the subdivision of section 28, and the survey of the subdivision of section 28, the metes and bounds survey in the southeast quarter of section 28, and the survey of the median lines of the Stanislaus River, through a portion of section 28, Township 6 North, Range 20 East, Mount Diablo Meridian, under Group No. 797, California, was accepted December 13, 1982.

3. The plat will immediately become the basic record for describing the land for all authorized purposes. The plat has been placed in the open files and is available to the public for information only.

4. This survey was executed to meet certain administrative needs of this Bureau and the U.S. Department of Agriculture, Forest Service.

5. All inquiries relating to this land should be sent to the California State Office, Bureau of Land Management, Federal Office Building, 2800 Cottage Way, Room E-2841, Sacramento, California 95825.

Celia Anderson,

Acting Chief, Records and Information Section.

[FR Doc. 83-1076 Filed 1-13-83; 8:45 am]

BILLING CODE 4310-84-M

[S 572, S 856]

California; Partial Revocation of Classifications of Public Lands for Multiple Use Management

Pursuant to the Act of September 19, 1964, the following described lands were classified for multiple use management and segregated from appropriation under the agricultural land laws (43 U.S.C. Chapters 7 and 9; 25 U.S.C. 334), from sales under section 2455 of the Revised Statutes (43 U.S.C. 1171), and from appropriations under the United States mining laws (30 U.S.C. ch. 2):

1. *S 572*, Bureau of Land Management Classification Order of December 21, 1967 (FR Doc. 67-14813):

Mount Diablo Meridian

T. 8 N., R. 9 E.,
Sec. 25, lot 1;
Sec. 26, SE¼NE¼NE¼, NE¼SE¼NE¼.
T. 11 N., R. 11 E.,
Sec. 20, SW¼SE¼.

The areas described aggregate 72.35 acres in Amador and El Dorado Counties.

2. *S 856*, Bureau of Land Management Classification Order of December 29, 1967 (FR Doc. 67-15087):

Mount Diablo Meridian

T. 17 N., R. 9 E.,
Sec. 10, S½S½SE¼;
Sec. 13, S½SE¼NE¼, SW¼NE¼, E½SE¼NW¼, SW¼SE¼NW¼, SE¼SW¼NW¼, N½N½SW¼, N½NE¼SE¼;
Sec. 14, Lot 4, SE¼NE¼, S½NW¼, N½SW¼, NW¼SE¼, N½NE¼SE¼;
Sec. 15, Lot 2, NE¼, E½SE¼NW¼, S½NW¼SW¼, SE¼SW¼, W½SW¼SE¼;
Sec. 16, Lots 3, 4, & 5, E½NE¼, S½NE¼SW¼, S½SW¼, N½SW¼SE¼, and that portion of N½ of lot 1 and N½SE¼ not in conflict with Mineral Survey 2278;
Sec. 17, S½SE¼SE¼;
Sec. 19, Lots 1 & 2, NE¼, E½NW¼;

Sec. 20, N½NE¼NE¼;
Sec. 22, Lot 12.
T. 18 N., R. 9 E.,
Sec. 34, SE¼SW¼.

The areas described aggregate approximately 1604 acres in Nevada County.

Pursuant to the authority delegated to me by Bureau Order No. 701 of July 23, 1964 (29 FR 10526), I hereby revoke the Bureau of Land Management Classification Orders of December 21, 1967, and December 29, 1967, insofar as they affect the above described lands.

At 10 a.m. on February 17, 1983 the segregative effect imposed by the above mentioned classifications will terminate.

Inquiries concerning the lands should be addressed to the State Director, Bureau of Land Management, Room E-2841, Federal Building, 2800 Cottage Way, Sacramento, California 95825.

Dated: January 5, 1983.

Ronald D. Hofman,

Associate State Director.

[FR Doc. 83-1083 Filed 1-13-83; 8:45 am]

BILLING CODE 4310-84-M

[Group 648]

California; filing of Plat of Survey

January 4, 1983.

1. This plat of survey of the following described land will be officially filed in the California State Office, Sacramento, California immediately:

Mount Diablo Meridian, California

T. 6 N., R. 12 E.

2. This plat, representing the dependent resurvey of a portion of the subdivisional lines, and the survey of the subdivision of section 12, Township 6 North, Range 12 East, Mount Diablo Meridian, under Group No. 648, California, was accepted November 30, 1982.

3. The plat will immediately become the basic record for describing the land for all authorized purposes. The plat has been placed in the open files and is available to the public for information only.

4. This survey was executed to meet certain administrative needs of this Bureau.

5. All inquiries relating to this land should be sent to the California state Office, Bureau of Land Management, Federal Office Building, 2800 Cottage Way, room E-2841, Sacramento, California 95825.

Celia Anderson,

Acting Chief, Records and Information Section.

[FR Doc. 83-1077 Filed 1-13-83; 8:45 am]

BILLING CODE 4310-84-M

[Group 648]

California; Filing of a Plat of Survey

January 4, 1983.

1. This plat of survey of the following described land will be officially filed in the California State Office, Sacramento, California immediately:

Mount Diablo Meridian, California

T. 6 N., R. 13 E.

2. These plats, in 13 sheets, representing the dependent resurvey of the First Standard Parallel North, along a portion of the south boundary of Township 6 North, Range 13 East, a portion of the east and north boundaries, the west boundary, a portion of the subdivisional lines, certain boundaries of mineral surveys, and the survey of the subdivision of sections 5, 6, 7, 8, 9, 12, 13, 14, 15, 17, 19 through 27, 30, 31, and 32, and the metes and bounds survey of lots, Township 6 North, Range 13 East, Mount Diablo Meridian, under Group No. 648, California, were accepted November 30, 1982.

3. The plat will immediately become the basic record for describing the land for all authorized purposes. The plat has been placed in the open files and is available to the public for information only.

4. This survey was executed to meet certain administrative needs of this Bureau.

5. All inquiries relating to this land should be sent to the California State Office, Bureau of Land Management, Federal Office Building, 2800 Cottage Way, Room E-2841, Sacramento, California 95825.

Celia Anderson,

Acting Chief, Records & Information Section.

[FR Doc. 83-1078 Filed 1-13-82; 8:45 am]

BILLING CODE 4310-84-M

[I-6129 et al.]

Idaho; Order Providing for Opening of Public Land

January 7, 1983.

In eighteen exchanges made under the provisions of section 206 of the Act of October 21, 1976, 90 Stat. 2756, 43 U.S.C. 1716, the following lands have been reconveyed to the United States:

Boise Meridian, Idaho

I-4238

T. 13 S., R. 10 E.,
Sec. 25, NE¼, E½NW¼, SW¼NW¼;
Sec. 26, E½SE¼NE¼.
T. 13 S., R. 11 E.,
Sec. 9, all;
Sec. 10, W½;
Sec. 19, lots 2, 3, 4, E½SW¼;
Sec. 20, E½NE¼, NE¼SE¼;
Sec. 21, NW¼, NW¼SW¼;
Sec. 23, S½SE¼;
Sec. 26, E½;
Sec. 30, lot 1, NE¼NW¼;
Sec. 35, NE¼, E½NW¼.
T. 14 S., R. 11 E.,
Sec. 1, lots 1, 2, 3, 4, S½N½, SW¼;
Sec. 12, W½.
T. 13 S., R. 12 E.,
Sec. 29, N½;
Sec. 31, lots 3, 4, 5, 6, 7, NE¼SW¼, N½SE¼;
Sec. 33, lots 2, 3, 4, N½SW¼, NW¼SE¼.
T. 14 S., R. 12 E.,
Sec. 4, S½NE¼, N½SW¼, NW¼SE¼;
Sec. 5, lots 3, 4, SW¼NE¼, S½NW¼, SW¼, N½SE¼;
Sec. 6, lots 1, 2, 3, 4, 5, S½NE¼, SE¼.

I-016583

T. 12 S., R. 20 E.,
Sec. 29, SW¼SW¼;
Sec. 30, S½NE¼, SE¼NW¼, SE¼;
Sec. 31, N½NE¼, SE¼NE¼, E½SE¼;
Sec. 32, NW¼NW¼, W½SW¼.
T. 10 S., R. 21 E.,
Sec. 28, lots 2, 6, 7, 8 and 9, SE¼SW¼, S½SE¼, and that portion of the SW¼SW¼ lying north of the right-of-way of the Minidoka-Buhl and Branch of the Union Pacific Railroad.
T. 15 S., R. 22 E.,
Sec. 8, W½SE¼, SE¼SE¼;
Sec. 17, NE¼NE¼.
T. 16 S., R. 22 E.,
Sec. 20, SE¼.

I-1435

T. 12 S., R. 26 E.,
Sec. 34, SE¼NW¼.
T. 16 S., R. 30 E.,
Sec. 16, W½NE¼.

I-4256

T. 14 S., R. 31 E.,
Sec. 36, all.
T. 16 S., R. 30 E.,
Sec. 16, W½NE¼.

I-4117

T. 12 S., R. 32 E.,
Sec. 15, S½NW¼, SW¼;
Sec. 21, E½NE¼;
Sec. 22, NE¼NE¼, W½NE¼, NW¼.

I-3780

T. 14 S., R. 34 E.,
Sec. 25, NE¼NE¼.

I-2014

T. 8 S., R. 40 E.,
Sec. 6, lot 1.
T. 10 N., R. 19 E.,
Sec. 23, NW¼NE¼, E½NW¼, SW¼NW¼.

I-4641

T. 9 N., R. 20 E.,
Sec. 25, N½.

I-295

T. 3 N., R. 27 E.,
A part of the NE¼ section 12, T. 3 N., R. 27 E., Boise Meridian, Idaho. Described in two parcels as follows: Parcel 1, beginning at the section corner common to secs. 1 and 12, T. 3 N., R. 27 E., thence

S. 89°10'W., 2628.0 ft. to the north quarter corner of said sec. 12; thence S. 0°17'W., 342.6 feet; thence S. 85°51'30"E., 2633.47 feet; thence N. 0°17'E., 571.0 feet to the place of beginning. Parcel 2, beginning at the east quarter corner of said sec. 12, thence N. 0°17'E., 1667.5 feet; thence N. 85°51'30"W., 2633.47 feet; thence S. 0°17'W., 1895.9 feet; thence N. 89°10'E., 2628 feet to the east quarter corner sec. 12, the place of beginning;
Sec. 20 SE¼SW¼.

I-6129

T. 29 N., R. 8 E.,
Sec. 4, S½SE¼.

I-6896

T. 17 N., R. 20 E.,
Sec. 14, SW¼SW¼NW¼;
Sec. 15, NE¼NE¼NE¼, S½NE¼SE¼NE¼, NW¼SE¼NE¼, S½SE¼NE¼.

I-6871

T. 18 N., R. 21 E.,
Salmon Run at Salmon River Subdivision,
Sec. 3, lots 66, 68, and 69, block 4 lot 64, block 5 lot 173, block 10;
Sec. 10, lot 176, block 10.

I-7496

T. 22 N., R. 23 E.,
Sec. 5, S½SE¼NW¼.

I-4602

T. 17 N., R. 25 E.,
Sec. 29, SE¼NE¼, NE¼SE¼.

I-7866

T. 3 N., R. 34 E.,
Sec. 3, SW¼NE¼, SE¼NW¼, E½SW¼, SE¼;
Sec. 10, SE¼;
Sec. 11, SW¼.

I-8154

T. 14 S., R. 22 E.,
Sec. 16, all.

I-6873

T. 16 S., R. 31 E.,
Sec. 16, all.

I-5071

T. 12 S., R. 34 E.,
Sec. 30, lots 3, 4, E½SW¼, SE¼.

The area described contains 11,201.68 acres in Idaho, Lemhi, Jefferson, Twin Falls, Oneida, Owyhee, Cassia, Power, Caribou, Custer and Butte Counties, Idaho.

2. Subject to valid existing rights, provisions of existing withdrawals, and the requirements of applicable law, the following-described land is hereby open to operation of the public land laws, including the mining laws (ch. 2, title 30 U.S.C.) and mineral leasing laws. All valid applications, received at or prior to 9:00 a.m., February 11, 1983, shall be considered as simultaneously filed at that time. Those received thereafter shall be considered in the order of filing.

Boise Meridian

I-6129

T. 29 N., R. 8 E.,
Sec. 4, all.

I-7866

T. 3 N., R. 34 E.,
Sec. 3, SW¼NE¼, SE¼NW¼, E½SW¼, SE¼;
Sec. 10, SE¼;
Sec. 11, SW¼.

I-8154

T. 14 S., R. 22 E.,
Sec. 16, all.

I-5071

T. 12 S., R. 34 E.,
Sec. 30, lots 3, 4, E½SW¼, SE¼.

I-4238

T. 13 S., R. 10 E.,
Sec. 25, NE¼, E½NW¼, SW¼NW¼;
Sec. 26, E½SE¼NE¼.
T. 13 S., R. 11 E.,
Sec. 9, all;
Sec. 10, W½;
Sec. 19, lots 2, 3, 4, E½SW¼;
Sec. 20, E½NE¼, NE¼SE¼;
Sec. 21, NW¼, NW¼SW¼;
Sec. 23, S½SE¼;
Sec. 26, E½;
Sec. 30, lot 1, NE¼NW¼;
Sec. 35, NE¼, E½NW¼.
T. 14 S., R. 11 E.,
Sec. 1, lots 1, 2, 3, 4, S½N½, SW¼;
Sec. 12, W½.
T. 13 S., R. 12 E.,
Sec. 29, N½;
Sec. 31, lots 3, 4, 5, 6, 7, NE¼SW¼, N½SE¼;
Sec. 33, lots 2, 3, 4, N½SW¼, NW¼SE¼.
T. 14 S., R. 12 E.,
Sec. 4, S½NE¼, N½SW¼, NW¼SE¼;
Sec. 5, lots 3, 4, SW¼NE¼, S½NW¼, SW¼, N½SE¼;
Sec. 6, lots 1, 2, 3, 4, 5, S½NE¼, SE¼.

I-016583

T. 12 S., R. 20 E.,
Sec. 29, SW¼SW¼;
Sec. 30, S½NE¼, SE¼NW¼, SE¼;
Sec. 31, N½NE¼, SE¼NE¼, E½SE¼;
Sec. 32, NW¼NW¼, W½SW¼.
T. 10 S., R. 21 E.,
Sec. 28, lots, 2, 6, 7, 8, 9, SE¼SW¼, S½S½, and that portion of the SW¼SW¼, lying north of the right-of-way of the Minidoka-Buhl Branch of the Union Pacific Railroad.
T. 16 S., R. 22 E.,
Sec. 20, SE¼.

I-1435

T. 12 S., R. 26 E.,
Sec. 34, SE¼NW¼.

I-4117

T. 12 S., R. 32 E.,
Sec. 15, S½NW¼, SW¼;
Sec. 21, E½NE¼;
Sec. 22, NE¼NE¼, W½NE¼, NW¼.

I-2014

T. 8 S., R. 40 E.,
Sec. 6, lot 1.

I-4641

T. 10 N., R. 19 E.,
Sec. 23, NW¼NE¼, E½NW¼, SW¼NW¼.
T. 9 N., R. 20 E.,
Sec. 25, N½.

I-295

T. 3 N., R. 27 E.
A part of the NE¼, sec. 12, T. 3 N., R. 27 E., described in two parcels as follows: parcel 1, beginning at the section corner common to secs. 1 and 12, T. 3 N., R. 27 E., thence S. 89°10'W., 2628.0 ft. to the north quarter corner of said sec. 12; thence S. 0°17'W., 342.6 feet; thence S. 85°51'30"E., 2633.47 feet; thence N. 0°17'E., 571.0 feet to the place of beginning. Parcel 2, beginning at the east quarter corner of said sec. 12, thence N. 0°17'E. 1667.5 feet; thence N. 85°51'30"W., 2633.47 feet; thence S. 0°17'W., 1895.9 feet; thence N. 89°10'E., 2628 feet to the east quarter corner sec. 12, the place of beginning.

3. Subject to valid existing rights, the provisions of existing withdrawals, and the requirements of applicable law, the land described below is hereby open to operation of the public land laws, but not the mining laws. All valid applications received prior to 9:00 a.m., February 11, 1983, shall be considered as simultaneously filed at that time. Those received thereafter shall be considered in the order of filing.

Boise Meridian

I-4256

T. 16 S., R. 30 E.,
Sec. 16, W½NE¼.
T. 14 S., R. 31 E.,
Sec. 36, all.

I-3780

T. 14 S., R. 34 E.,
Sec. 25, NE¼NE¼.

I-6896

T. 17 N., R. 20 E.,
Sec. 14, SW¼SW¼NW¼;
Sec. 15, NE¼NE¼NE¼, S½NE¼SE¼NE¼, NW¼SE¼NE¼, S½SE¼NE¼.

I-6871

T. 18 N., R. 21 E.,
Sec. 3, lots 66, 68, 69, block 4, lot 64, block 5, lot 173, block 10;
Sec. 10, lot 176, block 10.

I-7496

T. 22 N., R. 23 E.,
Sec. 5, S½SE¼NW¼.

I-4602

T. 17 N., R. 25 E.,
Sec. 29, SE¼NE¼, NE¼SE¼.

I-6873

T. 16 S., R. 31 E.,
Sec. 16, all.

I-295

T. 3 N., R. 27 E.,
Sec. 20, SE¼SW¼.

I-016583

T. 15 S., R. 22 E.,
Sec. 8, W½SE¼, SE¼SE¼;
Sec. 17, NE¼NE¼.

Inquiries concerning the lands should be addressed to the Chief, Lands Section, Bureau of Land Management, 3380 Americana Terrace, Boise, Idaho 83706.

William E. Ireland,

Chief, Lands Section.

[FR Doc. 83-1071 Filed 1-13-83; 8:45 am]

BILLING CODE 4310-84-M

[1792]

Price River Resource Area, Utah; Environmental Impact Statement

January 7, 1983.

AGENCY: Bureau of Land Management, Utah.

ACTION: Notice of Availability of Final Environmental Impact Statement.

SUMMARY: Pursuant to Section 102(2)(c) of the National Environmental Policy Act of 1969 and a 1975 Federal Court Order, the Bureau of Land Management (BLM) has prepared a final environmental impact statement (EIS) for the rangeland management program in the Price River Resource Area. The EIS area includes Carbon County and parts of Emery, Utah, Duchesne and Unitah Counties, Utah.

The final EIS examines four alternative management programs: (1) Enhance Livestock Production; (2) Planning Recommendation; (3) Enhance Watershed, Wildlife, and Recreation; and (4) No Action. The objective of the alternatives is to provide a grazing management program based on multiple use and sustained yield of the natural resources on 1,087,676 acres of public land.

Copies of the fianl EIS are available from the Price River Resource Area Office at 700 East 900 North, Price, Utah 84501, phone (801) 637-4584. Public reading copies will be available for review at the following locations:

Office of Public Affairs, Bureau of Land Management, Interior Building, 18th and C Streets NW., Washington, D.C. 20240

Moab District Office, Bureau of Land Management, 125 W. 200 S., Moab, Utah 84532

Utah State Office, Bureau of Land Management, University Club Building, 136 East South Temple, Salt Lake City, Utah 84111.

Written comments on the final EIS should be submitted by February 15, 1983 to: Gene Nodine, District Manager, Bureau of Land Management, P.O. Box 970, Moab, Utah 84532.

Written comments concerning the final EIS will be considered in the subsequent decision on the management program for the price River Resource Area.

Dated: January 7, 1983.

Gene Nodine,

District Manager.

[FR Doc. 83-1072 Filed 1-13-83; 8:45 am]

BILLING CODE 4310-84-M

Realty Action; Public Lands; Beaver County, Oklahoma

AGENCY: Bureau of Land Management; Interior.

ACTION: Notice of realty action on proposed land disposal.

SUMMARY: This notice is to advise the public that the Albuquerque District of the Bureau of Land Management (BLM) is proposing to dispose of public lands in Beaver County, Oklahoma.

SUPPLEMENTARY INFORMATION: The BLM has determined that the 195.77 acres of public land described below are suitable for lease or patent under authority of the Recreation and Public Purposes (R&PP) Act of June 14, 1926 (44 Stat. 741; 43 U.S.C. 869) or disposal by sale under Section 203 of the Federal Land Policy and Management Act of 1976 (90 Stat. 2750; 43 U.S.C. 1713).

Parcel No.	Legal description	Acreage
	T. 1 S., R. 24 E., C.M.	
Section 1: BV-1	Lot 1, T. 1 S., R. 25 E., C.M.	1.47
Section 2: BV-2	Lots 1, 2, 3, 4	5.25
Section 3: BV-2	Lots 1, 2, 3	6.18
Section 4: BV-2	Lot 2	3.78
Section 5: BV-2	Lots 1, 2, T. 1 S., R. 26 E., C.M.	8.39
Section 1: BV-3	Lots 1, 2	.32
Section 4: BV-4	Lots 2, 3, T. 4 N., R. 21 E., C.M.	1.23
Section 29: BV-5	SW¼ NW¼, T. 4 N., R. 22 E., C.MD40.00.	
Section 18: BV-6	SE¼ SE¼	40.00
Section 17: BV-7	Lots SW¼ NW¼, T. 6 N., R. 24 E., C.M.	40.00
Section 28: BV-12	NW¼, NE¼	40.00

The BLM has not effectively managed these tracts in the past and will not be capable of such management in the future. Their location as well as the physical characteristics and the private ownership of adjoining lands, make them difficult and uneconomical to manage as public land. In terms of the natural resources available in western Oklahoma, the value of these tracts is insignificant. Consequently, disposal would best serve the public interest.

This is an opportunity for Local, County or State governments to apply for a lease or patent on those tracts that they feel are needed for public parks, recreation or other public purposes. Those tracts that are not applied for under the R&PP Act by March 1, 1983 will be sold at public auction by competitive bidding.

A patent for the land, when issued, shall be subject to the following conditions:

1. A right-of-way for ditches or canals constructed by the authority of the United States. Act of August 30, 1890, 16 Stat. 391; 43 U.S.C. 945. This applies to all parcels.

2. All minerals "including gas and oil" shall be reserved to the United States as required by Section 209(a) of the Federal Land Policy and Management Act of 1976, 43 U.S.C. 1719. This applies to all parcels.

3. All valid existing rights and reservations of record. This applies to all parcels.

4. Recognizing that it lies within a floodplain and as such, the patentee or its successor(s) are limited by Section 3 (d) of Executive Order 11988 of May 24, 1977 from seeking compensation from the U.S. or its agencies in the event existing or future facilities on this patent are damaged by flood. (BV-2, Sec. 3, BV-5 and BV-6.) This applies to parcels BV-2 (Section 3 Lots), BV-5 and BV-6.

5. Grazing privileges are reserved for L. Barr Brown through June 27, 1984, pursuant to grazing record (lease) number 0752 and Notice of Cancellation letter dated June 28, 1982. This applies to parcel BV-5.

The sale will be held at the Beaver County Fair Building, Beaver, Oklahoma, on Thursday, March 31, 1983 at 1:00 P.M.

Bidding Information and Instructions

"Bidding Qualifications": The Federal Land Policy and Management Act requires that bidders must be citizens of the United States, 18 years of age or over, or, in the case of a corporation, be subject to the laws of any State or the United States. Bids may be made by a principle (the one desiring to purchase the land) or his duly qualified agent.

"Bid Standards": No bid will be accepted for less than the appraised fair market value. Bids must be for all the land in the parcel.

"Method of Bidding": Bids may be made either by mail or personally at the sale. Bids sent by mail shall only be considered if received at the Albuquerque, District Office, 3550 Pan American Freeway, N.W., P.O. Box 6770, Albuquerque, New Mexico, 87107, prior to 4:00 P.M. on March 29, 1983. Bids sent by mail must be in sealed envelopes

accompanied by a certified check, postal money order, or cashier's check made payable to the Bureau of Land Management for not less than one-fifth of the amount of the bid. The sealed envelopes must be marked in the lower left hand corner, "Sealed Bid, Public Land Sale NM-53598, NM-53599, NM-53600. Sale to be March 31, 1983." If two or more valid sealed bids in the same amount are received and they are the high bid, the determination of which bid is to be considered the highest bid shall be by a drawing. The drawing, if required, shall be held immediately following the opening of the bids. The highest qualifying sealed bid shall then be announced.

Oral bids will be received immediately after all sealed bids have been opened and the highest sealed bid is announced. The highest bid shall be the base for oral bids. All oral bids must be made in increments of not less than $20.00. Sealed bidders present at the sale may also make oral bids. The highest bid price, either sealed or oral, shall establish the sale price. If the highest bid is an oral bid, the successful bidder shall be required to pay immediately one-fifth of the high bid price by cash, personal check, money order, or any combination thereof.

"Final Details": The successful higher bidder, whether it is by sealed or oral bid, shall be required to submit full payment for the balance of the bid within a 30-day period shall disqualify the apparent high bidder bid deposit shall be forfeited. All unsuccessful sealed bids shall be returned within 30 days from the sale date.

Further Information/Inquiries

Detailed information concerning this sale, including the planning and environmental documents are available for review in the Oklahoma Resource Area Office, 200 N.W. Fifth, Room 548, Oklahoma City, Oklahoma 73102, or telephone 405-231-4481. The fair market appraisals will be available after February 7, 1983.

For a period of 45 days from the date of this notice, interested parties may submit comments to the Oklahoma Resource Area Manager. Any adverse comments will be evaluated by the New Mexico State Director, Bureau of Land Management, who may vacate or modify this realty action and issue a final determination. In the absence of any action by the State Director, this realty action will become the final determination of the Department of the Interior.

Mathew N. Millenbach,

Associate District Manager.

[FR Doc. 83-1086 Filed 1-13-83; 8:45 am]

BILLING CODE 4310-84-M

Salmon District Advisory Council Meeting

AGENCY: Bureau of Land Management, Interior.

ACTION: Notice of meeting.

SUMMARY: The Salmon District of the Bureau of Land Management (BLM) announces a forthcoming meeting of the Salmon District Advisory Council.

DATE: The meeting will be held at 10:00 a.m., Thursday, March 10, 1983.

ADDRESS: The meeting will be held at the Salmon District Office, Bureau of Land Management, Conference Room, South Highway 93, Salmon, Idaho 83467.

SUPPLEMENTARY INFORMATION: This meeting is held in accordance with Public Laws 92-463 and 94-579. The agenda for the meeting will include: State Director introduction; overview of Council; election of chairperson and vice-chairperson; district organization/reorganization; area presentations, Ellis/Pahsimeroi—implementation, Mackay—MFP/EIS, and Lemhi—planning issues; status of minerals activities in district, MMS merger; wilderness—status of EIS—upcoming EA—other WSAs; asset management; wildhorse/burro situation; and BLM's role in recreation maintenance and development.

The meeting is open to the public. Interested persons may make oral statements to the Council between 11:00 a.m. and 11:30 a.m., or file written statements for the Council's consideration. Anyone wishing to make an oral statement must notify the District Manager at the Salmon District Office by February 28, 1983. Depending on the number of persons wishing to make an oral statement, per person time limit may be established.

Summary minutes of the meeting will be maintained in the District Office and will be available for public inspection and reproduction (during regular business hours) within 30 days following the meeting. Notification of oral statements and requests for summary minutes should be sent to: Kenneth G. Walker, District Manager, Salmon District BLM, Box 430, Salmon, Idaho 83467.

Dated: January 7, 1983.

Jerry W. Goodman,

Acting District Manager.

[FR Doc. 83-1099 Filed 1-13-83; 8:45 am]

BILLING CODE 4310-84-M

[U-1291, U-4174, U-4175]

Salt Lake District, Utah; Realty Action; Segregation of Public Lands in Summit County

AGENCY: Bureau of Land Management, Utah State Office.

ACTION: Notice of segregation.

SUMMARY: The State of Utah has made application for indemnity selection involving the following described lands:

T. 2 S., R. 3 E., SLM,

All vacant, unappropriated public lands administered by the Bureau of Land Management within sections 13, 24, 25, 26.*

T. 2 S., R. 4 E., SLM,

All vacant, unappropriated public lands administered by the Bureau of Land Management excepting and excluding the following parcels:

Parcel No.	Section	Subdivision	Acres
3	3	S½SE¼	
	10	NW¼NE¼	69.3
16	10	Lots 7, 8	
	15	N½, NW¼SW¼	88.0

T. 2 S., R. 5 E., SLM,

All vacant, unappropriated public lands administered by the Bureau of Land Management.

Acreage to be disposed of totals approximately 1,629.8 acres.

The State of Utah made indemnity selection for the lands in T. 2 S., R. 4 E., under serial numbers U-1291, U-4174, and U-4175 on October 1, 1966 and October 9, 1967. The lands in T. 2 S., R. 3 E., and T. 2 S., R. 5 E., are included in this segregation in response to the Park City Management Framework Plan decision to dispose of these lands to the State and the State's interest in including these lands in their existing indemnity selection applications. Parcel numbers mentioned have been assigned by this office for indentification purposes only and have no reference to legal description.

In accordance with the regulations in 43 CFR 2091.2-6, the lands described above are hereby segregated from settlement, sale, location or entry under the public land laws, including the mining laws, but not the mineral leasing laws or the Geothermal Steam Act. Any application not consistent with disposal of these lands by state indemnity selection will not be accepted, shall not

be considered as filed and shall be returned to the applicant. This segregation shall become effective the date of publication of this notice. The segregative effect of the selection application on these public lands shall terminate upon issuance of a document of conveyance to such lands, or upon publication in the **Federal Register** of a notice of termination of the segregation or the expiration of two years from the date of the publication of this notice, whichever occurs first. However, where administrative appeal or review actions have been sought pursuant to part 4 or subpart 2450 of this title, the segregative period shall continue in effect until publication of a notice of termination of the segregation in the **Federal Register.**

Inquiries or comments should be sent to the Utah State Office, University Club Building, 136 East South Temple, Salt Lake City, Utah 84111 or phone (801) 524-4245.

Darrell Barnes,

Chief, Branch of Lands and Minerals Operations.

[FR Doc. 83-1085 Filed 1-13-83; 8:45 am]

BILLING CODE 4310-84-M

Vale District Grazing Advisory Board; Meeting

Notice is hereby given in accordance with Pub. L. 92-463 that a meeting of the Vale District Grazing Advisory Board will be held February 9, 1983.

The meeting will begin at 9:00 a.m. in the conference room of the Bureau of Land Management Office at 100 Oregon Street West, Vale, Oregon 97918.

Agenda items scheduled for advisory board action are: (1) Southern Malheur EIS Area preferred alternative, (2) range project maintenance agreements, and (3) Vale District wilderness preferred alternative.

The board will also be briefed on the 1983 grazing fee and the asset management program.

The meeting is open to the public. Interested persons may make oral statements to the Board or may file written statements for the Board's consideration. Anyone wishing to make oral statements may do so at 3:00 p.m. the day of the meeting.

Summary minutes of the Board meeting will be maintained in the District office and be available during regular business hours for public inspection, for the cost of duplication, within 30 days following the meeting.

Fearl M. Parker,

District Manager.

[FR Doc. 83-1070 Filed 1-13-83; 8:45 am]

BILLING CODE 4310-84-M

Wyoming; Rawlins District Grazing Advisory Board Meeting

AGENCY: Bureau of Land Management, Interior.

ACTION: Notice of Rawlins District Grazing Advisory Board meeting.

SUMMARY: Notice is hereby given in accordance with Pub. L. 92-563 that a meeting of the Rawlins District Grazing Advisory Board will be held on February 24, 1983, beginning at 9:00 a.m., in the large conference room of the Bureau of Land Management at 1300 Third Street, Rawlins, Wyoming.

The agenda items will be: (1) Review of the Final Rangeland Improvement Policy; (2) Range Improvement Project Status for FY 1983; (3) A discussion of efforts to remove impediments to private investment in range improvements from Policy and Regulations; (4) The Green Mountain Management Framework Plan (MFP) Decisions, Livestock Grazing Decisions and Summary Document; (5) Divide EIS Status Report; (6) Status of Bureau Rangeland Inventory Procedures; (7) Rangeland Monitoring Program Update; (8) Review of Stock Driveway Withdrawals; (9) Public Comment Period; and (10) Arrangements for the next meeting.

The meeting is open to the public. Interested persons may make oral statements to the Board or may file written statements for the Board's consideration. Anyone wishing to make an oral statement may do so between 3:00 and 3:30 p.m., but must notify the District Manager, Bureau of Land Management, 1300 Third Street, P.O. Box 670, Rawlins, WY 82301 by February 23, 1983.

Summary minutes of the Board meeting will be maintained in the district office and be available during regular business hours for public inspection within 30 days following the meeting. Copies may be obtained for the cost of duplication.

David J. Walter,

District Manager.

[FR Doc. 83-1073 Filed 1-13-83; 8:45 am]

BILLING CODE 4310-84-M

Minerals Management Service

Information Collection Submitted for Review

The proposal for the collection of information listed below has been submitted to the Office of Management and Budget (OMB) for approval under the provisions of the Paperwork Reduction Act (44 U.S.C. Chapter 35). Copies of the proposed information collection requirement and related forms and explanatory material may be obtained by contacting the Bureau's clearance officer at the telephone number listed below. Comments and suggestions on the requirement should be made directly to the Bureau clearance officer and the OMB reviewing official, Mr. Jefferson Hill, at 202-395-7340.

Title: 30 CFR 250.34, exploration, development, and production activities.

Bureau Form Number: None.

Frequency: Nonrecurring.

Description of Respondents: Federal Outer Continental Shelf Lessees.

Annual Responses: 1,233.

Annual Burden Hours: 516,219.

Bureau Clearance Officer: Dorothy J. Christopher at (703) 435-6213.

Dated: December 17, 1982.

Robert L. Rioux,

Associate Director for Offshore Minerals Management, Minerals Management Service.

[FR Doc. 83-1081 Filed 1-13-83; 8:45 am]

BILLING CODE 4310-MR-M

Intent To Revise Timing of U.S. Royalty Oil Sales From Federal Offshore and Onshore Leases

AGENCY: Minerals Management Service (MMS), Interior.

ACTION: Notice of intent to revise timing of sales; request for comments.

SUMMARY: The long-range intent of MMS is to continue the practice of issuing sales contracts for 3-year periods; but in order to make the royalty-in-kind (RIK) program more manageable for the Federal Government and royalty oil more regularly available for industry, MMS proposes to divide the total available royalty oil into 3 parcels and make one of the 3 parcels available each year. Contracts for royalty oil from any one of the 3 parcels would be for a duration of 3 years. To accomplish this, MMS plans to stagger the contract expiration dates at the next royalty sale be announced in April 1983.

DATE: Written comments on this revised timing of the royalty-in-kind sales program must be received in the Royalty Management Program, Minerals

Management Service, Denver Federal Center, Denver, Colorado, by 12:00 noon, m.s.t., February 14, 1983.

ADDRESSES: Written comments may be mailed to James H. Mikelson, P.O. Box 5760, Denver, CO 80217; or delivered to him at Room B509 in Building 85, Denver Federal Center.

FOR FURTHER INFORMATION CONTACT: Mr. James H. Mikelson or Mr. C. Boyd Donaldson, (303) 231-3133.

SUPPLEMENTARY INFORMATION: To make the Royalty-in-kind oil sales program more manageable and efficient, the 1983 sale is separated by regions as follows:

1. RIK oil from Federal leases in the Outer Continental Shelf (OCS) regions of the Gulf of Mexico and the Pacific Coast will be sold under contracts beginning October 1, 1983, with an expiration date of October 1, 1984. The effective beginning date of subsequent royalty oil contracts from these regions will be October 1, 1984, and every three years thereafter.

2. RIK oil from Federal leases in the States of Texas, Oklahoma, New Mexico, Arizona, Nevada, California, Oregon, Washington, Idaho, and Alaska will be sold under contracts beginning November 1, 1983, with an expiration date of October 1, 1985. The effective beginning date of subsequent royalty oil contracts from these 10 states will be October 1, 1985, and every three years thereafter.

3. RIK oil from Federal leases in all other states will be sold under contracts beginning December 1, 1983, with an expiration date of October 1, 1986. The effective begging date of subsequent royalty oil contracts for this area will be October 1, 1986, and every three years thereafter.

Because of the large number of Federal leases involved in the RIK program, MMS believes that this change in timing will result in better production data being furnished to interested eligible purchasers of U.S. royalty oil. It will also make the program more efficient and manageable for the Federal Government.

Dated: January 11, 1983.

Robert E. Boldt,

Associate Director for Royalty Minerals Management Service.

[FR Doc. 83-1018 Filed 1-13-83; 8:45 am]

BILLING CODE 4310-MR-M

Outer Continental Shelf Advisory Board; Mid-Atlantic Technical Working Group; Meeting

Notice of this meeting is issued in accordance with the Federal Advisory Committee Act (Pub. L. No. 92-463).

Name: Mid-Atlantic Regional Technical Working Group

Date: February 10, 1983.

Place: Garden State Ballroom, Parlor II, Hilton Gateway Hotel, Raymond Boulevard, Newark, New Jersey.

Time: 9:00 a.m. to 5:00 p.m.

Committee membership consists of representatives from federal agencies, the coastal states of New York through North Carolina, the petroleum industry, and other private interests.

Agenda: Overview of the Minerals Management Service's organizational structure and its role in pre and post sale OCS operations; overview of the Baltimore Canyon Block 598 Unit Agreement; overview of ongoing and proposed Mid-Atlantic studies and update on proposed OCS Sale No. 76.

This meeting will be open to the public. Public attendance may be limited by the space available. Persons wishing to make oral presentations to the Committee regarding items on the agenda should contact Richard Barnett of the New York OCS Office (212-264-1061) by January 28, 1983. Written statements should be submitted by February 17 to the New York OCS Office, Minerals Management Service, 26 Federal Plaza, Suite 32-120, New York, New York 10278.

Minutes of the meeting will be available for public inspection and copying by April 7, 1983 at the above address.

Frank Basile,

Manager, New York OCS Office.

[FR Doc. 83-1060 Filed 1-13-83; 8:45 am]

BILLING CODE 4310-MR-M

Oil and Gas and Sulphur Operations in the Outer Continental Shelf; Exxon Co., U.S.A.

AGENCY: Minerals Management Service, Interior.

ACTION: Notice of the receipt of a proposed development and production plan.

SUMMARY: This Notice announces that Exxon Company, U.S.A., Unit Operator of the South Timbalier Block 54 Federal Unit Agreement No. 14-08-001-3444, submitted on December 20, 1982, a proposed supplemental plan of development/production describing the activities it proposes to conduct on the South Timbalier Block 54 Federal Unit.

The purpose of this Notice is to inform the public, pursuant to Section 25 of the OCS Lands Act Amendments of 1978, that the Minerals Management Service is considering approval of the plan and that it is available for public review at the offices of the Regional Manager, Gulf of Mexico OCS Region, Minerals Management Service, 3301 N. Causeway Blvd., Room 147, Metairie, Louisiana 70002.

FOR FURTHER INFORMATION CONTACT: Minerals Management Service, Public Records, Room 147, open weekdays 9:00 a.m. to 3:30 p.m., 3301 N. Causeway Blvd., Metairie, Louisiana 70002, phone (504) 837-4720, ext. 226.

SUPPLEMENTARY INFORMATION: Revised rules governing practices and procedures under which the Minerals Management Service makes information contained in development and production plans available to affected States, executives of affected local governments, and other interested parties became effective on December 13, 1979 (44 FR 53685). Those practices and procedures are set out in a revised § 250.34 of Title 30 of the Code of Federal Regulations.

Dated: January 6, 1983.

John L. Rankin,

Acting Regional Manager, Gulf of Mexico OCS Region.

[FR Doc. 83-1087 Filed 1-13-83; 8:45 am]

BILLING CODE 4310-31-M

Bureau of Reclamation

Lower Gunnison Basin Unit; Colorado River Water Quality Improvement Program, Colorado; Public Hearing on Draft Environmental Statement

Pursuant to Section 102(2)(C) of the National Environmental Policy Act of 1969, the Department of the Interior has prepared a draft environmental statement for the Lower Gunnison Basin Unit, Colorado. This statement (INT DES 82-81, dated December 30, 1982) was made available to the public on January 3, 1983.

The draft environmental statement analyzes impacts of improving irrigation canals and laterals to reduce salt loading to the Colorado River. Plans to compensate wildlife habitat losses are included. The unit area is in the Uncompahgre River Valley of Delta and Montrose Counties, Colorado.

Public hearings will be held in Montrose and Olathe, Colorado, at the following locations and times: February 16, 2-4 p.m., Colorado Ute Electric Association Auditorium, 1845 South Townsend Avenue, Montrose; and February 16, 7-9 p.m., Olathe High School, Olathe. These hearings are designed to receive views and comments from interested organizations or individuals relating to the environmental impacts of this project. Oral statements at the hearings will be limited to a period of 10 minutes. Speakers will not trade their time to obtain a longer oral presentation; however, the person authorized to conduct the hearings may allow any speaker to provide additional oral comment after all persons wishing to

comment have been heard. Speakers will be scheduled according to their time preference, if any, requested by letter or telephone. Any speaker not present when called will lose his privilege in the scheduled order, and his name will be recalled at the end of the scheduled speakers. Requests for scheduled presentations will be accepted until 4 p.m., February 14, 1983. Any subsequent requests will be handled on a first come, first served basis following the scheduled presentations at the meeting.

Organizations or individuals desiring to present statements at the hearings should contact the Projects Manager, Grand Junction Projects Office, Bureau of Reclamation, 764 Horizon Drive, Grand Junction, Colorado 81501, telephone (303) 243-4992, by letter or telephone, and announce their intentions to participate. Written comments from those unable to attend and from those wishing to supplement their oral presentations at the hearings should be received by February 25, 1983, to be included in the hearing record. Other comments should be received by March 31, 1983.

Dated: January 11, 1983.

R. N. Broadbent,

Commissioner.

[FR Doc. 83-1130 Filed 1-13-83; 8:45 am]

BILLING CODE 4310-09-M

INTERNATIONAL TRADE COMMISSION

[Investigation No. 104-TAA-15]

Bicycle Tires and Tubes From Taiwan; Countervailing Duty Investigation and Scheduling of Hearing

AGENCY: International Trade Commission.

ACTION: Institution of countervailing duty investigation and scheduling of a hearing to be held in connection with the investigation.

SUMMARY: Pursuant to section 104(b)(2) of the Trade Agreements Act of 1979 (19 U.S.C. 1671 note), the United States International Trade Commission is instituting this countervailing duty investigation to determine whether an industry in the United States would be materially injured, or would be threatened with material injury, or the establishment of an industry in the United States would be materially retarded, by reason of imports of bicycle tires and tubes from Taiwan provided for in items 772.48 and 772.57 of the Tariff Schedules of the United States, covered by an outstanding countervailing duty order, if the order were to be revoked.

EFFECTIVE DATE: January 10, 1983.

FOR FURTHER INFORMATION CONTACT: Jim McClure, Supervisory Investigator, Office of Investigations, U.S. International Trade Commission, Washington, D.C. 20436, telephone 202-523-0439.

SUPPLEMENTARY INFORMATION:

Background.—On January 8, 1979, the Department of the Treasury (Treasury) published in the **Federal Register** (44 FR 1815) a final countervailing duty determination with respect to bicycle tires and tubes from Taiwan. Treasury determined that benefits have been paid but that they involve an aggregate amount considered to be de minimus and therefore no bounty or grant is being paid or bestowed within the meaning of section 303 of the Tariff Act of 1930, as amended (19 U.S.C. 1303). On March 8, 1979, counsel for the petitioner filed suit in the U.S. Customs Court to challenge Treasury's final countervailing duty determination.

On January 1, 1980, the provisions of the Trade Agreements Act of 1979 (Pub. L. 96-39) became effective, and on January 2, 1980, the authority for administering the countervailing duty statutes was transferred from Treasury to the Department of Commerce (Commerce).

On January 19, 1981, the U.S. Court of International Trade stayed the proceedings, vacated Treasury's negative countervailing duty determination, and remanded the case to the Secretary of Commerce for further inquiries as needed to determine the ad valorem benefit provided to the Taiwanese bicycle tire and tube manufacturers. On August 3, 1981, Commerce published in the **Federal Register** (46 FR 53201) its final countervailing duty determination in the reopened investigation that one Taiwanese manufacturer, Cheng Shin Rubber Company Ltd. (Cheng Shin) received bounties or grants within the meaning of section 303 of the Tariff Act of 1930. The net amount of the subsidy was determined by Commerce to be 0.893 percent.

On November 17, 1981, the Court of International Trade affirmed the results of the redetermination by Commerce. On February 17, 1982, pursuant to the court decision of November 17, 1981, Commerce published in the **Federal Register** (47 FR 6913) a countervailing duty order with respect to bicycle tires and tubes manufactured by Cheng Shin, determining that the amount of the net subsidy was 0.893 percent. Commerce also announced its intent to conduct an administrative review of the order within twelve months.

As required by section 751(a)(1) of the Tariff Act of 1930 (19 U.S.C. 1675(a)(1)), Commerce has conducted its first administrative review of that countervailing duty order and on December 9, 1982, as a result of that review, published in the **Federal Register** (47 FR 55406) its preliminary determination that the amount of net subsidy for bicycle tires and tubes manufactured by Cheng Shin is 0.90 percent of the f.o.b. invoice price of the merchandise.

Participation in the investigation.—Persons wishing to participate in this investigation as parties must file an entry of appearance with the Secretary to the Commission, as provided in § 201.11 of the Commission's Rules of Practice and Procedure (19 CFR 201.11, as amended by 47 FR 6189, Feb. 10, 1982), not later than 21 days after the publication of this notice in the **Federal Register**. Any entry of appearance filed after this date will be referred to the Chairman, who shall determine whether to accept the late entry for good cause shown by the person desiring to file the entry.

Upon the expiration of the period for filing entries of appearance, the Secretary shall prepare a service list containing the names and addresses of all persons, or their representatives, who are parties to the investigation, pursuant to § 201.11(d) of the Commission's rules (19 CFR 201.11(d), as amended by 47 FR 6189, Feb. 10, 1982). Each document filed by a party to this investigation must be served on all other parties to the investigation (as identified by the service list), and a certificate of service must accompany the document. The Secretary will not accept a document for filing without a certificate of service (19 CFR 201.16(c), amended by 47 FR 33682, Aug. 4, 1982).

Staff report.—A public version of the staff report containing preliminary findings of fact in this investigation will be placed in the public record on February 14, 1983, pursuant to § 207.21 of the Commission's rules (19 CFR 207.21).

Hearing.—The Commission will hold a hearing in connection with this investigation concurrently with the hearing for countervailing duty investigation No. 104-TAA-14, bicycle tires and tubes from Korea and antidumping investigation No. 731-TA-94 (Final), bicycle tires and tubes from Taiwan, beginning at 10:00 a.m., on March 1, 1983, at the U.S. International Trade Commission Building, 701 E Street, NW., Washington, D.C. 20436.

Requests to appear at the hearing should be filed in writing with the Secretary to the Commission not later than the close of business (5:15 p.m.) on February 18, 1983. All persons desiring to appear at the hearing and make oral presentations should file prehearing briefs and attend a prehearing conference to be held at 10:00 a.m., on February 22, 1983, in room 117 of the U.S. International Trade Commission Building. The deadline for filing prehearing briefs is February 25, 1983.

Testimony at the public hearing is governed by § 207.23 of the Commission's rules (19 CFR 207.23, as amended by 47 FR 33682, Aug. 4, 1982). This rule requires that testimony be limited to a nonconfidential summary and analysis of material contained in prehearing brief and to information not available at the time the prehearing brief was submitted. All legal arguments, economic analyses, and factual materials relevant to the public hearing should be included in prehearing briefs in accordance with § 207.22 (19 CFR 207.22, as amended by 47 FR 33682, Aug. 4, 1982). Posthearing briefs must conform with the provisions of § 207.24 (19 CFR 207.24, as amended by 47 FR 6191, Feb. 10, 1982) and must be submitted not later than the close of business on March 8, 1983.

Written submission.—As mentioned, parties to this investigation may file prehearing and posthearing briefs by the dates shown above. In addition, any person who has not entered an appearance as a party to the investigation may submit a written statement of information pertinent to the subject of the investigation on or before March 8, 1983. A signed original and fourteen (14) true copies of each submission must be filed with the Secretary to the Commission in accordance with section 201.8 of the Commission's rules (19 CFR 201.8, as amended by 47 FR 6188, Feb. 10, 1982, and 47 FR 13791, Apr. 1, 1982). All written submissions except for confidential business data will be available for public inspection during regular business hours (8:45 a.m. to 5:15 p.m.) in the Office of the Secretary to the Commission.

Any business information for which confidential treatment is desired shall be submitted separately. The envelope and all pages of such submissions must be clearly labeled "Confidential Business Information." Confidential submissions and requests for confidential treatment must conform with the requirements of section 201.6 of the Commission's rules (19 CFR 201.6).

For further information concerning the conduct of the investigation, hearing procedures, and rules of general application, consult the Commission's Rules of Practice and Procedure, Part 207, Subparts A and C (19 CFR Part 207, as amended by 47 FR 6190, Feb. 10, 1982, and 47 FR 33682, Aug. 4, 1982), and Part 201, Subparts A through E (19 CFR Part 201, as amended by 47 FR 6188, Feb. 10, 1982; 47 FR 13791, Apr. 1, 1982; and 47 FR 33682, Aug. 4, 1982).

This notice is published pursuant to § 207.20 of the Commission's rules (19 CFR 207.20, as amended by 47 FR 6190, Feb. 10, 1982).

By order of the Commission.

Issued: January 10, 1983.

Kenneth R. Mason,

Secretary.

[FR Doc. 83-1031 Filed 1-13-83; 8:45 am]

BILLING CODE 7020-02-M

INTERSTATE COMMERCE COMMISSION

Motor Carriers; Permanent Authority Decisions; Decision-Notice

In the matter of Motor Common and Contract Carriers of Property (Except fitness-only); Motor Common Carriers of Passengers (public interest); Freight Forwarders; Water Carriers; Household Goods Brokers.

The following applications of motor common or contract carriers of property, water carriage, freight forwarders, and household goods brokers are governed by Subpart A of Part 1160 of the Commission's General Rules of Practice. See 49 CFR Part 1160, Subpart A, published in the **Federal Register** on November 1, 1982, at 47 FR 49583, which redesignated the regulations at 49 CFR 1100.251, published in the **Federal Register** December 31, 1980. For compliance procedures, see 49 CFR 1160.19. Persons wishing to oppose an application must follow the rules under 49 CFR Part 1160, Subpart B.

The following applications for motor common carriage of passengers, filed on or after November 19, 1982, are governed by Subpart D of 49 CFR Part 1160, published in the **Federal Register** on November 24, 1982 at 47 FR 53271. For compliance procedures, see 49 CFR 1160.86. Carriers operating pursuant to an intrastate certificate also must comply with 49 U.S.C. 10922(c)(2) (E). Persons wishing to oppose an application must follow the rules under 49 CFR Part 1160, Subpart E. In addition to fitness grounds, these applications may be opposed on the grounds that the transportation to be authorized is not consistent with the public interest.

Applicant's representative is required to mail a copy of an application, including all supporting evidence, within three days of a request and upon payment to applicant's representative of $10.00.

Amendments to the request for authority are not allowed. Some of the applications may have been modified prior to publication fo conform to the Commission's policy of simplifying grants of operating authority.

Findings

With the exception of those applications involving duly noted problems (e.g., unresolved common control, fitness, water carrier dual operations, or jurisdictional questions) we find, preliminarily, that each applicant has demonstrated that it is fit, willing, and able to perform the service proposed, and to confrom to the requirements of Title 49, Subtitle IV, United States Code, and the Commission's regulations.

We make an additional preliminary finding with respect to each of the following types of applications as indicated: Common carrier of property-that the service proposed will serve a useful public purpose, responsive to a public demand or need; water common carrier-that the transportation to be provided under the certificate is or will be required by the public convenience and necessity; water contract carrier, motor contract carrier of property, freight forwarder, and household goods broker-that the tansportation will be consistent with the public interest and the transportation policy of section 10101 of chapter 101 of Title 49 of the United States Code.

These presumptions shall not be deemed to exist where the application is opposed. Except where noted, this decision is neither a major Federal Action significantly affecting the quality of the human environment nor a major regulatory action under the Energy Policy and Conservation Act of 1975.

In the absence of legally sufficient opposition in the form of verified statements filed on or before 45 days from date of publication, (or , if the application later becomes unopposed) appropriate authorizing documents will be issued to applicants with regulated operations (except those with duly noted problems) and will remain in full effect only as long as the applicant maintains appropriate compliance. The unopposed applications involving new entrants will be subject to the issuance of an effective notice setting forth the compliance requirements which must be satisfied before the authority will be issued. Once this compliance is met, the authority will be issued.

Within 60 days after publication an applicant may file a verified statement in rebuttal to any statement in opposition.

To the extent that any of the authority granted may duplicate an applicant's other authority, the duplication shall be construed as conferring only a single operating right.

Note.—All applications are for authority to operate as a motor common carrier in interstate or foreign commerce over irregular routes, unless noted otherwise. Applications for motor contract carrier authority are those where service is for a named shipper "under contract." Applications filed under 49 U.S.C. 10922(c)(2) (B) to operate in intrastate commerce over regular routes as a motor common carrier of passengers are duly noted.

Please direct status inquiries to Team 1, (202) 275-7992.

Volume No. OP1-04

Decided: January 7, 1983.

By the Commission, Review Board No. 1. Members Parker, Chandler, and Fortier. (Member Parker not participating.)

FF 641, filed December 21, 1982. Applicant: A ADVANCE WORLDWIDE MOVING COMPANY, 904 West San Marcos Blvd., San Marcos, CA 92067. Representative: Kenneth D. Polin, 225 Broadway, Suite 2100, San Diego, CA 92101, (619) 234-1966. As a *freight forwarder* in connection with the transportation of *household goods, unaccompanied baggage, and used automobiles*, between points in the U.S. (including AK and HI).

MC 3151 (Sub-25), filed December 20, 1982. Applicant: BENDER & LOUDON MOTOR FREIGHT, INC., 1100 Jenkins Blvd., Akron, OH 44306. Representative: George Wilkinson (same address as applicant), (216) 773-8921. Transporting *general commodities* (except classes A and B explosives, household goods and commodities in bulk), (A) over regular routes, (1) between Hammond, IN, and Louisville, KY, over Interstate Hwy 65, (3) between Louisville, KY, and junction U.S. Hwys 30 and 31, near Plymouth, IN, over U.S. Hwy 31, (4) between Louisville, KY, and Cincinnati, OH, over Interstate Hwy 71, (5) between Cincinnati, OH, and Indianapolis, IN, over Interstate Hwy 74, (6) between Fort Wayne, IN, and Indianapolis, IN, from Fort Wayne, over U.S. Hwy 30 to junction Interstate Hwy 69, then over Interstate Hwy 69 to Indianapolis, and return over the same route, and (7) between Dayton, OH, and Terre Haute, IN, (a) from Dayton over Interstate Hwy 75 to junction Interstate Hwy 70, then over Interstate Hwy 70 to Terre Haute, and return over the same route, and (b) from Dayton over Interstate Hwy 75 to junction U.S. Hwy 40, then over U.S. Hwy 40 to Terre Haute, and return over the same route, serving all intermediate points in (1)-(7) above, and points in IN as off-route points and (B) over irregular routes, between points in IN, OH, and those points in MI in and south of Oceana, Newaygo, Mecosta, Isabella, Midland, Bay, Tuscola and Huron Counties.

MC 97841 (Sub-27), filed December 20, 1982. Applicant: GENERAL HIGHWAY EXPRESS, INC., 2280 Industrial Dr., PO Box 727, Sidney, OH 45365. Representative: Jack R. Wells (same address as applicant), (513) 492-1256. Transporting *general commodities* (except houshold goods as defined by the Commission and classes A and B explosives), between points in Hamilton County, OH, on the one hand, and, on the other, points in the US (except AK and HI).

Note.—Applicant intends to tack the authority sought with its existing regular route authority in MC-97841 Sub 26X.

MC 115370 (Sub-98), filed December 23, 1982. Applicant: THE MICKOW CORP., P.O. Box 1774, Des Moines, IA 50306. Representative: Cecil L. Goettsch, 1100 Des Moines Bldg., Des Moines, IA 50307, (515) 243-4191. Transporting *metal products*, between points in Ramsey and St. Louis Counties, MN, Muscatine County, IA, and Monroe and Wayne Counties, on the one hand, and, on the other, points in the U.S. (except AK and HI).

MC 115730 (Sub-99), filed December 23, 1982. Applicant: THE MICKOW CORP., P.O. Box 1774, Des Moines, IA 50306. Representative: Cecil L. Goettsch, 1100 Des Moines Bldg., Des Moines, IA 50307, (515) 243-4191. Transporting *General commodities* (except classes A and B explosives, household goods and commodities in bulk), between points in the U.S. (except AK and HI), under continuing contract(s) with Copperweld Corporation of Pittsburgh, PA.

MC 119631 (Sub-53), filed December 20, 1982. Applicant: DEIOMA TRUCKING COMPANY, P.O. Box 335, East Sparta, OH 44626. Representative: Lawrence E. Lindeman, 4660 Kenmore Ave., Suite 1203, Alexandria, VA 22304, (703)-751-2441. Transporting *general commodities* (except classes A and B explosives, household goods and commodities in bulk), between points in the U.S. (except AK and HI).

MC 126241 (Sub-4), filed December 23, 1982. Applicant: PRYOR TRUCKING, INC., 816 Orleans Ave., Keokuk, IA 52632. Representative: Kenneth F. Dudley, P.O. Box 279, Ottumwa, IA 52501, (515) 682-8154. Transporting *pulp, paper and related products* between points in the U.S. (except AK and HI), under continuing contract(s) with Champion International Corporation, of Stamford, CT.

MC 138730 (Sub-15), filed December 9, 1982. Applicant: CARAVAN COACH LINES, INC., RD 3 Box 451, Wharton, NJ 07885. Representative: L. C. Major, Jr., Suite 304 Overlook Bldg., 6121 Lincolnia Rd., P.O. Box 11278, Alexandria, VA 22312, (703) 750-1112. Over regular routes, transporting *passengers*, (1) between New York, NY, and Ogdensburg, NJ, from New York, over Interstate Hwy 495 via to Lincoln Tunnel to junction NJ Hwy 3, then over NJ Hwy 3 to junction U.S. Hwy 46, then over U.S. Hwy 46 to junction NJ Hwy 23, near Wayne, NJ, then over NJ Hwy 23 to junction U.S. Hwy 46, then over U.S. Hwy 46 to junction unnumbered hwy near Denville, NJ, then over unnumbered hwy to junction U.S. Hwy 46, then over U.S. Hwy 46 to junction Interstate Hwy 80, then over Interstate Hwy 80 to junction unnumbered hwy near Rockaway Township, NJ, then over unnumbered hwy to junction NJ Hwy 15, then over NJ Hwy 15 to junction unnumbered hwy near Wharton, NJ, then over unnumbered hwy to junction NJ Hwy 15 near Rockaway Township, NJ, then over NJ Hwy 15 to junction NJ Hwy 181, then over NJ Hwy 181 to junction County Hwy 517, near Sparta, NJ, then over County Hwy 517 to Ogdenburg, and return over the same route, (2) between Wharton, NJ, and Singac, NJ, from Wharton, over unnumbered hwy to junction Interstate Hwy 80, then over Interstate Hwy 80 to junction NJ Hwy 23, then over NJ Hwy 23 to Singac, and return over the same route, (3) between junction Interstate Hwy 80 and U.S. Hwy 206, near Netcong, NJ, and Secaucus, NJ, from junction Interstate Hwy 80 and U.S. Hwy 206, over U.S. Hwy 206 to junction County Hwy 512 near Peapack, NJ, then over County Hwy 512 to junction U.S. Hwy 202, near Far Hills, NJ, then over U.S. Hwy 202 to junction unnumbered hwy, then over unnumbered hwy to junction Interstate Hwy 287 near Basking Ridge, NJ, then over Interstate Hwy 287 to junction NJ Hwy 24, near Morristown, NJ, then over NJ Hwy 24 to junction Interstate Hwy 78, near Summit, NJ, then over Interstate Hwy 78 to junction Interstate Hwy 95 (NJ Turnpike), near Newark, NJ, then over Interstate Hwy 95 (NJ Turnpike) to junction NJ Hwy 3 at Secaucus, and return over the same route, (4) between Bernardsville, NJ and Summit, NJ, from Bernardsville over County Hwys 527/525 Spur, near Basking Ridge, NJ, then over County Hwys 527/525 Spur to junction County Hwy 512, then over

County Hwy 512 (Valley Road) to junction unnumbered hwy near Summit, NJ, then over unnumbered hwy to junction Interstate Hwy 78, at Summit, NJ, and return over the same route, (5) between Budd Lake, NJ, and Morristown, NJ, from Budd Lake over U.S. Hwy 46 to junction unnumbered hwy near Netcong, NJ, then over unnumbered hwy to junction NJ Hwy 183, then over Hwy 183 to junction U.S. Hwy 206, then over U.S. Hwy 206 to junction Interstate Hwy 80, then over Interstate Hwy 80 to junction U.S. Hwy 46, near Ledgewood, NJ, then over U.S. Hwy 46 to junction NJ Hwy 10, then over NJ Hwy 10 to junction NJ Hwy 53, near Morris Plains, NJ, then over NJ Hwy 53 to junction U.S. Hwy 202 near Morris Plains, NJ, then over U.S. Hwy 202 to junction NJ Hwy 24, near Morristown, NJ, then over NJ Hwy 24 to junction Interstate Hwy 287 at Morristown, NJ, and return over the same route, (6) between Bedminster, NJ, and Newark, NJ, from Bedminster over U.S. Hwy 206 to junction Interstate Hwy 78, then over Interstate Hwy 78 to junction U.S. Hwy 22, then over U.S. Hwy 22 to Newark, NJ, and return over the same route, as an alternate route for operating convenience only, and (7) between Bedminster, NJ, and Newark, NJ, from Bedminster over U.S. Hwy 206 to junction Interstate Hwy 287, then over Interstate Hwy 287 to junction Interstate Hwy 95 (NJ Turnpike), then over Interstate Hwy 95 (NJ Turnpike), to Newark, NJ, and return over the same route, as an alternate route for operating convenience only, serving all intermediate points in routes (1)–(7) above.

Note.—Applicant seeks to provide regular-route service in interstate or foreign commerce.

MC 143230 (Sub-7), filed December 20, 1982. Applicant: LUCK TRUCKING, INC., Rural Route #1, Box 190, Wolcott, IN 47995. Representative: Andrew K. Light, 1301 Merchants Plaza, East Tower, Indianapolis, IN 46204–3491, (317) 638–1301. Transporting *general commodities* (except classes A and B explosives and household goods), between points in the U.S. (except AK and HI).

MC 144591 (Sub-3), filed December 20, 1982. Applicant: FUSARO TRANSPORTATION, INC., P.O. Box 360, Ridge Hill Rd., Assonet, MA 02702. Representative: Francis E. Barrett, Jr., 10 Industrial Park Rd., Hingham, MA 02043, (617) 749–6500. Transporting *general commodities* (except classes A and B explosives, household goods and commodities in bulk), between points in the U.S., under continuing contract(s) with (1) Bank Miller Co., Inc., and Richloom Fabrics Corp., both of New York, NY, and (2) Design Craft Fabric Corp., of Chicago, IL.

MC 148141 (sub-8), filed December 22, 1982. Applicant: GOODY PRODUCTS, INC., 969 Newark Turnpike, Kearny, NJ 07032. Representative: William Jacobs (same address as applicant), (201) 997–3000. Transporting *tires*, between points in McLennan County, TX, on the one hand, and, on the other, points in Monroe County, GA. under continuing contract(s) with Georgia Farm Bureau Service Co., of Macon, GA.

MC 149481 (Sub-4), filed December 21, 1982. Applicant: RITEWAY-WESTERN, INC., 7701 Wilbur Way, Sacramento, CA 96828. Representative: Frank Culy, III (same address as applicant), (916) 682–2146. Transporting *general commodities* (except classes A and B explosives, used household goods, and commodities in bulk), between points in the U.S. (except AK and HI), under continuing contract(s) with G. I. Joe's, Inc., of Portland, OR.

MC 150511 (Sub-5), filed December 22, 1982. Applicant: BETTER HOME DELIVERIES, INC., 3700 Park East Dr., Cleveland, OH 44122. Representative: J. A. Kundtz, 1100 National City Bank Bldg., Cleveland, OH 44114, (216) 566–5639. Transporting *furniture and fixtures*, between points in the U.S., under continuing contract(s) with Fisher Mattress, of Hayward, CA.

MC 150951 (Sub-20), filed December 13, 1982. Applicant: CRANSTON TRUCKING COMPANY, 1381 Cranston St., Cranston, RI 02920. Representative: Paul M. Overton (same address as applicant), (401) 943–4800. Transporting *textile goods*, and *miscellaneous canvas based camping equipment*, between points in the U.S., under continuing contract(s) with Diamond Brand Canvas Products, of Naples, NC.

MC 151721 (Sub-7), filed December 30, 1982. Applicant: LAUFENBERG FEED & AGRI-SERVICE, INC., Route 1, Box 90–A, Highland, WI 53543. Representative: Michael J. Wyngaard, 150 East Gilman Street, Madison, WI 53703, (608) 256–7444. Transporting *general commodities* (except classes A and B explosives and household goods), between points in IL, IA, MN and WI, on the one hand, and, on the other, points in the U.S. (except AK and HI).

MC 151851 (Sub-2), filed December 20, 1982. Applicant: T. L. MOORE, d.b.a. T. L. MOORE TRUCKING, 18700 Roberts Rd., Riverside, CA 92504. Representative: William J. Monheim, P.O. Box 1756, Whittier, CA 90609, (213) 945–2745. Transporting *general commodities* (except classes A and B explosives, household goods and commodities in bulk), between points in AZ, CA, NV and UT, on the one hand, and, on the other, points in IL, IN, GA, KY, MI, MO, NY, OH, PA, TN and WI.

MC 152320 (Sub-4), filed December 27, 1982. Applicant: VERSPEETEN CARTAGE LIMITED, 67 Dalton Road, Delhi, Ontario, Canada N4B 1B4. Representative: Neill T. Riddell, 900 Guardian Bldg., Detroit, MI 48226, (313) 963–3750. Transporting *metal products and transportation equipment*, between points in the U.S. under continuing contract(s) with Hoover Ball and Bearing Company (Canada) Limited, Manchester Tank Canada Limited and Mastico Industries, all of Tillsonburg, Ontario, Canada.

MC 152361 (Sub-2), filed December 21, 1982. Applicant: SHANNON MOTOR LINES, INC., 7517 Pivot St., Downey, CA 90241. Representative: A. Dayton Schell, 6 Eileen Way, Edison, NJ 08837, (201) 494–8765. Transporting *general commodities* (except classes A and B explosives, household goods and commodities in bulk), between points in the U.S. (except AK and HI), under continuing contract(s) with Eldon Associates, Inc., of Downey, CA.

MC 156010 (Sub-1), filed December 20, 1982. Applicant: PENN'S BEST, INC., Canal St., Meshoppen, PA 18630. Representative: John Fullerton, 407 N. Front St., Harrisburg, PA 17101, (717) 236–9318. Transporting *general comodities* (except classes A and B explosives), between those points in the US in and east of MN, IA, MO, AR, and TX.

MC 159051, filed December 21, 1982. Applicant: RINKER TRANSPORT, INCORPORATED, R.D. #1, Box 97, Hamlet, IN 46532. Representative: Clifford J. Rice, 3235 Willowcreek Rd. Portage, IN 46368, (219) 762–7711. Transporting *alcoholic beverages*, between points in the U.S. (except AK and HI).

MC 159220 (Sub-7), filed December 21, 1982. Applicant: REFRIGERATED INTERNATIONAL CARGO HAULERS, INC., 1170 Niagara St., Buffalo, NY 14240. Representative: Charles H. White, Jr., 1019 19th St., NW., Suite 800, Washington, DC 20036, (202) 785–3420. Transporting *general commodities* (except classes A and B explosives, household goods and commodities in bulk), between points in the U.S., under continuing contract(s) with Hickman, Coward & Wattles, Inc., of Buffalo, NY.

MC 162760, filed December 21, 1982. Applicant: JUAN SEGOVIA, dba. JAUN SEGOVIS TRUCKING, 705 Alemeda,

San Juan, TX 78569. Representative: William D. Lynch, 1003 West 6th St., Austin, TX 78703, (512) 472-1101. Transporting *brick, tile, pottery and clay products* and materials and supplies used in the installation of brick, tile, pottery and clay products, between points in TX.

MC 163061, filed December 20, 1982. Applicant: BENGAL MOBILE HOME SERVICES, INC., 19913 Hoo Shoo Too Rd., Baton Rouge, LA 70816. Representative: Janet Boles Chambers, 8211 Goodwood Blvd., Suite C-1, Baton Rouge, LA 70806, (504)-924-2686. Transporting *moblie homes, mobile trailers and protable buildings*, between points in AL, AR, FL, GA, LA, MS, OR and TX.

MC 163710 (Sub-3), filed December 20, 1982. Applicant: WESTERN LIQUID TRANSPORT, 2120 Harbor St., Pittsburg, CA 94565. Representative: Eldon M. Johnson, 650 California St., Suite 2808, San Francisco, CA 94108, (415) 986-8696. Transporting *commodities in bulk*, between points in the U.S. (except AK and HI), under continuing contract(s) with (1) AMCO Chemical Corporation, of Oakland, CA, (2) Great Western Chemical Company, of Portland, OR, and (3) Crown Zellerbach, of Commerce, CA.

MC 164061, filed December 20, 1982. Applicant: DOUBLE DUTCH, Jacksonburg Rd., Blairstown, NJ 07825. Representative: Robert Oostdyk, P.O. Box 877, Dover, NJ 07801, (201) 584-9034. Transporting *general commodities* (except classes A and B explosives and household goods), between points in the U.S., under continuing contract(s) with Equipment Company, Inc., of Greenville, NC and Life Anew, Inc., of Flanders, NJ.

MC 165261, filed December 20, 1982. Applicant: J&J WAREHOUSING AND DISTRIBUTION, INC., 117 Fourth St., Pittsfield, MA 01201. Representative: James M. Burns, 1365 Main St., Suite 403, Springfield, MA 01103, (413) 781-8205. Transporting *general commodities* (except classes A and B explosives, household goods and commodities in bulk), between points in the U.S. (except AK and HI), under continuing contract(s) with Cornish Wire General Cable Company, of Williamstown, MA.

MC 165271, filed December 21, 1982. Applicant: CLINTON L. THOMPSON, P.O. Box 78, Osage City, KS 66523. Representative: Erle W. Francis, 719 Capitol Federal Bldg., Topeka, KS 66603. Transporting *telephone equipment and supplies*, between Kansas City, MO, on the one hand, and, on the other, points in KS.

MC 165281, filed December 20, 1982. Applicant: WILLIS G. PATRICK, d.b.a., PATRICK TRUCKING, 632 Locust St., Carthage, IL 62321. Representative: Robert T. Lawley, 300 Reisch Bldg., Springfield, IL 62701, (217) 544-5468. Transporting *corn products*, between points in the US. (except AK and HI), under continuing contract(s) with Industrial Energy Corporation, and its subsidiaries, all of Keokuk, IA.

MC 165301, filed December 20, 1982. Applicant: WIESBROCK TRUCKING, INC., RFD Box 21, Leonore, IL 61332. Representative: James A. Andreoni, 222 East St. Paul St., Spring Valley, IL 61362-0187 (815)-664-2393. Transporting (1) *Coal and coal products*, (2) *ores and minerals*, (3) *farm products*, and (4) *commodities in bulk*, between points in Bureau, La Salle and Putnam Counties, IL, on the one hand, and, on the other, points in Dane and Rock Counties, WI, and Boone and Winnebago Counties, IL.

MC 165331, filed December 21, 1982. Applicant: THOLAND, INC., Piedmont Farm, Route 1, Box 28, Sperryville, VA 22740. Representative: David L. Bolyard, 112 South Pitt St., P.O. Box 453, Alexandria, VA 22313 (703)-548-3301. Transporting *lumber and wood products*, between points in the U.S. (except AK and HI), under continuing contract(s) with Culpeper Wood Preservers, of Culpeper, VA.

MC 165360, filed December 27, 1982. Applicant: WESTERN STATES ENERGY, INC., 400 South 415 West, Salt Lake City, UT 84101. Representative: Jack L. Schiller, 111-56 76th Drive, Forest Hills, NY 11375 (212) 263-2078. Transporting *general commodities* (except commodities in bulk and household goods), between points in the U.S. (except AK and HI), under continuing contract(s) with Devo & Reynolds Company, of Louisville, KY, Conagra, Inc., of Chester, IL, Angus Chemical, of Northbrook, IL, Universal Packaging Corporation, of Concord, NH, and Pine Mountain Corporation, of Austin, TX. Condition: To the extent that the certificate in this proceeding authorizes the transportation of classes A and B explosives, it will expire 5 years from the date of issuance.

MC 165381, filed December 27, 1982. Applicant: ROBERT E. FRANKLIN, d.b.a. ALLSTON PIANO & FURNITURE MOVING COMPANY, 167 Brighton Ave., Allston, MA 02134. Representative: Robert G. Parks, 20 Walnut Street, Suite 101, Wellesley Hills, MA 02181 (617) 235-5571. Transporting *pianos*, between points in CT, ME, MA, NH, NY, RI and VT.

Volume No. OP1-06

Decided: January 10, 1983

By the Commission, Review Board No. 1, members Parker, Chandler, and Fortier.

MC 61440 (Sub-222), filed November 8, 1982. Applicant: LEE WAY MOTOR FREIGHT, INC., P.O. Box 12750, Oklahoma City, OK 73157. Representative: T. M. Brown (same address as applicant) (405)-840-7579. Transporting *general commodities* (except classes A and B explosives, household goods and commodities in bulk), between points in the U.S. (except AK and HI), under continuing contract(s) with E. I. du Pont de Nemours and Company, and its subsidiaries.

For the following, please direct status calls to Team 2 at 202-275-7030.

Volume No. OP2-013

Decided: December 30, 1982.

By the Commission, Review Board No. 1, Members Parker, Chandler, and Fortier. (Member Fortier not participating.)

MC 109173 (Sub-7), filed November 19, 1982. Applicant: MICHIGAN TRAILWAYS, INC., 12154 N. Saginaw Rd., Clio, MI 48420. Representative: Robert J. Brooks, 1828 L St., NW., Suite 1111, Washington, DC 20036, 202-466-3892. Transporting *passengers*, (1) over regular routes, between Flint and Detroit, MI: from Flint over U.S. Hwy 23 to junction Interstate Hwy 69, then over Interstate Hwy 69 to junction Interstate Hwy 475, then over Interstate Hwy 475 to junction Interstate Hwy 75, then over Interstate Hwy 75 to Detroit, and return over the same route, serving all intermediate points and the off-route point of Pontiac, MI; and (2) over irregular routes, in charter and special operations, between points in the U.S. Condition: The person or persons who appear to be engaged in common control of another regulated carrier must either file an application under 49 U.S.C. 11343(a), submit an affidavit indicating why such approval is unnecessary, or file a petition seeking exemption under 49 U.S.C. 11343(e). In order to expedite issuance of any authority, please submit a copy of the petition for exemption, the affidavit, or proof of filing the application(s) for common control to Team 2, Room 2379.

Note.—(1) applicant may tack the proposed regular-route with existing authority; (2) applicant receives governmental financial assistance for the purchase or operation of buses, or is an operator for such a recipient; and (3) applicant seeks to provide regular-route service in interstate or foreign commerce and in intrastate commerce under 49 U.S.C. 10922(c)(2)(B) over the same route.

MC 143503 (Sub-38), filed December 20, 1982. Applicant: MERCHANTS HOME DELIVERY SERVICE, INC., P.O. Box 5067, Oxnard, CA 93031. Representative: David B. Schneider, 210 W. Park Ave., Suite 1120, Oklahoma City, OK 73102, (405) 232-9990. Transporting *general commodities* (except classes A and B explosives, household goods, and commodities in bulk), between points in the U.S. (except AK and HI), under continuing contract(s) with Reichart Furniture Company, of Martins Ferry, OH.

MC 146463 (Sub-6), filed December 13, 1982. Applicant: SLACK TRANSPORT LIMITED, P.O. Box 579, Caledonia, Ontario, CD NOA 1AO. Representative: William J. Hirsch, 64 Niagara St., Buffalo, NY 14202, 716-853-0200. Transporting *general commodities* (except classes A and B explosives and household goods), between points in the U.S. (except AK and HI).

MC 147942 (Sub-6), filed December 20, 1982. Applicant: M & L TRUCK LINE, INC., P.O. Box 358, Memphis, TN 38101. Representative: John Paul Jones, P.O. Box 3140, Front Street Station, 189 Jefferson Ave., Memphis, TN 38103, (901) 527-2482. Transporting *general commodities* (except classes A and B explosives, household goods, and commodities in bulk), between those points in the U.S. in and east of ND, SD, NE, CO, and AZ.

MC 148412 (Sub-9), filed November 26, 1982. Applicant: GRIBBLE TRUCKING, INC., RD 3, Rockwood, PA 15557. Representative: John Fullerton, 407 N. Front St., Harrisburg, PA 17101, 717-236-9318. Transporting *general commodities* (except classes A and B explosives), between points in the U.S. (except AK and HI), under continuing contract(s) with (a) Thomas V. Flynn, of Horsham, PA, and (b) Harry R. Bell, of Philadelphia, PA.

MC 156243, filed December 20, 1982. Applicant: MICHAEL HARRELSON, d.b.a. HARRELSON TRUCKING COMPANY, P.O. Box 707, Calimesa, CA 92320. Representative: Michael Harrelson (same as applicant) (714) 795-3404. Transporting *rubber and plastic articles*, between points in Los Angeles, Riverside and Orange Counties, CA, and Parker County, TX, on the one hand, and, on the other, points in NM, TX, LA, MS and AR.

MC 162142 (Sub-1), filed December 21, 1982. Applicant: VERL CARNEY d.b.a. CARNEY TRUCKING, P.O. Box 627, Melvin, AL 36913. Representative: John A. Crawford, 17th Floor Deposit Guaranty Plaza, P.O. Box 22567, Jackson MS 39205 (601) 948-5711. Transporting (1) *lumber, wood products, building materials*, and (2) *forest products*, between points in AL, AR, FL, GA, IL, IN, KY, LA, MO, MS, OH, OK, TN, and TX.

MC 163632, filed December 21, 1982. Applicant: NATHANIEL JOHNSON, INC., 326 Brookfield Place, Rahway, NJ 07065. Representative: Robert B. Pepper, 168 Woodbridge Ave., Highland Park, NJ 08904 (201) 572-5551. Transporting (1) *toilet preparations, electrical applicances, and parts*, between points in the U.S. (except AK and HI), under continuing contract(s) with Conair Corp., of Edison, NJ, and (2) *paper and paper products and plastic and plastic products*, between points in the U.S. (except AK and HI), under a continuing contract(s) with Accurate Box Co., Inc., of Newark, NJ.

Volume No. OP2-015

Decided: January 7, 1983.

By the Commission, Review Board No. 1, Members Parker, Chandler, and Fortier. (Member Chandler not participating.)

MC 52793 (Sub-117), filed December 28, 1982. Applicant: BEKINS VAN LINES CO., 333 South Center St., Hillside, IL 60162. Representative: David A. Gallagher (same address as applicant) 312-547-2148. Transporting *household goods*, between points in the U.S. (except AK and HI), under continuing contract(s) with R.R. Donnelley & Sons Company, of Chicago, IL.

MC 135513 (Sub-10), filed December 27, 1982. Applicant: ECHO TRUCKING COMPANY, P.O. Drawer AY, Benson, AZ 85602. Representative: Lex J. Smith, 2600 North Central, Suite 1900, Phoenix, AZ 85004, 602-234-2600. Transporting *ores and minerals, machinery, equipment, materials, and supplies*, and *such commodities* as are used in and produced in mining, milling, metallurgical processing and leaching processes, between points in the U.S. (except AK and HI) under continuing contract(s) with Phelps Dodge Corporation, of Phoenix, AZ.

MC 143712 (Sub-2), filed December 8, 1982, published in the **Federal Register** issue of January 4, 1983, and republished, as corrected, this issue. Applicant: A&D MOVING & STORAGE CO., INC., 250 Globe St., P.O. Box 835, Radcliff, KY 40160. Representative: Robert J. Gallagher, 1000 Connecticut Ave., NW., Suite 1200, Washington DC 20036, 202-785-0024. Transporting *household goods*, between points in AL, AK, AZ, AR, CA, CO, CT, DE, FL, GA, HI, ID, IL, IN, IA, KS, KY, LA, MD, MA, MI, MN, MS, MO, MT, NE, *NV*, NH, NJ, NM, NY, NC, ND, OH, OK, OR, PA, RI, SC, TN, TX, UT, VT, VA, WA, WV, WI, WY, and DC. Condition: The person or persons who appear to be engaged in common control of another regulated carrier must either file an application under 49 U.S.C. 11343(e). In order to expedite issuance of any authority please submit a copy of *the petition for exemption*, the affidavit, or proof of filing application(s) for common control to Team 2, Room 2379.

Note.—The purpose of this republication is to include NV in the territory description and to correct part of the condition.

MC 144433 (Sub-4), filed December 29, 1982. Applicant: DOUGLAS G. MARCHIONDA d.b.a. DOUG MARCHIONDA TRUCKING, Champlin Ave., Penn Yan, NY 14527. Representative: Douglas G. Marchionda (same address as applicant) 315-536-8417. Transporting *alcoholic beverages*, between points in Chautauqua and Monroe Counties, NY, and Monmouth County, NJ, on the one hand, and, on the other, points in Orange County, FL.

MC 144893 (Sub-7), filed December 29, 1982. Applicant: NORMAN HOWARD d.b.a. HOWARD TRUCKING OF UTAH, 1755 East 800 North, St. George, UT 84770. Representative: J. Ralph Atkin, 60 N. 300 E., St. George, UT 84770, 801-628-2612. Transporting (1) *petroleum and petroleum products*, and (2) *vehicle body sealer and sound deadening compounds and related products*, between points in Alameda and Los Angeles Counties, CA, on the one hand, and, on the other, points in CA, NV, AZ, UT, CO, NM, and TX.

MC 147932 (Sub-5), filed December 28, 1982. Applicant: COWEN TRUCK LINE, INC., Rte. 2, Perrysville, OH 44864. Representative: Boyd B. Ferris, 50 West Broad St., Columbus, OH 43215, 614-464-4103. Transporting *general commodities* (except classes A and B explosives, household goods, and commodities in bulk), between points in OH, IN, MI, and PA, on the one hand, and, on the other, points in the U.S. (except AK and HI).

MC 156133 (Sub-5), filed December 6, 1982. Applicant: TANDEM TRANSPORT CORP., 322 U.S. Hwy 20 West, Michigan City, IN 46360. Representative: James M. Hodge, 3730 Ingersoll Ave., Des Moines, IA 50312, 515-274-4985. Transporting *lumber, wood products, and building materials*, between points in CO, FL, IN, MI, OR, and WA, on the one hand, and, on the other, points in the U.S. (except AK and HI). Condition: The person or persons who appear to be engaged in common control of another regulated carrier must either file an application under 49 U.S.C. 11343(a), submit an affidavit indicating why such approval is unnecessary, or file a petition seeking

exemption under 49 U.S.C. 11343(e). In order to expedite issuance of any authority please submit a copy of the petition for exemption, the affidavit, or proof of filing the application(s) for common control to Team 2, Room 2379.

MC 156373, filed December 22, 1982. Applicant: ZION TRANSPORTATION, INC., 1999 South Bascom Ave., Campbell, CA 95008. Representative: David H. Baker, 600 Maryland Ave. SW, Washington, DC 20024, 202-484-9090. Transporting *general commodities* (except classes A and B explosives, household goods, and commodities in bulk), between points in the U.S. (except AK and HI),under continuing contract(s) with G.T.S. Transportation Services, Inc., of San Jose, CA.

Volume No. OP2-017

Decided: January 6, 1983.

By the Commission, Review Board No. 1, Members Parker, Chandler, and Fortier. (Member Fortier not participating.)

MC 147573 (Sub-6),filed December 27, 1982. Applicant: OAK ISLAND EXPRESS, INC., 2 Sixth St., Jersey City, NJ 07302. Representative: Peter Wolff, 722 Pittston Ave., Scranton, PA 18505, 717-342-7595. Transporting *general commodities* (except classes A and B explosives, household goods, and commodities in bulk), between points in the U.S. (except AK and HI), under continuing contract(s) with Target Stores, of Minneapolis, MN.

MC 161033 (Sub-2), filed December 27, 1982. Applicant: CARDINAL CONTAINER, INC., 500 Nordhoff Place Englewood, NJ. Representative: Jack L. Schiller, 111-56 76th Drive, Forest Hills, NY 11375, 212-263-2078. Transporting *general commodities* (except classes A and B explosives and household goods), between points in the U.S. (except AK and HI), under continuing contract(s) with Clifford Transportation Services, Inc., of Ridgefield Park, NJ.

MC 163503 (Sub-1), filed December 27, 1982. Applicant: NATIONAL FREIGHT SYSTEM, INC., 2305 Oak Lane, Suite 115, Grand Prairie, TX 75051. Representative: Stephen W. Mitchell (same address as applicant) 214-642-6401.Transporting *food and related products*, between points in AR, CA, CO, FL, IA, IL, LA, NC, NE, NJ, OK, TN, TX and WA, on the one hand, and, on the other, points in the U.S. (except AK and HI).

For the following, please direct status inquiries to Team 4 at 202-275-7669.

Volume No. OP4-002

Decided: January 6, 1983.

By the Commission, Review Board No. 2, Members Carleton, Williams, and Ewing.

MC 127247 (Sub-5), filed December 27, 1982.

Applicant: LELAND R. HAWTHORNE & SON, INC., 97 Maple St. Enfield, CT 06082. Representative: Gerald A. Joseloff, 410 Asylum St., Hartford, CT 06103 (203) 728-0700. Transporting *farm products, food and related products, and such commodities as are dealt in or used by feed and grain stores, home and garden stores, and home improvement stores*, between points in ME, VT, NH, MA, CT, RI, NY, NJ, PA, WV, VA, MD, DE, Phelps County, MO and DC, on the one hand and, on the other, points in the U.S. in and east of WI, IL, KY, TN and MS.

MC 128087 (Sub-15), filed December 23, 1982. Applicant: JOHN N. JOHN, III, INC., P.O. Box 921, Crowley, LA 70526. Representative: William M. John (Same address as applicant) (318) 783-3394. Transporting *textile and burlap bags and bagging material*, between points in Acadia Parish, LA, and points in AL, AR, MS, and TX.

MC 128917 (Sub-10), filed December 27, 1982. Applicant: HANDY TRUCK LINE, INC., P.O. Box 148, Heyburn, ID 83336. Representative: Clay Handy (Same address as applicant) (208) 438-5071. Transporting *chemicals and related products*, between points in WA, on the one hand, and, on the other, points in ID and UT.

MC 134167 (Sub-4), filed December 27, 1982. Applicant: CARRIER SERVICE CO. OF WISCONSIN, INC., 2621 South 5th Place, Milwaukee, WI 53207. Representative: Michael J. Wyngaard, 150 E Gilman St., Madison, WI 53703 (608) 256-7444. Transporting *general commodities* (except classes A and B explosives, household goods and commodities in bulk), between points in the U.S. (except AK and HI), under continuing contract(s) with American Motors Corporation of Kenosha, WI.

MC 150117 (Sub-2), filed December 28, 1982. Applicant: PREMIUM SERVICES, INCORPORATED, 6060 Manchester Ave., St. Louis, MO 63110. Representative: Stephen G. Newman, P.O. Box 456, Jefferson City, MO 65102 (314) 635-7166. Transporting *food and related products*, between points in the U.S. (except AK and HI).

MC 151087 (Sub-12), filed December 27, 1982. Applicant: AREA INTERSTATE TRUCKING, INC., 15224 Dixie Hwy., Harvey, IL 60426. Representative: Leonard R. Kofkin, Suite 1515, 140 South Dearborn St., Chicago, IL 60603, (312) 580-2210. Transporting *metal products*, (1) between points in AL, AR, FL, GA, MS, NC, SC, and VA, and (2) between points in AL, AR, FL, GA, MS, NC, SC, and VA, on the one hand, and, on the other, points in the U.S. (except AK, HI, ND, SD, NE, and KS.)

MC 161767, filed December 23, 1982. Applicant: BOBBY SMITH BROKERAGE, INC., 2520 N.E. 35th, Ft. Worth, TX 76111. Representative: Harry F. Horak, Suite 115, 5001 Brentwood Stair Rd., Ft. Worth, TX 76112, (817) 457-2225. Transporting (1) *food and related products*, between points in the U.S. (except AK and HI), and (2) *polystyrene and plastic materials*, between Ft. Worth, TX, on the one hand, and, on the other, points of entry on the International Boundary line between the U.S. and Canada at Detroit, MI, Buffalo, NY, and points in Toole County, MT, Whatcom County, WA, and Clinton County, NY, and St. Clair, MI.

MC 165377, filed December 27, 1982. Applicant: CON-WAY CENTRAL EXPRESS, INC., 3240 Hillview Ave., Palo Alto, CA 94303. Representative: Robert M. Bowden, P.O. Box 3062, Portland, OR 97208, (503) 226-4692. Transporting *general commodities*, (except classes A and B explosives, household goods, and commodities in bulk), between points in IL, IN, IA, KY, MI, MN, MO, OH, PA, and WI.

MC 165406, filed December 28, 1982. Applicant: McFERRIN, INC., R.R. #1, Box 47, Modale, IA 51556. Representative: Edward A. O'Donnell, 1004 29th St., Sioux City, IA 51104, (712) 255-3127. Transporting *food and related products*, between points in the U.S. (except AK and HI), under continuing contract(s) with Victor's Iowa Pack, Inc. of Council Bluffs, IA.

Volume No. OP4-005

Decided: January 7, 1983.

By the Commission, Review Board No. 2, Members of Carleton, Williams, and Ewing.

MC 149497 (Sub-31), filed December 27, 1982. Applicant: HAUPT CONTRACT CARRIERS, INC., P.O. Box 1023, Wausau, WI 54401. Representative: Robert A. Wagman (same address as applicant) (715) 359-2907. Transporting *general commodities*, (except clases A and B explosives, household goods and commodities in bulk), between points in the U.S. (except AK and HI), under continuing contract(s) with Signode Corporation, of Glenview, IL.

For the following, please direct status inquiries to Team 5 at 202-275-7289.

Volume No. OP5-001

Decided: January 3, 1983.

By the Commission, Review Board No. 3, Members Krock, Joyce, and Dowell.

MC 140859 (Sub-18), filed December 18, 1982. Applicant: WESTERN KENTUCKY TRUCKING, INC., P.O. Box 1072, 1245 Center St., Henderson, KY 42420. Representative: George M. Catlett, 700-702 McClure Bldg., Frankfort, KY 40601, (502) 227-7384. Transporting (1) *pipe and pipe fittings*, between points in AL, AR, GA, IL, IN, IA, KY, MA, MI, MS, MO, OH, PA, TN, VA, WV, and WI, (2) *aluminum and steel products*, between points in WI, PA, MI, OH, IN, IL, MO, KY, and TN, on the one hand, and on the other, points in AR, AL, IN, KY, PA, GA, MI, MO, MS, TN, VA, and WI, and (3) *plastic products*, between points in IA, IL, IN, KY, OH, MO, TN, and TX.

MC 149388 (Sub-10), filed December 21, 1982. Applicant: FEPCO TRUCKING, INC., 3458 Moreland Ave., Conley, GA 30027. Representative: Archie B. Culbreth, Suite 570, 2200 Century Parkway, Atlanta, GA 30345, 404-321-1765. Transporting *general commodities* (except classes A and B explosives, household goods, and commodities in bulk), between points in the U.S. (except AK and HI).

Note.—Applicant seeks to convert its contract carrier authorities to common carrier authority.

MC 150299 (Sub-4), filed December 13, 1982. Applicant: WARREN OIL TRANSPORTATION CO., INC., 727 South 13 St., Omaha, NE 68102. Representative: Marshall D. Becker, 7171 Mercy Rd., Omaha, NE 68106, (402) 392-1220. Transporting *general commodities* (except classes A and B explosives and household goods), between points in NE, IL, IN, IA, KS, OK, CO, SD, ND, MN, MT, MI, MO, TX, KY, AR, WI, and WY.

MC 163558, filed December 22, 1982. Applicant: JAMES E. KINCAID, d.b.a. KINCAID TRUCKING CO., 2425 E. High St., Springfield, OH 45502. Representative: Doug Badgley, 130 Tri-County Pkwy., Suite 205, Cincinnati, OH 45246, 513-772-7900. Transporting *machinery* and *furniture and fixtures*, between points in the U.S., under continuing contract(s) with Dynamic Distributors, of Springfield, OH.

MC 165088, filed December 21, 1982. Applicant: DAN CLARK, d.b.a. CLARK TRANSPORTATION CO., Route 2, Box 215, Decatur, TX 76234. Representative: Bernard H. English, 6270 Firth Rd., Fort Worth, TX 76116, 817-731-8431. Transporting (1) *lumber and wood products*, (2) *chemicals or allied products*, (3) *metal products*, (4) *machinery*, between points in AR, AZ, CA, CO, KS, KY, LA, MO, MS, NE, NV, NM, OK, TN, TX, UT and WY.

MC 165328, filed December 21, 1982. Applicant: SOUTHEASTERN WASTE TRANSPORTERS, INC., P.O. Box 278, Chatsworth, GA 30705. Representative: Steven L. Weiman, Suite 200, 444 N. Frederick Ave., Gaithersburg, MD 20877, 301-840-8565. Transporting *textile mill products*, between points in GA, on the one hand, and, on the other, points in the U.S. (except HI).

Volume No. OP5-003

Decided: January 6, 1983.

By the Commission, Review Board No. 3, members Krock, Joyce, and Dowell.

MC 102679 (Sub-7), filed December 22, 1982. Applicant: COLLINS MOVING SYSTEMS, INC., 904 West Morgan, Kokomo, IN 46901. Representative: Robert J. Gallagher, 1000 Connecticut Ave., N.W., Washington, DC 20036, 202-785-0024. Transporting *household goods, furniture and fixtures*, between points in the U.S. (except AK and HI).

MC 114648 (Sub-5) filed December 27, 1982. Applicant: LOXTERCAMP TRANSPORT, INC., 307 South 3rd Ave. West, Melrose, MN 56352. Representative: Stanley C. Olsen, Jr., 5200 Wilson Rd. Suite 307, Edina, MN 55424, (612) 927-8855. Transporting *food and related products*, between points in MN, ND, SD, IA, NE, WI, and IL.

MC 116859 (Sub-31), filed December 22, 1982. Applicant: CLARK TRANSFER, INC., 403 Dulty Lane, Burlington, NJ 08016. Representative: David A. Sutherlund, 1150 Connecticut Ave., NW, Washington, DC 20036, (202) 452-6800. Transporting *magazines and printed matter* between points in CT, DE, MD, NJ, NY, PA, VA, WV, and DC, under continuing contract(s) with Family Circle, Inc., of New York, NY.

MC 133189 (Sub-49), filed December 27, 1982. Applicant: VANT TRANSFER, INC., 1257 Osborne Road, Minneapolis, MN 55432. Representative: John B. Van De North, Jr., c/o Briggs and Morgan, 2200 First National Bank Bldg., St. Paul, MN 55101, (612) 291-1215. Transporting *general commodities* (except household goods and classes A and B explosives), between points in the U.S. (except AK and HI), under continuing contract(s) with Cimarron Lumber and Supply Company, of Kansas City, MO.

MC 141758 (Sub-19), filed December 27, 1982. Applicant: LYDALL EXPRESS INC., 615 Parker Street, Manchester, CT 06040. Representative: Robert J. Dunbar (same address as applicant), (203) 646-1233. Transporting *pet food*, between points in the U.S. (except AK and HI), under continuing contract(s) with Wayne Pet Food Division, Continental Grain Company, of Everson, PA.

MC 144599 (Sub-9), filed December 27, 1982. Applicant: TRANSFER, INC., 4750 Kentucky Ave., Indianapolis, IN 46241. Representative: Robert W. Loser II, 512 Chamber of Commerce Bldg., 320 N. Meridian St., Indianapolis, IN 46204, 317-635-2339. Transporting *furniture* between points in the U.S. (except AK and HI), under continuing contract(s) with Jasper Chair Company, of Jasper, IN.

MC 145058 (Sub-11), filed December 27, 1982. Applicant: THOMAS PRODUCE COMPANY OF MOUNT AIRY, INC., P.O. Box 16707, Greensboro, NC 27406. Representative: Michael F. Morrone, 1150 17th St., N.W., Suite 1000, Washington, DC 20036, (202) 457-1124. Transporting *textile mill products*, between points in the U.S. (except AK and HI) under continuing contract(s) with Coats and Clarks Sales Corporation, of Atlanta, GA.

MC 155999 (Sub-1), filed December 10, 1982. Applicant: SOUTHWEST EXPRESS, INC., P.O. Box 843, Taylors, SC 29687. Representative: Mitchell King, Jr., P.O. Box 5711, Greenville, SC 29606, (803) 288-6000. Transporting *food and related products* between points in the U.S. (except AK and HI), under continuing contract(s) with Shedd's Food Products, of Greenville, SC.

MC 165299, filed December 21, 1982. Applicant: MAXWELL MOTOR FREIGHT, 11908 James Rd., Minnetonka, MN 55343. Representative: Timothy H. Butler, 4200 IDS Center, 80 South Eighth St., Minneapolis, MN 55402, 612-371-3211. Transporting *food and related products*, between points in the U.S. under continuing contract(s) with Meinerz Creameries, of New Berlin, WI; Have-A-Portion, Inc., Roseville, MN; Stewart Sandwiches, Incorporated, of New Hope, MN and The Creamette Company, of New Hope, MN.

MC 165349, filed December 23, 1982. Applicant: UNITED TERMINALS LTD., 7890 Express Street, Burnaby, B.C. V5A 1T4. Representative: Hans J. Jensen (same address as applicant), (604) 420-6808. Over *regular* routes, transporting *general commodities* (except classes A and B explosives, household goods as defined by the Commission and commodities in bulk), between Seattle, WA and Blaine, WA, over Interstate Hwy 5, serving all intermediate points.

Agatha L. Mergenovich,

Secretary.

[FR Doc. 83-1049 Filed 1-13-83; 8:45 am]

BILLING CODE 7035-01-M

Motor Carriers; Intent To Engage in Compensated Intercorporate Hauling Operations

This is to provide notice as required by 49 U.S.C. 10524(b)(1) that the named corporations intend to provide or use compensated intercorporate hauling operations as authorized in 49 U.S.C. 10524(b).

1. Parent corporation and address of principal office: Ames Department Stores, Inc., 2418 Main Street, Rocky Hill, CT 06067.

2. Wholly-owned subsidiaries which will participate in the operations, and States of their Incorporation:

Eastern Retailers Service Corporation—(New York).

Ames of Southbridge, Inc.—(Massachusetts).

Gilfel of Vermont, Inc.—(Connecticut).

Ames of Salisbury, Inc.—(Maryland).

Ames of Pennsville, Inc.—(New Jersey).

Ames of Carbondale, Inc.—(Pennsylvania).

Ames of Ogdensburg, Inc.—(Connecticut).

Ames of New Hampshire, Inc.—(New Hampshire).

Ames of Seaford, Inc.—(Delaware).

Ames of Maine, Inc.—(Maine).

Sema Distribution, Inc.—(New Jersey).

1. Parent corporation and address of principal office: Clark Equipment Company, Circle Drive, Buchanan, Michigan 49107.

2. Wholly-owned subsidiaries which will participate in the operations, and state(s) of incorporation:

(i) Clark Equipment of Canada Ltd., Canada.

(ii) Clark Equipment Credit of Canada Ltd., Canada.

(iii) Clark Automotive Products Corporation, Michigan.

(iv) Clark Equipment Engineering and Marketing Corporation, Michigan.

(v) Michigan Power Shovel Company, Michigan.

(vi) Clark Equipment Credit Corporation, Michigan.

(vii) Clark Equipment Realty Corporation, Delaware.

(viii) Clark Financial Marketing Corporation, Michigan.

(ix) Clark Rental Corporation, Michigan.

(x) Clark Rental System, Inc., Michigan.

(xi) Clark Equipment Overseas Finance Corporation, Delaware.

1. Parent Corporation and address of principal office: Columbus Foundries, Inc., 1600 Northside Industrial Blvd., Columbus, Georgia 31904.

2. Wholly-owned subsidiary which will participate in the operations and State of incorporation: Columbus Neunkirchem Foundry, Inc.

1. Parent Corporation and address of principal office: Dart & Kraft, Inc., 2211 Sanders Road, Northbrook, IL 60062.

2. Wholly-owned subsidiaries which will participate in the operations and State (S) of incorporation:

(A) Dart Industries, Inc. (Delaware).

(B) Duracell International, Inc. (Delaware).

(C) Hobart Corporation (Delaware).

(D) Kraft, Inc. (Delaware).

(E) Universal Packaging Corporation (Delaware).

(F) Universal Bow Transport, Inc. (New Hampshire).

1. Parent Corporation and address of principal office: Springfield Sugar & Products Company, 1120 Harvey Lane, Suffield, Connecticut 06078.

2. Wholly-owned subsidiary which will participate in the operations: Hamlet Trading Corporation (a Massachusetts corporation).

Agatha L. Mergenovich,

Secretary.

[FR Doc. 83-1048 Filed 1-13-83; 8:45 am]

BILLING CODE 7035-01-M

[No. MC-F-15046]

Motor Carriers; United Van Bus Delivery—Continuance in Control Exemption—Service Express Transport Ltd.

AGENCY: Interstate Commerce Commission.

ACTION: Notice of proposed exemption.

SUMMARY: Pursuant to 49 U.S.C. 11343(e), added by section 21 of the Bus Regulatory Reform Act of 1982, Pub. L. 97-261 (September 20, 1982), United Van Bus Delivery (United) which holds authority in Nos. MC-139066 and MC-141620, and, in turn, Arnie Hillman, who owns stock in United, seek an exemption from the requirement under section 11343 of prior regulatory approval of their continuance in control of Service Express Transport LTD which has an application pending in No. MC-165325.

DATES: Comments must be received within 30 days after the date of publication in the **Federal Register**.

ADDRESSES: Send comments to:

(1) Motor Section, Room 2139, Interstate Commerce Commission, Washington, D.C. 20423

and

(2) Petitioner's representative Andrew R. Clark, 1600 TCF Tower, Minneapolis, MN 55402

Comments should refer to No. MC-F-15046.

FOR FURTHER INFORMATION CONTACT: Warren C. Wood, (202) 275-7949.

SUPPLEMENTARY INFORMATION: Please refer to the petition for exemption, which may be obtained free of charge by contacting petitioner's representative. In the alternative, the petition for exemption may be inspected at the offices of the Interstate Commerce Commission during usual business hours.

Decided: January 11, 1983.

By the Commission, Heber P. Hardy, Director, Office of Proceedings.

Agatha L. Mergenovich,

Secretary.

[FR Doc. 83-1050 Filed 1-13-83; 8:45 am]

BILLING CODE 7035-01-M

[Docket No. AB-3 (Sub-34)]

Rail Carriers; Missouri Pacific Railroad Co.—Abandonment—in Butler and Ripley Counties, Mo.; Findings

The Commission has issued a certificate authorizing the Missouri Pacific Railroad Company to abandon its 19-6 mile rail line between milepost 181.3 near Neelyville, MO, and milepost 200.9 at Doniphan, MO, located in Butler and Ripley Counties, MO. The abandonment certificate will become effective 30 days after this publication unless the Commission also finds that: (a) A financially responsible person has offered financial assistance (through subsidy or purchase) to enable the rail service to be continued; and (2) it is likely that the assistance would fully compensate the railroad.

Any financial assistance offer must be filed with the Commission and served concurrently on the applicant, with copies to Mr. Louis E. Gitomer, Room 5417, Interstate Commerce Commission, Washington, DC 20423, no later than 10 days from publication of this Notice. Any offer previously made must be remade within this 10 day period.

Information and procedures regarding financial assistance for continued rail service are contained in 49 U.S.C. 10905 and 49 CFR 1152.27 (formerly 49 CFR 1121.38).

Agatha L. Mergenovich,

Secretary.

[FR Doc. 83-1049 Filed 1-13-83; 8:45 am]

BILLING CODE 7035-01-M

[Finance Docket No. 30083]

Rail Carriers; the O'Brien Machinery Co.—Exemption From 49 U.S.C. Subtitle IV

AGENCY: Interstate Commerce Commission.

ACTION: Notice of exemption.

SUMMARY: The Interstate Commerce Commission exempts the O'Brien Machinery Company from 49 U.S.C. Subtitle IV in connection with its current rail operations.

DATES: This exemption is effective on January 13, 1983. Petitions to reopen this proceeding must be filed by February 3, 1983.

ADDRESSES: Send pleadings to:.

(1) Rail Section, Room 5349, Interstate Commerce Commission, Washington, DC 20423

(2) Petitioner's representative, Burton K. Stein, 1900 Market St., Suite 328, Philadelphia, PA 19103.

FOR FURTHER INFORMATION CONTACT: Louis E. Gitomer, (202) 275-7245.

SUPPLEMENTARY INFORMATION: Additional information is contained in the Commission's decision. To purchase a copy of the full decision contact: TS Infosystems, Inc., Room 2227, 12th & Constitution Avenue NW., Washington, DC 20423, (202) 289-4357—DC metropolitan area (800) 424-5403—Toll free for outside the DC area.

Decided: January 7, 1983.

By the Commission, Chairman Taylor, Vice Chairman Sterrett, Commissioners Gilliam, Andre, Simmons, and Gradison. Commissioner Gilliam did not participate.

Agatha L. Mergenovich,

Secretary.

[FR Doc. 83-1047 Filed 1-13-83; 8:45 am]

BILLING CODE 7035-01-M

DEPARTMENT OF JUSTICE

Attorney General

Advisory Committee on Tax Litigation; Meeting

The Tax Division's Advisory Committee on Tax Litigation will meet from 9:30 AM to 5:00 PM on January 31, 1983, in Room 3000 of the Benjamin Franklin Post Office Building, 12th and Pennsylvania Avenue, N.W., Washington, D.C.

The Agenda for the meeting is:

I. *Opening Remarks* (9:30 a.m.).

II. *Attorney-Client Privilege: Information Disclosed for Use in Preparing Returns or in Formulating Positions to be Taken on Returns* (9:35 a.m.).

III. *Use of Undercover Operations to Investigate Tax Crimes* (10:00 a.m.).

IV. *Criminal Tax Cases: Grand Jury Investigation vs. Administrative Investigation* (10:30 a.m.).

V. *Less Costly Alternatives to Formal Discovery* (11:30 a.m.).

VI. *Lunch* (12:00-1:30 p.m.).

VII. *Addressing "Abusive" Shelters and Other Tax Avoidance Schemes* (1:30 p.m.).

VIII. *Section 6701—The Civil Penalty for Aiding and Abetting Understatement of Tax Liability* (3:30 p.m.).

IX. *Public Comments* (4:00 p.m.).

X. *Summation: Establishment of Next Meeting Date and Proposed Agenda Items* (4:25 p.m.).

The Meeting is open to the public with a period set aside for their comments on agenda items. Approximately 30 seats will be made available to the public on a first-come, first-served, basis.

For further information, as well as to secure admission to the building, please contact Diane M. Kozub, Committee Management Liaison Officer, Tax Division, U.S. Department of Justice, Washington, D.C. 20530, (202) 633-3968.

Dated: January 3, 1983.

Glenn L. Archer, Jr.,

Assistant Attorney General, Tax Division.

[FR Doc. 83-1089 Filed 1-11-83; 8:45 am]

BILLING CODE 4410-01-M

Drug Enforcement Administration

Importer of Controlled Substances; Registration

By Notice dated October 21, 1982, and published in the **Federal Register** on October 28, 1982, (47 FR 47948), Arenol Chemical Corporation, 40-33 23rd Street, Long Island City, New York 11101, made application to the Drug Enforcement Administration to be registered as an importer of Phenylacetone (8501), a basic class of controlled substance listed in Schedule II.

No comments or objections have been received. Therefore, pursuant to Section 1008(a) of the Controlled Substances Import and Export Act and in accordance with Title 21, Code of Federal Regulations, § 1311.42, the above firm is granted registration as an importer of the basic class of controlled substance listed above.

Dated: January 7, 1983.

Gene R. Haislip,

Deputy Assistant Administrator, Office of Diversion Control, Drug Enforcement Administration.

[FR Doc. 83-979 Filed 1-13-83; 8:45 am]

BILLING CODE 4410-09-M

DEPARTMENT OF LABOR

Employment and Training Administration

Determinations Regarding Eligibility To Apply for Worker Adjustment Assistance

In accordance with Section 223 of the Trade Act of 1974 (19 USC 2273) the Department of Labor herein presents summaries of determinations regarding eligibility to apply for adjustment assistance issued during the period January 3, 1983-January 7, 1983.

In order for an affirmative determination to be made and a certification of eligibility to apply for adjustment assistance to be issued, each of the group eligibility requirements of Section 222 of the Act must be met.

(1) That a significant number or proportion of the workers in the workers' firm, or an appropriate subdivision thereof, have become totally or partially separated,

(2) That sales or production, or both, of the firm or subdivision have decreased absolutely, and

(3) That increases of imports of articles like or directly competitive with articles produced by the firm or appropriate subdivision have contributed importantly to the separations, or threat thereof, and to the absolute decline in sales or production.

Negative Determinations

In each of the following cases the investigation revealed that criterion (3) has not been met. A survey of customers indicated that increased imports did not contribute importantly to worker separations at the firm.

TA-W-13,437; Arbaba Sportswear, Inc., New York, NY

TA-W-13,279; Waterous Co., Traverse City Div., Lake Street Plant, Traverse City, MI

TA-W-13,455; American Bosch Corp., Springfield, MA

TA-W-13,603; Ellingson Timber Co., Baker, OR

TA-W-13,604; Ellingson Lumber Co., Baker, OR

TA-W-13,607; MCR Fashions, Inc., Hoboken, NJ

TA-W-13,460; Flora Fashions, Stanhope, NJ

TA-W-13,485; John DePinto Enterprises, West New York, NJ

TA-W-13,497; West New York Sportswear, West New York, NJ

TA-W-13,403; Noranda Lakeshore Mines, Inc., Casa Grande, AZ

TA-W-13,439; Century Inks, Corp., Park Ridge, IL

TA-W-13,440; Century Inks, Corp., Beltsville, MD
TA-W-13,441; Century Inks, Corp., Glendale, WI
TA-W-13,442; Century Inks, Corp., Minneapolis, MN
TA-W-13,443; Century Inks, Corp., Pennsauken, NJ
TA-W-13,444; Century Inks, Corp., Fenton, MO
TA-W-13,433; Phoenix Clothes, Vineland, NJ
TA-W-13,413; Hanna Mining Co., Riddle, OR
TA-W-13,413A; Hanna Nickel Smelting Co., Riddle, OR
TA-W-13,402; National Zinc Co., Bartlesville, OK
TA-W-13,428; Cyclops Corp., Sawhill Tubular Div., Fabricating Plant, Wheatland, PA

In the following cases the investigation revealed that criterion (3) has not been met. Increased imports did not contribute importantly to workers separations at the firm.

TA-W-13,608; Cousin's Fashions, T/A Pepi Spina, West New York, NJ
TA-W-13,600; Block Industries, New York, NY
TA-W-13,486; Junior Gallery, Ltd. Secaucus, NJ
TA-W-13,146; Laconia Needle Manufacturing Co., Inc., Laconia, NH
TA-W-13,464; Noranda Mining, Inc., Ontario Project, Park City, Ut
TA-W-13,466; Trio Knitting Mills, Inc., New York, NY

In the following cases the investigation revealed that criterion (3) has not been met for the reason specified.

TA-W-13,276; Ranchers Exploration & Development Corp., Bluebird Mine, Miami, AZ

Imports did not contribute importantly to worker separations at the firm.

TA-W-13,498; Brisco Manufacturing, Inc., Elizabeth, NJ

There are no known U.S. imports of military uniforms.

TA-W-13,475; Clara Fashions, Inc., Jersey City, NJ

The investigation revealed that criterion (2) has not been met. Sales or production did not decline as required for certification.

TA-W-13,470; Perfection Heat Treating, Inc., Detroit, MI

Workers did not produce an article within the meaning of Section 222(3) of the Trade Act as required for certification.

TA-W-13,468; Midway Lincoln-Mercury, Inc., Franklin, OH

Workers did not produce an article within the meaning of Section 222(3) of the Trade Act of 1974.

TA-W-13,474; Campi Fashions, Hoboken, NJ

The investigation revealed that criterion (2) has not been met. Sales or production, or both, did not decline as required for certification.

TA-W-13,447; Trace Fork Coal Co., Premier, WV

Aggregate U.S. imports of coal or coke did not increase as required for certification.

TA-W-13,495; Stephanie Coat, Inc., Hoboken, NJ

Imports did not contribute importantly to workers separations at the firm.

TA-W-13,499; Bunge Corp., Logansport, IN

Aggregate U.S. imports of soybean oil and meal are negligible.

TA-W-13,617; Marathon Steel Co., Rolling Mills Div., Tempe, AZ

Aggregate U.S. imports of rebars and structural steel did not increase as required for certification.

TA-W-13,631; Marathon Steel Co., Fabrication Div., Phoenix, AZ

Aggregate U.S. imports of rebars and structural steel did not increase as required for certification.

TA-W-13,753; Kane Steel Co., Millville, NJ

Workers do not produce an article within the meaning of Section 222(3) of the Trade Act of 1974.

TA-W-13,530; Dole Company, Lanai Plantation, Lanai City, Lanai, HI

The investigation revealed that criterion (1) has not been met. A significant number or proportion of the workers were not separated from employment at the firm.

Affirmative Determinations

TA-W-13,113; General Dynamics Corp., Quincy Shipbuilding Div., Quincy, MA

A certification was issued in response to a petition received on November 27, 1981 covering all workers separated on or after December 10, 1981.

TA-W-13,601; Block Industries, Wilmington, NC

A certification was issued in response to a petition received on June 25, 1982 covering all workers separated on or after April 6, 1981.

TA-W-13,494; Nicoletta Fashions, Jersey City, NJ

A certification was issued in response to a petition received on May 15, 1982 covering all workers separated on or after November 1, 1981.

TA-W-13,472; Alorna Coat Corp., Hoboken, NJ

A certification was issued in response to a petition received on May 18, 1982 covering all workers separated on or after May 13, 1981.

TA-W-13,425; Avon Services, Mineral Point, MO

A certification was issued in response to a petition received on April 6, 1982 covering all workers separated on or after December 1, 1981.

TA-W-13,430; IMCO Services, Inc., Apex Mine, Mineral Point, MO

A certification was issued in response to a petition received on April 6, 1982 covering all workers separated on or after December 1, 1981.

TA-W-13,527; Del Monte Corp., Molokai Plantation, Kualapuu, Molokai, HI

A certification was issued covering all workers of the firm separated on or after May 24, 1981.

TA-W-13,528; Del Monte Corp., Honolulu Cannery, Honolulu, Oahu, HI

A certification was issued covering all workers of the firm separated on or after May 24, 1981.

TA-W-13,529; Dole Co., Honolulu Can Plant, Honolulu Oahu, HI

A certification was issued covering all workers of the firm separated on or after April 1, 1982.

TA-W-13,531; Dole Co., Honolulu Cannery, Honolulu, Oahu, HI

A certification was issued covering all workers of the firm separated on or after April 1, 1982.

TA-W-12,913; Harley-Davidson Motor Co., Inc., York, PA

A certification was issued in response to a petition received on August 6, 1981 covering all workers separated on or after March 1, 1982.

TA-W-13,471; Adriatic Originals (Formerly Cerro Coat, Inc.), Hoboken, NJ

A certification was issued in response to a petition received on May 18, 1981 covering all workers separated on or after August 24, 1981.

I hereby certify that the aforementioned determinations were issued during the period January 3, 1983–January 7, 1983. Copies of these determinations are available for inspection in Room 10,332, U.S. Department of Labor, 601 D Street, NW, Washington, D.C. 20213 during normal business hours or will be mailed to persons who write to the above address.

Dated: January 11, 1983.

Marvin M. Fooks,

Director, Office of Trade Adjustment Assistance.

[FR Doc. 83-1104 Filed 1-13-83; 8:45 am]

BILLING CODE 4510-30-M

Labor Surplus Area Classifications Under Executive Orders 12073 and 10582; Additions to Annual List of Labor Surplus Areas

AGENCY: Employment and Training Administration, Labor.

ACTION: Notice.

DATE: The additions to the annual list are effective on January 1, 1983.

SUMMARY: The purpose of this notice is to announce additions to the annual list of labor surplus areas.

FOR FURTHER INFORMATION CONTACT: James W. Higgins, United States Employment Service (Attention: TEEPA) 601 D Street, N.W., Washington, D.C. 20213. Telephone: 202-376-6890.

SUPPLEMENTARY INFORMATION: Executive Order 12073 requires executive agencies to emphasize procurement set-asides in labor surplus areas. The Secretary of Labor is responsible under that Order for classifying and designating areas as labor surplus areas.

Under Executive Order 10582 executive agencies may reject bids or offers of foreign materials in favor of the lowest offer by a domestic supplier, provided that the domestic supplier undertakes to produce substantially all of the materials in areas of substantial unemployment as defined by the Secretary of Labor. The preference given to domestic suppliers under Executive Order 10582 has been modified by Executive Order 12260. Federal Procurement Regulations Temporary Regulation 57 (41 CFR Chapter 1, Appendix), issued by the General Services Administration on January 15, 1981 (46 FR 3519), implements Executive Order 12260. Executive agencies should refer to Temporary Regulation 57 in procurements involving foreign businesses or products in order to assess its impact on the particular procurements.

The Department of Labor's regulations implementing Executive Orders 12073 and 10582 are set forth at 20 CFR Part 654, Subparts A and B. Subpart A requires the Assistant Secretary of Labor to classify jurisdictions as labor surplus areas pursuant to the criteria specified in the regulations and to publish annually a list of labor surplus areas. Pursuant to those regulations the Assistant Secretary of Labor published the annual list of labor surplus areas on June 4, 1982 (47 FR 24474).

Subpart B of Part 654 states that an area of substantial unemployment for purposes of Executive Order 10582 is any area classified as a labor surplus area under Subpart A. Thus, labor surplus areas under Executive Order 12073 are also areas of substantial unemployment under Executive Order 10582.

The areas described below have been classified by the Assistant Secretary of Labor as labor surplus areas pursuant to 20 CFR 645.5(c) and are added to the annual list of labor surplus areas, effective January 1, 1983. The following additions to the annual list of labor surplus areas are published for the use of all Federal agencies in directing procurement activities and locating new plants or facilities.

Signed at Washington, D.C. on December 29, 1982.

Albert Angrisani,

Assistant Secretary of Labor.

Additions to the Annual List of Labor Surplus Areas—January 1, 1983

Labor Surplus Area	*Civil Jurisdiction Included*
Alabama	
Bal. of Jefferson County	Jefferson County less Birmingham City
Connecticut	
Bristol City	Bristol City
Illinois	
Henry County	Henry County
Mercer County	Mercer County
Massachusetts	
Fitchburg City	Fitchburg City in Worcester County
New Hampshire	
Sullivan County	Sullivan County
North Carolina	
Columbus County	Columbus County
Iredell County	Iredell County
Ohio	
Bal. of Summit County	Summit County less Akron City
Rhode Island	
Pawtucket City	Pawtucket City
Tennessee	
Madison County	Madison County
Wisconsin	
Manitowoc County	Manitowoc County

[FR Doc. 83-1017 Filed 1-13-83; 8:45 am]

BILLING CODE 4510-30-M

Revised Schedule of Remuneration for the UCX Program

Under section 8521(a)(2) of title 5 of the United States Code the Secretary of Labor is required to issue from time to time a Schedule of Remuneration specifying the pay and allowances for each pay grade of members of the military services. The schedules are used to calculate the base period wages and benefits payable under the program of Unemployment Compensation for Ex-Servicemembers (UCX Program).

A revised Schedule of Remuneration has been published from time to time as changes in military pay and allowances have occurred. In the past the revised schedules have been published as amendments to the regulations, at 20 CFR 614.19 The regulations have been revised to authorize issuance of revised schedules as notices which are published in the **Federal Register**, 20 CFR 614.12 (47 FR 54702).

The revised schedule published with this Notice reflects increases in military pay and allowances which were effective in October 1982. The revised schedule was issued on December 1, 1982, in Unemployment Insurance Program Letter No. 7-83, and is effective with respect to UCX first claims filed on or after January 2, 1983.

Accordingly, the following new Schedule of Remuneration, issued pursuant to 5 U.S.C. 8521(a)(2) and 20 CFR 614.12, applies to "First Claims" for UCX which are effective on and after January 2, 1983:

Pay Grade	Monthly rate
(1) Commissioned Officers:	
0-10	$6,186
0-9	6,181
0-8	6,179
0-7	5,916
0-6	4,916
0-5	4,019
0-4	3,335
0-3	2,773
0-2	2,173
0-1	1,666
(2) Warrant Officers:	
W-4	3,126
W-3	2,559
W-2	2,203
W-1	1,866
(3) Enlisted Personnel:	
E-9	2,814
E-8	2,372
E-7	2,021
E-6	1,716
E-5	1,443
E-4	1,219
E-3	1,063
E-2	990
E-1	906

The publication of this new Schedule of Remuneration does not revoke any prior schedule or change the period of time any prior schedule was in effect.

Signed at Washington, D.C., on January 7, 1983.

Albert Angrisani,

Assistant Secretary of Labor.

[FR Doc. 83-1016 Filed 1-13-83; 8:45 am]

BILLING CODE 4510-30-M

Mine Safety and Health Administration

[Docket No. M-82-132-C]

Rapoca Energy Co.; Petition for Modification of Application of Mandatory Safety Standard

Rapoca Energy Co., Norton Coal Division, Route 1, Box 80, Nora, Va. 24272 has filed a petition to modify the application of 30 CFR 77.214(a) (refuse piles) to its Nora Preparation Plant (I.D. No. 44-05498) located in Dickenson County, Virginia. The petition is filed under Section 101(c) of the Federal Mine Safety and Health Act of 1977.

A summary of the petitioner's statements follows:

1. The petition concerns the requirement that refuse piles not be located over abandoned openings or steamlines.

2. As an alternative method, petitioner proposes to cover existing abandoned mine openings with refuse material. In support of this proposal, petitioner states that prior to covering the mine openings with refuse material:

a. A sandstone cobble underdrain will be constructed to prevent a head build up in the abandoned mine works and to carry any water being made away from the refuse pile itself;

b. Mine plugs of clay or inert material will be constructed over the mine opening prior to covering with refuse material;

c. Adjacent mining will be limited to 200 feet of the existing mine workings.

3. The refuse materials would not support combustion and the existing refuse handling plan employs adequate dewatering measures throughout the life of the site.

4. For these reasons, petitioner requests a modification of the standard.

Request for Comments

Persons interested in this petition may furnish written comments. These comments must be filed with the Office of Standards, Regulations and Variances, Mine Safety and Health Administration, Room 627, 4015 Wilson Boulevard, Arlington, Virginia 22203. All comments must be postmarked or received in that office on or before February 14, 1983. Copies of the petition are available for inspection at that address.

Patricia W. Silvey,

Acting Director, Office of Standards, Regulations and Variances.

January 7, 1983.

[FR Doc. 83-1103 Filed 1-13-83; 8:45 am]

BILLING CODE 4510-43-M

Occupational Safety and Health Administration

[Docket No. P-300]

Conference on Workplace Health Programs Held on October 6-8, 1982; Availability of Report

AGENCY: Occupational Safety and Health Administration (OSHA), Labor.

ACTION: Notice of availability of conference report.

SUMMARY: On October 6-8, 1982, OSHA held a conference dealing with workplace health programs. The conference was attended by representatives of organized labor, State OSHA programs, private employers and by other occupational health professionals.

Conferees discussed the essential elements of workplace health programs, with the purpose of assisting OSHA in better use of its health staff and other resources. The result of the discussions was a consensus as to the most important factors in such programs. These deliberations have now been summarized in a report which is available for public inspection at the OSHA Docket Office, U.S. Department of Labor, 200 Constitution Avenue NW., Room S6212, Washington, D.C. 20210.

The document will also be available in all OSHA regional offices.

FOR FURTHER INFORMATION CONTACT: Anthony E. Goldin, Director, Policy, Legislation and Regulatory Analysis, Occupational Safety and Health Administration, 200 Constitution Avenue NW., Room N3629; Washington, D.C. 20210; (202) 523-8021.

Signed at Washington, D.C., this 11th day of January 1983.

Thorne G. Auchter,

Assistant Secretary of Labor

[FR Doc. 83-1102 Filed 1-13-83; 8:45 am]

BILLING CODE 4510-26-M

[V-83-1]

Hammermill Papers Group

AGENCY: Occupational Safety and Health Administration, Labor.

ACTION: Notice of application for variance; notice of hearing on the application for variance.

SUMMARY: The notice announces the application of Hammermill Papers Group for a variance from the part of 29 CFR 1910.261(c)(9)(i) which requires that the flagman must always remain in sight of the operator when the crane or locomotive is in motion. It also announces a hearing on the Hammermill Papers Group variance application.

DATES: Interested parties are invited to submit comments, written data, views and arguments relating to this variance application no later than February 14, 1983.

Interested parties wishing to participate in the hearing noticed by this document may file a request to appear no later than January 31, 1983.

The hearing will begin at 9:30 a.m. on February 23, 1983.

ADDRESS: Comments on the variance application and requests to participate in the hearing must be filed in duplicate with both:

James J. Concannon, Director, Office of Variance Determination, Occupational Safety and Health Administration, U.S. Department of Labor, 200 Constitution Avenue NW., Room N-3662, Washington, D.C. 20210.

and

Nahum Litt, Chief Administraive Law Judge, U.S. Department of Labor, Vanguard Building, Suite 700, 1111 20th Street NW., Washington, D.C. 20036.

The location of the hearing will be in the Federal Building, Courtroom B, Second Floor, 6th and State Streets, Erie, Pennsylvania 16533.

Written comments received and hearing participation requests will be available for inspection and copying in the Office of Variance Determination, Room N-3662 at the above address.

SUPPLEMENTARY INFORMATION:

I. Notice of Application

Notice is hereby given that Hammermill Papers Group (hereinafter referred to as "Applicant"), Erie Plant, 1540 East Lake Road, Erie, Pennsylvania, 16533 has made application pursuant to section 6(D) of the Occupational Safety and Health Act of 1970 (84 Stat. 1596; 29 U.S.C. 655) and 29 CFR 1905.11 for a variance from the part of 29 CFR Part 1910.261(c)(9)(i) which requires that the flagman must always remain in sight of the operator when the crane or locomotive is in motion.

The place of employment that will be affected by the application is the Erie Pennsylvania plant of the Applicant.

The Applicant certifies that employees who would be affected by the variance have been notified of the application by presenting a copy of it to the authorized employee representative, and by posting a copy at all places where notices to employees are normally posted. Employees have also been informed of their right to petition the Assistant Secretary for a hearing. Subsequently, the employees' Union has submitted a request for a hearing. Section II of this notice will discuss the particulars of the hearing scheduled in this matter.

Regarding the merits of the application, the Applicant contends that radio communications between the railroad crew is as safe and healthful as visual contact between the railroad crew as required by § 1910.261(c)(9)(i). The Applicant proposes that their railroad crews use portable radios to relay verbal instructions in directing movement of the locomotives rather than using visual observation of hand signals. The railroad crew would thus be able to maintain voice contact when throwing switches, coupling, uncoupling or spotting rail cars within the Applicant's railroad system. The Applicant contends that constant visual contact while the locomotive is in motion is not the exclusive means of achieving a safe operation.

The Applicant further states that the operating area of the locomotive encompasses approximately 7.5 miles of track, all within the confines of the company's property. Approximately one mile is owned, maintained and operated by Conrail. Only two miles of its track are in frequent use. The maximum operating speed of the locomotive is 10 m.p.h. Normaly, only one to five rail cars are moved at one time. Inbound cargo includes longwood, wood chips, pulp and chemicals such as chlorine, caustic soda, clay, rosin, sodium chlorate, talc, sulphur dioxide and starch. Outbound products are pulp and paper.

The Applicant maintains that a variance from the requirement that the railroad crew be in visual contact with the locomotive engineer at all times should be granted because the use of radios in conjunction with written operational procedures provides an operation which is as safe as, or safer than, the currently employed and outdated method of hand signals. Specifically,

(a) Without the visual contact requirement, crew members' mobility will be enhanced and they will be able to position themselves at the safest possible location during train movement;

(b) Radios will provide a means of communicating instantaneously, whereas hand signals must await visual contact between the parties; and

(c) Radios improve communication under adverse weather conditions and after nightfall.

The Applicant contends that its request for a variance should be granted because the OSHA requirement for visual contact applies only to the pulp and paper industry. Locomotives routinely operate in other industries using radio communication in lieu of visual contact. There is nothing unique about the pulp and paper industry which justifies a visual contact requirement.

The Applicant contends that it has taken the following steps to assure that the system of radio communication will work safely and efficiently:

(a) The Applicant has purchased a sufficient number of radios and microphones to supply all required employees;

(b) The radios purchased are a 2 watt FM system providing a clear and audible signal;

(c) The Applicant has obtained two separate radio frequencies from the Federal Communications Commission. One of these frequencies will be used solely among members of the train crew to direct the movement of the locomotive. The other frequency will be used only for communication between the locomotive engineer and the dispatcher. The use of these unique Hammermill FM frequencies prevents interference from Conrail train crews operating on the company's premises and from other possible sources of interference, e.g. boats, and airplanes;

(d) The radios, when not in use, will be maintained in a secure place under the control of Hammermill supervision; employees will be responsible for the security of radios which have been issued to them;

(e) The radios will be checked regularly and recharged when appropriate; and,

(f) Employees will be trained in the use of the radios as well as in the operational procedures which apply during the use of radios. The locomotive engineer will be under instruction not to move the train until given a radio signal from the crew. Should radio failure or interference occur after an order to move has been given, the locomotive engineer will stop. The engineer will not move the train again until radios are repaired, replaced or until interference has cleared. Established operational procedures will be followed.

A copy of the application will be made available for inspection and copying upon request at the Office of Variance Determination listed above.

II. Notice of Hearing

Notice is hereby given pursuant to section 6(d) of the Occupational Safety and Health Act of 1970, Secretary of Labor's Order No. 8-76 (41 FR 25059) and 29 CFR 1905.20, that a hearing will be held on the application of Hammermill Papers Group, Erie Plant, 1540 East Lake Road, Erie, Pennsylvania 16533, for a variance from the part of 29 CFR 1910.261(c)(9)(i) which requires that the flagman must always remain in sight of the operator when the crane or locomotive is in motion.

By letter dated December 23, 1982, Local 620, United Paperworkers International Union, AFL-CIO-CLC (hereinafter referred to as "Union"), 703 French Street, Erie, Pennsylvania 16501, the authorized employee representative, requested a hearing on the variance application. The Union is opposed to the Applicant's request to use radio communication as a substitute for the standard's requirement for a flagman to be in visual contact with a locomotive engineer while the engine is in motion. The Union does not object to the use of radio communication as an aid to the present method of operation but only when radio communication is used as a substitute for visual contact between the railroad crew.

The Union also strongly objects to the Applicant's announced intention to reduce its three-man railroad crews to two-man railroad crews. The Union states that Conrail operates locomotives and freight cars into the Applicant's premises with a crew consisting of three men that use radio communication. The Union's understanding is that the Conrail railroad crews have frequent problems with their radio and therefore rely primarily on visual contact as the method of insuring the safe movement of their rail cars.

The Union further contends that during periods of darkness, railroad crew members such as flagmen and switchmen must use one hand to maintain their hold on a moving train and their other hand to grasp and use a lantern or other lighting device. The contention is that should an emergency situation occur, it would not be possible for the flagman or switchman to attempt to use a radio to communicate with the locomotive engineer. Similarly, during periods of severe cold weather, which are common at the Erie Plant during the winter months, crew members must wear extensive protective clothing

including hoods, earmuffs and hats in order to prqtect their faces and heavy mittens in order to protect their hands. With such protective clothing, crew members operating the company's rail cars would not be able to communicate by radio at all, much less in a safe manner.

The Union further states that extremely loud conditions exist in many areas of the Applicant's facility. In addition, the engineer is required to frequently use the locomotive horn which emits an extremely loud noise. The Union contends that the loud conditions, in addition to a second radio in the cab of the locomotive used for railroad yard communications, could cause the engineer to fail to understand a radio communication in an emergency situation.

The Union states there are other reasons for their opposition which will be brought out in the hearing. Some of these situations include the need for a third crew member to reduce the risk of derailment, the need for the flagman and the switchman to mannually brake a rail car and the need for the railroad crew to pay close attention to constant truck and pedestrian traffic across railroad tracks.

All interested persons, including employers and employees, who believe they would be affected by the grant or denial of the application for a variance are invited to submit written data, views and arguments relating to the pertinent application no later than February 14, 1983.Intersted persons, including affected employers and employees, may file a request to present views and evidence and to participate in the hearing no later than January 31, 1983. Such request shall contain a statement of the position to be taken and a concise summary of the evidence to be adduced in support of that position.

Comments on the variance application and requests to participate in the hearing must be filed in duplicate with both:

James J. Concannon, Director, Office of Variance Determination, Occupational Safety and health Administration, U.S. Department of Labor, 200 Constitution Avenue NW., Room N-3662, Washington, D.C. 20210

and

Nahum Litt, Chief Administrative Law Judge, U.S. Department of Labor, Vanguard Building, Suit 700, 1111 20th Street NW., Washington, D.C. 20036, Docket #V-83-1.

These submissions will be available for inspection and copying in the Office of Variance Determination, Room N-3662 at the above address.

The Applicant, the Union, and OSHA, represented by the Solicitor are hereby granted party status and need not submit additional requests to participate in the hearing. Granting of party in interest status to additional interested persons will be at the discretion of the appointed administrative law judge in the interest of a full and fair hearing on the issues.

The hearing will be convened on Wednesday, February 23, 1983, at 9:30 a.m., Federal Building, Courtroom B, Second Floor, 6th and State Streets, Erie, Pennsylvania 16533, at which time the Applicant, the Union, OSHA and any person who has been granted party status in accordance with the above requirements, may submit written or oral data, views or arguments and call witenesses, subject to the regulations on hearings contained in 29 CFR 1905.20 et seq., the Occupational Safety and Health Act, the Administrative Procedure Act, pertinent provisions of the Federal rules of civil procedure, and rulings of the administrative law judge.

The issues of fact and law will include, although not necessarily be limited to, whether the Applicant has demonstrated by a preponderance of evidence that the conditions, practices, means, methods, operations, or processes used or proposed to be used will provide places of employment which are as safe and healthful as those which would prevail if the standard were complied with.

I hereby designate as hearing examiner to conduct this hearing an administrative law judge to be appointed by the Chief Administrative Law Judge of the United States Department of Labor.

Signed at Washington, D.C. this 12th day of January 1983.

Thorne G. Auchter,

Assistant Secretary of Labor.

[FR Doc. 83-1240 Filed 1-13-83; 9:49 am]

BILLING CODE 4510-26-01-M

[V-82-6]

Burroughs OEM Corp.; Grant of Variance

AGENCY: Occupational Safety and Health Administration, Labor.

ACTION: Grant of variance.

SUMMARY: OSHA has granted the Burroughs OEM Corporation application for a temporary variance from the standards prescribed in 29 CFR 1910.1025(e)(1) and 1910.1025(i)(3) concerning the utilization of engineering and work practice controls for limiting exposure to lead, and the provision and assurance of use of shower facilities, respectively.

DATES: The effective date of this grant of variance is January 14, 1983.

FOR FURTHER INFORMATION CONTACT:

James J. Concannon, Director, Office of Variance Determination, U.S. Department of Labor, Occupational Safety and Health Administration, Third Street and Constitution Avenue NW., Room N-3662, Washington, D.C. 20210, Telephone: (202) 523-7183

or the following Regional and Area Offices:

U.S. Department of Labor, Occupational Safety and Health Administration, 1515 Broadway (1 Astor Plaza), Room 3445, New York, New York 10036

U.S. Department of Labor, Occupational Safety and Health Administration, Belle Mead GSA Depot, Building T3, Belle Mead, New Jersey 08502.

I. Background

On June 23, 1982, the Burroughs OEM Corporation, 141 Mount Bethel Road, Warren Township, New Jersey 07060 made application pursuant to Section 6(b)(6)(A) of the Occupational Safety and Health Act of 1970 (84 Stat. 1594, 29 U.S.C. 655) and 29 CFR 1905.10 for a temporary variance, and interim order pending a decision on the application for a variance, from the standards prescribed in 29 CFR 1910.1025(e)(1) which require that engineering and work practice controls be used to control exposure to lead, and in 29 CFR 1910.1025(i)(3) (i), (ii), and (iii), which require that shower facilities be provided and used. An interim order was granted on September 3, 1982 (47 FR 39039-40; September 3, 1982).

The address of the place of employment that will be affected by this application is as follows: 141 Mount Bethel Road, Warren Township, New Jersey 07060.

Applicant certifies that employees who would affected by the variance have been informed of the application by posting a copy at all places where notices to employees are normally posted. Employees have also been informed of their right to petition the Assistant Secretary for a hearing.

One comment was received from the American Federation of Labor and Congress of Industrial Organizations dealing not with the substance of the variance request but with an oversight on the part of the Agency in allowing the interim order to remain in effect for an indefinite period. A clarification has since been sent to the applicant setting June 30, 1983 as the maximum effective

time for the order unless a variance is granted prior to that date.

Regarding the merits of the application, the applicant states that it is unable to comply with the requirements of § 1910.1025(e)(1) by the date required by the standard and, further, that when it is able to comply with these requirements, the shower facilities no longer will be required pursuant to § 1910.1025(i)(3).

The applicant states that the manufacture of the display devices requires the use of lead glass frit, a material considered to be hazardous because it contains lead oxide. Lead glass frit is presently the state-of-the-art material for manufacture of display devices because it has the necessary physical properties and the melting temperature required. The lead glass frit is mixed with other materials to make either a paste or liquid which is used as a peripheral sealant for the various forms of display devices. The manufacturing process requires that the paste or liquid be applied either manually or through spray operations to the display devices, which are then transferred to various high temperature sealing ovens, which are used to melt the material to form a glass ceramic seal.

The applicant has implemented a comprehensive safety and health program which has assured that no employee is exposed to concentrations of lead above the permissible exposure limit. This current program is, however, partially dependent upon the use of respirators. The applicant is presently in the process of implementing improvements to its program, however, which should eliminate the need to use respirators. These improvements require extensive new construction and alteration of existing facilities, and cannot be completed before June 30, 1983.

Under § 1910.1025(e)(1) employers within the electronics industry are required to reduce and maintain employee exposure to lead to or below 50 ug/m^3, without regard to respirators, within one year from the effective date. For all industries for which the standard has been found feasible, of which electronics is one, OSHA has taken the position that the effective date of the standard with regard to engineering controls and construction of hygiene facilities, is June 29, 1981. On that date, the Supreme Court of the United States denied certiorari in the matter of *Lead Industries Association, Inc., et. al.* v. *Donovan*, 101 S. Ct. 3148 (1981), and dissolved its stay on implementation of paragraph (e) of the lead standard.

The applicant has stated and produced substantiating evidence that from about July, 1979, the Corporation has explored a variety of methods and processes in an effort to protect its employees, including product redesign, use of alternative (non-lead) materials in the manufacturing process, work station redesign and engineering controls. The applicant has determined that the only feasible method presently available to reduce employee exposure to lead to or below the permissible exposure limit, without utilizing respirators, is work station redesign and related additional engineering controls. The work station redesign project is underway and is scheduled for completion about June 30, 1983.

In the interim, the applicant states that it has already implemented a comprehensive safety and health program to protect its employees from the hazards of lead, which includes the use of engineering and administrative controls, respirators, full-body protective work clothing, hygiene practices, biological monitoring, medical removal, and extensive employee training.

The applicant further states that, because of the steps it has taken, including the use of respirator selection based upon quantitative fit testing and the requirement that all employees working in any lead manufacturing area wash all exposed skin areas with soap and tepid running water and use medicated hand lotion each time they leave the lead manufacturing areas, it is providing adequate protection for the employees. In substantiation thereof, the applicant states that only one individual of the 32 whose blood had to be analyzed for lead content in August 1981 needed to be medically removed. No other employee's blood lead value was greater than 39 ug/100g, and the average value for all 32 employees was 27.4 ug/1000gm whole blood. Similarly, in March 1982, only one of the 27 employees required to have biological monitoring had to be medically removed. Only 2 other employees' blood lead values were greater than 40 ug/100g, and the average value for all 27 employees was 27.1 ug/100g.

II. Order

It appears from the application for a temporary variance and an interim order that the Burroughs OEM Corporation is unable to comply with the requirement of 29 CFR 1910.1025(e)(1) by the date required by the standard. It appears further, that compliance with 29 CFR 1910.1025(i)(3) is not warranted inasmuch as the Corporation is presently implementing engineering controls which by June 30, 1983 should render unnecessary the use of respiratory protection and eliminate the requirement to construct and use showers by reducing airborne exposure to lead within the facility to levels below the permissible exposure limit (PEL). It further appears that the applicant is taking all available steps to safeguard its employees during the time needed to come into compliance with the standard. Therefore, it is ordered, pursuant to the authority in Section 6(b)(6)(A) of the Occupational Safety and Health Act of 1970, in 29 CFR 1905.10(c) and in Secretary of Labor's Order No. 8-76(41 FR 25059), that the Burroughs OEM Corporation be, and is hereby, authorized to conduct its manufacturing process prior to coming into compliance with the requirements of 29 CFR 1910.1025(e)(1), and without constructing the shower facilities required by paragraph (i)(3), by complying with the following:

1. The terms of this Order are applicable to all employees assigned to work in lead glass frit areas.

2. All such employees shall have blood lead level and ZPP (Zinc Protoporphyrin) determinations at least every two months.

3. Respiratory protection, as required by 29 CFR 1910.1025(e)(2), shall be worn when the concentration of lead in air is at or above 50 micrograms per cubic meter of air (50 ug/m^3), averaged over an 8 hour period.

Quantitive fit tests shall be given to assure proper fit of the respirator.

4. Any employee whose blood lead level has increased by at least 10 micrograms per 100 grams of whole blood (10 ug/100g) from one sampling to another shall be retested immediately, even though the higher level is below 40 ug/100g. If the retest confirms this increase, the employer shall investigate to determine the cause.

5. Employees shall wear protective clothing which is impervious to lead dust, to prevent contaminating their underclothing or otherwise exposed portions of their bodies. This clothing shall consist of at the least the following: full-body protective coveralls, shoe covers, gloves, and some form of snood (cloth bag) completely covering the hair.

6. The employer shall assure that employees wash hands, face, neck, and arms (if arms/neck are exposed) with soap and tepid running water and use medicated hand lotion when leaving the lead glass frit areas.

7. The employer shall assure that the employees' protective work clothing, including shoes, are removed and placed

in the appropriate container prior to leaving the plant.

8. The employer shall provide separate storage facilities (clean/dirty) for protective clothing, tools, and personal items.

9. The employer shall continue with all other facets of his comprehensive safety and health program, shall comply with all provisions in this Order and, in addition, shall not be relieved from compliance with all other applicable provisions of the Standard for Occupational Exposure to Lead.

Burroughs OEM Corporation shall give notice of this grant of variance to employees affected thereby by the same means required to be used to inform them of the application for a variance.

This order shall remain in effect until June 30, 1983, or until the applicant is in compliance with the standard, whichever occurs first.

Signed at Washington, D.C. this 7th day of January 1983.

Thorne G. Auchter,

Assistant Secretary of Labor.

[FR Doc. 83-1012 Filed 1-13-83; 8:45 am]

BILLING CODE 4510-26-M

Oregon State Standards; Notice of Approval

1. *Background.* Part 1953 of Title 29, Code of Federal Regulations prescribes procedures under section 18 of the Occupational Safety and Health Act of 1970 (hereinafter called the Act) by which the Regional Administrator for Occupational Safety and Health (hereinafter called the Regional Administrator) under a delegation of authority from the Assistant Secretary of Labor for Occupational Safety and Health (hereinafter called the Assistant Secretary) (29 CFR 1953.4) will review and approve standards promulgated pursuant to a State Plan which has been approved in accordance with section 18(c) of the Act and 29 CFR Part 1902. On December 28, 1972, notice was published in the **Federal Register** (37 FR 28628) of the approval of the Oregon plan and the adoption of Subpart D to Part 1952 containing the decision.

The Oregon plan provides for the adoption of State standards which are at least as effective as comparable Federal standards promulgated under section 6 of the Act. The State adopted on June 5, 1981 a standard identical to the original Federal standard 29 CFR 1910.1043, Cotton Dust, as published in the **Federal Register** (43 FR 27394) on June 23, 1978, and subsequent corrections that were published in the **Federal Register** (43 FR 28473) on June 30, 1978, (43 FR 35032) on August 8, 1978, and (45 FR 12416) on February 26, 1980. The State omitted from the adoption an amendment to the Federal standard that was published in the **Federal Register** (45 FR 67340) on October 10, 1980. This was an amendment to Appendix A and relates to monitoring equipment for use in Class III hazardous locations. Following this adoption, the State Cotton Dust standard was published in the **Federal Register** (47 FR 7551) on February 19, 1982.

By letter dated February 25, 1982 from Darrel D. Douglas, Administrator, Accident Prevention Division, Workers' Compensation Department, State of Oregon, to James W. Lake, Regional Administrator, Occupational Safety and Health Administration, and incorporated as part of the plan, the State submitted an amendment to their Cotton Dust standard in response to Appendix A of the Federal Cotton Dust Standard as published in the **Federal Register** (45 FR 67340) on October 10, 1980.

No written comments or requests for public hearing were received. The State's Order of Adoption of the amendment became effective October 10, 1981.

2. *Decision.* Having reviewed the State submission in comparison with the Federal standards, it has been determined that the State standard amendment is identical to the Federal standard and accordingly should be approved.

3. *Location of supplement for inspection and copying.* A copy of the standards supplement, along with the approved plan, may be inspected and copied during normal business hours at the following locations: Office of the Regional Administrator, Occupational Safety and Health Administration, Room 6003, Federal Office Building, 909 First Avenue, Seattle, Washington 98174; Workers' Compensation Department, Labor and Industries Building, Salem, Oregon 97310; or the Office of State Programs, Room N-3613, 200 Constitution Avenue NW, Washington, D.C. 20210.

4. *Public participation.* Under 29 CFR 1953.2(c) the Assistant Secretary may prescribe procedures to expedite the review process or for other good cause which may be consistent with applicable laws. The Assistant Secretary finds that good cause exists for not publishing the supplement to the Oregon plan as a proposed change and making the Regional Administrator's approval effective upon publication for the following reason:

The standard was adopted in accordance with the procedural requirements of State law which included public comment and further public participation would be repetitious.

This decision is effective January 14, 1983.

(Sec. 18, Pub. L. 91-596, 84 Stat. 1608 (29 U.S.C. 667)).

Signed at Seattle, Washington this first day of November 1982.

Ronald T. Tsunehara,

Acting Regional Administrator.

[FR Doc. 83-1014 Filed 1-13-83; 8:45 am]

BILLING CODE 4510-26-M

Office of Federal Contract Compliance Programs

Ingersoll Milling Machine Co.; Reinstatement of Previously Debarred Contractor

On August 1, 1977 Ingersoll Milling Machine Company was debarred as an eligible bidder on Government contracts and subcontracts pursuant to an August 1, 1977 Decision and Order of the Director of the Office of Federal Contract Compliance Programs. This Decision and Order was based upon a January 6, 1976 Recommended Decision and Order by Administrative Law Judge Salvatore J. Arrigo. On August 16, 1977 the Director's Decision and Order and the Administrative Law Judge's Recommended Decision and Order were published in the **Federal Register** at 42 FR 41330.

On December 17, 1982 Ingersoll Milling Machine Company entered into a Consent Decree with the Office of Federal Contract Compliance Programs which resolved all the differences between the parties. Ingersoll Milling Machine Company is therefore reinstated, effective December 17, 1982, as an eligible bidder on Federal contracts and subcontracts. This reinstatement also applies to the following Ingersoll divisions and subsidiaries:

Ingersoll Manufacturing Consultants, Inc., Rockford, Ill.;
Ingersoll Manfacturing Consultants, International, S.A., Belgium;
Ingersoll Maschinen und Werkzuege GmbH, West Germany; and
Waldrich Siegen Werkzeigmaschinen GmbH, West Germany.

Dated: January 7, 1983.

Ellen M. Shong,

Director, Office of Federal Contract Compliance Programs.

[FR Doc. 83-1015 Filed 1-13-83; 8:45 am]

BILLING CODE 4510-27-M

NATIONAL SCIENCE FOUNDATION

Subpanel on Cellular Physiology; Meeting

In accordance with the Federal Advisory Committee Act, as amended, Pub. L. 92-463, the National Science Foundation announces the following meeting:

Name: Subpanel on Cellular Physiology of the Advisory Panel for Physiological, Cellular and Molecular Biology.

Date and time: January 31, February 1 & 2, 1983—8:30 a.m. to 5 p.m. each day.

Place: Room 523, National Science Foundation, 1800 G St., NW, Washington, DC 20550.

Type of meeting: Closed.

Contact person: Dr. Barbara K. Zain, Assistant Program Director, Cellular Physiology Program (202) 357-7377, Room 332, National Science Foundation, Washington, DC 20550.

Purpose of subpanel: To provide advice and recommendations concerning support for research in Cellular Physiology.

Agenda: To review and evaluate research proposals and projects as part of the selection process of awards.

Reason for closing: The proposals being reviewed include information of a proprietary or confidential nature, including technical information; financial data, such as salaries; and personal information concerning individuals associated with the proposals. These matters are within exemptions (4) and (6) of 5 U.S.C. 552b(c), Government in the Sunshine Act.

Authority to close meetings: This determination was made by the Committee Management Officer pursuant to provisions of Section 10(d) of Pub. L. 92-463. The Committee Management Officer was delegated the authority to make such determinations by the Director, National Science Foundation, on July 6, 1979.

January 11, 1983.

M. Rebecca Winkler,

Committee Management Coordinator.

[FR Doc. 83-1030 Filed 1-13-83; 8:45 am]

BILLING CODE 7555-01-M

NUCLEAR REGULATORY COMMISSION

Ad Hoc Committee for Review of Nuclear Reactor Licensing Reform Proposals; Meeting

Notice is hereby given in accordance with Section 10 of the Federal Advisory Committee Act that NRC's Ad Hoc Committee for Review of Nuclear Reactor Licensing Reform Proposals will hold its next meeting at 10:00 a.m., January 26, 1983. This meeting will take place at the office of Shaw, Pittman, Potts and Trowbridge, South Building, 9th Floor Lobby, 1800 M Street, NW., Washington, DC and will be open for public observation.

At this meeting, the committee will continue its review of administrative propsals for reforming the NRC's licensing process for nuclear plants. A transcript of the meeting will be made available for public inspection and copying at NRC's Public Document Room, 1717 H Street, NW., Washington, DC.

This meeting, which was publicly announced at the open Committee meeting held on January 12, 1983, is being held on short notice in order to meet the tight time limits set for presenting the Committee's views to the Commission and to minimize scheduling conflicts among individual Committee members.

Further information on the meetings may be obtained from Mr. Rothschild, Office of the General Counsel, U.S. Nuclear Regulatory Commission, Washington, DC 20555. (Telephone 202/634-1465).

Dated at Washington, DC this 12th day of January 1983.

John C. Hoyle,

Advisory Committee Management Officer.

[FR Doc. 83-1201 Filed 1-13-83; 8:45 am]

BILLING CODE 7590-01-M

[Docket No. 50-368]

Arkansas Power & Light Co.; Issuance of Amendment to Facility Operating License

The U.S. Nuclear Regulatory Commission (the Commission) has issued Amendment No. 38 to Facility Operating License No. NPF-6 issued to Arkansas Power & Light Company (the licensee), which revised the Technical Specifications for operation of Arkansas Nuclear One, Unit 2 (the facility), located in Pope County, Arkansas. The amendment is effective as of the date of issuance.

The amendment allows for the early removal of the first capsule of the ANO-2 Reactor Vessel Surveillance Program at 1.69 effective full power years (EFPY), rather than in accordance with the original schedule at 5 EFPY.

The application for the amendment complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules and regulations. The Commission has made appropriate findings as required by the Act and the Commission's rules and regulations in 10 CFR Chapter I, which are set forth in the license amendment. Prior public notice of this amendment was not required since the amendment does not involve a significant hazards consideration.

The Commission has determined that the issuance of this amendment will not result in any significant environmental impact and that pursuant to 10 CFR 51.5(d)(4) an environmental impact statement or negative declaration and environmental impact appraisal need not be prepared in connection with the issuance of this amendment.

For further details with respect to this action, see: (1) The application for amendment dated October 15, 1982, (2) Amendment No. 38 to Facility Operating License No. NPF-6, and (3) the Commission's related Safety Evaluation. These items are available for public inspection at the Commission's Public Document Room at 1717 H Street, NW., Washington, D.C. 20555 and at the Tomlinson Library, Arkansas Tech University, Russellville, Ark. 72801. A copy of items (2) and (3) may be obtained upon request addressed to the U.S. Nuclear Regulatory Commission, Washington, D.C. 20555, Attention: Director, Division of Licensing.

Dated at Bethesda, Md., this 6th day of January, 1983.

For the Nuclear Regulatory Commission.

Robert A. Clark,

Chief, Operating Reactors Branch No. 3, Division of Licensing.

[FR Doc. 83-1090 Filed 1-13-83; 8:45 am]

BILLING CODE 7590-01-M

[Docket No. 50-318]

Baltimore Gas & Electric Company; Issuance of Amendments to Facility Operating Licenses

The U.S. Nuclear Regulatory Commission (the Commission) has issued Amendment No. 60 to Facility Operating License No. DPR-69, issued to Baltimore Gas and Electric Company, which revised Technical Specifications for operation of the Calvert Cliffs Nuclear Power Plant, Unit No. 2. The amendment is effective as of the date of issuance.

The amendment revises the Technical Specifications to reflect recent modifications to remote shutdown instrumentation as described in TS Table 3.3-9, "Remote Shutdown Monitoring Instrumentation."

The application for the amendment complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the

Commission's rules and regulations. The Commission has made appropriate findings as required by the Act and the Commssion's rules and regulations in 10 CFR Chapter I, which are set forth in the license amendment. Prior public notice of the amendment was not required since the amendment does not involve a significant hazards consideration.

The Commission has determined that the issuance of the amendment will not result in any significant environmental impact and that pursuant to 10 CFR 51.5(d)(4) an environmental impact statement, or negative declaration and environmental impact appraisal need not be prepared in connection with issuance of the amendment.

For further details with respect to this action, see: (1) The application for amendment dated December 23, 1982, (2) Amendment No. 60 to License No. DPR-69, and (3) the Commission's related Safety Evaluation. All of these items are available for public inspection at the Commission's Public Document Room, 1717 H Street, NW., Washington, D.C. and at the Calvert County Library, Prince Frederick, Md. A copy of items (2) and (3) may be obtained upon request addressed to the U.S. Nuclear Regulatory Commission, Washington, D.C. 20555, Attention: Director, Division of Licensing.

Dated at Bethesda, Md., this 3rd day of January, 1983.

For the Nuclear Regulatory Commission.

Robert A. Clark,

Chief, Operating Reactor's Branch No. 3, Division of Licensing.

[FR Doc. 83-1091 Filed 1-13-83; 8:45 am]

BILLING CODE 7590-01-M

[Docket No. 50-293]

Boston Edison Co.; Issuance of Amendment to Facility Operating License

The U.S. Nuclear Regulatory Commission (the Commission) has issued Amendment No. 66 to Facility Operating License No. DPR-35 issued to Boston Edison Company (the licensee) which revised the Technical Specifications for operation of the Pilgrim Nuclear Power Station (the facility) located near Plymouth, Massachusetts. The amendment is effective as of its date of issuance.

The amendment revises the Technical Specifications by adding a note to Specification 3.12.F "Penetration Fire Barrier" to revise the requirements of this specification for one specific fire barrier.

The application for the amendment complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules and regulations. The Commission has made appropriate findings as required by the Act and the Commission's rules and regulations in 10 CFR Chapter I, which are set forth in the license amendment. Prior public notice of this amendment was not required since it does not involve a significant environmental impact and that pursuant to 10 CFR 51.5(d)(4) an environmental impact statement or negative declaration and enviromental impact appraisal need not be prepared in connection with the issuance of the amendment.

For further details with respect to this action, see: (1) The application for amendment dated December 15, 1982, (2) Amendment No. 66 to License No. DPR-35, and (3) the Commission's related Safety Evaluation. All of these items are available for public inspection at the Commission's Public Document Room, 1717 H Street, NW., Washington, D.C., and at the Plymouth Public Library on North Street in Plymouth, Massachusetts 02360. A single copy of items (2) and (3) may be obtained upon request addressed to the U.S. Nuclear Regulatory Commission, Washington, D.C. 20555, Attention: Director, Division of Licensing.

Dated at Bethesda, Md., this 7th day of January 1983.

For the Nuclear Regulatory Commission.

Domenic B. Vassallo,

Chief, Operating Reactors Branch No. 2, Division of Licensing.

[FR Doc. 83-1092 Filed 1-13-83; 8:45 am]

BILLING CODE 7590-01-M

[Docket No. 50-482]

Kansas Gas & Electric Co., et al. (Wolf Creek Generating Station, Unit No. 1); Order Scheduling Prehearing Conference

A prehearing conference in this proceeding is scheduled for March 8, 1983, commencing at 10:00 a.m. in Coffey County Courthouse Basement Room, Sixth and Neosho Street, Burlington, Kansas 66839.

It is ordered that:

1. Attorneys in attendance must have full authority to stipulate for their clients.

2. Attorneys appearing at the prehearing conference will be those who will try the case.

3. Counsel shall meet or confer before the prehearing conference so that they will have an opportunity to reach agreement on the items which will be discussed at the conference.

It is further ordered that at the conference, counsel shall be prepared to discuss the following:

1. Simplification of the issues.

2. The date and place of the evidentiary hearing.

3. Lists of exhibits to be offered in evidence.

4. Identification of expert witnesses.

5. Scheduling advance filing of direct testimony.

6. Any remaining requests for discovery.

7. Any additional prehearing motions.

8. Stipulations concerning admission of facts, documentary evidence, and procedural matters.

9. Order of presentation of case.

10. Estimated length of hearing.

11. Scheduling trial briefs and cross-examination plans, if necessary.

12. Such other matters as may aid in the disposition of this matter.

Dated at Bethesda, Md., this 10th day of January 1983.

Atomic Safety and Licensing Board Panel.

James A. Laurenson,

Administrative Law Judge.

[FR Doc. 83-1093 Filed 1-13-83; 8:45 am]

BILLING CODE 7590-01-M

[Docket Nos. 50-282 and 50-306]

Northern States Power Co.; Issuance of Amendments to Facility Operating Licenses and Granting of Relief From ASME Section XI Inservice Testing Requirements

The U.S. Nuclear Regulatory Commission (the Commission) has issued Amendment No. 60 to Facility Operating License No. DPR-42, and Amendment No. 54 to Facility Operating License No. DPR-60 issued to Northern States Power Company (the licensee), which revised Technical Specifications (TSs) for operation of Prairie Island Nuclear Generating Plant, Unit Nos. 1 and 2 (the facilities) located in Goodhue County, Minnesota. The amendments are effective as of the date of issuance.

The amendments incorporate the provisions of the approved inservice testing program into the common TSs for the Prairie Island Nuclear Generating Plant Unit Nos. 1 and 2.

By letter dated January 4, 1983, as supported by the related Safety Evaluation, the Commission has also granted to the licensee relief from certain requirements of the ASME Code, Section XI, "Rules for Inservice Inspection of Nuclear Power Plant

Components". The relief relates to the inservice testing program for the facilities. The ASME Code requirements are incorporated by reference into the Commission's rules and regulations in 10 CFR Part 50. The relief is effective as of its date of issuance.

The applications for the amendments and requests for relief comply with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules and regulations. The Commission has made appropriate findings as required by the Act and the Commission's rules and regulations in 10 CFR, Chapter I, which are set forth in the license amendments and letter granting relief. Prior public notice of these amendments was not required since the amendments do not involve a significant hazards consideration.

The Commission has determined that the issuance of these amendments and the granting of this relief will not result in any significant environmental impact and that pursuant to 10 CFR 51.5(d)(4) an environmental impact statement or negative declaration and environmental impact appraisal need not be prepared in connection with issuance of this action.

For further details with respect to this action, see: (1) The licensee's filings dated October 15, 1976, October 12, 1977, February 1, 1978, September 15, 1978, June 8, 1980, September 3, 1980, July 31, 1981, and December 23, 1981, (2) Amendment Nos. 60 and 54 to License Nos. DPR-42 and DPR-60, (3) the Commission's letter to the licensee dated January 4, 1983, and (4) the Commission's related Safety Evaluation. All of these items are available for public inspection at the Commission's Public Document Room, 1717 H Street, NW., Washington, D.C. and at the Environmental conservation Library, 300 Nicollet Mall, Minneapolis, Minnesota 55401. A copy of items (2), (3) and (4) may be obtained upon request addressed to the U.S. Nuclear Regulatory Commission, Washington, D.C. 20555, Attention: Director, Division of Licensing.

Dated at Bethesda, Md., this 4th day of January 1983.

For the Nuclear Regulatory Commission.

Robert A. Clark,

Chief, Operating Reactors Branch No. 3, Division of Licensing.

[FR Doc. 83-1094 Filed 1-13-83; 8:45 am]

BILLING CODE 7590-01-M

[Docket No. 50-285]

Omaha Public Power District; Issuance of Amendment to Facility Operating License

The U.S. Nuclear Regulatory Commission (the Commission) has issued Amendment No. 66 to Facility Operating License No. NPF-40 issued to Omaha Public Power District (the licensee), which revised the Technical Specifications for operation of the Fort Calhoun Station, Unit 1, located in Washington County, Nebraska. The amendment is effective as of its date of issuance.

The amendment temporarily revises the minimum temperature requirement for secondary system pressure testing.

The application for the amendment complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules and regulations. The Commission has made appropriate findings as required by the Act and the Commission's rules and regulations in 10 CFR Chapter I, which are set forth in the license amendment. Prior public notice of this amendment was not required since the amendment does not involve a significant hazards consideration.

The Commission has determined that the issuance of this amendment will not result in any significant environmental impact and that pursuant to 10 CFR 51.5(d)(4) an environmental impact statement or negative declaration and environmental impact appraisal need not be prepared in connection with the issuance of this amendment.

For further details with respect to this action, see: (1) The application for amendment dated January 3, 1983, (2) Amendment No. 66 to License No. DPR-40, and (3) the Commission's related Safety Evaluation. All of these items are available for public inspection at the Commission's Public Document Room, 1717 H Street, NW., Washington, D.C. 20555 and at the W. Dale Clark Library, 215 South 15th Street, Omaha, Nebr. 68102. A copy of items (2) and (3) may be obtained upon request addressed to the U.S. Nuclear Regulatory Commission, Washington, D.C. 20555, Attention: Director, Division of Licensing.

Dated at Bethesda, Md., this 5th day of January, 1983.

For the Nuclear Regulatory Commission.

Robert A. Clark,

Chief, Operating Reactors Branch No. 3, Division of Licensing.

[FR Doc. 83-1095 Filed 1-13-83; 8:45 am]

BILLING CODE 7590-01-M

[Docket No. 50-311]

Public Service Electric & Gas Co., et al.; Issuance of Amendment to Facility Operating License

The U.S. Nuclear Regulatory Commission (the Commission) has issued Amendment No. 16 to Facility Operating License No. DPR-75, issued to Public Service Electric and Gas Company, Philadelphia Electric Company, Delmarva Power and Light Company and Atlantic City Electric Company (the licensees), which revised Technical Specifications for operation of the Salem Nuclear Generating Station, Unit No. 2 (the facility) located in Salem County, New Jersey. The amendment was effective November 22, 1982.

The amendment amends the Technical Specifications on a one-time basis to permit operation for an additional 12 hours with one component cooling water loop inoperable.

The application for the amendment complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules and regulations. The Commission has made appropriate findings as required by the Act and the Commission's rules and regulations in 10 CFR Chapter I, which are set forth in the license amendment. Prior public notice of this amendment was not required since the amendment does not involve a significant hazards consideration.

The Commission has determined that the issuance of this amendment will not result in any significant environmental impact and that pursuant to 10 CFR 51.5(d)(4) an environmental impact statement or negative declaration and environmental impact appraisal need not be prepared in connection with issuance of this amendment.

For further details with respect to this action, see: (1) The application for amendment dated November 22, 1982, (2) Amendment No. 16 to License No. DPR-75, (3) the Commission's letter dated November 23, 1982, and (4) the Commission's related Safety Evaluation. All of these items are available for public inspection at the Commission's Public Document Room, 1717 H Street, NW., Washington, D.C. and at the Salem Free Public Library, 112 West Broadway, Salem, N.J. A copy of items (2), (3) and (4) may be obtained upon request addressed to the U.S. Nuclear Regulatory Commission, Washington, D.C. 20555, Attention: Director, Division of Licensing.

Dated at Bethesda, Md., this 10th day of January, 1983.

For the Nuclear Regulatory Commission.

Steven A. Varga,

Chief, Operating Reactors Branch No. 1, Division of Licensing.

[FR Doc. 83-1097 Filed 1-13-83; 8:45 am]

BILLING CODE 7590-01-M

[Docket No. 50-333]

Power Authority of the State of New York; Issuance of Amendment to Facility Operating License

The U.S. Nuclear Regulatory Commission (the Commission) has issued Amendment No. 72 to Facility Operating License No. DPR-59 issued to the Power Authority of the State of New York (the licensee), which revised the Technical Specifications for operation of the James A. FitzPatrick Nuclear Power Plant (the facility), located in Oswego County, New York. The amendment is effective as of the date of issuance.

The amendment revises the definition of rated loop recirculation flow and extends the power/flow operating envelope within previously analyzed limits to provide more operating flexibility during power ascension and reduction operations.

The application for amendment complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules and regulations. The Commission has made appropriate findings as required by the Act and the Commission's rules and regulations in 10 CFR Chapter I, which are set forth in the license amendment. Prior public notice of the amendment was not required since the amendment does not involve a significant hazards consideration.

The Commission has determined that the issuance of the amendment will not result in any significant environmental impact and that pursuant to 10 CFR 51.5(d)(4) an environmental impact statement or negative declaration and environmental impact appraisal need not be prepared in connection with issuance of the amendment.

For further details with respect to this action, see: (1) The application for amendment dated February 20, 1981, as supplemented by letters dated November 18, 1981 and February 19, 1982, (2) Amendment No. 72 to License No. DPR-59, and (3) the Commission's related Safety Evaluation. All of these items are available for public inspection at the Commission's Public Document Room, 1717 H Street NW., Washington, D.C. and at the Penfield Library, State University College of Oswego, Oswego, N.Y. A copy of items (2) and (3) may be obtained upon request addressed to the U.S. Nuclear Regulatory Commission, Washington, D.C. 20555, Attention: Director, Division of Licensing.

Dated at Bethesda, Md., this 6th day of January 1983.

For the Nuclear Regulatory Commission.

Domenic B. Vassallo,

Chief, Operating Reactors Branch No. 2, Division of Licensing.

[FR Doc. 83-1096 Filed 1-13-83; 8:45 am]

BILLING CODE 7590-01-M

SMALL BUSINESS ADMINISTRATION

[License No. 09/09-0184]

Grocers Capital Company, Inc.; Application for Approval of Conflict of Interest Transaction Between Associates

Notice is hereby given that Grocers Capital Company (Grocers), 2601 S. Eastern Avenue, Los Angeles, California 90040, a Federal Licensee under the Small Business Investment Act of 1958, as amended, has filed an application with the Small Business Administration pursuant to Section 107.1004 of the Regulations governing small business investment companies (13 CFR 107.1004 (1982)) for approval of a conflict of interest transaction.

Grocers proposes to loan $100,000 to Kheirkhah, Inc., 301 N. Crescent Drive, Beverly Hills, California. The proceeds of the loan will be used to purchase equipment or inventory from Grocers Equipment Company (G.E.C.) and/or Certified Grocers of California, Ltd. (Certified), Associates of the Licensee.

All of Grocers' stock is owned by subsidiaries of Certified, a retailer owned grocery cooperative. G.E.C., a subsidiary of Certified, is a 41 percent shareholder of Grocers and is defined as an Associate by § 107.3 of the SBA Rules and Regulations.

As a result, Grocers' financing to Kheirkhah, Inc., fall within the purview of §§ 107.3 and 107.1004(b)(5) of the Regulations. Grocers' loan to Kheirkhah requires prior written approval of SBA.

Notice is hereby given that any person may, not later than 15 days from the date of publication of this Notice, submit written comments to the Deputy Associate Administrator for Investment, Small Business Administration, 1441 "L" Street, NW., Washington, D.C. 20416.

A similar Notice shall be published in a newspaper of general circulation in the Beverly Hills, California area.

(Catalog of Federal Domestic Assistance Program No. 59.011, Small Business Investment Companies)

Dated: January 5, 1983.

Robert G. Lineberry,

Deputy Associate Administrator for Investment.

[FR Doc. 83-1115 Filed 1-13-83; 8:45 am]

BILLING CODE 8025-01-M

[Proposed License No. 08/08-0057]

Transcontinental Growth Capital Corporation; Application for a License To Operate as a Small Business Investment Company

Notice is hereby given that an application has been filed with the Small Business Administration pursuant to Section 107.102 of the Regulations governing small business investment companies (13 CFR 107.102 (1982)), under the name of Transcontinental Growth Capital Corporation, 2430 Broadway, Suite E, Boulder, Colorado 80302, for a license to operate as a small business investment company (SBIC) under the provisions of the Small Business Investment Act of 1958, as amended (the Act), (15 U.S.C. 611 *et seq.*), and the Rules and Regulations promulgated thereunder.

The proposed officers, directors and shareholders of the Applicant are as follows:

President and Director
Thomas E. Willard, 7153 Cedarwood Circle, Boulder, Colorado 80301
Senior Vice President
J. Steven Barnard, 9423 E. Chenango Avenue, Englewood, Colorado 80111
Vice President
Kathleen Bottagaro, 4965 Twin Lakes Way, Boulder, Colorado 80301
Secretary/Treasurer
Norbert J. Lukas, 6970 Indian Peaks Avenue, Boulder, Colorado 80301
Director
Anthony G. Bottagaro, 4965 Twin Lake Way, Boulder, Colorado 80301
100 percent
Transcontinental Growth Capital, Holding Company

The officers, directors and shareholders of Transcontinental Growth Capital Holding Company are as follows:

President and Director 33.33 Percent
Thomas E. Willard
Vice President
Kathleen M. Bottagaro
Secretary/Treasury and Director 33.33 Percent
Norbert J. Lucas
Director 33.33 Percent
Anthony G. Bottagaro

There will be two classes of stock authorized: two million shares of common stock and two million shares of preferred stock. Initially only five hundred shares of common stock will be

issued with a resultant private capital of $500,000.

Applicant proposes to conduct its operations principally in the State of Colorado.

Matters involved in SBA's consideration of the application include the general business reputation and character of shareholders and management, and the probability of successful operations of the new company in accordance with the Act and Regulations.

Notice is hereby given that any person may not later than 15 days from the date of publication of this Notice, submit written comments to the Deputy Associate Administrator for Investment, Small Business Administration, 1441 "L" Street, NW., Washington, D.C. 20416.

A copy of this notice will be published in a newspaper of general circulation in Boulder, Colorado.

(Catalog of Federal Domestic Assistance Program No. 59.011, Small Business Investment Companies)

Dated: January 4, 1983.

Robert G. Lineberry,

Deputy Associate Administrator for Investment.

[FR Doc. 83-1114 Filed 1-13-83; 8:45 am]

BILLING CODE 8025-01-M

DEPARTMENT OF STATE

[Public Notice CM-8/595]

Joint Meeting of the Integrated Services Digital Network (ISDN) Working Party and Study Group D of the U.S. Organization for the International Telegraph & Telephone Consultative Committee (CCITT); Meeting

The Department of State announces that the ISDN Working Party and Study Group D of the U.S. Organization for the International Telegraph and Telephone Consultative Committee (CCITT) will meet on February 3, 1983 at 9:30 a.m. in Room 1408 of the Department of State, 2201 C Street, N.W., Washington, D.C. Study Group D deals with matters in telecommunications relating to the development of international digital data transmission. The ISDN Working Party deals with the evolution of ISDN within the CCITT.

The agenda for the February 3 meeting will include the following:

1. Report on the Study Group VII meeting (Geneva, December 3-17 1983);
2. Report of Modem Working Party, consideration of contributions for the Special Rapporteur's meeting on 4800 bps full duplex, 9600 bps full duplex and fast training sequence;
3. Report on ISDN related results from the meetings of Study Group VII and XI;
4. Consideration of contributions for the meeting of the Study.

Group XVIII Experts on ISDN (Kyoto 14-15 February 1983).

Members of the general public may attend the meeting and join in the discussion subject to the instructions of the Chair. Admittance of public members will be limited to the seating available. In that regard, entrance to the Department of State building is controlled and entry will be facilitated if arrangements are made in advance of the meeting. It is therefore requested that prior to February 3 persons who plan to attend the meeting inform Mr. William Lowell, Office of International Communications Policy, Department of State, telephone (202) 632-6583, of their intention. All attendees must use the C Street entrance to the building.

Dated: January 10, 1983.

Gordon L. Huffcutt,

Director, Acting, Office of International Communications Policy.

[FR Doc. 83-1044 Filed 1-13-83; 8:45 am]

BILLING CODE 4710-07-M

DEPARTMENT OF THE TREASURY

Customs Service

[T.D. 83-3]

Revocation of Customhouse Cartman's License No. 1816 Issued by District (Area) Director of Customs, Newark, to Port Terminal Refrigerated Transport, Inc.; Correction

This document corrects an error in the effective date of a notice relating to the revocation of Customhouse Cartman's License No. 1816 issued to Port Terminal Refrigerated Transport, Inc.

The following correction is made to the document published in the **Federal Register** on December 23, 1982, at page 57388, the effective date is corrected to read: "January 6, 1983".

Ronald W. Gerdes,

Assistant Chief Counsel (Administration and Legislation).

[FR Doc. 83-1060 Filed 1-13-83; 8:45 am]

BILLING CODE 4820-02-M

Sunshine Act Meetings

Federal Register
Vol. 48, No. 10
Friday, January 14, 1983

This section of the FEDERAL REGISTER contains notices of meetings published under the "Government in the Sunshine Act" (Pub. L. 94-409) 5 U.S.C. 552b(e)(3).

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1

COMMODITY FUTURES TRADING COMMISSION

TIME AND DATE: 10 a.m., Monday, January 31, 1983.

PLACE: 2033 K Street, N.W., Washington, D.C., fifth floor hearing room.

STATUS: Open.

MATTERS TO BE CONSIDERED: Second Quarter Objectives.

CONTACT PERSON FOR MORE INFORMATION: Jane Stuckey, 254-6314.

[S-56-83 Filed 1-12-83; 3:23 pm]

BILLING CODE 6351-01-M

2

COMMODITY FUTURES TRADING COMMISSION

TIME AND DATE: 11 a.m., Friday, January 28, 1983.

PLACE: 2033 K Street, N.W., Washington, D.C., eighth floor conference room.

STATUS: Closed.

MATTERS TO BE CONSIDERED: Surveillance Briefing.

CONTACT PERSON FOR MORE INFORMATION: Jane Stuckey, 254-6314.

[S-57-83 Filed 1-12-83; 3:23 pm]

BILLING CODE 6351-01-M

3

EQUAL EMPLOYMENT OPPORTUNITY COMMISSION

DATE AND TIME: Tuesday, January 18, 1983, 9:30 a.m. (eastern time).

PLACE: Commission Conference Room No. 5240, fifth floor, Columbia Plaza Office Building, 2401 E Street NW., Washington, DC. 20506.

STATUS: Part will be open to the public and part will be closed to the public.

MATTERS TO BE CONSIDERED:

1. Ratification of Notation Vote/s.
2. Report on Commission Operations (Optional).
3. Freedom of Information Act Appeal No. 82-11-FOIA-47-NO, concerning a request for documents from a Title VII Charge file.
4. Freedom of Information Act Appeal No. 82-10-FOIA-23-BA, concerning a request for memoranda from closed Title VII case files.
5. Freedom of Information Act Appeal No. 82-9-FOIA-142-NY, concerning a request for access to records in a charge file.
6. Biennial Filing of EEO-5 Reports.
7. Proposed revisions to ORA Case Review Procedures, Order 960.
8. A motion relating to the establishment of future Commission agenda items.
9. A motion relating to a study of Hispanic charges.
10. A motion relating to procedures for the consideration of the proposed field reorganization.

Closed:

1. Litigation Authorization; General Recommendations.
2. Proposed extension to an existing contract.

Note.—Any matter not discussed or concluded may be carried over to a later meeting. (In addition to publishing notices on EEOC Commission meetings in the **Federal Register**, the Commission also provides recorded announcements a full week in advance on future Commission sessions. Please telephone (202) 634-6748 at all times for information on these meetings).

CONTACT PERSON FOR MORE INFORMATION: Treva McCall, Executive Secretary to the Commission at (202) 634-6748.

This notice issued January 11, 1983.

[S-52-83 Filed 1-11-83; 4:09 pm]

BILLING CODE 6570-06-M

4

FEDERAL MARITIME COMMISSION

"FEDERAL REGISTER" CITATION OF PREVIOUS ANNCOUNCEMENT: 48 FR 921, January 7, 1983.

PREVIOUSLY ANNOUNCED TIME AND DATE OF THE MEETING: 9 a.m., January 11, 1983.

CHANGE IN THE MEETING: Addition of the following item to the closed session:

2. Docket No. 82-58: Actions to Adjust or Meet Conditions Unfavorable to shipping in the United States/Venezuela Trade—Consideration of the Record.

[S-51-83 Filed 1-11-83; 4:02 pm]

BILLING CODE 6730-01-M

5

FEDERAL MARITIME COMMISSION

TIME AND DATE: 9 a.m., January 19, 1983.

PLACE: Hearing room one, 1100 L Street, N.W., Washington, D.C. 20573.

STATUS: Open.

MATTER TO BE CONSIDERED: 1. Docket No. 82-13: Exemption of Bulk Cargo Moving in the Foreign Commerce of the United States From the Tariff Filing Requirements of Section 18(b) of the Shipping Act, 1916—Consideration of responses to notice of proposed rulemaking.

CONTACT PERSON FOR MORE INFORMATION: Francis C. Hurney, Secretary (202) 523-5725.

[S-54-83 Filed 1-12-83; 11:55 am]

BILLING CODE 6730-01-M

6

FEDERAL RESERVE SYSTEM

(Board of Governors)

TIME AND DATE: 10 a.m., Wednesday, January 19, 1983.

PLACE: 20th Street and Constitution Avenue, N.W., Washington, D.C. 20551.

STATUS: Closed.

MATTERS TO BE CONSIDERED:

1. Proposed acquisition of check sorters within the Federal Reserve System.
2. Personnel actions (appointments, promotions, assignments, reassignments, and salary actions) involving individual Federal Reserve System employees.
3. Any items carried forward from a previously announced meeting.

CONTACT PERSON FOR MORE INFORMATION: Mr. Joseph R. Coyne, Assistant to the Board (202) 452-3204.

Dated: January 11, 1983.

James McAfee,
Associate Secretary of the Board.

[S-53-83 Filed 1-12-83; 10:06 am]

BILLING CODE 6210-01-M

7

FEDERAL RESERVE SYSTEM

(Board of Governors)

"FEDERAL REGISTER" CITATION OF PREVIOUS ANNOUNCEMENT: 48 FR, 769, Thursday, January 6, 1983.

PREVIOUSLY ANNOUNCED TIME AND DATE OF THE MEETING: Approximately 11:00 a.m., Wednesday, January 12, 1983,

following a recess at the conclusion of the open meeting.

CHANGES IN THE MEETING: One of the items announced for inclusion at this meeting was consideration of any agenda items carried forward from a previous meeting; the following such closed item(s) was added:

Proposed changes to the Plans administered under the Federal Resere System's employee benefits program. (This item was originally announced for a meeting on December 13, 1982.)

CONTACT PERSON FOR MORE INFORMATION: Mr. Joseph R. Coyne, Assistant to the Board 452–3204.

[S-55-83 Filed 1-12-83; 3:23 pm]

BILLING CODE 6210-01-M

8

INTERNATIONAL TRADE COMMISSION

[USITC SE-83-03]

TIME AND DATE: 2:30 p.m., Tuesday, January 25, 1983.

PLACE: Room 117, 701 E Street, NW., Washington, D.C. 20436.

STATUS: Open to the public.

MATTERS TO BE CONSIDERED:

1. Agenda.
2. Minutes.
3. Ratifications.
4. Investigation TA-201-47 (Motorcycles and Motorcyle Power Train Subassemblies)—briefing and vote on remedy, if necessary.
5. Investigations 731-TA-116 and -117 (Preliminary) (Carton-Closing Staples and Nonautomatic Carton-Closing Staple Machines from Sweden)—briefing and vote.
6. Investigation 731-TA-89 (Final) (Prestressed Concrete Stell Wire Strand from the United Kindgom)—briefing and vote.
7. Any items left over from previous agenda.

CONTACT PERSON FOR MORE INFORMATION: Kenneth R. Mason, Secretary (202) 523-0161.

[S-60-83 Filed 1-12-83; 3:26 pm]

BILLING CODE 7020-02-M

9

INTERNATIONAL TRADE COMMISSION

TIME AND DATE: 2:30 p.m., Thursday, January 27, 1983.

PLACE: Room 117, 701 E Street, NW., Washington, D.C. 20436.

STATUS: Open to the public.

MATTERS TO BE CONSIDERED:

1. Petitions and complaints:
   a. Anhydrous ammonia from Mexico (Docket No. 891).
   b. Certain marine hardware (Docket No. 901).
2. Investigations 104-TAA-11 and -12 (Float Glass from Belgium and Italy)—briefing and vote.
3. Any items left over from previous agenda.

CONTACT PERSON FOR MORE INFORMATION: Kenneth R. Mason, Secretary (202) 523-0161.

[S-59-83 Filed 1-12-83; 3:26 pm]

BILLING CODE 7020-02-M

federal register

Friday
January 14, 1983

Part II

Department of Labor

Occupational Safety and Health Administration

Occupational Exposure to Inorganic Arsenic; Supplemental Statement of Reasons for Final Rule

DEPARTMENT OF LABOR

Occupational Safety and Health Administration

29 CFR Part 1910

Occupational Exposure to Inorganic Arsenic

AGENCY: Occupational Safety and Health Administration (OSHA), Labor.

ACTION: Supplemental Statement of Reasons for the Final Rule.

SUMMARY: This notice presents the final assessment of the degree of risk from occupational exposure to inorganic arsenic and the signficance of that risk. OSHA issued a standard in 1978 reducing the permissible exposure limit for inorganic arsenic from 500 $\mu g/m^3$ to 10$\mu g/m^3$, the lowest feasible level, based on substantial human data associating excess lung cancer with exposure to inorganic arsenic (43 FR 19589, May 5, 1978; 29 CFR 1910.1018). There was quantitative evidence of risk below 500 $\mu g/m^3$. However, at that time OSHA had not quantitatively estimated risk at low levels nor made a formal signficant risk determination. Subsequently, the Ninth Circuit Court of Appeals ordered the Agency to receive additional evidence and make additional findings on these issues as required by *Industrial Union Department* v. *American Petroleum Institute*, 448 U.S. 607 (1980). Pursuant to that order OSHA published a notice (47 FR 15358, April 9, 1982) presenting three risk assessments and OSHA's preliminary analysis, requesting comments and scheduling a hearing. After analyzing all the evidence, OSHA concludes that a significant risk is presented by inorganic arsenic at the 500 $\mu g/m^3$ level and that the 10 $\mu g/m^3$ inorganic arsenic standard is needed to substantially reduce a significant risk of lung cancer. The 10 $\mu g/m^3$ standard, which has remained in effect subject to limited stays during the reopening of the record pursuant to the Court's order, therefore, continues in effect.

EFFECTIVE DATE: The inorganic arsenic standard went into effect on August 1, 1978. This supplemental statement takes effect on January 14, 1983.

ADDRESS: For additional copies of the Supplemental Statement contact: OSHA Office of Publications, U.S. Department of Labor, Room H-3423, 200 Constitution Avenue, N.W., Washington, D.C. 20210, telephone 202-523-8677.

FOR FURTHER INFORMATION CONTACT: Mr. James F. Foster, OSHA, U.S. Department of Labor, Office of Public Affairs, Rm. N-3641, 200 Constitution Avenue, N.W., Washington, D.C. 20210, Telephone (202) 523-8151.

SUPPLEMENTARY INFORMATION:

Background

In 1971, in accordance with section 6(a) rulemaking procedures of the Occupational Safety and Health Act of 1970, OSHA adopted the consensus standards for "arsenic and its compounds" at 0.5 mg As/m^3, lead arsenate at 0.15 mg/m^3, and calcium arsenate at 1.0 mg/m^3 as determined on an eight-hour time weighted average basis. These levels were based on the 1968 ACGIH list of Threshold Limit Values for Chemical Substances and Physical Agents in the Workroom Environment (TLV's).

OSHA began the process of revising the 1971 standard after receipt of the National Institute for Occupational Safety and Health document, "Criteria for a Recommended Standard . . . Occupational Exposure to Inorganic Arsenic." published in 1973. The National Institute for Occupational Safety and Health (NIOSH) recommended that no worker be exposed to a concentration of arsenic greater than 50 micrograms per cubic meter ($\mu g/m^3$) of air determined as a time-weighted average (TWA) exposure for up to a 10-hour workday, over a 40-hour work week. This standard was based on reports that associated occupational exposure to inorganic arsenic with the induction of cancer. On September 20, 1974, following a notice published in the **Federal Register**, OSHA conducted an informal fact-finding hearing on the potential health hazards associated with occupational exposure to inorganic arsenic.

On November 8, 1974, NIOSH sent to OSHA new recommendations for inorganic arsenic including a more stringent permissible exposure limit of 2 $\mu g/m^3$ of air as determined over a 15-minute sampling period. NIOSH based these new recommendations on additional significant information, along with earlier reports on the carcinogenicity of inorganic arsenic. The new recommendations appeared in a revised criteria document published in 1975.

On January 21, 1975, a proposed standard to control occupational exposure to inorganic arsenic to a limit of 4 $\mu g/m^3$ was published by OSHA in the **Federal Register** (40 FR 3392). The proposal included a detailed preamble describing the rationale for the proposed standard, the information relied upon in its development and the provisions of the proposed standard. The notice requested the submission of written comments, data, views and arguments on all the issues raised by the proposal and scheduled an informal public hearing pursuant to section 6(b)(3) of the Act commencing April 8, 1975. A notice of the availability of a Technological Feasibility Analysis and Inflationary Impact Statement was published on June 24, 1976 (41 FR 26029) and the record on feasibility issues and new scientific data was reopened. Another informal hearing on feasibility issues commenced on September 8, 1976.

On May 5, 1978 a final standard regulating occupational exposure to inorganic arsenic as a confirmed carcinogen was published in the **Federal Register** (43 FR 19584). This standard (29 CFR 1910.1018) applied to all employments in all industries except pesticide application, agriculture, and the treatment and use of arsenically preserved woods. The standard reduced the permissible exposure level from 500 $\mu g/m^3$ to 10 $\mu g/m^3$ and established requirements for monitoring, control strategy, medical surveillance, and other provisions. OSHA concluded, based on the evidence contained in the record, which included a number of high quality human studies associating inorganic arsenic exposure with excess risk of lung cancer, that inorganic arsenic is a carcinogen, that no safe level of exposure can be demonstrated, and that 10 $\mu g/m^3$ is the lowest feasible level to which employee exposure could be controlled.

Shortly after its promulgation, the inorganic arsenic standard was challenged by industry in several U.S. Courts of Appeals. The cases were consolidated in the U.S. Court of Appeals for the Ninth Circuit in three cases, *ASARCO Inc., et al.* v. *OSHA*, No. 78-1959, *The Anaconda Co. et al.* v. *OSHA*, Nos. 78-2764, 3038 and *General Motors, et al.* v. *OSHA*, Nos. 78-2477 and 2478.

The ASARCO case was briefed and argued. Prior to decision, the Ninth Circuit Court on its own motion withdrew the case from consideration pending the decision of the Supreme Court in *Industrial Union Dept.* v. *American Petroleum Institute*, 448 U.S. 607 (1980), the benzene decision. The Supreme Court held in that case that the agency must make a determination of significance of risk prior to issuing a standard.

During the rulemaking proceedings on arsenic, OSHA had not made any estimates of the degree of risk at low levels of exposure to inorganic arsenic. In light of the Supreme Court's benzene decision, therefore, industry representatives petitioned the Ninth

Circuit to vacate the inorganic arsenic standard and remand it to OSHA for reconsideration. OSHA agreed that the standard should be remanded for the purpose of analyzing the quantitative degree of risk and for the purpose of arriving at a determination of the significance of that risk as required by *Industrial Union Dept.* v. *American Petroleum Institute*. However, OSHA requested that the standard remain in effect during the period of the remand because, unlike the benzene standard, there were measured data showing excess cancer risk at levels below the prior (500 $\mu g/m^3$) exposure limit. In addition, three risk assessments performed on inorganic arsenic after issuance of the standard indicated excess risk at levels of exposure well below the 500 $\mu g/m^3$ level.

On April 7, 1981 the Ninth Circuit Court of Appeals issued the following order:

> This matter is remanded to permit respondent to reopen the record to receive additional evidence and to make additional findings in the light of *Industrial Union Department* v. *American Petroleum Institute*, 488 U.S. 607, 100 S. Ct. 2844 (1980). If respondent determines the permissible exposure level for inorganic arsenic should be adjusted, the respondent shall amend the standard accordingly. Jurisdiction is retained. The matter shall be resubmitted to this court on the amended record no later than one year from the date of this order. * * *
>
> The occupational health standard regulating employee exposure to inorganic arsenic shall remain in effect pending the resubmission of this matter to this court, and until further order of this court, except insofar as petitioners have obtained stays from this court or variances from the respondent.

Thus, the inorganic arsenic standard has been and remains in effect for all employers except for limited stays granted by the Ninth Circuit to ASARCO, Inc., on June 19, 1979, the Bunker Hill Co., on December 11, 1979, the Anaconda Co., on December 28, 1979 and Kennecott Copper Corp., on November 19, 1981 for their facilities only. The stays basically permit those companies only, to achieve the 10 $\mu g/m^3$ exposure limit with respiratory protection rather than engineering controls. Except for the requirement to build new filtered-air lunchrooms at their facilities, all other provisions of the standard are in effect for those companies.

Some automotive manufacturers requested permanent variances from the arsenic standard's (as well as the lead standard's) provisions for engineering controls and certain other requirements for their solder-grind operations. Lead-arsenic solder, used to fill body joints, is ground smooth in these operations. The companies stated that there were no feasible engineering controls available to reduce exposure to 10 $\mu g/m^3$ and that supplied-air respirators, hoods and suits provided appropriate protection. OSHA granted variances permitting the affected companies (General Motors, 45 FR 46922, July 11, 1980; Chrysler, 45 FR 74096, November 7, 1980; Ford, 46 FR 32520, June 23, 1981) to use supplied-air respirators to comply with the 10 $\mu g/m^3$ permissible exposure limit. Certain additional requirements were specified in the variance grants, including a provision that the companies were to attempt to eliminate the use of lead-arsenic solder by developing appropriate substitutes.

OSHA published in the **Federal Register** on April 9, 1982 (47 FR 15358), a notice pursuant to the Court order reopening the inorganic arsenic rulemaking record for the purpose of receiving evidence and making findings on the degree of risk from occupational exposure to arsenic and the significance of that risk, and making any adjustments to the standard as may be warranted by the additional evidence and findings on risk. The notice briefly reviewed the science of risk assessment, summarized three risk assessments performed for inorganic arsenic, stated the reasons for OSHA's preliminary assessment of risk and stated OSHA's preliminary judgment of the significance of the predicted risk. Comments were requested on the above issues, the three risk assessments presented, and OSHA's preliminary judgments. Public comments were requested by June 18, 1982 and an informal public hearing was held on July 13–16, 1982. Post-hearing submissions of additional information were due on August 13, 1982 and final briefs were due on September 3, 1982.

A number of interested parties participated, including trade associations, companies, unions and members of the general public. A number of scientists testified and responded to cross-examination. Many studies, statements and comments were submitted into the record. The record was certified by the Administrative Law Judge on November 24, 1982.

OSHA has now reviewed all the evidence in the record. In this document, as ordered by the Ninth Circuit Court of Appeals, OSHA reviews in depth the evidence on the degree of risk presented by inorganic arsenic and its significance. It sets forth OSHA's final judgments on these issues and OSHA's conclusion that the 10 $\mu g/m^3$ standard for inorganic arsenic is needed to substantially reduce a significant risk of lung cancer. This document does not repeat analysis of studies presented in the preamble accompanying the issuance of the final inorganic arsenic standard unless needed for purposes of updating or to clarify discussion. This document reviews new health data which have become available since 1977.

The following is an outline of this **Federal Register** Notice.

I. Summary of OSHA's Analysis
II. Background and General Considerations
  A. Background
  B. General Issues in Quantitative Risk Assessment
  C. Miscellaneous Issues
III. Epidemiologic Studies
  A. Introduction
  B. Anaconda Copper Smelter
  C. Analysis of Studies of Anaconda Copper Smelter
  D. ASARCO Copper Smelter
  E. Analysis of Studies of ASARCO Copper Smelter
  F. Urine-Air Correlation
  G. Additional Studies
  H. Effects of Smoking
  I. Effects of Other Exposures
  J. Conclusions
IV. Quantitative Risk Assessment
  A. Summary of Risk Assessments
  B. Estimating Risks
  C. Conclusions
V. Other Health Issues
  A. Animal Studies
  B. Mutagenicity and Cytogenetic Effects
  C. Teratologic and Reproductive Studies
  D. Interconversion
  E. Carcinogenicity of Pentavalent Arsenic
  F. Essentiality
  G. Mode of Action
  H. Power Plants
VI. Summary of Evidence, Conclusions and Significant Risk
  A. OSHA's Approach
  B. Quality of Underlying Studies
  C. Reasonableness of the Risk Assessments
  D. Further Research
  E. Statistical Significance and Type of Risk
  F. Significance of Risk
VII. Regulatory Analyses
VIII. Authority

I. Summary of OSHA's Analysis

OSHA's overall analytic approach for setting worker health standards is a four-step process consistent with recent court interpretations of the Occupational Safety and Health Act and rational, objective, policy formulation. In the first step, risk assessments are performed where possible and considered with other relevant factors to determine whether the substance to be regulated poses a significant risk to workers. Then in the second step, OSHA considers which, if any, of the proposed standards being considered for that substance will substantially reduce the risk. In the third step, OSHA looks at the best available data to set the most protective exposure limit necessary to reduce significant risk that is both

technologically and economically feasible. In the fourth and final step, OSHA considers the most cost-effective way to achieve the objective.

The Ninth Circuit's remand provided that OSHA consider the issues presented by the first two steps and the elements of the third step dealing with risk issues. This final **Federal Register** document directly addresses those matters. A cooperative evaluation by technical experts from OSHA, the smelter companies and the United Steelworkers of America, which is not part of this record, gives additional consideration to the final steps.

It is appropriate to consider a number of different factors in arriving at a determination of significant risk with respect to inorganic arsenic. The Supreme Court gave some general guidance as to the process to be followed. It indicated that the Secretary is to make the initial determination of the existence of a significant risk, but recognized that "while the Agency must support its finding that a certain level of risk exists with substantial evidence, we recognize that its determination that a particular level of risk is 'significant' will be based largely on policy considerations." (*IUD* v. *API*, 448 U.S. 655, 656, n. 62). In order for such a policy judgment to have a rational foundation, it is appropriate to consider such factors as quality of the underlying data, reasonableness of the risk assessment, statistical significance of the findings, the type of risk presented and the significance of the numerical risk relative to other risk factors.

In the April 9, 1982 (47 FR 15358) document which opened the issue of significant risk, OSHA pointed out that there were a number of high quality epidemiology studies such as Lee and Fraumeni, Pinto and Enterline, Ott et al., and Hill and Faning which strongly associated exposure to inorganic arsenic with excess risk of lung cancer among workers in both smelters and chemical plants. Many of these studies demonstrated a good dose response relationship and provided a good basis for risk assessment. Several demonstrated measured excess risk below the prior 500 $\mu g/m^3$ exposure limit. For example, the Lee and Fraumeni study indicated that for long term exposure to inorganic arsenic a 445 to 567% excess risk (334 to 425 excess cases per 1000 exposed employees) of lung cancer exists at 580 $\mu g/m^3$ and a 150 to 210% excess risk (112 to 158 excess cases per 1000 exposed employees) exists at 290 $\mu g/m^3$.

During the notice and comment period OSHA received published versions of additional studies, including Lee-Feldstein, Enterline and Marsh, Higgins et al., Mabuchi et al., and Lubin et al., which continued to strongly associate exposure to inorganic arsenic with excess risk of lung cancer. Recently, the International Agency for Research on Cancer, the World Health Organization-Arsenic Working Group and the Chemical Manufacturers Association have also judged inorganic arsenic to be a human carcinogen. The new data is of high quality and confirms OSHA's earlier conclusion that inorganic arsenic is strongly associated with excess risk of lung cancer. The new data also includes measured excess risk below 500 $\mu g/m^3$. For example, the Lee-Feldstein study covering 8045 employees and including 4448 low exposure workers whose average exposure was 290 $\mu g/m^3$, and whose mortality was observed over a 39 year period, indicates a 131% excess risk for those low exposure employees. Also, Enterline and Marsh observed a 168% excess risk for employees exposed to an average of 49 $\mu g/m^3$ (estimated from urinary level of 163 $\mu g/l$) for 10–19 years.

In the April 9th document, OSHA pointed out that a number of the epidemiology studies provided a good basis for risk assessment because of their high quality and because of the availability of quantitative estimates of exposure. OSHA presented three risk assessments and reached the preliminary conclusion that they presented reasonable estimates of risk, with OSHA selecting as most reasonable estimates ranging from a 500–620% excess risk (375 to 465 excess cases of lung cancer 1000 exposed employees) for a working lifetime of exposure at 500 $\mu g/m^3$ to a 10–14% excess risk (7 to 10 excess cases per 1000) at 10 $\mu g/m^3$. These estimates were based on a linear model. OSHA also presented estimates based on a quadratic model, but new analysis indicate that the data strongly supports a linear model in the case of inorganic arsenic.

Additional data were submitted which strongly support estimates of risk in this range. Dr. Crump submitted risk assessments based on the new epidemiologic studies which were in this range and which demonstrated good fits between the data and the linear model. Dr. Radford submitted an estimate of risk which was somewhat higher and Dr. Enterline an estimate which was somewhat lower. The National Institute of Occupational Safety and Health agreed with OSHA's estimates and approach.

Based on the earlier data and the data submitted in response to the April 9th document, OSHA concludes that the range of reasonable estimates of risk from a working lifetime of exposure to inorganic arsenic are from 148 to 767 excess deaths from lung cancer per 1000 exposed employees at 500 $\mu g/m^3$ to 2.2 to 29 excess lung cancer deaths per 1000 exposed employees at 10 $\mu g/m^3$. The OSHA preferred estimates within that range are approximately 400 excess deaths per 1000 at 500 $\mu g/m^3$, 40 excess deaths per 1000 at 50 $\mu g/m^3$ and 8 excess deaths per 1000 at 10 $\mu g/m^3$.

Consultants in Environmental and Occupational Health (CEOH) presented an alternate analysis principally based on the results of the study by Higgins et al. Employees with average exposures between 100 and 500 $\mu g/m^3$, including those who had peak exposures over 500 $\mu g/m^3$, had statistically significant increased respiratory cancer mortality. However, they found that employees whose ceiling exposures never exceeded 500 $\mu g/m^3$ had SMR's between 116 and 129 (16 to 29% excess risk), which were not statistically significant (Method I analysis). CEOH, therefore, suggested that 500 $\mu g/m^3$ was a practical threshold and there would be little excess risk for employees with no peak exposures over that limit.

This hypothesis is not nearly as strongly supported as the estimates of risk OSHA has presented. First, the OSHA estimates are based on a generally accepted model, with a biologic basis, which fits well a substantial body of high quality data. Second, both the Lee and Fraumeni, and Lee-Feldstein studies of the entire Anaconda cohort (not just 22%) demonstrated a statistically significant excess risk (from 86% to 213%) for low exposure employees who did not have any peak exposures over approximately 500 $\mu g/m^3$. This result directly contradicts the ceiling hypothesis. Third, the Higgins data was based on a 22% sampling of Anaconda employees, resulting in very low statistical power. The study only had a 16–37% chance of detecting a 50% excess risk, if it actually existed. Fourth, the employees actually had an excess risk (under Higgins Method I analysis) which was not very different (116–129 SMR) from OSHA's estimate (150 SMR) for employees with their relatively low average exposure. Fifth, the ceiling hypothesis has only been preliminarily tested at one location and before the possibility would develop of general acceptance in the scientific community, there would need to be supportive results in a number of locations.

Based on measured data in the record of excess risk below 500 $\mu g/m^3$ and estimates from the risk assessments

summarized above and discussed in depth below indicating approximately 400 excess cases per 1000 exposed employees at 500 $\mu g/m^3$. OSHA concludes that a significant risk is presented by inorganic arsenic at the prior 500 $\mu g/m^3$ limit and that a lower exposure limit is needed. The Ninth Circuit has already agreed with this conclusion stating "it is undisputed that exposure to inorganic arsenic at the level of 500 $\mu g/m^3$ * * * poses a significant health risk . . . "(ASARCO et al. v. OSHA, supra, Memorandum, April 7, 1981, p. 3).

OSHA also concludes, based on the estimates from the risk assessments and the dose-response demonstrated in many of the epidemiology studies, that a 10 $\mu g/m^3$ exposure limit, the lowest level feasible, together with the industrial hygiene provisions in the arsenic standard are necessary and appropriate to significantly reduce the health risk. These requirements will very substantially reduce the risk, by approximately 98%, and will protect employees principally in the nonferrous metal smelting, automobile and arsenical chemical industries.

Finally OSHA concludes that the new inorganic arsenic standard setting exposures at 10 $\mu g/m^3$ does not reduce the risk of the exposure to inorganic arsenic below the level of significance. The level of risk from working a lifetime of exposure at 10 $\mu g/m^3$ is estimated at approximately 8 excess lung cancer deaths per 1000 employees. OSHA believes that this level of risk does not appear to be insignificant. It is below risk levels in high risk occupations but it is above risk levels in occupations with average levels of risk. The OSHA Act was enacted in order to reduce significant risk insofar as feasible. It should be noted that the Supreme Court stated as to a 1 in 1000 level of risk of fatality that "a reasonable person might well consider the risk significant and take appropriate steps to decrease or eliminate it" (*IUD.* v. *API*, 448 U.S. 655). OSHA believes the risk assessments and significant risk analysis support the retention of the 10 $\mu g/m^3$ level.

By achieving the 10 $\mu g/m^3$ limit, industry will have taken reasonable steps to protect their employees from the risks of arsenic. Substantial progress has already been made. Separate from this notice, and not part of this record, OSHA proposed to the affected smelter companies and the United Steel workers of America, which represents smelter workers, a cooperative assessment by technical experts representing the three sectors to evaluate control methodology to protect employees while maintaining the efficiency of the smelting industry. This suggestion was accepted by USWA, ASARCO, and Kennecott. Agreements carrying out this proposal have been signed by OSHA, ASARCO and the United Steelworkers for 5 ASARCO facilities, and OSHA believes those parties have made exceptional progress in protecting exposed employees.

II. Background and General Considerations

A. Background

Based on legal considerations and Agency policy views applicable at the time, the 1978 inorganic arsenic standard did not include a quantitative risk assessment. OSHA pointed out that the results of quantitative risk assessments were somewhat speculative, that the methodology used bordered on the frontiers of scientific knowledge and that there was no adequate scientific basis to verify the mathematical estimates derived by risk assessments that would reflect a realistic expectation of the incidence of tumor induction (43 FR 19617).

Subsequent to the issuance of the inorganic arsenic standard, however, the Supreme Court ruled that the OSH Act requires that, prior to issuance of a new standard, a determination be made that a significant risk exists and that the new standard will significantly reduce or eliminate that risk. The court stated that "before he can promulgate any permanent health or safety standard, the Secretary is required to make a threshold finding that a place of employment is unsafe—in the sense that significant risks are present and can be eliminated or lessened by a change in practices" (488 U.S. 642). The Court also stated "that the Act does limit the Secretary's power to requiring the elimination of significant risks" (448 U.S. 644).

The Court indicated, however, that the significant risk determination is "not a mathematical straitjacket," and that "OSHA is not required to support its finding that a significant risk exists with anything approaching scientific certainty." The Court ruled that "a reviewing court [is] to give OSHA some leeway where its findings must be made on the frontiers of scientific knowledge [and that] * * * the Agency is free to use conservative assumptions in interpreting the data with respect to carcinogens, risking error on the side of over-protection rather than under-protection" (488 U.S. 655, 656). The Supreme Court thereby acknowledged that risk assessments, which may involve mathematical estimates with some inherent uncertainties, are nevertheless valid for demonstrating the existence of a significant risk.

This finding by the Court mitigates some of the previous concern that OSHA had expressed about quantitative risk assessments. Keeping in mind that the predictions of risk presented are estimates and not certain hard numbers, OSHA believes that the predictions derived from the risk analyses performed on arsenic are reasonable.

B. General Issues in Quantitative Risk Assessment

A quantitative risk assessment is an attempt to predict the degree of risk associated with a specific level of exposure. This is done either through direct observation or by extrapolation, a statistical technique used to estimate risk at levels outside the range of observed exposure levels.

In performing a quantitative risk assessment there are several important components which must be considered.

1. *A description of the hazard which poses the risk.* The principal hazard that the 10 $\mu g/m^3$ standard addresses is lung cancer. In the 1978 preamble to the final inorganic arsenic standard, OSHA made the determination that although there were other significant health hazards attributable to arsenic exposure, the evidence of respiratory cancer in humans was substantial and unequivocal. There is evidence that arsenic is associated with skin cancer and it is considered a systemic poison at levels substantially higher than 10 $\mu g/m^3$. However, the 10 $\mu g/m^3$ level will provide substantial protection against these other hazards. Because of the serious nature of lung cancer and substantial body of evidence associating arsenic with lung cancer, the quantitative risk assessments discussed below center on lung cancer mortality as the major response.

2. *A description of the potential exposure and worker scenarios.* Comparability in route and duration of exposure as well as carcinogenic response (e.g., same site of tumors) increases confidence in the prediction of risk from one observed population to another population. The use of epidemiological data obtained from one worker population to estimate the risk to another worker population, therefore, has the advantage that it eliminates the need to extrapolate from a more general or heterogeneous population. Furthermore, a greater degree of confidence can be placed in extrapolations from human studies than from results derived from laboratory animal studies.

There are many studies discussed in the 1978 document associating inorganic arsenic exposure with respiratory cancer. A number of these, though good studies, do not provide enough information on degree of exposure to be as useful in performing a quantitative risk assessment. There were three studies in which worker exposures have been documented well enough for quantitative risk assessment purposes. Two of these (Lee and Fraumeni 1969 and Pinto and Enterline 1975) formed the basis of the primary studies used in the three risk assessments presented by OSHA in the April 9, 1982 proposal.

The third, the study by Ott et al. has some data on exposure characterization, though the data are not considered as strong as that in Lee and Fraumeni and Pinto and Enterline. The Ott et al. data have been incorporated into several of the quantitative risk assessments.

Several other studies which have become available during the current rulemaking proceeding and which broaden the base for OSHA's current finding of significant risk are discussed in detail below. Each is assessed for its quality in the following areas which strongly influence the prediction of risk:

(i) Classification of workers' exposure;
(ii) Duration of exposure;
(iii) Concomitant exposures;
(iv) Response for a given exposure.

3. *A description of the dose-response relationship and a quantitative determination of risk.* Determining risk at the pre-1978 PEL of 500 $\mu g/m^3$ involves little estimation because the 500 $\mu g/m^3$ PEL falls within the range of the dose levels actually observed in the epidemiologic studies and no extrapolation of data was necessary. Predicting risk at the 1978 PEL of 10 $\mu g/m^3$ involves estimation at dose levels lower than those seen in the study populations, i.e., a low-dose extrapolation. For each dose group of workers associated with exposure to a certain amount of arsenic (dose), there is a measured risk of lung cancer (response). Generally, as exposures increase, the risk increases. In order to make the low-dose extrapolation, a mathematical relationship between dose and response is established using the experimental data; that is, a curve is "fit" to the data. This is done using statistical techniques involving plausible biological models for the general shape of the mathematical curve. In order to predict a response outside the experimental range, it is then assumed that this same mathematical relationship will hold in the range of doses that were not observed. By "reading off" the curve, one is able to estimate the risk at any dose level. Confidence in the risk estimates is increased if (1) the assumptions "reflect the expected experience of workers in a fashion that most people find reasonable," and (2) the "extrapolation is not required to extend far beyond the range of actual measurement." (Ex. 201-4, p. 2.)

The quantitative estimation of risk depends on the choice of the mathematical model (if one is used) and the biological assumptions which influence the model (such as threshold, promotion, etc.). Factors that impact on the choice of a model and the interpretations that can be placed on the estimates of risk will be discussed later in the document.

Last, considerations of the significance of risk must be made to comply with the mandate of the benzene decision.

4. *Terminology and Definitions.* There are several components which are common to most quantitative risk assessments: there will be a *dose*, a level of exposure which can be quantified for a specific period of time; a *measure of risk* or response, often expressed as excess risk and related to some reference population; and a *model*, the mathematical function used to describe the data.

The expressions of dose found in the quantitative risk assessments for inorganic arsenic encompass two dimensions: 1) intensity, which refers to actual level or degree of exposure which can be attributed to a specific group, and 2) duration, which refers to the length of time the subject is exposed. Intensity is commonly expressed as an "average" exposure or as a ceiling or peak exposure. Measures of cumulative dose include the dimension of duration, such as a *lifetime* dose, or a multiplication of intensity times the number of years exposed to compute a "total" dose ($\mu g/m^3$-years).

Risk statistics are presented in two basic formats. The first is the percentage of excess risk of respiratory cancer above the background level. For example, based on the Lee and Fraumeni data the OSHA estimated excess risk of 68% for workers exposed to 50 $\mu g/m^3$ of arsenic for a working lifetime means that those workers would have a 68% greater chance of dying of lung cancer than an equivalent group of workers not exposed to inorganic arsenic.

In the preamble to the final inorganic arsenic standard, the April 9, 1982 document, and many epidemiology studies, results are presented in the form of a standardized mortality ratio or SMR. The standardized mortality ratio is defined as the observed number of deaths divided by the expected number of deaths and is usually expressed as a percentage. In that system of notation, the normal death rate for a group from a specific cause is stated as 100 and a 68% increase above the normal rate would be indicated as an SMR of 168.

The excess risk of lung cancer from inorganic arsenic exposure is also presented as the number of lung cancer deaths per 1000 exposed workers over a lifetime. For example, a 68% excess risk of lung cancer death for workers, as mentioned above, would be 51 excess lung cancer deaths per 1000 exposed workers over those workers' lifetimes. This number represents the increased number of lung cancer deaths due to inorganic arsenic exposure above the normal level of deaths from lung cancer for each 1000 exposed employees.

The two non-threshold mathematical models for cancer initation which have been employed in the quantitative risk assessments presented are the linear model and the quadratic model. Both of the models have been selected for their biological plausibility in describing the processes of carcinogenesis.

The models predict that risk is proportional to dose (linear model) or the square of the dose (quadratic model) and assume that there will be a common biologic response to the insult over the entire range of doses. Predictions based on the linear model are also consistent with estimates which would result from the multistage model at low doses. The multistage model is based on the theory that several stages are required prior to cancer development, a theory which is also consistent with known biologic mechanisms (Ex. 201-6, 201-7).

A threshold model has been hypothesized by several of the participants in the hearings. A threshold model assumes that there exists some dose of arsenic below which a response (in this case, lung cancer) will not occur.

These factors are the important determinants of the degree of risk predicted from exposure to inorganic arsenic at the 500 $\mu g/m^3$ and 10 $\mu g/m^3$ levels and are discussed in detail in the following sections.

C. Miscellaneous Issues

Several participants suggested that OSHA had not followed its internal management procedures. Though not a matter subject to judicial review, OSHA has followed its internal management procedures which included some modifications for those substances like inorganic arsenic which were quite far along when the internal system was instituted.

Several participants submitted some esconomic feasibility data and argued

that OSHA must reopen the rulemaking on that issue. OSHA does not believe that its is required to do so. This rulemaking was directly pursuant to a Ninth Circuit order which ordered OSHA to consider the issues of degree and significance of risk and any changes to the standard resulting from the analysis, and to complete the consideration within a brief period of time. The Court has retained jurisdiction of the case and did not order OSHA to reopen any other issue. The April 9, 1982 **Federal Register** document gave notice of reopening the issues ordered reopened by the Court.

OSHA has held two full rounds of notice and comment rulemaking on feasibility issues, each of which included week long oral hearings. At least four major feasibility studies by Arthur Young & Co., Arthur D. Little, Inc., D.B. Associates and Industrial Health Engineering Associates were submitted as was an Inflationary Impact Statement and much other data. OSHA has fulfilled the notice, comments and hearing requirements of the OSH Act.

OSHA has briefly reviewed the feasibility data submitted, has stated it will consider it as a petition to amend the standard and will take appropriate actions based on the merits of the data and other agency priorities. However, the record is ample to support OSHA's decisions and such possible future actions should not be a basis for delaying any judicial review. OSHA is always considering the need to amend standards based on public suggestions, and that possibility, if a basis for not completing a review, would mean that there never would be finality of any agency action.

Several participants suggested technical changes to the monitoring and medical provisions of the standard including the elimination of sputum cytology. The Motor Vehicle Manufacturer's Association suggested a series of changes to the industrial hygiene provisions of the standard. Again, the Court did not order the agency to reopen the record on these issues and no notice was given on them. Some of these suggestions may be reasonable and OSHA will consider proposing technical amendments to the arsenic standard in the future to incorporate them. But they are not a basis for denying finality to a process which is fast approaching a decade in temporal extent.

III. Epidemiologic Studies

A. Introduction

OSHA based its final regulation for occupational exposure to inorganic arsenic primarily on epidemiologic studies indicating a high lung cancer risk among workers exposed to inorganic arsenic. OSHA concluded that inorganic arsenic is clearly a human carcinogen.

For the sake of brevity, the term arsenic will sometimes be used to refer to inorganic arsenic in this preamble. When OSHA intends to refer to organic arsenicals, it will always use the term "organic arsenic".

Studies of copper smelter workers cited by OSHA as evidence of excess cancer risk among workers exposed to inorganic arsenic were authored by Lee and Fraumeni (Ex. 5D), Pinto and Enterline (Ex. 29B and Ex. 111, Attachment 4), and Tukadome and Kuratsune (Ex. 191). In 1978, OSHA also cited the following studies of arsenical pesticide manufacturing workers as evidence for the carcinogenicity of inorganic arsenic: Ott, Holder, and Gordon (Ex. 1A, 3–1), Baetjer et al. (Ex. 1A–24), and Hill and Faning (Ex. 5B). Another group of workers observed to have an excess risk of cancer, as discussed in the preamble to the final regulation, was vineyard workers exposed to arsenic-contaminated wine and arsenical pesticides (Denk et al., Ex. 109C–87 and Roth, Ex. 65, 109C, No. 88).

As discussed in the preamble to the final regulation, the studies listed above were of high quality in terms of their scientific methodology. Therefore, the positive findings of these studies presented very strong evidence for the carcinogenicity of inorganic arsenic. Although these studies confirmed the strong association between arsenic and lung cancer risk, they were not all suitable for quantitative risk analysis.

In its pre-hearing submission to the latest proceeding, the Arsenic Panel of the Chemical Manufacturers Association (CMA) commented that OSHA had failed to demonstrate that inorganic arsenic was carcinogenic (Ex. 202–3). In addition to stating that laboratory animal studies had failed to confirm the carcinogenicity of arsenic, CMA contended that exposures to substances other than arsenic within the studied copper smelters and arsenical pesticide manufacturing facilities may have led to the observed excess of respiratory cancer risk.

In response to CMA's statements, OSHA wishes to reiterate its earlier conclusion that inorganic arsenic has been demonstrated to be carcinogenic to exposed workers. In addition to the studies available before 1977, the new or updated studies available since 1977 found a strong association between arsenic exposure and excess lung cancer risk. Also, subsequent to 1977, both the International Agency for Research on Cancer (Ex. 201–13, p. 114) and the World Health Organization-Arsenic Working Group (Ex. 252) have concluded that inorganic arsenic is a human carcinogen. The fact that this association has been demonstrated in different occupational settings strengthens the evidence for arsenic being a respiratory carcinogen.

At the informal public hearing in 1982, Dr. Lederer, on behalf of CMA, modified the CMA position. He stated that he did "not dispute that there is an association between arsenic exposure and respiratory cancer. Likewise, the evidence indicates that reducing arsenic exposure apparently reduces the carcinogenic risk. However, there may be factors other than arsenic involved, which must be considered" (Tr. 356).

As will be discussed in subsequent sections of this preamble, recent studies indicate that it is highly unlikely that smoking, sulfur dioxide, asbestos, and other exposures were primarily responsible for the excess risk observed in arsenic-exposed workers. Also, strong human evidence of carcinogenicity cannot be dismissed because of the absence of strong evidence of carcinogenicity in animal studies. OSHA's statutory mandate is to protect employees and evidence that reducing exposures to arsenic reduces human risk must weigh heavily in OSHA's decision to regulate.

Since the promulgation of the final regulation in 1978, follow-up studies have been performed on the original study cohorts of Lee and Fraumeni, Pinto and Enterline, and Baetjer and colleagues. In addition, new studies of arsenic-exposed workers have been conducted. The following sections analyze in depth the follow-up epidemiologic studies and the most important new epidemiologic studies.

B. Anaconda Copper Smelter

The preamble to the final arsenic regulation had a detailed analysis of the study by Lee and Fraumeni (Ex. 5D) and should be referred to for more extensive information. What follows is a summary of Lee and Fraumeni's findings.

Lee and Fraumeni studied the mortality of 8,047 white males who had been exposed to arsenic trioxide while working for the Anaconda copper smelter. Smelter workers were eligible for inclusion in the study cohort if they were employed for 12 or more months before December 31, 1956. The mortality experience of the study cohort was observed for the period 1938–1963. The comparison population was the white male population of the state of Montana. The expected numbers of deaths were

derived from the age, calendar period, and cause-specific mortality rates of white males in Montana during 1938–1963.

Standardized Mortality Ratios (SMR's), consisting of the observed number of deaths in the study cohort divided by the expected number of deaths times 100, were calculated for the overall cohort as well as for various groups of workers categorized by length of employment and intensity of exposure to inorganic arsenic.

Workers were classified as having received heavy, medium, or light exposure to arsenic based on industrial hygiene measurements of arsenic trioxide made in their particular work areas and on judgments of industrial hygiene experts. Jobs in the arsenic kitchen, Cottrell, and arsenic roaster areas were considered to involve heavy arsenic exposure. Areas assigned a classification of medium arsenic exposure were the acid plant, ore roaster, reverbatory furnace, casting, and converter. All other work areas were considered as having light arsenic exposures. Most workers had been exposed in several different areas and the authors classified workers based on their heaviest exposure. The authors believed that the relative exposure levels of the work areas classified as having heavy, medium, and light exposure probably did not vary substantially overtime. Workers were also classified as having received heavy, medium, or light exposure to sulfur dioxide. Silicon dioxide (silica), lead fumes, and ferromanganese exposures were also rated for individual workers.

For the overall cohort, statistically significant increases in mortality were observed for respiratory system cancer (SMR-329), tuberculosis, diseases of the heart, and cirrhosis of the liver. Lee and Fraumeni observed that lung cancer risk increased consistently with increasing length of employment, and increasing exposure. Lung cancer SMR's ranged from 214 for lightly exposed workers with less than 15 years of employment to 800 for heavily exposed workers with at least 15 years of employment prior to 1938. See 43 FR 19595 for a detailed table of Lee and Fraumeni's results indicating that risk increased with both increasing duration and degree of exposure to inorganic arsenic.

Lee and Fraumeni concluded that the observed excess in lung cancer mortality probably was not attributable to smoking and other confounding factors including country of birth, socio-economic status, availability of medical care, genetic suseptibility urbanization, and accuracy of death certificates. In their opinion, their findings were consistent with arsenic trioxide being an etiologic agent for the observed increase in cancer risk; however, the potential influence of sulfur dioxide or unknown agents could not be separated from the potential effect from arsenic exposure.

Lee and Fraumeni did not give quantitative estimates of arsenic exposure levels in their heavy, medium, and light categories. However, testimony was submitted to OSHA by H.F. Morris, Consulting Engineer for Anaconda on quantitative exposures (Ex. 28B). Based on air measurements and on experience at the smelter during the 1940's and 1950's, he estimated the mean arsenic measurements for the Lee and Fraumeni categories at the Anaconda smelter for 1943–1959 were as follows: heavy (11.27 mg/m^3), medium (0.58 mg/m^3), and light (0.29 mg/m^3).

Lubin, Pottern, Blot, Tokudome, Stone, and Fraumeni (Ex. 201–17) updated the original study by Lee and Fraumeni by following mortality experience during 1964–1977 for all 5,403 smelter workers alive as of December 31, 1963. Deaths occuring before 1964 were thus excluded from Lubin et al.'s analysis. Expected values for lung cancer mortality were derived from the age-specific, cause-specific, and calender period-specific mortality rates of U.S. white males. SMR's were calculated for the overall cohort and for groups of workers categorized by length of employment. Relative risks (RR's) were also calculated for groups of workers categorized by length of employment, intensity of exposure to arsenic and sulfur dioxide, and estimated cumulative doses of arsenic. Relative Risks are similar to SMR's but are calculated in a slightly different manner. Relative Risks in mortality studies consist of the observed mortality rate for a specific cause in a study group divided by the corresponding mortality rate in the comparison population, which in this study was U.S. white males. The authors calculated the RR's using multivariate models that included several variables related to arsenic exposure, sulfur dioxide exposure, and employment status as of 1964.

Based on the testimony submitted to OSHA on arsenic exposure levels in the Anaconda copper smelter (Ex. 28B), Lubin et al. assigned exposure levels of 11.3, 0.58, and 0.29 mg/m^3 in the heavy, medium, and light exposure categories respectively. Because respirators generally were worn in the heavy exposure areas, Lubin et al. reduced the assigned exposure level to 1.13 mg/m^3 in the heavy exposure category for some of their multivariate analyses. Cumulative arsenic exposure indices for individual workers were estimated by multiplying the number of years spent in each exposure category prior to 1964 by the assigned exposure level and summing over all the exposure categories. For the multivariate statistical analyses, the author combined workers in the heavy and medium categories because of the uncertainty of exposures and the small number of individuals in the heavy category.

In the overall cohort, significant increases were observed for mortality from lung cancer (SMR=166), circulatory diseases, non-malignant respiratory diseases, external causes, and ill-defined conditions and senility. Workers with 25 or more years of employment had the highest lung cancer SMR's. There was an increased risk of respiratory cancer associated with heavy/medium arsenic exposure. Workers who had never been exposed to heavy/medium work areas, some of whom may have had essentially nil exposure, did not have an increased risk of respiratory cancer mortality except for those with 25 or more years of employment. A significant linear trend was observed with respect to years worked at heavy/medium exposure and respiratory cancer.

When relative risks of the quintiles of cumulative arsenic exposure were compared, relative risks increased as cumulative exposure increased. Reducing the heavy exposure levels by 10-fold to reflect the use of respirators did not greatly alter the observed gradient in risk.

Lubin et al. concluded that their study cohort continued to have an excess risk of respiratory cancer during 1964–1977. Lee and Fraumeni observed a respiratory cancer SMR of 329 in their earlier study whereas Lubin et al. observed a respiratory cancer SMR of 165. Lubin et al. attributed the lower SMR in their study to several factors:

1. Respiratory cancer mortality rates have risen in the United States during 1964–1977 compared to 1938–1963;

2. U.S. respiratory cancer mortality rates are higher than those of the state of Montana;

3. Workers of unknown vital status were assumed to be alive as of the study cut-off date, which would tend to produce underestimates of risk;

4. Possibly the individuals most susceptible to lung cancer succumbed to it during the period before 1964.

Lubin et al. stated:

> As in the previous study, the excess deaths from respiratory cancer were linked to employment in areas of the plant where airborne arsenic levels were elevated. Indeed, excess risks were found among employees who had worked in areas with

heavy or medium arsenic exposure regardless of total length of employment at the smelter. Overall there was a strong gradient in risk associated with the index of cumulative arsenic exposure with individuals in the highest quintile of exposure having four times the risk of those in the lowest quintile (Ex. 201-17, p. 783).

Regarding smoking, Lubin et al. stated:

Arguing against a major confounding role of smoking in this study is that no significant increases was observed for other smoking-related diseases (cancers of the mouth and throat, esophagus, and bladder, and heart disease) (Ex. 201-17, p. 784).

Lee-Feldstein (Ex. 201-16) conducted a follow-up study of the original occupational cohort of the study by Lee and Fraumeni (Note: Lee-Feldstein and Lee are the same author). This follow-up study observed mortality during 1938-1977, combining the follow-up periods of Lubin et al. (1964-1977) and Lee and Fraumeni (1938-1963). Furthermore, Lee-Feldstein's study included the exposure history for those smelter workers who were employed at Anaconda during 1964 to September 30, 1977, whereas Lubin et al. only used exposure data prior to 1964. Therefore, Lee-Feldstein's study reports the complete mortality and exposure experience during 1938-1977 of Anaconda copper smelter workers employed at least 12 months before December 31, 1956. Two females in the original study group of 8,047 workers were deleted, leaving a study cohort of 8,045 white males. The comparison population was composed of white males in the states of Idaho, Wyoming, and Montana, whose age, calendar period, and cause-specific mortality rates during 1938-1977 were the basis for generating expected numbers of deaths.

Lee-Feldstein used the same system for classifying workers into heavy, medium, and light exposure categories as Lee and Fraumeni, with exposure histories updated to reflect smelter employment after 1963. Standardized Mortality Ratios (SMR's) were calculated for the overall cohort as well as for the various exposure and length of employment categories.

Statistically significant increases in mortality in the overall cohort were observed for respiratory system cancer (SMR-285), digestive system cancer, diseases of the heart, emphysema, tuberculosis, vascular lesions of the central nervous system, and cirrhosis of the liver. SMR's for respiratory cancer ranged from 225 in the group with 1-4 years of employment to 408 in the group with 25 or more years of employment. In the light, medium and heavy exposure categories, the respiratory system cancer SMR's were 231, 446, and 512 respectively. In all three categories of exposure intensity and in all five length of emloyment categories, the observed excesses were statistically significant.

When the effect of intensity of exposure was examined within 3 length of employment categories (less than 15 years, 15-24 years, and 25 or more years), a consistent gradient of increasing risk with increasing intensity was observed except for the group with 25 or more years of employment (Table 5 of Lee-Feldstein's paper). In this group, the workers with medium exposure had the highest risk. Observed lung cancer deaths were in excess in all intensity-length of employment categories, including workers in the light exposure category with less than 15 years of employment.

Lee-Feldstein concluded that the findings of the follow-up study supported the hypothesis of Lee and Fraumeni that exposure to arsenic trioxide, possibly interacting with sulfur dioxide or other agents, was responsible for the increased respiratory cancer risk among smelter workers.

Higgins, Welch, Oh, and Burchfiel (Ex. 202-3B) also studied the mortality of workers at the Anaconda copper smelter. Rather than studying the entire cohort of 8047 employees exposed for at least 12 months before December 31, 1956, Higgins et al. studied a random sample of 20% of employees classified as having received medium and light exposures to arsenic. In addition, all employees classified as having been heavily exposed were included in the study cohort. This resulted in a total sampling of 22% of the Anaconda cohort.

Note.—These exposure classifications of heavy and medium/light were listed on the computer tape sent by the National Cancer Institute (NCI) to Higgins and colleagues. Unlike Lee and Fraumeni's heavy exposure category, individuals assigned to the heavy category by the NCI received at least 24 months of exposure in their category of maximum exposure.

Altogether, the study cohort included 1800 men, 277 of whom were in the heavy exposure category. Follow-up was from 1938-1977.

The comparison population was Montana white males, although a few comparisons were made with U.S. white males. Expected numbers of deaths were derived from age, calendar period, and cause-specific mortality rates of Montana white males.

Higgins et al. also reviewed industrial hygiene data collected by staff of the Anaconda smelter and the state of Montana during 1943-1965 and calculated the average air concentrations of arsenic for 18 departments. For 17 departments with no available measurements, the air concentrations of arsenic were estimated. (Note: As used by Higgins et al., the terms "TWA", "Ceiling", and "peak" do not have the standard regulatory definitions used by OSHA.) Based on his duration of employment in each of the departments, each worker was assigned a *Time Weighted Average* (TWA) arsenic category and a *Ceiling* arsenic category. In addition, workers were categorized by Cumulative arsenic exposure (Ex. 203-5). The TWA consisted of the man's average daily dose rate, and the Ceiling was defined as the highest arsenic category in which a man had spent at least 30 days. *Cumulative* exposure incorporated both duration and intensity of exposure, and was calculated by multiplying the average arsenic concentration for each department during 1943-1965 by the years spent in that department and summing the individual's department exposures over his entire work history.

Cumulative exposure is an approximation of total dose received over a working lifetime. A man exposed 5 years to an average exposure of 100 $\mu g/m^3$ and an additional 2 years to an average exposure of 200 $\mu g/m^3$ would have an estimated *Cumulative* exposure of 900 $\mu g/m^3$-years. *TWA* exposure is an approximation of usual exposure levels, while *Ceiling* exposure refers to maximum exposure levels for 30 days or more. As explained earlier, all of these methods of classifying exposure are useful for exploring dose-response relationships for toxic substances.

The four categories of arsenic exposure for both the TWA and Ceiling classification systems were Low (less than 100 $\mu g/m^3$), Medium (100-499 $\mu g/m^3$), High (500-4999 $\mu g/m^3$), and Very High (greater than 4999 $\mu g/m^3$). For the Cumulative exposure classification system, designated categories were less than 500, 500-2000, 2000-12000, and greater than 12000 $\mu g/m^3$-years. No adjustments were made for respirator use because the authors considered respirator use to be inconsistent prior to 1964.

'Low' and 'Medium' categories of Higgins et al. generally corresponded to the 'Light' category of Lee-Feldstein. The 'High' category of Higgins et al. was generally similar to Lee-Feldstein's 'Medium' exposure category while the 'Very High' category of Higgins et al. corresponded to 'Heavy' in Lee-Feldstein's exposure scheme. To avoid confusion, these differences in nomenclature should be kept in mind when reading this preamble. Higgins et al. rated two areas (Acid Plant, Casting)

as having lower exposure levels and five areas (Maintenance, Surface, Shops, Unknown, Masons) as having higher exposure levels than those assigned by Lee and Fraumeni. Air concentration measurements of arsenic were not available for Maintenance, Surface, Shops, and Unknown departments.

Higgins et al. analyzed the mortality experience of the study cohort by using 5 different methods of defining exposure/follow-up periods. Method I featured complete separation of exposure and follow-up periods in the data analysis. Therefore, each man's exposure was counted only until the date he entered the study cohort. For workers employed at least 12 months prior to 1938, year of entry into the study cohort was 1938. Workers hired in 1938 or later were entered into the study cohort after they had been employed 12 months. Hence, Method I exposure analysis for a large portion of the study cohort was based on 12 months of exposure experience. For Method I, mortality was followed through 1977. Methods II and III included exposure experienced through 1963, and mortality was followed from 1938 through 1963 and 1977 respectively. Method IV included exposure experienced through 1963, and followed mortality from 1964 through 1977. Method V included the complete exposure experience and mortality experience of workers from 1938 through 1977. Because the major body of the report by Higgins et al. discussed Method I findings and because most risk analyses and pre-hearing and post-hearing submissions were based on Method I findings, the remainder of this discussion will focus on study findings of Method I. Data from the Method V analysis, separately submitted, was utilized in some cumulative dose analyses (Ex. 203–5).

Using the classification system of the National Cancer Institute computer tape (*Heavy* defined as at least 24 months in the arsenic kitchen, Cottrell, and arsenic roaster and *Other* defined as all other exposures), Standardized Mortality Ratios (SMRs) were calculated for both categories of exposure. Observed numbers of deaths were significantly elevated for the following causes of death in the Heavy category: respiratory system cancer (SMR=527), all cancers, respiratory diseases, diseases of the heart, and all other causes. In the Other category, the same causes of death were significantly elevated, including respiratory system cancer (SMR=257). In addition, workers in the other category had significant increases in mortality from digestive system cancer, vascular lesions of the central nervous system, and cirrhosis of the liver. For this comparison, Standardized Mortality Ratios (SMRs) were adjusted such that age differences between the 2 categories would not confound the observations (Table 16, Ex. 202–3B).

Using the TWA exposure classification system for arsenic, a gradient of response was apparent, with SMR's ranging from 138 in the Low category to 704 in the Very High category. The observed increases in respiratory cancer mortality were statistically significant except in the Low category (under 100 $\mu g/m^3$) (Table 16, Ex. 202–3B).

Using the *Ceiling* exposure classification system for arsenic, the observed increases in respiratory cancer mortality were statistically significant only in the High and Very High categories (Table 20, Ex. 202–3B). A dose-response gradient was observed. SMR's were 129 and 116 in the Low and Medium categories respectively.

When both *TWA* and *Ceiling* arsenic categories were examined simultaneously, the following respiratory system SMR's were calculated:

TABLE 1

	Ceiling							
	Low		Medium		High		Very high	
	Obs.[2]	SMR	Obs.	SMR	Obs.	SMR	Obs.	SMR
Low	7	115	1	113	3	310	0	
Medium	1	765	3	120	[1]18	398	0	
TWA:								
High					[1]20	318	[1]9	641
Very high							[1]18	704

[1] Statistically significant
[2] Obs = Observed number of lung cancer deaths.

As indicated in Table 1, observed respiratory cancer deaths were increased significantly for the Medium, High, and Very High TWA groups with a High or Very High Ceiling (Table 5, Ex. 203–5).

Using the *Cumulative* exposure classification system for arsenic, significantly increased respiratory cancer deaths were observed in the categories of 2000–12000 and 12000 or more $\mu g/m^3$-years. A non-significant respiratory cancer SMR of 157 was observed in the 500–2000 $\mu g/m^3$-years category. A dose-response gradient was apparent for this analysis.

Consultants in Epidemiology and Occupational Health (Ex. 219, Ex. 232–B) combined the *Cumulative* exposure data and *Ceiling* exposure data from the study of Higgins et al. and calculated the following SMR's for respiratory system cancer:

TABLE 2.—LIFETIME CEILING

	Low/medium		High		Very high	
	Obs.	SMR	Obs.	SMR	Obs.	SMR
CUM less than 500	3	67	1	77	0	.....
EXP 500–2000	1	79	8	180	0	.....
($\mu g/m^3$ 200.–12000 years)						
12000 or more	0	.....	[1]22	394	[1]5	637
	1	940	[1]10	409	[1]29	616

[1] Statistically significant.

As indicated in Table 2, significant increases in respiratory cancer mortality were observed for the Cumulative exposure groups above 2000 $\mu g/m^3$-years with Lifetime Ceilings above 500 $\mu g/m^3$.

Higgins et al. also analyzed respiratory cancer mortality by years worked and Cumulative exposure (Ex. 244, Appendix A). Statistically signficant increases in respiratory cancer mortality were generally observed for workers employed for less than 10 years who had Cumulative exposures above 500 $\mu g/m^3$-years, as well as for workers employed for more than 10 years who had Cumulative exposures above 2000 $\mu g/m^3$-years.

Tables 47 and 49 of the report by Higgins et al. (Ex. 202–3B) compare the results obtained from using Methods I–V of exposure classification. For Method III, the results of the TWA analysis differed from Method I only in that the Low category no longer had an excess (non-significant) of respiratory cancer mortality. The results of the Ceiling analysis for Method III in the Low and Medium categories also did not exhibit the excesses (non-significant) of respiratory cancer observed for Method I.

Higgins et al. concluded, "Exposure to arsenic is strongly related to respiratory cancer mortality in this cohort of Smelter workers * * * There is a clear dose/response relationship, from no apparent increased risk among men exposed to low concentrations of arsenic to a roughly seven fold excess

risk in those exposed to the highest concentrations" (Ex. 202–3B, pp. 65). Discussing the nature of the dose-response relationship for arsenic, Higgins et al. suggested that "were men to have worked only in departments with average arsenic concentrations estimated to have been below 500 μg/m³, there would have been little excess mortality due to respiratory cancer." They went on to state: "The estimates of arsenic exposure, however, are less precise than we would like." This conclusion regarding the dose-response relationship is based on their assessment that Ceiling had a stronger relationship to respiratory cancer mortality than did TWA. The primary evidence for such an assessment was Table 1, which exhibited signficant excesses only in those TWA groups with Ceiling exposures above 500 μg/m³.

Higgins cited his findings with regard to Cumulative exposure as additional evidence for the hypothesis that respiratory cancer risk may be more dependent on *intensity* of exposure, including short-term peak exposures, than on *duration* of exposure or *average* exposure (Ex. 203–5, Ex. 244—Appendix A). Higgins stated that workers with short-term employment had higher respiratory cancer SMRs than workers accumulating the same exposure over a longer period of time. Table 6, which examined Cumulative exposure by Lifetime Ceiling, had statistically significant increases in respiratory cancer mortality only in workers whose Lifetime Ceiling exceeded 500 μg/m³.

While Higgins et al. did not propose a mechanism to explain their observations on the effects of short-term peak exposures. Higgins stated: "It does seem, however, that repair and characteristics of deposition and clearance are all factors likely to be involved."

Noting that 12 lung cancer deaths had been observed compared to 9.6 expected in workers whose TWA and ceilings were below 500 μg/m³ (see Table 4), Higgins suggested that there may have been perhaps 10 excess lung cancer deaths in this group within the entire Anaconda study cohort.

C. Analysis of Studies of Anaconda Copper Smelter

Regarding the exposure classification system used by Lee and Fraumeni, as well as by Lee Feldstein, Crump (Ex. 206, p. 6), Marsh (Ex. 203–5, p. 2), Enterline (Ex. 203–5, p. 3) and Radford (Ex. 207, p. 10) commented that Lee and Fraumeni's and Lee-Feldstein's approach tended toward overestimation of exposures. Overestimating exposures results in understating true cancer risk for a given level of exposure. This overestimation resulted from classifying workers in the category in which they received their highest exposure for 12 or more months, even though they may have worked in lower exposure areas for the balance of their employment. Workers who received less than 12 months of exposure in their category of maximum exposure were deleted from the comparative analysis of Heavy, Medium, and Light exposures. Therefore, Lee-Feldstein's and Lee and Fraumeni's classification system was similar but not identical to the Ceiling analysis of Higgins and colleagues, differing in the minimum length of exposure required for classification in a category and other features.

Crump (Ex. 206, p. 6), Marsh Ex. 203–5, p. 5), and Radford (Ex. 239, p. 3) noted the uncertainties from a cumulative or total dose viewpoint (i.e. classification by maximum rather than usual exposure or total exposure) of the method of exposure assessment used by Lee-Feldstein and Lee and Fraumeni, and suggested that a more detailed analysis of the exposure data would be helpful. Hence, they considered the exposure reevaluation conducted by Higgins and colleagues to be a worthwhile endeavor.

Radford made the following comments about the exposure classification system of Higgins and colleagues and their statistical analysis:

1. In order to assess the effect of changes in categorization from the Lee-Feldstein system, the numbers of workers in the various departments should have been specified, especially for those departments lacking air measurements which were assigned values of 559 μg/m³. "For example, it would be interesting to know whether assignment of a value of, say, 400 μg/m³ to these groups would have affected the subsequent results greatly, since now they would be below the 500 μg/m³ ceiling. If so, then any conclusion that 500 μg/m³ was a critical exposure level rests on a shaky foundation indeed." (Ex. 239, p. 6).

2. Analyzing risk by Ceiling exposure level in addition to TWA exposure level removed a large proportion of the workers from the Medium group and placed them in the High group lowering the statistical power to detect excess risk in the Low and Medium groups (Ex. 239, p. 7).

3. Analyses of the role of peak exposures also should have been performed for definitions of high short-term exposure other than the 30-day Ceiling (Ex. 239, p. 8).

4. "Because of the difference in sample size, the Lee-Feldstein results are much more robust statistically than those of Higgins et al. all other things being equal. Lee-Feldstein has analysed 3522 deaths from all causes and 302 deaths from respiratory cancer; the corresponding numbers in the Higgins study are 816 and 80. * * * It should be emphasized that 136 lung cancer cases were observed in this dose category (Light exposure—Lee-Feldstein), far more than all the lung cancers studied by Higgins et al." (Ex. 239, pp. 2 and 8).

5. There were some findings pointing toward a role for arsenic in the etiology of ischemic heart disease and respiratory diseases, especially for smokers. For non-smokers, the role of arsenic in these diseases could not be explored in the absence of smoking-specific mortality rates (Ex. 239, pp. 4–5).

6. For lung cancer, there was a consistent linear dose-response relationship with regard to cumulative exposure except in the lowest dose category (less than 500 μg/m³-years). "But this finding of no excess at the lowest cumulative dose can be given no significance because of the error limits on many of the relative or absolute risks. It is regrettable that no error limits on any of the key derived quantities is provided in the Higgins reports, a major deficiency precisely when one is analyzing dose-response relationships." (Ex. 239, p. 9).

Crump commented as follows on the Higgins exposure classification system and statistical analysis:

1. The SMR's in the Low and Medium exposure categories of the Ceiling analysis were not remarkably different from the SMR's in the categories of the TWA analysis. For example, the 90% confidence interval for the statistically significant SMR of 303 in the Medium TWA category overlapped with the non-significant SMR in the Medium Ceiling category (Ex. 212, p. 4).

2. "More importantly, even if these observed decreases in SMR's are real, this is exactly what would be expected even if mortality does not depend at all upon ceiling exposures * * * because within a given TWA category persons with higher ceiling exposures are also expected to have higher TWA's * * * "(Ex. 212, p. 4).

Note.—Higgins et al. mentioned this phenomenon when discussing effects of sulfur dioxide exposures on carcinogenic risk. See section on *Effects of Other Exposures.*

3. The TWA-Ceiling analysis (See Table 1) did not adequately test the hypothesis of the over-riding importance of short-term peak exposures. Small sample sizes and the fact that persons with higher ceiling exposures also would be expected to have higher TWA

exposures limited the interpretation of the TWA-Ceiling analysis (Ex. 212, p. 4).

4. "I therefore consider the argument that risk depends primarily upon exposure level irrespective of duration to be highly speculative at this point. However, I would not rule out the possibility that measures of exposure other than cumulative exposure might correlate better with respiratory cancer risk. Further analyses of the data from both the Anaconda and Tacoma Smelters utilizing other measures of exposure could be helpful in this regard. Although I consider cumulative exposure to be a very reasonable measure, others are also reasonable. However, the way in which the data have been presented in the published reports has made it difficult to consider other approaches" (Ex. 212, p. 4).

Higgins' comments in both pre-hearing and post-hearing submissions to OSHA (Exhibits 244, Appendix A and 203–5) were mostly included in the section of this preamble summarizing his study results and conclusions. In response to the comments of Radford and Crump concerning his study, he made the following additional points:

1. Criticisms of Method I for defining exposure that were voiced by Crump (Ex. 212, p. 3) and Radford (Ex. 239, p. 7) were not valid because findings from Methods II–V of defining exposure did not differ substantially from findings of Method I. Also, because men could only move into higher Ceiling categories after being classified by Method I, Method I would tend toward overestimation of risk in lower Ceiling categories (Ex. 244, Appendix A, p. 2).

2. In contrast to Radford, Higgins considered dose-response relationships for respiratory diseases and ischemic heart disease to be inconsistent, unimpressive, and possibly due to the effect of other unmeasured factors. Smoking-specific mortality rates would have been desirable for smokers as well as non-smokers. In any case, the number of non-smokers was small such that it precluded meaningful analysis for these diseases (Ex. 244, Appendix A, pp. 7–8).

3. Regarding departments without air measurements that were assigned the mean value for the Low, Medium, and High arsenic categories, Higgins stated that "men in these departments likely worked for significant periods in various areas of the smelter, including those areas with High and Very High measured arsenic concentration." (Ex. 244, Appendix A, p. 9).

4. Contrary to the Lee-Feldstein definition of Light exposure, in which those in this category were reported to have had maximum exposure in the Light work areas, Higgins et al. did not find that these workers had always been exposed to less than 500 $\mu g/m^3$ (Ex. 244, Appendix A, p. 11).

The epidemiologic studies discussed in the preceding section were well-conducted and thorough analyses of the mortality experience of Anaconda Copper Smelter workers. Despite methodological differences, these studies were in substantial agreement in that the authors all concluded that their findings supported the hypothesis of arsenic being a respiratory carcinogen. Furthermore, all of these studies found a dose-response relationship in which increasing exposure to arsenic was correlated with increasing lung cancer risk.

The primary strength of the studies by Lee and Fraumeni and Lee-Feldstein was that the complete population at risk (workers with at least 12 months of employment before December 31, 1956) was included in their study cohorts. In addition, all surviving members of the study cohort would have been able to accumulate over 20 years of latency since first exposure by the end of 1977, which was Lee-Feldstein's study cut-off date.

The generalizability of the findings of the study by Lubin et al. is somewhat more limited by virtue of the fact that their study population was composed of persons alive in 1964, excluding persons who died from lung cancer and other causes prior to 1964. Hence, the mortality experience of the cohort of Lubin et al. was only a partial representation of the mortality of the overall cohort.

One strength of the study by Higgins et al. was their extensive survey of the exposure experience of the Anaconda cohort. This survey featured compilation of exposure data within departments, matching of the exposure data to occupational histories, and classification of individuals' exposures using different types of measures (i.e. TWA, Ceiling, Cumulative exposures). There are several potential problems with the exposure classification system developed by Higgins and colleagues:

1. Seventeen departments had no available measurements of arsenic air concentration. These departments were assigned exposures by analogy or by averaging exposures from departments rated, Low, Medium, and High. Clearly, these assigned exposure measurements may have considerable potential for error.

2. Most available measurements were made in those departments that industrial hygienists deemed to pose the greatest hazard (Ex. 202–3B). Hence, available air measurements may tend to represent higher exposure areas rather than representing overall exposure within the smelter. Also, departments with unknown concentrations may tend to have had the lowest exposure levels. Higgins and colleagues assigned several departments with unknown concentrations to the High exposure category.

3. Although arsenic air concentrations generally declined over the 20 year period for which measurements were available, Higgins and colleagues did not incorporate temporal trends in their exposure measures. For example, a worker exposed between 1955 and 1960 in a particular department would have the same exposure rating as a worker exposed between 1933 and 1938 in that department. Because Higgins and colleagues found that measurements frequently were made in order to test the efficacy of new industrial hygiene control measures, so that measurements would not necessarily reflect overall conditions in the smelter, they decided that temporal trends could not be accurately estimated.

Consultants in Epidemiology and Occupational Health (CEOH), representing CMA, stated that the exposure classification scheme of Higgins and colleagues was "probably a more direct and better estimate than that deriving from the Lee and Fraumeni classification" because it tied exposure estimates more directly to the work history of the individual worker.

Wright, representing the United Steelworkers of America (USW), commented that exposure of maintenance workers, masons, and miscellaneous crushing workers would vary widely from day to day depending on their job assignment (Ex. 231). He suggested that sampling for arsenic may not have taken place during job assignments for which little or no arsenic exposure would be expected. Wright also cited a measurement taken within the stack of the Cottrells as an example of a sample that may have been taken during a cleaning operation that would have been done no more than several times a year. In summary, he suggested that Higgins and colleagues may have overestimated average exposure for some job classifications.

One major shortcoming of the study by Higgins et al. is the incomplete study cohort. Higgins et al. studied only a 20% sample of the group receiving exposures other than Heavy. OSHA is particularly concerned about the incomplete information for the group receiving lower arsenic exposures. Higgins and colleagues acknowledged that the number of men in categories less than

5000 $\mu g/m^3$ was very small and that some of their conclusions were based on a small number of deaths (Ex. 202–3B, Ex. 244—Appendix A). Thus, they recommended that their analysis be applied to the entire Anaconda copper smelter cohort.

One consequence of studying only 20% of workers in categories other than Heavy was that the study by Higgins and colleagues had low statistical sensitivity for detection of an excess lung cancer risk among workers in these categories. As discussed during the public hearing (see Tr. 464), statistical power quantifies the ability of a study to detect an excess risk that truly exists and refers to the probability of not missing a true excess risk.

OSHA staff submissions (Ex. 221, Ex. 237–A, Ex. 237–B) calculated the statistical power of the study by Higgins et al. to detect a 1.5-fold increase in lung cancer risk among workers in Low and Medium exposure categories.

Note.—A 1.5-fold increase in risk refers to a 50% increase in risk, which is generally equivalent to an SMR or 150 or a relative risk of 1.5.

Because risk analyses predicted an approximately 1.5-fold increase in risk in workers exposed to about 150 $\mu g/m^3$ for 15 years, OSHA considered that quantifying the study's ability to detect a 1.5-fold increase in lung cancer risk would be appropriate. Also, a 1.5-fold increase in lung cancer risk would constitute a highly significant risk because lung cancer is a relatively common cause of death. Estimates of statistical power to detect a 1.5-fold lung cancer risk for Ceiling categories of less than 100 $\mu g/m^3$ and 100–500 $\mu g/m^3$ were 23% and 14% respectively (Method I analysis). Combining these 2 categories of exposure below 500 $\mu g/m^3$ yielded a power estimate of 37% (Method I analysis). Therefore, the Higgins et al. study had less than a 37% chance of detecting a true 50% excess risk. For the TWA category of less than 100 $\mu g/m^3$, statistical power was estimated to be 31% (Method I analysis).

For Methods III and V of analysis, the statistical power to detect an excess risk for ceiling exposures below 500 $\mu g/m^3$ was 28% and 25% respectively (Ex. 237 B). It should be noted that Methods III and V, which did not find excesses of respiratory cancer mortality below a ceiling of 500 $\mu g/m^3$, had lower statistical power than Method I, which did find excesses below a 500 $\mu g/m^3$ ceiling. Thus, decreased statistical power was associated with non-positive findings using Methods III and V of analysis.

Most epidemiologic investigators, when initiating a study, attempt to choose a study cohort of sufficient size to have at least 80% power to detect a true difference in the variable of interest. Therefore, the statistical power estimates for the study of Higgins et al., all of which are less than 40%, are much lower than desirable. The problem of low statistical power was worsened by the TWA-Ceiling and Cumulative exposure-Ceiling analyses (Tables 1 and 2) because the already small number of person-years were spread among more categories by these analyses.

Given the low statistical power of the study by Higgins and colleagues to detect increased respiratory cancer risk among workers in the Low and Medium exposure categories, and given the dose-response gradients observed in their study, it is appropriate to consider excesses of respiratory cancers in these categories as evidence of potential risk, even if such excesses are not statistically significant when considered individually. Hence, the respiratory cancer SMR's of 138, 129, and 116 in the Low TWA exposure category, Low Ceiling category, and Medium Ceiling category respectively should not be disregarded (Method I analysis).

Further evidence of the low statistical sensitivity of the study by Higgins et al. was their failure to observe significant excess mortality from digestive cancer and tuberculosis. The study by Lee-Feldstein, which included the mortality experience of the entire study cohort, did find significant increases for these causes of mortality. Radford (Ex. 239, p. 3) was not concerned about this discrepancy between the findings of Lee-Feldstein and Higgins; however, OSHA considers the discrepancy to be one indicator of potential problems with low statistical power in the study by Higgins et al.

Higgins cited Table 7 as evidence for his conclusion that duration of exposure had a relatively unimportant relationship to risk (Ex. 244, Appendix A, p. 3). Higgins is correct in stating that workers with less than 10 years of employment who received a particular Cumulative exposure had higher respiratory cancer SMR's than their counterparts who received the same exposure over a longer period of time. The differences in the magnitude of the SMR's, however, were not necessarily of biological or statistical significance. For example, respiratory cancer SMR's of 476 and 439 were calculated for the group of workers with less than 10 years and 30 or more years respectively. As mentioned earlier, another potential problem may be confounding effects from age in the comparison of SMR's.

Also, Brown and Chu (Ex. 241–B), in their multivariate analyses of factors contributing to lung cancer risk, observed duration of exposure to arsenic be the most important single etiologic factor. Brown and Chu studied 8014 of the 8045 Anaconda cohort members, increasing the statistical confidence which can be placed on their findings compared to those of Higgins et al.. See *Estimating Risks* section for a fuller discussion of Brown and Chu's study (Ex. 241–B).

OSHA considers it appropriate to examine the findings from all methods of exposure classification. First, clear dose-response gradients have been obtained for duration of exposure, cumulative exposure, average exposure, and maximum exposure classification systems. Second, there is no scientific consensus as to the exact mechanism of carcinogenesis. Another reason for examining the results of different exposure analyses is the low statistical power in the study by Higgins and colleagues for detection of a risk in Low and Medium exposure categories. Results from analyses by TWA exposure, Cumulative exposure, Ceiling exposure, and other methods of classifying exposures were all reviewed by OSHA in reaching a decision on significance of risk posed by inhaled arsenic.

A major consideration is that the studies of Lee and Fraumeni and Lee-Feldstein, that included the entire cohort, found a significantly increased respiratory cancer risk among workers categorized as having received Light exposures who had never been employed in Medium or Heavy exposure work areas. Lee and Fraumeni's and Lee-Feldstein's findings, which diverge from those of Higgins et al., may be due to differences in ascription of exposure for work departments or may be due to their studies' greater statistical power. With the exposure data available to OSHA, OSHA is not able to choose whether Lee-Feldstein or Higgins and colleagues developed the most appropriate exposure ascription scheme. Both exposure ascription systems had strengths and limitations, and both appear reasonable. However, because Higgins et al. studied only a limited sample of the cohort, resulting in low statistical power, OSHA places less weight on their findings for the Anaconda cohort than those of Lee-Feldstein and Lee and Fraumeni.

The hypothesis of Higgins and colleagues that respiratory cancer may be more a function of intensity of exposure than a function of duration of exposure of average exposure stemmed

from their analyses of risk by 30-day ceiling exposures. In effect, Higgins et al. and CEOH are proposing a threshold by suggesting that little risk would occur from arsenic exposures below 500 μg/m.³ This hypothesis would represent a mechanism of carcinogenesis different from that upon which standard dose extrapolation models for humans are based. OSHA is not aware of any studies that have definitively demonstrated the existence of a threshold for human carcinogens. Even if a threshold was clearly demonstrated in laboratory animals for a particular carcinogen, that carcinogen would not necessarily have a threshold for humans. This is because humans are exposed to carcinogens in ambient air, diet, cigarette smoke (either by direct inhalation or by sidestream smoke), alcohol and other sources at levels ranging from infinitesimal to considerable. Additional carcinogenic exposures in the workplace may have a synergistic or additive effect on cancer risk when combined with these background carcinogenic exposures.

Other biological evidence against thresholds for human carcinogens includes the self-replicating nature of cancer and the wide range of individual susceptibilities to carcinogens. Because of the possibility of synergism between workplace exposures and other carcinogenic exposures and because of biological evidence against there being a threshold for human carcinogens, evidence concerning the existence of a threshold would have to be considerable in order for the concept of a threshold for carcinogenesis to be generally accepted by the scientific community.

As discussed in this section, the limitations of the study by Higgins et al. preclude the study from providing strong evidence for the existence of a threshold. Nor do any of the studies of other arsenic-exposed populations demonstrate a threshold. In support of a threshold, Dr. Lamm of CEOH suggested that the human lung could clear the arsenic under ordinary circumstances of exposure through ciliary action, but be overwhelmed by high arsenic exposures such that the process of clearance through the bronchial mucus ladder would be inhibited and particles would be retained (Tr. 510–512). This suggested mechanism must be considered speculative. The limitations of the study by Higgins et al. and the biological data against thresholds for human carcinogens seriously weaken the findings of Higgins et al. concerning the effects of Ceiling exposures below 500 μg/m.³

Furthermore, as discussed earlier, OSHA considers that findings from all exposure classification systems should be incorporated into the agency's assessment of risk. While Higgins et al's findings with respect to Ceiling arsenic exposure suggest that cancer risk may be low below 500 μg/m³, their TWA analyses found that workers with average arsenic exposure between 100–499 μg/m³ had increased respiratory cancer risk. Furthermore, significantly increased respiratory cancer mortality was observed in workers with 500–2000 μg/m³-years of cumulative exposure. (The average of 500–2000 μg/m³-years is 1250 μg/m³-years. This total dose could be accumulated for 45 years of exposure to 28 μg/m³).

D. ASARCO Copper Smelter

A series of epidemiologic studies have been conducted of the ASARCO Copper Smelter in Tacoma, Washingon, (Ex. 3Z; Ex. 29 B; Ex. 111, Attachment 4; Ex. 133; Ex. 201–8; Ex. 201–9; Ex. 201–19; Ex. 205–2). The preamble to the final arsenic standard extensively analyzed the studies which were available to OSHA during rulemaking (Ex. 3Z; Ex. 29 B; Ex. 111, Attachment 4; Ex. 133) and should be referred to for more detailed information concerning these earlier studies. What follows is a short summary of the earlier studies and a more detailed summary of the subsequent studies.

Pinto and Enterline studied the mortality of 526 men who had retired from the ASARCO copper smelter and were receiving pensions (Ex. 298; Ex. 111, Attachment 4). To be eligible for the cohort, retirees had to be alive as of January 1, 1949 and had to have reached age 65 by December 31, 1960. The mortality experience was observed for the period 1949–1973. Expected numbers of deaths were generated from age-specific, calendar period-specific, and cause-specific mortality rates of white males in the state of Washington during 1949–1973. Based on urinary arsenic concentrations collected in 1973 from active employees, Pinto and Enterline estimated the total (cumulative) arsenic exposure (μg/As/1-years) and average arsenic exposure (μg/As/1) for their cohort of retirees. From employment records of the retirees, a cumulative arsenic exposure index was computed by multiplying average urinary values in 1973 for each department by the number of years during which the employee worked in that department and then summing values across all departments. The average arsenic exposure was calculated by dividing each man's total exposure by the total number of years worked at the smelter.

Standardized Mortality Ratios (SMRs) were calculated for the overall cohort as well as for groups of workers categorized by duration of employment, total exposure, and average exposure. For the overall cohort, respiratory system cancer mortality was significantly increased (SMR=300.3). Significantly increased respiratory cancer mortality was observed in all arsenic average exposure categories for workers with 25 years or more of employment, with SMRs increasing from 273.7 to 859.5 in the low to high category. A similar dose-response gradient was noted for men with less than 25 years of employment, although only one SMR was statistically significant. Workers with more than 25 years of employment consistently had higher SMRs than workers in the same average exposure category who were employed less than 25 years.

For both the total (cumulative) arsenic exposure index and the average arsenic exposure index, Enterline described their relationships to respiratory cancer as "linear" (Ex. 111, Attachment 4, p. 1). Pinto and Enterline stated, "In conclusion, results thus far indicate that there is a relationship between exposure to arsenic trioxide, or associated agents in the smelter atmosphere, and increased risk of respiratory cancer" (Ex. 29B, p. 7).

In published articles on the mortality of their cohort of retirees, Pinto et al. (Ex. 201; Ex. 203–2) suggested that a threshold of safety for arsenic trioxide may exist, based on their not having observed an increased risk of respiratory cancer among men with an average exposure below 200 μg/1 who had been employed less than 25 years. They did note the possibility that this group of men may not have been observed for an adequate length of time, but went on to state that the carcinogenic effects of arsenic had declined with increasing time since cessation of exposure. Commenting on the possibility of a threshold based on the Pinto-Enterline data, OSHA in the preamble to the final regulation noted the small number of workers in the exposure category at which no excess was observed.

Pinto et al. compared the measured urinary arsenic concentrations in 1973 with 800 urinary samples collected during 1948–1952 mostly from men in high exposure jobs (Ex. 29B; Ex. 205–2). The 1948–1952 urinary arsenic values were roughly twice as high as the 1973 values upon which their exposure analysis was based, although a few departments had higher values in 1973. In addition, Pinto et al. indicated that

"scattered" air measurements made on an irregular basis during that late 1930's and early 1940's exhibited airborne arsenic concentrations about 5 to 10 times as high as in 1973. Therefore, Pinto et al. recommended that their findings of elevated risk be interpreted as resulting from levels of airborne arsenic higher than the 1973 values.

Pinto et al. (Ex. 201-19; Ex. 203-5) stated that both duration of arsenic exposure and average arsenic exposure contributed to the excess of respiratory cancer among workers at ASARCO copper smelter, and that average exposure predicted lung cancer risk better than duration of exposure.

Subsequent to publication of studies on the mortality of ASARCO retirees, Enterline and Marsh expanded their study cohort to include all 2802 men employed one year or more during 1940-1964 (Ex. 201-8, Ex. 201-9). In addition, arsenic exposure indices were revised to better reflect historical arsenic exposures, involving linear extrapolation to 1948-1952 from 1973, 1974, and 1975 urinary arsenic values. Exposure levels during 1940-1948 were assumed to be the same as those measured during 1948-1952 (Ex. 201-9). Average urinary arsenic levels, Cumulative (total) arsenic levels, and Cumulative arsenic levels minus the 10 years of exposure preceding death or the study cut-off date were estimated for each worker. Subtracting 10 years of exposure was done on the theory that the exposure immediately preceding death from lung cancer probably would not have been responsible for the death because of the latency period between the onset of exposure and illness.

The period of observation of mortality was 1941-1976. Age-specific, cause-specific, and calendar period-specific mortality rates of white males in the state of Washington during 1950-1976 generated the expected numbers of deaths. Because background lung cancer mortality rates were lower during 1941-1949 than during subsequent years, the expected number of lung cancer deaths were overstated for the period 1941-1949, leading to underestimates of the excess risk. Enterline and Marsh also generated expected numbers of deaths from the specific age, cause, and calendar period mortality rates of U.S. white males during 1941-1976.

For the overall cohort, respiratory system cancer mortality was significantly increased. Compared to U.S. males and Washington males, the respiratory cancer SMRs for the study cohort were 198.1 and 189.4 respectively (Ex. 201-9, Table 6, p.8).

Cumulative exposure categories, expressed in micrograms or arsenic per liter of urine years (μg As/1-years), were less than 500, 500-1500, 500-3000, 3000-5000, and 7000 or more. Respiratory cancer SMRs ranged from 158.4 to 243.4 in these categories, with no clear trend of increasing SMRs with increasing dose. When the 10 years of exposure accrued before death or the study cut-off date were subtracted from the Cumulative exposure (hereafter referred to as the 10 Year Lag exposure), an inconsistent dose-response gradient emerged (Ex. 201-9, Table 8, p. 10).

For the 2 lowest Cumulative exposure categories (less than 500 and 500-1500), respiratory cancer SMRs of 202 and 158.4 respectively were observed, although these increases were not statistically significant. For the same categories of 10 Year Lag exposure, respiratory cancer SMRs of 155.4 and 176.6 respectively were observed, with the increase in the 500-1500 group attaining statistical significance. Hence, increased respiratory cancer risk was observed in relatively low dose categories (Ex. 201-9, table 8, p. 10). Using a urinary to air conversion factor of 0.3, 500 μg As/1-years is equivalent to 150 $\mu g/m^3$-years of airborne arsenic. Furthermore, the average exposure in the less than 500 μg As/1-years group was 302 μg As/1-years, which is roughly equivalent to 90 $\mu g/m^3$-years of arsenic. A dose 90 $\mu g/m^3$-years can be accumulated by one year of exposure to 90 $\mu g/m^3$ or by more years of exposure to lower levels (i.e. 45 years to 2 $\mu g/m^3$).

A somewhat clearer dose-response gradient was observed for 582 retired workers at ages 65 or over. Respiratory system cancer SMRs ranged from 136.8 to 393.2 (Ex. 201-9, Table 10, p. 11). When Enterline and Marsh analyzed respiratory cancer mortality by latency from initial exposure and duration of employment, they observed that respiratory cancer SMRs were significantly in excess during the first decade or two after cessation of exposure. For the second or third decades following cessation of exposure, the observed number of respiratory cancer deaths (SMR=137.9) no longer was significantly in excess.

When Enterline and Marsh examined respiratory cancer mortality by duration of employment and by average exposure, respiratory cancer SMRs increased both with increasing duration and increasing average exposure. This particular analysis was confined to workers who had either left the active smelter work force or retired by December 31, 1976. Enterline and Marsh stated that this analysis showed "that both duration of exposure and intensity of exposure contribute to respiratory cancer mortality" (Ex. 201-9, p. 14). Respiratory cancer SMRs in the "low" average exposure group (defined as having an average less than 290 μg As/1, with a group mean of 163 μg As/1) ranged from 169.9 to 302.0. The respiratory cancer excesses observed in the low average exposure group were statistically significant, except for workers with less than 10 years of exposure. Using a urinary to air conversion factor of 0.3, 163 μg As/1 is equivalent to 49 $\mu g/m^3$.

Enterline and Marsh reached the following conclusions:

(1) Concerning the relationship between arsenic and cancer, "the carcinogenic response apparently can occur rather quickly—in this study apparently in about 10 years" (Ex. 201-9, p. 16).

(2) The carcinogenic effects of arsenic appeared to decline with time following the cessation of exposure.

(3) Arsenic appears to act as a cancer promoter rather than an initiator, based on evidence of lack of an effect of latency and based on the apparent decline in risk after cessation of exposure.

E. Analysis of Studies of ASARCO Copper Smelter

For purposes of risk analysis, the most recent epidemiologic study by Enterline and Marsh of ASARCO copper smelter (Ex. 201-9) has an advantage compared to the earlier studies available to OSHA because it included the entire cohort at risk from a year or more of exposure (2802 men) rather than only the pensioned retirees (527), who might have been unrepresentative of the overall employee population of the smelter. Including the entire cohort at risk yield 104 respiratory cancer deaths with which to analyze dose-response relationships, whereas the earlier studies observed only 32 respiratory cancer deaths. Another advantage of the most recent study by Enterline and Marsh was their reconstruction of the individual worker's probable exposure based not only on 1973 urinary arsenic levels but on 1948-1952 urinary arsenic levels. A urinary arsenic level is a biological indicator of arsenic exposure that would reflect protection provided by respirator use.

Much of these studies' analyses entailed comparison of SMR's and relative risks among different exposure groups. This is a common analytical procedure of epidemiologic studies. As noted in the staff submission on SMR's (Exhibits 241-A, 237-N, 237-PP), the SMR is a risk measure that is dependent on the age structure of the study population. Cancer incidence, including

lung cancer incidence, rises with age. Hence, an older study cohort will be expected to have a greater number of deaths from cancer compared to a younger study cohort. Sometimes, comparison of SMR's among different study populations may be confounded by age if their underlying age distributions are different, which may in turn obscure the true nature of the excess risks. A hypothetical example given in the staff submission (Ex. 241–A) shows the rate of excess deaths attributable to an unspecified agent doubling for each successive 10-year age group while SMR's remain constant across the age groups.

Groups of workers in different exposure categories may have different age distributions, thereby causing age to confound the comparison of SMR's among exposure categories. Absolute risk analysis is one method of addressing age confounding in SMR comparison. Crump performed an absolute risk analysis of the Enterline and Marsh study, the results of which will be discussed extensively in the *Estimating Risks* section. Absolute risk will also be explained in that section.

Crump commented on Enterline and Marsh's observation of declining respiratory cancer risk following cessation of exposure:

> The concept of absolute risk may also help to explain certain other features of the Enterline and Marsh analyses. When they considered (their Table 11) SMR's by duration of exposure and by latency (time since first exposure) they detected a drop-off in SMR's past about 10 years after the termination of exposure * * *
>
> The effects in their Table 11 that partially evoked these interpretations are based upon small numbers of cancers and it appears to me that they may simply be an artifact. However, assuming that the observed drop-off in SMR's is real, it could be that absolute risk is holding steady or even increasing. The evidence provided by Enterline and Marsh's Table 11 for designating arsenic as a promoter seems tenuous at best (Ex. 206, pp. 18–19).

Radford also noted the problem of small numbers of deaths as an impediment to determining whether arsenic-induced cancer risk declined after cessation of exposure in the study by Enterline and Marsh (Ex. 207, p. 8). Radford also stated that the continuing respiratory cancer excess in retired workers contradicted evidence of a decreased risk after cessation of exposure, and thus constituted evidence against arsenic acting as a promoter.

Enterline, in a pre-hearing submission to OSHA (Ex. 203–5), pointed out that revising his exposure estimates for the ASARCO workers to include historical exposures lowered the observed regression coefficients (approximations of carcinogenic potency) in the various exposure categories. Enterline suggested that even his current regression coefficients were overstated by a factor of 2 because of the lack of historical exposure data for years preceding 1948.

For reasons explained below, OSHA concludes that cumulative exposure is one of several appropriate methods of analyzing the dose-response of workers in the ASARCO copper smelter. The use of cumulative dose is supported by the good dose-response observed in Table 10 of Enterline and Marsh's paper, which examines SMRs by cumulative dose in retirees age 65 and over (Ex. 201–9, p. 11). In addition, Table 12 of the paper exhibits a risk gradient with increasing duration of exposure for both "low" and "high" intensity exposure categories (Ex. 201–9, p. 14). Enterline and Marsh interpreted Table 12 as demonstrating that both duration and intensity of exposure contributed to excess respiratory cancer risk. In addition, Crump's absolute risk analysis for Cumulative exposure data and 10 Year Lag data found a strong linear trend of increasing risk with increasing cumulative dose.

OSHA judges that Enterline and Marsh's observations of declining respiratory cancer risk after cessation of exposure are inconclusive for the following reasons. Age may confound the comparisons of SMRs of cohorts' successive decades following cessation of exposure. Interpretation of finding is further hampered by low power to detect a statistically significant risk in some of the categories analyzed. In addition, the decreased SMRs two to three decades following cessation of exposure were not markedly different from the statistically significant SMRs of the preceding decades.

With regard to low dose risk, OSHA considers the respiratory cancer SMRs in low dose categories, which indicate excess risk, in Table 8 and 10 to constitute some additional evidence of a potential risk from low levels of arsenic exposure. Some of these SMRs were not statistically significant; however, these exposure categories had low statistical power to detect a 1.5-fold lung cancer risk. Although an isolated statistically non-significant excess risk would have relatively little meaning, statistically non-significant excess risks in some circumstances can be meaningful when they fit reasonably closely curves derived from statistically significant excess risks or are consistent with observed trends. At the relatively low predicted excess risks for low level exposures, there would have to be large numbers of workers before statistical significance is obtained.

F. Urine-Air Correlation

A published article by Pinto et al. (Ex. 210) reported the results of a study of the relationship between airborne arsenic trioxide and urinary arsenic. A total of 24 workers participated in this study, for which they wore personal air samplers and did not wear respirators for 5 successive days. Also, workers were asked to not eat fish for 2 days preceding and during the study period. Pinto et al. stated, "A fairly good correlation was found between airborne arsenic concentrations and urinary arsenic levels over the range studied" (Ex. 201–19, p. 128). The conversion factor was 0.304 so that a urinary level of 100 $\mu g/l$ of arsenic was roughly equivalent to 30.4 $\mu g/m^3$ of arsenic in air.

Note— Some authors rounded off 0.304 to either 0.3 or 0.31.)

Consultants in Epidemiology and Occupational Health (CEOH) (Ex. 202–3D, p. 28) refit the regression line of Pinto et al. so that it did not pass through zero and obtained a steeper slope indicating higher air levels per unit of urinary arsenic. They estimated the slope as approximately twice as high as Pinto et al.'s slope.

ASARCO presented Pinto et al.'s study on the relationship of urinary arsenic concentration to airborne arsenic during earlier proceedings as the best available data on this subject. In the most recent proceedings, ASARCO characterized OSHA's use of Pinto et al.'s conversion factor as "extremely questionable", due to limitations of Pinto et al.'s data base (Ex. 202–7, p. 22). ASARCO criticized the small number of workers in Pinto et al.'s study, the short study period, the lack of data on the urine-air relationship at high arsenic air concentrations, and the lack of adjustment for background urinary arsenic concentrations. ASARCO suggested that:

> OSHA should have conducted risk assessment based on the Tacoma studies in terms of urinary concentrations. The attempt to convert from urine to air concentrations should have been the last step in the assessment rather than one of the first, and the uncertainties on any such conversion should have been noted (Ex. 202–7, p. 22).

The study of Pinto et al. had some limitations. Because the men studied by Pinto et al. were asked to not eat seafood, which would be the major source of urinary arsenic in the absence of air exposure, Pinto et al.'s assumption of zero urinary arsenic from zero air

arsenic exposure appears reasonable. Therefore, OSHA considers Pinto et al.'s correlation coefficient to be the best available measure of the relationship between urinary arsenic and airborne arsenic and it has been used by a number of scientists. The steeper slope suggested by CEOH would result in approximately halving the estimates of risk based on the data of Pinto and Enterline and Enterline and Marsh. These lower estimates would still result in significant risk.

G. Additional Studies

Mabuchi, Lilienfeld, and Snell studied the mortality of 1393 persons employed at an inorganic arsenical pesticide manufacturing plant between 1946 and 1974 (Ex. 237 BB; Ex. 237 CC). Included in the study cohort were 1050 males and 343 females. Baetjer et al. (Ex. 1A–24) had performed a preliminary study of the retirees of this plant, the results of which were extensively discussed in the preamble to the final arsenic regulation in 1978.

The study cohort of Mabuchi and colleagues was composed of all 952 workers employed 4 months or longer and a 20% sample (441) of the 2189 workers employed for less than 4 months. The comparison population was Baltimore City whites, whose sex, age, calendar period, and cause-specific mortality rates generated the expected numbers of deaths. Vital status as of August 1977 was ascertained for 87% of males and 67% of females. The period of observation was 1946–1977.

Workers were exposed to both inorganic arsenicals and non-arsenical compounds, including DDT and other chlorinated hydrocarbons. In 1972, the arsenic concentration in the insecticide building was estimated as 0.5 mg/m^3 as a time-weighted average. Exposures in the 1940's and 1950's were reported to be higher.

No statistically significant increases in mortality were observed for females. For males, a statistically significant lung cancer SMR of 168 was observed. When U.S. white males instead of Baltimore City white males generated the expected values, a lung cancer SMR of 265 was observed. When workers employed less than a year were excluded from the analysis, the overall male cohort had a lung cancer SMR of 271 (Baltimore City comparison). Unlike the previous study by Baetjer et al., lymphatic cancer mortality was not significantly in excess.

A strong gradient of lung cancer risk with increasing duration of exposure was observed, with SMRs renging from 94 in workers with 4 to 11 months of high exposure to arsenicals to 2750 in workers with 25 or more years of high exposure to arsenicals. Mabuchi et al. stated: "A dose-response relationship was demonstrated from an SMR increasing with length of high exposure to arsenicals" (Ex. 237 BB, p. 318).

Consultants in Epidemiology and Occupational Health (CEOH) interpreted Mabuchi et al.'s findings as demonstrating that "the risk of lung cancer does not increase with duration of exposure for a given exposure category" (Ex. 202–3D, p. 35). CEOH's statement is not supported by the observed gradient of response with increasing length of employment, as remarked upon by Mabuchi and colleagues.

Production workers were categorized as having had high exposures; maintenance/shipping workers were categorized in the medium exposure group; and office workers were categorized in the low exposure group. Lung cancer SMRs were 156 and 0 for the medium and low exposure groups respectively. Low statistical power may have been responsible for the lack of statistically significant increases in risk in the medium and low categories. Also, office workers may have had essentially nil arsenic exposure.

Mabuchi et al. did not have smoking histories for the cohort members. They thought it unlikely that smoking could explain the cohort's excess of lung cancer because other smoking-related diseases were not in excess and because of the dose-response observed for arsenic exposure.

Mabuchi and colleagues concluded that their "findings provide strong evidence for a causal relationship between occupational exposure to inorganic arsenicals and lung cancer" (Ex. 237 CC, p. 51).

Axelson, Dahlgren, Jansson, and Rehnlund performed a case-control study in Sweden to determine whether copper smelter employment was associated with increased mortality (Ex. 237D). Cases were selected from a registry of deaths occurring during 1960–1976 within a parish in Sweden and had to have died from lung cancer, cardiovascular disease, other cancers, cerebrovascular disease, and cirrhosis of the liver. Controls were selected from the same registry of deaths and died from causes other than those listed above. Industrial hygiene data were available such that the degree of past arsenic exposure could be assigned to each case and control. A 5-fold increase in lung cancer risk was observed among arsenic-exposed workers. In addition, a 2-fold increase in cardiovascular disease risk was observed among arsenic-exposed workers. A dose-response for lung cancer risk and arsenic exposure was apparent, although not statistically significant.

Axelson et al. considered that their data were insufficient to permit conclusions about the relationship of lung cancer to arsenic exposures below 500 μg/m^3. Axelson et al. stated: "exposure to arsenic is likely to be the major cause of the increased mortality, but other factors, particularly agents associated with arsenic, may also play a part" (Ex. 237 D, p. 14).

A cohort mortality study of another Swedish copper smelter was conducted by Wall (Ex. 237 MM). A total of 3919 male workers first employed at least 3 months during 1928–1966 at the smelter were included in the study. Mortality was observed during 1960–1977. Compared to the expected values derived from age and calendar year-specific mortality rates of Swedish males, the observed lung cancer SMR was 288. Compared to the expected values derived from the mortality rates of the county in which the plant was located, the lung cancer SMR was about 500. Wall concluded: "A dose-response analysis clearly indicates that the roasters and arsenic departments are risk places for the development of cancer, especially lung cancer" (Ex. 237 MM, p. 73).

ASARCO submitted an epidemiologic study by Cooper of employees of a lead smelter located in East Helena, Montana (Ex. 202–7A). A study of lead refinery workers in Omaha, Nebraska, where exposures to arsenic were reported as being extremely low, was also submitted (Ex. 214). OSHA believes that the Omaha study is not relevant because of the low levels of arsenic exposure and it will not be discussed further in this preamble.

At the lead smelter in East Helena, Montana, Cooper studied all 437 males employed for at least one year during 1946–1970 (Ex. 202–7A). Expected numbers of deaths were generated from the calendar period and age-specific mortality rates of U.S. white males. Some employees at East Helena were exposed to arsenic; however, the number of employees exposed to arsenic was not specified. Also, mortality experience was not analyzed for the specific group of arsenic-exposed workers. Two lung cancer deaths were observed compared to 3.4 deaths expected. Although Cooper recognized the low statistical power of his study to detect an excess risk of respiratory cancer, he stated that the lack of trends with regard to latency and duration of exposure indicated little excess cancer risk at the plant.

Landrigan of NIOSH calculated that Cooper's East Helena study had 21% statistical power to detect a 1.5-fold relative risk for lung cancer mortality (Ex. 215). Because of the small number of employees in the East Helena cohort, resulting in low statistical power, and lack of analysis of the mortality of employees known to be exposed to arsenic, no conclusions can be drawn about the relationship between arsenic exposure and lung cancer risk from this study.

Koppers Company submitted studies performed by Tabershaw Occupational Medicine Associates of workers at two wood preserving plants using chromated copper arsenate (Ex. 202–6B). Both studies were cross-sectional health and industrial hygiene surveys of the active work force. At the first plant, exposures to pentavalent arsenic averaged 2.1 $\mu g/m^3$, with a peak exposure of 5.2 $\mu g/m^3$. Sixty-three employees were included in the health survey. Urinary arsenic levels were below the limits detectable by laboratory assay.

At the second plant, exposures to pentavalent arsenic averaged 0.7 $\mu g/m^3$, with a peak exposure of 3 $\mu g/m^3$. Forty-six employees participated in the health survey. Specific urinary arsenic levels were not reported, but were described as showing no excess arsenic.

Neither of the two surveys detected any cases of lung cancer. While cross-sectional health surveys are useful for purposes of medical surveillance and studying some occupational diseases, such studies usually have limitations that restrict their usefulness for epidemiologic analysis of cancer risk. These two studies were confined to the active work force, who may not have been representative of the total population at risk, and surveyed a small number of employees, resulting in near zero statistical power to detect excess cancer risk. In addition persons who had lung cancer and already died or who left or retired and then developed lung cancer would not be covered. The study would have only detected persons who just developed lung cancer and had not yet quit or died. In addition, these two studies did not follow employees over a sufficient period of time to allow for the long latency period of lung cancer. For these reasons, no conclusions can be drawn from these studies concerning excess cancer risk and exposure to the chromated copper arsenate wood preserving process. It should also be noted that the reported levels of exposure to arsenic were very low, well under the 10 $\mu g/m^3$ level.

A number of epidemiologic studies have been submitted to the record which attempt to analyze the relation of arsenic ingestion from the public water supply to cancer risk. Also, studies of cancer risk among members of the general population exposed to air levels of arsenic well below 10 $\mu g/m^3$ have been submitted to the record. Although in some circumstances environmental studies may be relevant to assessing occupational risks, in the case of arsenic OSHA believes there is no need to discuss these studies because their ability to define exposure and consider other variables, such as latency, related to excess cancer risk was lower compared to other studies discussed by OSHA in the final regulation and in this preamble and because in the case of arsenic OSHA has available high quality occupational studies.

In some of the environmental studies, the authors concluded that results were negative and in some the authors concluded that the results were positive. OSHA has reached no conclusions concerning the results of these studies and has no authority to regulate either the public water supply or the general environment.

Several commenters have stated, incorrectly, that environmental (ambient air) levels of arsenic might be as high as 40 to 70 $\mu g/m^3$. In one case, this mistake was probably the result of a typographical error in the study by Ott et al. (Ex. 1A, 3–1). Data of the U.S. Public Health Service (Ex. 1A–23) and the World Health Organization (Ex. 252) indicate that maximum environmental exposures are substantially lower than 2 $\mu g/m^3$. Another consideration is that much of the arsenic that is ingested in drinking water or seafood is organic arsenic, which OSHA does not regulate as carcinogenic.

OSHA concludes that the epidemiologic studies of Mabuchi et al., Axelson et al., and Wall provide additional evidence in support of the strong causal association between inorganic arsenic exposure and excess lung cancer risk (Ex. 237 BB; Ex. 237 CC; Ex. 237 D; Ex. 237 MM). OSHA considers the study results of Cooper and Tabershaw Occupational Medicine Associates to be inconclusive because of the nature of their study design and analysis.

H. Effects of Smoking

Smoking is a major cause of respiratory cancer mortality in the United States. Therefore, smoking is a potential confounding factor for any epidemiologic study of humans exposed to a respiratory carcinogen. The preamble to the final arsenic regulation (43 FR 19584) discussed the potential role of smoking in the elevated respiratory cancer risk of arsenic-exposed workers. Based on testimony by Weir (Ex. 29N) and the study of Enterline (Ex. 111, Attachment 4), OSHA stated that it was "unwilling to assume that smoking alone accounted for more than a 17 percent excess in lung cancer mortality" among arsenic-exposed workers (43 FR 19590).

The **Federal Register** notice of April 9, 1982 announcing the limited reopening of the inorganic arsenic rulemaking record (47 FR 15358) also discussed the effects of smoking on arsenic-induced respiratory cancer. The aforementioned study by Enterline was included in the discussion. Enterline found a 2.6-fold increase in respiratory cancer risk among smoking copper smelter workers compared to smokers in the general population. Enterline also observed a 4.6-fold increase in respiratory cancer risk among non-smoking copper smelter workers compared to non-smokers in the general population (Ex. 111, Attachment 4). Based on this analysis Enterline stated that the observed excess in SMRs for respiratory cancer did not appear to be due to smoking. A subsequent publication by Pinto et al. (Ex. 205–2) observed substantially similar increases in risk among smoking and non-smoking copper smelter workers and reached the same conclusion as the original analysis of smoking by Enterline (Ex. 111, Attachment 4).

The **Federal Register** notice of April 9, 1982 also discussed data from studies by Ott et al. (Ex. 1A 3–1) and Lee and Fraumeni (Ex. 5D). It presented a hypothetical example of the effect of higher smoking prevalence in a cohort of arsenic workers to demonstrate the minimal potential confounding effects of smoking. The hypothetical study cohort of arsenic workers had a 60% prevalence of smoking while a comparison population had a 40% prevalence of smoking.

Note.—This large a difference in smoking habits seems very unlikely.

Such a 20% difference in the proportion of smokers between the study and comparison populations would contribute only about a 40% increase in lung cancer risk in the study cohort over the risk of the comparison population. This estimate was calculated by assuming a 10-fold excess of lung cancer among smokers as compared to non-smokers. Compared to non-smokers, a population consisting of 60% smokers would have about a 6.4-fold lung cancer excess and a population consisting of 40% smokers would have a 4.6-fold lung cancer

excess. Therefore, the relative risk of a 60% smoker population compared to a 40% smoker population is 1.4 (6.4/4.6) or 40% increased risk attributable to the smoking differential. Much larger increased risks than 40% were observed in arsenic-exposed workers, including 7-fold increases in respiratory cancer risk. Hence, the likelihood of a difference in smoking prevalence between exposed and comparison populations accounting for these large increases in risk is extremely low.

Ott et al. collected smoking histories from active employees exposed to arsenic (not study cohort members) and did not observe differences in smoking prevalence compared to the population at the location or differences in smoking prevalence by exposure category. Assuming that this survey reflected the smoking experience of the study cohort, smoking could not account for the observed excess of respiratory cancer deaths.

While Lee and Fraumeni did not have smoking histories for workers in the Anaconda smelter, they suggested that the dose-response observed among workers in heavy, medium, and light categories made it unlikely that smoking alone could explain the increased lung cancer risk.

Since publication of the April 9, 1982 Federal Register notice, additional data on the effects of smoking have been submitted to the OSHA record on inorganic arsenic. A discussion of the additional data follows.

Higgins and colleagues conducted an interview survey in addition to the mortality study in order to collect information on smoking habits of the study cohort. Live cohort members were interviewed by telephone or received mail questionnaires. Proxy respondents furnished smoking data for dead cohort members. About 83% of the total cohort of 1800 men participated in the interview surveys.

Using proxy respondents to furnish smoking histories for deceased cohort members created several potential problems. One problem is the possibility of Berksonian bias: proxy respondents may know the relationship between smoking and lung cancer and may be more likely to report smoking when the cohort member died from lung cancer. Higgins et al. compared respondent and proxy smoking histories for 83 men and found 88% agreement (Ex. 205-1). These proxy histories were obtained one year after the respondent was questioned; perhaps poorer agreement would have been obtained if more time had elapsed since questioning of the respondent. Also, 30% of the non-smokers in the sample of 83 men were classified by proxies as smokers compared to about 5% of smokers who were classified by proxies as non-smokers. Therefore, one cannot assume that there is an equal amount of over-reporting and under-reporting across all smoking status categories.

For their analysis of the mortality of smokers and non-smokers, Higgins et al. derived expected values from the specific age, race, and calendar year mortality rates of the state of Montana. This created another problem for the analysis, as noted by Higgins and colleagues. Presumably, Montana males resemble U.S. males and thus have roughly a 50% prevalence of smoking. Thus, Higgins et al. compared non-smoking workers to a standard population with 50% smokers. This caused the non-smoking workers' expected values for lung cancer to be too high, consequently underestimating the excess risk for non-smoking arsenic workers, and the smoking workers' expected values for lung cancer to be too low, consequently overestimating the excess risk for smoking arsenic workers.

Respiratory cancer SMRs for cigarette smokers and non-smokers were 327 and 205 respectively. When divided by exposure category, workers in the Heavy category had higher SMRs regardless of their smoking status.

Regarding their study results, Higgins and colleagues stated:

> This analysis showed that arsenic exposure was more important than smoking in relation to mortality from all causes, respiratory cancer, and ischemic heart disease. Smoking appeared to be the more important factor for all respiratory diseases. Taken as a whole, there was no evidence to indicate that cigarette smoking confounded the relationship of arsenic exposure to respiratory cancer (Ex. 202-3B, p. 45).

Crump examined the effects of smoking and concluded that "failure to control for smoking can not have been the sole cause of the increased cancer incidences observed in these studies" (Ex. 206, p. 21). He estimated that correcting for increased prevalence of smoking among ASARCO and Anaconda smelter workers would lower the observed respiratory cancer SMRs by about 13%. Crump considered the available data to be consistent with both an additive and multiplicative effect from smoking combined with exposure to arsenic, and noted that both smokers and non-smokers were at increased risk of developing respiratory cancer from arsenic exposure.

Pershagen, Well, Taube, and Linnman performed additional statistical analyses on the study results reported by Wall (Ex. 237MM) in order to explore the interaction between exposure to arsenic and tobacco smoke. For each of 76 copper smelter workers who had died from lung cancer, 2 referents were chosen who had been employed at the same copper smelter and had died from other causes. Arsenic-exposed non-smokers were observed to have a 3-fold increased risk of lung cancer death compared to non-smokers with no history of arsenic exposure. Smoking arsenic workers had a 14.6-fold increased risk of lung cancer death compared to non-smokers with no history of arsenic exposure. The authors did not compare smoking arsenic workers to smokers who had no arsenic exposure; however, an increased lung cancer risk of roughly 2-fold for smoking arsenic workers compared to smokers with no arsenic exposure can be estimated from Table 1 of their paper (Ex. 202-7I, p. 304). Pershagen and colleagues concluded that combining tobacco smoking with arsenic exposure had a multiplicative effect on lung cancer mortality rather than additive effect. Pershagen et al. did not explain how their findings differed from those which would be expected from an additive relationship between arsenic and tobacco smoke.

OSHA concludes that the additional data on the effects of smoking support OSHA's previous conclusion that the excess lung cancer risk observed among arsenic-exposed workers could not be attributed primarily to smoking. Furthermore, the authors of the studies providing additional data on smoking generally are in agreement with this conclusion. Whether tobacco smoke and arsenic exposure have an additive or multiplicative relationship does not affect OSHA's conclusion concerning the effect of smoking. The following observations, among others, indicate that smoking cannot be the primary etiologic factor for the increased respiratory cancer risk:

1. Non-smoking arsenic workers had significantly increased risk.
2. Smoking arsenic workers had significantly increased risk relative to smokers not exposed to arsenic.
3. The magnitude of increased respiratory cancer risk among arsenic workers was higher than what would have been observed if smoking was the major etiologic factor for the excess risk.
4. Differentials in smoking prevalence would be an extremely unlikely explanation for the dose-response gradient observed for arsenic exposure.

I. Effects of Other Exposures

Lee and Fraumeni (Ex. 5D) stated that the potential carcinogenic effects of

exposure to sulfur dioxide or other unknown agents could not be distinguished from the effects of arsenic exposure. This was because workers who received heavy exposure to arsenic also received medium or heavy exposure to sulfur dioxide. Pinto and Enterline also could not rule out potential carcinogenic effects from agents associated with arsenic exposure in the smelter atmosphere (Ex. 29B).

Lubin et al.'s multivariate analyses of the Anaconda cohort enabled examination of the question of the potential carcinogenic effects of exposure to sulfur dioxide independently or with contemporaneous exposure to arsenic (Ex. 201-17). When multivariate models controlled for heavy/medium arsenic exposures, no significantly increased lung cancer risk was observed from heavy/medium exposure to sulfur dioxide (RR=0.9 for workers with heavy/medium exposure to sulfur dioxide who had no heavy/medium exposure to arsenic). However, there was a non-significant 5-fold increased risk among workers with heavy/medium exposure to sulfur dioxide who had also been employed 15-24 years. When multivariate models controlled for heavy/medium sulfur dioxide exposures, heavy/medium arsenic exposure continued to be associated with increased respiratory cancer risk (RR=2.3 for workers with heavy/medium exposure to arsenic who had no heavy/medium exposure to sulfur dioxide).

With regard to the role of sulfur dioxide in producing the observed excess of respiratory cancer, Lubin et al. noted that statistical power of their study to detect an increased risk from exposure to sulfur dioxide by itself or in combination with arsenic was not high. Nevertheless, in their opinion, multivariate analyses demonstrated that the excess risk of death from respiratory cancer was primarily associated with exposure to arsenic.

Brown and Chu (Ex. 241-C) also examined the effects from exposure to sulfur dioxide for 8014 members of the Anaconda study cohort. Both arsenic and sulfur dioxide were assigned exposure categories of light, medium and heavy.

After adjusting for the effects of age at initial exposure, duration of exposure, and time since employment stopped, excess lung cancer mortality rates within each of the three arsenic exposure categories were examined with adjustment for the effects of sulfur dioxide exposure, and vice versa. A clear dose-response gradient was observed for lung cancer risk and arsenic exposure.

Sulfur dioxide did not exhibit a dose-response gradient when excess lung cancer mortality rates were adjusted for the effects of arsenic exposure. Brown and Chu concluded:

> This Table [3] shows that SO_2 level by itself, i.e., unadjusted for arsenic level, shows an increasing trend of excess mortality risk with increasing level of the contaminant. However, when the effect of one atmospheric contaminant is adjusted for the possible confounding effect of the other, the relationship of excess risk with arsenic level remains unchanged, while the effect of SO_2 level disappears. Therefore, these results . . . indicate that arsenic level is the more important measure of carcinogenic contamination than is SO_2 level (Ex. 241-C, p. 15-16).

Mabuchi et al. (Ex. 237AA; Ex. 237BB; Ex. 237CC) attempted to distinguish the potential carcinogenic effects of exposure to non-arsenicals, including chlorinated hydrocarbons, from the effect of exposure to arsenicals in their cohort of pesticide manufacturing workers. When the cross-classified workers by duration of high exposure to arsenicals and non-arsenicals, they continued to observe increasing SMRs for lung cancer with increasing duration of exposure to arsenic. With regard to the effect of exposure to non-arsenicals, Mabuchi et al. stated: "no substantial differences in SMR by duration of non-arsenical exposure were apparent for a given duration of arsenical exposure * * * Thus, no dose-response pattern is apparent for non-arsenical exposure" (Ex. 237BB, p. 318). In addition, a case-control study of workers within the plant found no association between DDT exposure and lung cancer risk. Mabuchi et al. noted that "the interval of observation after exposure to the maximum doses of these non-arsenical chemicals may not have been sufficient to allow for a prolonged latent period for cancer" (Ex. 237BB, p. 318).

The Chemical Manufacturers Association-Arsenic Panel stated, in their pre-hearing brief, that the presence of copper oxide, dry lime sulfur, and powdered sulfur in the pesticide plant studied by Mabuchi et al. was evidence that pesticide plant exposures were similar to the copper and sulfur dioxide exposures of the copper smelter workers (Ex. 202-3, p. 42). Therefore, CMA considers that these other chemicals may have been responsible for the observed excess cancer risk. OSHA judges that the non-arsenical chemical exposures within copper smelters and arsenic pesticide plants cannot be considered similar; for example powdered sulfur differs greatly from gaseous sulfur dioxide.

Seeking to explore the potential role of sulfur dioxide in the respiratory cancer excess among ASARCO copper smelter workers, Enterline and Marsh compared the mortality experience of the Arsenic department workers to that of the Cottrell department workers (Ex. 201-9). In the Cottrell department, arsenic exposures were considered very high, exceeding 500 $\mu g/m^3$ and sulfur dioxide exposures were considered moderate, ranging from 5 to 20 ppm. Arsenic exposures were also considered very high in the Arsenic department, also exceeding 500 $\mu g/m^3$, while sulfur dioxide exposures were considered nil. For this comparison, none of the workers categorized in the Arsenic department had ever worked in the Cottrell department. Respiratory cancer SMRs were 370.4 and 334.6 in the Cottrell and Arsenic departments respectively. Both increases in respiratory cancer mortality were statistically significant. Enterline and Marsh stated: "Respiratory cancer SMR's were quite similar suggesting that SO2 exposure did not play an important role in the respiratory cancer excess at this copper smelter" (Ex. 201-9, p. 15).

Higgins and colleagues also sought to determine the potential confounding effects of exposure to sulfur dioxide and asbestos among workers in their study cohort (Ex. 202-3B). For sulfur dioxide, departments were categorized as having low, medium or high exposure. Workers were classified as having received either low *Ceiling* or medium/high *Ceiling* exposures to sulfur dioxide. *Ceiling*, for this analysis, was defined as maximum category in which each worker spent one year or more.

Air concentrations of asbestos were not measured during 1943-1965. Potential exposure to asbestos was defined as working with asbestos or insulation or working in the mason, pipefitter, or boiler shops.

Regarding the effects from exposure to sulfur dioxide and asbestos, Higgins et al. stated that these substances did "not appear to account for respiratory cancer excess in this population." (Ex. 202-3B, p. 65). Higgins and colleagues were not able to completely separate the sulfur dioxide, asbestos, and arsenic exposures in their analysis, yet they concluded that arsenic appeared to be the major factor in the increased respiratory cancer risk of Anaconda workers. Their conclusion regarding asbestos was based on the lack of a decrease in respiratory cancer SMRs when men with asbestos exposure were excluded from the analysis.

Workers with medium/high exposure to sulfur dioxide did appear to have

increased respiratory cancer SMRs relative to workers with low sulfur dioxide exposure within the same *Ceiling* arsenic category. However, Higgins and colleagues found that workers with medium/high sulfur dioxide exposure had higher *average* arsenic concentrations than their counterparts with low sulfur dioxide exposure. Hence, while a potential carcinogenic effect from sulfur dioxide exposure could not be ruled out, Higgins and colleagues judged that "arsenic exposure could have been responsible for the apparent association between sulfur dioxide and excess respiratory cancer" (Ex. 202–3B, p. 39).

OSHA realizes that many occupational environments involve exposure to multiple substances. When an excess of cancer is observed in an occupational population, it is not always possible to attribute the excess solely to the suspect etiologic agent. Additional studies of the same type of workplace and of other types of workplaces which find carcinogenic risk associated with the suspect agent strengthen the causal evidence. Excess respiratory cancer risk has been observed in copper smelter workers, pesticide manufacturing workers, and vineyard workers exposed to arsenic. These three types of workplaces had dissimilar exposures except for their common exposure to arsenic. In addition, analyses by Lubin et al., Brown and Chu, Mabuchi et al., Enterline and Marsh, and Higgins et al. suggest that arsenic exposure was the primary cause of the respiratory cancer excess in their study cohorts. While these investigators' analyses cannot completely rule out carcinogenic effects from substances other than arsenic, their fiindings further strengthen the evidence for arsenic causing respiratory cancer.

OSHA concludes that the increased respiratory cancer risk observed among arsenic workers is primarily due to arsenic exposure, based on the excess risk observed in dissimilar work environments and based on the analyses performed by Lubin et al., Brown and Chu, Mabuchi et al., Higgins et al., and Enterline and Marsh.

J. Conclusions

In keeping with OSHA's statutory mandate to review the latest available scientific evidence, OSHA's conclusions regarding the epidemiologic evidence on the carcinogenicity of inorganic arsenic are based on the most recent studies as well as on the studies available earlier. OSHA concludes that the findings of the most recent studies (Lee-Feldstein, Lubin et al., Higgins et al., Enterline and Marsh, Mabuchi et al., Axelson et al., Wall) and the older studies (Lee and Fraumeni, Pinto and Enterline, Tukadome and Kuratsune, Ott et al., Hill and Faning, Baetjer et al., Denk et al., Roth) are strong evidence that inorganic arsenic is a human carcinogen (Exhibits 5D, 29B, 111—Attachment 4, 191, 1A 3–1, 1A–24, 5B, 109 C–87, 65, 109C–88, 201–17, 201–16, 202–3B, 203–5, 201–8, 201–9, 205–2, 237BB, 237CC, 237D, 237 MM). The International Agency for Research on Cancer, the World Health Organization—Arsenic Working Group and NIOSH concur with this judgment (Exhibits 201–13, 252, 227).

Data concerning the quantitative relationship of inorganic arsenic to increased lung cancer risk are available for the study cohorts of Lee and Fraumeni, Lee-Feldstein, Higgins et al., Pinto and Enterline, Ott et al., and Enterline and Marsh. In addition to confirming that a dose-response exists for arsenic exposure and lung cancer risk, these studies provide direct evidence of excess risk at and below the previous OSHA permissible exposure limit of 500 $\mu g/m^3$. *Measured* estimates of excess risk at specific levels of exposure for these study cohorts, as distinguished from estimates of risk *predicted* by dose-extrapolation models, indicated excess lung cancer risk from levels of exposure to inorganic arsenic less than 500 $\mu g/m^3$.

Table 3 summarizes measured estimates of respiratory cancer risk from exposure to relatively low air concentrations of inorganic arsenic. Statistically significant increases in respiratory cancer mortality were observed at average arsenic exposures of 49 $\mu g/m^3$ and at cumulative arsenic exposure of 150–450 $\mu g/m^3$-years.

Note.—A cumulative exposure of 150 $\mu g/m^3$-years represent 150 $\mu g/m^3$ for one year or 3.3 $\mu g/m^3$ for 45 years, or other exposure levels adding up to 150 $\mu g/m^3$-years.

Also, other increases in risk were observed at low levels of exposure but these were not statistically significant increases. As explained in previous sections, these increases are meaningful because small numbers of employees in each category may prevent true excess risks from attaining statistical significance. Another reason why these increases are meaningful is that trends in mortality data, as well as stistical significance, are important.

In addition to low statistical power, another factor might be responsible for the fact that some of the observed excess risks were not statistically significant in some of the low exposure categories. This factor is simply that some workers classified as receiving low exposure may have had close to zero exposure to arsenic (for example, company farm workers).

TABLE 3.—RESPIRATORY CANCER RISK OBSERVED IN LOW EXPOSURE CATEGORIES

Studies and exposure categories	Respiratory cancer SMR's
Maximum Exposure (Table 5, 6)	
Lee-Feldstein (Ex. 201–16):	
Light (12 or more months)[1]	*231
Light (1–15 Years)	*223
Light (15–24 years)	*186
Light (25 or more years)	*313
Cumulative Exposure (Table 8)[2]	
Enterline and Marsh (Ex. 201–8):	
Less than 150 $\mu g/m^3$-years	155.4
150–450 150 $\mu g/m^3$-years	*176.6
450–800 150$\mu g/m^3$-years	*226.4
Average Exposure by Duration of Exposure (Table 12)[3]	
Less than 10 years (49 $\mu g/m^3$)	169.9
10–19 years (49 $\mu g/m^3$)	*266.2
Average Exposure (Table 16)	
Higgins et al. (Ex. 202–3B, 203–5):	
Less than 100 $\mu g/m^3$	138
100–499 100 $\mu g/m^3$	*303
Ceiling Exposure (Table 20)	
Less than 100 $\mu g/m^3$	129
100–499 100 $\mu g/m^3$	116
Cumulative Exposure (Table 6)	
Less than 500 $\mu g/m^3$-years	69
500–2000 $\mu g/m^3$-years	157

[1] Light estimated to average 290 $\mu g/m^3$ by H.F. Morris.
[2] Based on 10 year Lag Data and 0.3 conversion factor for urinary levels to air levels.
[3] Based on 0.3 conversion factor for urinary levels to air levels.
* Statistically significant (P less than 0.05).

A few investigators did not observe increases in lung cancer risk for some low exposure categories. For example, as listed in Table 3, Higgins et al. observed an SMR of 69 for those workers with cumulative exposures less than 500 $\mu g/m^3$-years. As with the low exposure groups which did have lung cancer excesses that were not statistically significant, low statistical power might have been responsible for the lack of excess risk observed in these instances. Also, the exposure levels for some workers in these categories such as office workers and farm workers may have been 10 $\mu g/m^3$ or well below that level. OSHA does not consider these no-risk findings to constitute evidence for a threshold of arsenic carcinogenesis. Nor do these findings counterbalance the preponderance of the epidemiologic evidence indicating significant risk from exposure to relatively low levels of arsenic.

In summary, increased respiratory cancer risk was observed at and far below the former PEL of 500 $\mu g/m^3$. OSHA believes that these data are sufficient by themselves to support a finding that the risk is significant. It is not necessary for OSHA to establish the significance of risk by using mathematical dose-extrapolation models. Both measured estimates of risk and estimates of risk predicted by dose

extrapolation models are valid methods of establishing significance of risk.

Using different measures of exposure, including average exposure levels, cumulative exposure, ceiling or maximum exposure, and duration of exposure, a dose-response gradient of increasing lung cancer risk with increasing exposure was observed in the various studies. Significant reduction in risk from lowering workplace exposure levels is likely, based on the dose-response data indicating lesser risk from lower exposures.

Higgins et al. suggested that peak exposures exceeding 500 $\mu g/m^3$ rather than average exposure or cumulative exposure may be the primary determinant of arsenic-induced lung cancer risk. This hypothesis should be considered preliminary, given that Higgins et al. studied only 20 percent of workers who received relatively low exposures, resulting in very low statistical power to detect excess lung cancer risk in the low exposure categories. In contrast, Lee and Fraumeni and Lee-Feldstein, who studied the entire cohort at risk, found that workers in the light exposure category (estimated as having average exposures of 290 $\mu g/m^3$) who had never been exposed to medium or heavy levels of arsenic had significantly increased lung cancer risk. In addition, a potential confounding effect from average exposures hinders interpretation of the effects from peak exposures, because workers with higher peak exposures would be expected to have higher average exposures. For these reasons and other reasons discussed in Section VI, OSHA placed more weight on Lee and Fraumeni's and Lee—Feldstein's findings than on the findings of Higgins et al. regarding peak exposures. An additional factor contributing to OSHA's decision concerning the question of peak exposures was the good dose-response observed for measures of exposure other than peak exposure and measured excess risks for employees who had average exposure well under 500 $\mu g/m^3$. Both these factors tend to indicate excess risk for employees who had no peak exposures over 500 $\mu g/m^3$.

Since publication of the final regulation, additional data have strengthened OSHA's earlier conclusion that smoking and occupational exposure to agents other than arsenic could not be primarily responsible for the excess respiratory risk of arsenic-exposed workers. Increased respiratory cancer risk has been observed in both non-smokers and smokers in occupational cohorts exposed to arsenic. Whereas good dose-response has been observed for arsenic exposure, consistent dose-response has not been observed for sulfur dioxide and other non-arsenical exposures. Also, observing excess risk in different occupational environments with arsenic exposure, including copper smelters, arsenical pesticide plants, and arsenic-exposed vineyard workers, is strong evidence for arsenic rather than other substances being the etiologic agent for lung cancer.

IV. Quantitative Risk Assessment

Section II in the April 9, 1982 document and Section II. C above offer general discussions on risk assessment and background information. Those aspects of risk assessment will not be repeated here.

A. Summary of Risk Assessments

Table 4 summarizes all of the estimates of risk presented during the rulemaking proceedings. There were nine separate risk assessments discussed. The following section will briefly describe the methodology used and conclusions drawn by each author. Datailed discussions of the issues can be found in the subsequent analytic sections. The first three risk assessments are those presented in the April 9, 1982 document which formed the basis of OSHA's preliminary determination of significant risk.

Dr. Kenneth Chu, while on detail to OSHA from the National Toxicology Program, performed a risk assessment based on the Lee and Fraumeni and Ott et al. studies and the Pinto and Enterline data. He based his assessment of risk on a linear, non-threshold relative risk versus cumulative dose model. (Dr. Chu also calculated risk according to a quadratic model, although he indicated in his report that the linear model was more representative of the risk associated with arsenic on the basis of statistical fit, as measured by R^2. The R^2 values were, in general, higher for the linear model than for the quadratic model. R^2 is discussed in more detail in Section IV–B). Dr. Chu's risk assessments predict a risk of 375 to 713 excess cancer deaths per 1000 workers with a lifetime exposure at 500 $\mu g/m^3$ and 7.7 to 25 deaths per 1000 at 10 $\mu g/m^3$.[1]

[1] Dr. Chu also made predictions from the Ott et al. study, but he did not include them in his preferred estimates.

TABLE 4.—SUMMARY OF RISK ASSESSMENTS EXCESS RISK OF LUNG CANCER PER 1,000 WORKERS RISK AT 10/50/500 μg/Cubic Meter

Model used	Lee and Fraumeni	Pinto et al.	Ott et al.	Lee-Feldstein	Enterline and Marsh	Higgins et al.
Chu:						
Linear RR[1]	10/51/393	25/125/713	29/146/767			
Quadratic RR	0.3/7/-	2/49/-	2.1/52-			
Clement Associates: Linear RR	7.7/39/394	9.1/46/465				
EPA-CAG: Linear RR	[2]8/38/375					
Crump:						
Linear RR	8.7/43/321	19/92/518	25/117/578	8.3/40.6/310		[3]9.4/45.8/342
Linear AR [4]				3.2/16.0/148	7.8/38.6/315 Lag 0 7.6/37.3/303 Lag 10.	5.2/25.9/229
Radford: Linear RR			[5]18.8-37.5/-/-			
Enterline: Linear RR					2.7/13.4/- Lag 10 2.2/11.2/- Table 12.	
Blejer and Wagner	Recommends 2 $\mu g/m^3$.					
World Health Organization: Linear RR	[6]61/305/-					
CEOH						No excess risk if exposure <500 $\mu g/m^3$.[7]

[1] Relative risk (Observed/Expected).
[2] Combined estimates from Lee and Fraumeni, Pinto et al. and Ott et al. studies.
[3] Cumulative exposure data. Ex. 202-8, Appendix D.
[4] Absolute risk (Observed-Expected)/Person-Years.
[5] Range of estimates from Ott et al., Lee-Feldstein, and Enterline and Marsh studies.
[6] Calculated by OSHA using WHO's methodology for risk analysis.
[7] Ex. 202-3A.

Clement Associates performed a risk assessment based on the Lee and Fraumeni study and the Pinto et al. study published in 1977. (Dr. Chu based his assessments solely on data in the arsenic record, which closed in 1976). Clement concluded that the Ott et al. study was not as well suited for risk assessment and did not include it in its analysis.

The Clement risk assessment is based on a linear non-threshold model with dose measured as an average lifetime exposure. Clement estimated that a 45-year working lifetime of exposure to 500 $\mu g/m^3$ of arsenic will result in a 525% to 620% excess risk of lung cancer or 394 to 465 excess deaths per 1000 workers over a lifetime, and that exposure at 10 $\mu g/m^3$ of arsenic will result in a 10% to 12% excess of lung cancer or 7.7 to 9.1 excess deaths per 1000 exposed workers over a lifetime.

The EPA-Carcinogen Assessment Group (EPA–CAG) also performed a risk assessment on arsenic. The judgment of the group was that the data in the Lee and Fraumeni, Pinto et al. and Ott et al. studies were of sufficient quality to perform a risk assessment and that a linear model was appropriate. It estimated, as a best estimate, an 8.1% increase in lung cancer per 1 $\mu g/m^3$ of arsenic for an environmental exposure of 24 hours a day, 365 days a year over a natural lifetime. The EPA–CAG averaged results from all three studies in making its overall risk estimate.

Since a working year exposure (40 hours per week for 46 weeks) is only about 20% of an environmental exposure, the estimate of risk had to be adjusted to a working year estimate before comparisons could be made with the other risk assessments. The formula the EPA–CAG used, based on a 46-week work year, was:

$$\frac{46 \text{ weeks} \times 40 \text{ hours}}{365 \text{ days} \times 24 \text{ hours}} = 0.21$$

In addition, a natural lifetime averages 74 years while a maximum working lifetime is considered to be 45 years. Therefore, the EPA–CAG's risk factor has to be further reduced to take into account the shorter number of years exposed during work.

The conversion is $45/74 \times 0.21 = 0.128$. This conversion was presented in the April 9, 1982 document and was not challenged. Therefore, the 8.1% excess risk per 1 $\mu g/m^3$ of arsenic exposure estimated by EPA–CAG must be multiplied by 0.128 to convert to a working lifetime equivalent of an excess risk of 1.0368% or approximately 1% excess risk per 1 $\mu g/m^3$ of arsenic exposure. This results in a 500% excess risk of lung cancer at 500 $\mu g/m^3$ of arsenic exposure, or 375 excess deaths per 1000 workers over a working lifetime, a 50% excess risk at 50 $\mu g/m^3$ or 38 excess deaths per 1000 workers over a working lifetime, and a 10% excess risk at 10 $\mu g/m^3$ or 8 excess deaths per 1000 workers over a working lifetime.

In addition to the three risk assessments discussed in the proposal six additional risk assessments were presented, or became available, during the rulemaking proceedings: Drs. Crump, Radford and Enterline, and Consultants in Epidemiology and Occupational Health each presented analyses on data presented in the arsenic record. An analysis by Blejer and Wagner (1976) gives a "projection" of risk from exposure to inorganic arsenic and the World Health Organization-Arsenic Working Group (WHO-AWG) also presents an evaluation of the risk from inorganic arsenic exposure.

The results from the independent assessments performed by Dr. Crump support the preliminary estimates of risk proposed by OSHA, falling within the same range: 8.7 to 29 excess deaths per 1000 at 10 $\mu g/m^3$ and 321 to 578 per 1000 at 500 $\mu g/m^3$. Employing a linear model, he used an age-adjusted method for estimating risk from lifetime exposure to arsenic with both relative risk and absolute risk. Dr. Crump concluded that any of the 3 studies, Lee and Fraumeni (1969), Ott et al. (1974) and Pinto et al. (1977), "would be an adequate basis for a quantitative risk assessment of respiratory cancer risk from occupational exposure to arsenic. Moreover, in evaluating the Ott et al. study, Dr. Crump did not consider its shortcomings "severe enough to prevent its use in quantitative risk assessment." (Ex. 206, p. 2).

Dr. Crump also performed risk assessments on the more recent studies by Lee-Feldstein, Enterline and Marsh, and Higgins et al. The predictions from these analyses are consistent with estimates from the previous studies. Using a relative risk model, at 10 $\mu g/m^3$, they predict a lifetime excess risk of 8.3 and 9.4 deaths per 1000 for the Lee-Feldstein and Higgins et al. data respectively. The comparable predictions of risk when absolute risk is incorporated are approximately half those predicted by a relative risk model (3.2 per 100 and 5.2 per 1000, respectively). When Dr. Crump fit a linear absolute risk model to the Enterline and Marsh (1982) data (which, as discussed in the next section, may be a more appropriate method) the predicted risks were very similar to estimates presented earlier (7.6 per 1000 at 10 $\mu g/m^3$ and 303 per 1000 at 500 $\mu g/m^3$ in the 10 Year Lag group).

Dr. Radford presented his estimates of risk in terms of a "doubling dose", that is, the cumulative dose at which one would expect a doubling of the risk (SMR=200). He calculated the doubling dose for the Lee-Feldstein data (approximately 2900 $\mu g/m^3$-years) and the Enterline and Marsh data (doubling dose approximately 500–3000 $\mu g/m^3$-years from Table 12). He also computed the doubling dose for the Ott et al. data to be approximately 1500 $\mu g/m^3$-years.

Taking a value of 1000–2000 $\mu g/m^3$-years as a "best range", he estimated that a lifetime occupational exposure (45 years) to the 10 $\mu g/m^3$ level would yield approximately a 25 to 50% increased risk of lung cancer (18.8 deaths per 1000 to 37.5 per 1000), which was similar to the upper risk estimates of Dr. Chu. Dr. Radford concluded that "the risk estimates presented by OSHA in the April 9 summary must be raised in light of the new information" (Ex. 207, p. 13).

Dr. Enterline made predictions of risk in a prehearing submission (Ex. 202–8 Appendix C). He employed a linear regression model with relative risk and a cumulative measure of dose to arrive at a risk of 5.4 excess deaths per 1000 workers at 10 $\mu g/m^3$. Eliminating the duration of exposure dimension (i.e., plotting risk versus average intensity rather than a cumulative measure) he predicted 4.5 per 1000 from a lifetime exposure at 10 $\mu g/m^3$. Dr. Enterline concluded that since earlier exposure may have been considerably higher and considering factors of urinary arsenic concentrations, he may have overestimated the risk. He commented: "My guess is that regression coefficients are overstated by at least a factor of 2. This would thererefore reduce excess deaths related to arsenic exposure by 50%," thus leading to the estimates in

Table 4 of 2.7 and 2.3 deaths per 1000 at the 10 μg/m³ level (Ex. 202–8, Appendix C, p. 8).

Blejer and Wagner (1976) reviewed much of the literature associating respiratory (and other) cancer with exposure to inorganic arsenic. They determined that both the Lee and Fraumeni (1969) and the Ott et al. (1964) studies "correlated work exposure levels of inorganic arsenicals with observed mortality experience" (Ex. 237–I, p. 180). Using only the data in the published literature Blejer and Wagner determined that the dose-response relationship found in Lee and Fraumeni was semiquantitative, but that the quantitative dose measures found in Ott et al. were adequate to perform a "projection" of risk from exposure to inorganic arsenic. (Blejer and Wagner did not have available the Morris submission presented at OSHA's 1975 hearing which provided numercial estimates for the Lee and Fraumeni categories. Their determination that the dose-response was semi-quantitative was based on measures "light, medium, and heavy"). Blejer and Wagner concluded:

> Occupationally, there are no data to document a noncancerigenic exposure level for inorganic arsenic. Moreover, our evaluation of the occupational dose-response relationship appears to indicate that nonresponse level of exposure may not exist. Therefore, because of the ubiquity of arsenic in the environment and because of the necessity of preventing occupational exposure from increasing the arsenic body burden, the most prudent and logical approach would be to limit these occupational exposures to those of approximately the *natural ambient level.*

Consequently, Blejer and Wagner recommended an occupational 8-hour time-weighted average of 2 μg/m³.

In its review of arsenic, the World Health Organization-Arsenic Working Group presents an assessment of cancer risk from exposure to inorganic arsenic based on the study of Pinto et al. (1977). WHO-AWG assumed that the lifetime cancer risk is a function of the total dose of arsenic." They continued:

> This is a necessary assumption because occupational exposures begin at maturity, whereas exposure to airborne arsenic in the general environment begin at conception. Furthermore, in the case of lung cancer risk estimates, it is assumed that there are no age or sex differences in susceptibility to cancer induced by arsenic. There is not much basis in scientific fact for assuring the validity of these assumptions. It is not unreasonable to assume that the cancer response is proportional to the total dose, since the occupational smelter exposures extended over a substantial portion of the life span (Ex. 252, p. 145).

The WHO-AWG predicted risk for an average daily lifetime dose of 0.8% per 1 μg/m³. Using the same ascumption (of excess risk associated with total dose) OSHA calculated that for a *working* lifetime average dose of 10 μg/m³, the WHO-AWG method predicts a risk of approximately 61 per 1000 excess lung cancer deaths.[2]

The Consultants in Epidemiology and Occupational Health (CEOH) reviewed the health data on exposure to inorganic arsenic and analyzed it as to degree of risk. CEOH concurred with other commenters that a clear dose-response relationship exists when peak exposures are above 500 μg/m³ and that such exposure constitutes a significant risk. CEOH concluded, however, that there may be a threshold for exposure to arsenic. In support of this conclusion, they relied on the Higgins et al. "ceiling" analysis which indicated that there was no statistically significant excess risk for employees who had less than 30 days exposure at levels above 500 μg/m³.

For further support CEOH stated its opinion that the dose-response relationship for arsenic was not a strong one. Dr. Lamm of CEOH cited several tables (Lee Feldstein, Ex. 201–16, Table 4, Enterline and Marsh, Ex. 201–9 Table 10) as evidence of a "plateau effect" in the dose-response curve. That is, in CEOH's view, unless exposures are at very high concentrations, or for very long durations, one does not see increasing risk with increasing dose. CEOH did not employ a regression analysis and its conclusions concerning dose were based solely on evaluation of the exposure measurement parameter intensity and not an evaluation of other parameters, such as duration.

B. Estimating Risks

In its April 9, 1982 document, OSHA presented the results of three independent risk assessments, based on 3 studies of high quality found in the arsenic record. OSHA concluded that the Lee and Fraumeni and Pinto and Enterline studies are excellent epidemiologic studies and provide a strong basis for quantitative risk assessment and that it was reasonable to utilize data from the Ott et al. study for risk assessment.

As pointed out in the proposal, and discussed in Section III, several recent reports have become available which continue to show excess lung cancer risk among smelter workers exposed to inorganic arsenic. The data received in these rulemaking proceedings and the analyses of these new studies have some effect on the quantitative estimates of risk proposed in the April 9, 1982 document.

Several questions were raised in the proposal regarding the dose-response curve, and questions of ascription of historical dose. Many of these were addressed in comments and at the July, 1982 hearings and their impact on risk assessment will also be detailed here.

The three risk assessments presented in the April 9, 1982 proposal predicted excess risk at the 10 μg/m³ level based on a linear model to describe the dose-response relationship. OSHA preliminarily concluded that "the linear hypothesis appears to be the most reasonable approach for estimating the risk presented by occupational exposure to inorganic arsenic." (47 FR 15364). OSHA relied on Dr. Chu's R^2 calculations in reaching this conclusion as well as the fact that both Clement Associates and EPA-CAG had chosen a linear model for their analyses.

As pointed out in the April 9, 1982 document, R^2 or correlation coefficient squared, indicates how close the measured points are to the dose-response curve predicted by the model. The closer the R^2 is to one, the better is the fit. That is, if the model predicts the observations perfectly, then R^2 equals one. It was pointed out in Dr. Chu's report that it can be seen that R^2 values are, in general, higher for the linear model than for the quadratic model.

In his pre-hearing submission, Dr. Crump analyzed five[3] of the major studies presented in the rulemaking proceedings. He used different models and methods for fitting the models to the data and estimating the lifetime risk and employed a Chi-squared goodness-fit test to assess the fit of the models.

Like the R^2 statistic, the Chi-squared goodness of fit statistic is also a measure of how close the measured points are to the predicted curve. The quality of the fit is judged by a P value associated with each Chi-squared statistic. The closer the P value is to one, the better the fit. However, many statisticians consider P values far less

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[2] The computation was as follows:

Total dose (Pinto et al.) = 8 m³/day × 240 days × 50 μg/m³ × 25 years = 2,400,000 μg/m³ = 2400 mg.

Total dose (environmental) = 12 m³/day × 365 days × 8 μg/m³ × 70 years = 2,452,000 μg = 2452 mg.

which was assumed to produce an excess relative risk of 200%.

Total dose (workplace, OSHA) = 9.6 m³/day × 230 days × 10 μg/m³ × 45 years = 993,600 μg = 993.6 mg.

2452.8/993.6 = 2/x

where x is the excess relative risk for working lifetime exposure to arsenic of 10 μg/m³. x = 0.81, or 81%. Therefore, the excess risk is 0.81 × 0.075 (background) = 0.06075 or 61 deaths per 1000.

[3] Lee and Fraumeni, Ott et al., Pinto et al., Enterline and Marsh, Lee-Feldstein.

than one as indicative of an acceptable fit.

In a pre-hearing submission the CEOH (Ex. 202–30 p. 23) criticized the use of the R^2 statistic as a measure of goodness-of-fit, suggesting this was an "inaccurate" interpretation of the statistic. Dr. Crump's use of the Chi-squared goodness-of-fit test addresses many of the shortcomings of the R^2, including assumptions of normality for the underlying data.

In his independent assessments, Dr. Crump fit both linear and quadratic dose-response models to the data, concluding that, based on Chi-squared goodness-of-fit tests, the linear model was a more appropriate model. In most cases, the P values were substantially higher for the linear model than for the quadratic model. Overall Dr. Crump has characterized the fit of the linear model as "good" (P values ranging from 0.14 to 0.97) but noted that the Lee-Feldstein data fit was "marginally acceptable". In his testimony Dr. Lamm characterized the fit of the Lee-Feldstein data as "unacceptable" (Tr. 522). Dr. Crump commented further however, that he believes the lack of fit in the Lee-Feldstein data is due to imprecision of the exposure estimates rather than any inherent deviation from linearity. In reaching this conclusion, Dr. Crump also fit a linear model to the Higgins et al. cumulative exposure data. (Higgins and colleagues may have done a better job of describing an individual's cumulative exposure than did Lee-Feldstein). Crump characterized the fit of the linear model in this instance as "excellent" (P values equaled 0.46 and 0.75) and the data are supportive of a strong linear dose-response relationship for the Anaconda data.

During a question and answer period at the hearing, Dr. Lamm also pointed to the fit of the quadratic curve for several studies, noting that where there is an adequate fit for the linear model, there is usually a more than adequate fit for the quadratic model. He concluded that while there may be quite a good fit for the linear, ". . . your quadratic fits sufficiently well that it would be inappropriate to exclude that as a reasonable or feasible explanation of the behavior [of the data]" (Tr. p. 519). OSHA disagrees with this conclusion. In all but one study, the P value from the Chi-square goodness of fit test for the linear model is substantially higher than that for quadratic. OSHA concludes there is strong evidence to support the use of the linear model in this risk assessment. As Dr. Crump concluded: "These [chi-squared] analyses indicate that it is reasonable to use a linear model to assess risk from occupational exposure to arsenic, but it would not be reasonable to use a quadratic model" (Ex. 206, p. 5).

Dr. Radford also supported the use of a linear model, pointing out: "The fact that a linear no-threshold convention has been widely applied for chemical initiators represents a conservative position reflecting our uncertainty about biochemical mechanisms of low doses of initiators" (Ex. 207, p. 6).

In addition, the WHO–AWG summarized the support for a linear non-threshold model in carcinogenic risk assessment. It concluded:

> The use of the linear non-threshold model is recommended for extrapolation of risks from relatively high dose levels, where cancer responses can be measured, to relatively low dose levels, which are of concern in environmental protection where such risks are too small to be measured directly either through animal or human epidemiological studies.
>
> The linear non-threshold model has been generally accepted amongst regulatory bodies in the USA for chemical carcinogens (IRLG) and for ionizing radiation on an international basis (ICRP). The linear non-threshold philosophy was accepted by a Task Group on Air Pollution and Cancer in Stockholm in 1977 (Task Group on Air Pollution and Cancer, 1978). The scientific justification for the use of a linear non-threshold extrapolation model stems from several sources: the similarity between carcinogenesis and mutagenesis as processes which both have DNA as target molecules, the strong evidence of the linearity of dose-response relationships for mutagenesis, the evidence for the linearity of the DNA binding of chemical carcinogens in the liver and skin, the evidence for the linearity in the dose-response relationship in the initiation stage of the mouse 2-stage tumorigenesis model, and the rough consistency with the linearity of the dose-response relationships for several epidemiological studies; for example, aflatoxin and liver cancer, leukaemia and radiation. This rationale for the linear non-threshold dose-response model is strongest for the genotoxic carcinogens (Ex. 252, p. 144).

Another issue raised in the proceeding is the question of the dose ascription methods in several studies. When ascribing dose levels, one must consider such issues as historical exposures and temporal trends, the choice of mean, median, or peak values as representative of exposure, and urinary-airborne exposure conversion levels. The influence of dose ascription on the shape of the dose-response curve (and consequently the estimates of risk) can sometimes be substantial, particularly when it affects shifting between exposure classes.

In analyzing the Lee and Fraumeni data, Clement Associates' and Dr. Chu's risk assessments utilized the extensive exposure data in the arsenic record, based on data submitted by Morris of measurements taken at the Anaconda Smelter (Ex. 28 B). Both excluded data for the workers in the highest exposure category for some of their analyses. (Those workers frequently wore respirators and, therefore, the levels of arsenic inhaled would have been lower than the level of arsenic measured in the workplace air.)

The EPA-CAG risk assessment utilized a 1975 National Institute of Occupational Safety and Health (NIOSH) survey of the Anaconda smelter as the basis for estimating exposures of workers in the Lee and Fraumeni study. These exposure data were "derived from a single survey of copper smelters conducted after the period of employment of the workers studied" in the Lee and Fraumeni study (Ex. 201–4, p. 4). The "heavy" and "medium" exposure classifications as determined by NIOSH were virtually identical in this analysis and, therefore, the EPA averaged the two exposure levels for its analysis.

There were several updates to the original Lee and Fraumeni study. The study by Higgins et al. attempted a more accurate calculation of an individual's exposure particularly his cumulative exposure. Several commenters expressed reservations about the classification scheme of Higgins et al. The method of estimating cumulative exposure by multiplying exposure times average duration used by several experts is also a reasonable approximation. This is borne out by the similarity in the estimates of risk from analyses using both methods of dose ascription.

There were also questions on the ascription of dose in the Pinto et al. studies. The exposure levels used in the risk assessment based on the Pinto and Enterline results are derived from urinary arsenic levels. All three risk assessments utilized the same factor, 0.3, which was estimated by Pinto et al. (Ex. 201–19), to convert urinary levels to airborne levels.

The risk assessment performed by Dr. Chu on the Pinto and Enterline data utilized data contained in the arsenic record, that the urinary arsenic levels in 1948 were twice the 1973 level, to estimate exposures prior to 1948. Dr. Chu believes that these estimates are good estimates of exposure. They take into account the protection afforded by the respirators that were sometimes used. Higher exposures would have resulted in acute symptoms, which were infrequent.

Both the Clement and EPA-CAG assessments are based on estimates presented in the Pinto and Enterline 1977 update that stated that exposures before 1948 were 5 to 10 times higher than the 1973 levels. These higher estimates of past exposures are based on estimates made by ASARCO, though these estimates were not based on detailed studies. Since an assumption of higher exposures in the past would result in lower estimates of risk per unit of exposure, this particular assumption was the principal explanation for the higher estimates of risk in the assessment performed by Dr. Chu.

OSHA concluded in its April 9, 1982 proposal that it accepted "the [5 to 10-fold] higher estimates of past exposure because they are documented in the published literature and because ASARCO has had extensive programs for monitoring arsenic going back to the late 1930's." However, OSHA pointed out that Dr. Chu's estimates were also "reasonable" (47 FR 15364). As pointed out in section III, recent reports (Ex. 201-8, 201-9) tend to support Dr. Chu's determination that pre-1948 levels were approximately twice as high as those of 1973, and lend support to his higher estimates of risk.

The new study by Enterline and Marsh (1982) confirmed OSHA's conclusion in the preamble to the final standard that there is significant excess risk of lung cancer from exposed to inorganic arsenic, even at low exposures. There was some question, however as to the strength of the dose-response relationship in this data.

Some of the participants pointed to the Enterline and Marsh (1982) analysis as evidence of a "plateau effect" in the dose-response curve. They used this term to define a phenomenon that, at lower doses, there is little or no gradient of risk with increasing dose, and that one only sees an increase or "jump" at very high doses. Some commenters pointed to Table 10 of Enterline and Marsh noting that the data failed to show a gradient of risk for doses less than or equal to 5000 μg/l-years (Exhibit 202-3, Table 10). Drs. Crump and Radford have suggested, however, that this lack of a dose-response relationship may be a result of the way dose was accumulated and that, perhaps, an "absolute risk" model may be more appropriate than a relative risk model to examine these data. Absolute risk is a measure of excess risk defined by Dr. Crump as (Observed Deaths-Expected Deaths)/Person-Years.

Dr. Crump noted that cohorts in higher exposure categories in the study might tend to be older than those in lower exposure categories. For illnesses which increase with age, this creates the possibility of age confounding. To address this potential problem of age confounding the comparison of SMR's, Dr. Crump calculated absolute risk by exposure category.

Absolute risk differs from SMR's and relative risk by *subtracting* the expected values from the observed number of deaths rather than *dividing* the expected deaths into the observed deaths. Hence, the expected value for cancer deaths, which is age-dependent, still figures in the calculation of absolute risk. Relative risks and SMR's are directly proportional to the expected values because they are multiples of the expecteds. Absolute risk is not directly proportional to the expected values and thus is less subject to age-confounding than SMR's and relative risks. Also, absolute risk corrects for differences in person-years at risk between study cohorts by dividing person-years into (Observed Deaths—Expected Deaths). As discussed by Dr. Crump (Ex. 206, p. 17) and the OSHA staff submission (Ex. 241-A), even if respiratory cancer mortality rates increase with increasing dose, older cohorts who received higher exposure, may not exhibit higher SMR's that reflect their greater risk. Absolute risk measures would reflect their greater risk of dying from respiratory cancer.

Dr. Crump stated:

> In an absolute risk model, the increase in cancer risk due to arsenic exposure at a given age does not depend upon the background risk (i.e., the risk in the absence of exposure to arsenic). In a relative risk model this increase is proportional to the background risk. If an absolute risk model is correct and if cohorts with higher dose also tend to be older (which was probably the case in the Enterline and Marsh analysis, due to the way exposure was accumulated) then even if respiratory cancer age-specific mortality rates increase linearly with dose, relative risks might not increase with dose, and they could actually decrease (Ex. 206 p. 17).

Dr. Crump (Ex. 206) analyzed the mortality data of Enterline and Marsh using an absolute risk model for the Cumulative exposure data and 10 Year Lag data (Ex. 206, Table 3). A clearer dose-response gradient for respiratory cancer risk was apparent using absolute risk measures. Dr. Crump suggested that "an absolute risk model may more nearly approximate the carcinogenic effect of arsenic than a relative risk model." In support of this hypothesis, Dr. Crump cited the better dose-response observed using SMR's when Enterline and Marsh confined their analysis to workers age 65 and over (Ex. 201-9, Table 10, p. 11). Since dose and age would not be related for this group, a dose response with SMR's would be expected, as well as for absolute risks (Ex. 212, p. 17-18).

Dr. Enterline responded that since absolute risk measures ignore the magnitude of the background risk and since most known industrial carcinogens interact with background cancers he prefers the use of relative rather than absolute risk models. He added that consideration of background is particularly important for agents suspected as cancer promoters. (Ex. 244, Appendix B, p. 1). However, to predict the excess risk attributable solely to arsenic exposure, independent of the background level, an absolute risk would also be an acceptable measure of risk.

Though use of absolute risk in place of relative risk does change the shape of the dose-response curve, estimates of risk based on the two measures do not differ substantially (See Table 4).

Based on observations at the Tacoma smelter, Enterline and Marsh suggest that for arsenic, "effective dose is not simply a multiplication of time times dose rate of intensity. Short exposures seem to have a disproportionately greater effect than long exposure * * * It is also possible that * * * it is not historic but recent exposure that is most important in any particular case, and the cumulative exposure to arsenic as a measure of dose have no overall meaning." In a post hearing submission (Ex. 244, Appendix B) Dr. Enterline reiterated that duration may be a "poor surrogate" for amount of exposure, a concept which may be supported by findings in the Higgins' report.

In addition, Enterline and Marsh further suggested that arsenic may be a cancer promoter, rather than a cancer initiator. This issue was raised in light of its impact on the shape of the dose-response curve and the threshold hypothesis. In general, initiation refers to the processes involved in starting or "initiating" a carcinogenic tumor. It may involve a single event, or several independent events. Promoting generally refers to an increase in the tumor growth rate; promotion can only take place once a cell is initiated. The terms initiator and promoter refer to the mode of action of the carcinogenic event; that is, whether it is an initiator, promoter, or both, it is considered a carcinogen.

Drs. Enterline and Marsh noted arsenic appeared to be a promoter because of the short latency period for arsenic-induced cancer observed in the ASARCO studies and the strong (Ex. 201-9) relationship bewteen lung cancer risk and age at initial exposure observed by Brown and Chu (Ex. 241-B, 241-C). In his post-hearing submission Dr.

Enterline concluded that if arsenic is a late stage promoter and if the multistage theory of carcinogenesis[4] is valid, then "use of a linear time-weighted dose-response relationship for arsenic would overstate response at low dose" (Ex. 244, App B, p. 1).

Brown and Chu (Ex. 241–C, 241–B) analyzed the mortality of 8014 members of the Anaconda cohort in order to determine whether excess respiratory cancer risk was related to duration of exposure, age at initial exposure, and follow-up time since exposure stopped. Their interest in these factors stemmed from the multistage theory of carcinogenesis, which predicts that risk will be differentially affected by these factors depending on whether the carcinogen acts on an early stage or late stage of the process of carcinogenesis.

Brown and Chu found that excess respiratory cancer mortality risk was a function of increasing age at initial exposure, duration of exposure, and exposure concentration. Duration of exposure was observed to be the most important single factor in the excess lung cancer risk. They considered their finding of increased risk with increased age of initial exposure to be consistent with arsenic having a late stage effect, since older individuals presumably would have more initiated cells susceptible to carcinogenesis.

Evidence against arsenic having an effect on promotion and growth cited by Brown and Chu included the relatively long latency period and continuing excess risk 20 years after cessation of exposure that they observed in the Anaconda cohort. This is inconsistent with animal models of promotion of carcinogenesis, where short latency periods and tumor regression after cessation of exposure to the promoter are characteristic.

Brown and Chu concluded that while their results suggested that arsenic primarily may have an irreversible effect on the late stage of the cellular transformation process, they could not rule out an additional effect at the initial carcinogenic stage from arsenic exposure (Ex. 241–C, 241–B).

In support of the use of a linear model, Dr. Radford noted that certain toxic agents may act as initiator *and* promoter; he posited (as did Dr. Enterline) that a promoter's dose-response curve may be curvilinear upward (less effect per unit dose at lower doses), whereas the studies of Enterline and Marsh and Lee Feldstein seemed to find more effect per unit dose at lower doses (Ex. 207, p. 7).

Even if a substance were clearly found to be a promoter rather than an initiator, humans are exposed to a variety of carcinogens such that a linear model might still be appropriate.

Several commenters suggested that there may be a "plateau effect" for inorganic arsenic in the Anaconda data as well.

Dr. Lamm cited the Lee-Feldstein study as one example about which he suggested "there is a plateau of risk unaffected by increasing duration for an extended period" (Ex. 202–3D).[5]

Dr. Crump commented: "I [therefore] consider the argument that risk depends primarily upon exposure level irrespective of duration to be highly speculative at this point." (Ex. 212, p. 9). Moreover, as discussed earlier, Brown and Chu concluded that duratrion of exposure is the most important single factor in determining lifetime risk (Ex. 241–C, p. 19).

Dr. Lamm has applied a very narrow definition to the dose-response relationship, insisting that there must be a statistically significant increase in the SMR's for each successive employment group (i.e., significant change from group to group). Applying such a definition lends support to the "plateau" effect theory. Dr. Lamm's definition is not the usual criteria for a dose-response curve and the authors of the studies OSHA discusses consider that their data demonstrate dose-response relationships. For example, Drs. Lee-Feldstein stated: "The excess respiratory cancer mortality increased with length of employment and was positively related to degree of arsenic exposure" (Ex. 202–3A).

Dr. Crump addressed many of these issues stating that the "plateau" effect; " * * * rather than being an inherent property of the dose-response is more probably due to small sample sizes and the fact that it is more appropriate in this particular situation to look for a dose-response in absolute risk rather than relative risk." (Ex. 212, p. 7). As with the Enterline and Marsh data, Dr. Crump noted that the "plateau effects" disappear almost entirely when absolute risk is plotted against length of employment." He elaborates, however, that if the plateaus of risk are "real" one must also accept the conclusion that there are possibly very sizable risks associated with small cumulative doses (i.e., arsenic is more potent than thought earlier.)

As was pointed out earlier in this discussion, the dose-response ralationship seen in the Lee-Feldstein data was not as strong as that in the Lee and Fraumeni data, and Dr. Crump characterized the linear fit as "marginally acceptable." He believed, however, that this was due to imprecisions in the exposure estimates rather than an inherent deviation in linearity.

Lee-Feldstein assigned workers to exposure categories in the same manner as Lee and Fraumeni. Dr. Marsh (Ex. 202–8 Appendix F. p. 23) commenting on that classification scheme, stated that assigning workers in the manner used by Lee and Fraumeni (1969) will "dilute effects seen in the high and medium groups" thus producing an artificial decrease in slope (lower risk per unit dose). He also noted that classification by highest exposure is confounded by duration. Marsh recommended that a time-weighted average over a work history would be a "more representative scheme."

The question of the suitability of cumulative dose for risk assessment was also investigated with data from the Higgins et al. study. Dr. Higgins and colleagues classified individuals by time-weighted averages and cumulative total exposure. A significant risk for lung cancer was observed and a clear dose-response relationship is seen between TWA and respiratory cancer mortality (Table 16) and when respiratory cancer is plotted against cumulative exposure as well. When Dr. Crump fit his models to the cumulative lifetime exposure data presented by Dr. Higgins (Ex. 202–8, Appendix D, Table 6) the data demonstrated an excellent fit (P values 0.46, 0.75) for both relative risk and absolute risk. Dr. Crump concluded that there was a strong dose-response relationship and that these data are consistent with a linear dose-response model.

The CEOH and Dr. Higgins have suggested that the data in the Higgins et al. report constitute evidence of a threshold of exposure to inorganic arsenic. They contend that there is no increased risk when exposures are not allowed to exceed 500 $\mu g/m^3$, and they stress that peak exposures are the major determinant of risk, regardless of length of exposure.

This conclusion must be assessed in light of the discussion presented in Section III. The exposure groups under 500$\mu g/m^3$ had a very low power to

[4] The multistage theory of carcinogenesis postulates that cancers are initiated only through a series of independent stages, and that all stages must be completed before a tumor will appear. In general, a polynomial curve (curvilinear upward) is used to describe this relationship; this curve will tend to approach zero much more quickly than a linear model.

[5] Dr. Lamm has included some qualifications to these conclusions, stating that a relationship exists only with very high concentrations or exposure of more than 25 years.

detect a 50 percent excess risk, even if one existed, and that classification by "ceiling" exposure may have had an artificial effect on the dose-response relationship due to "class shifting."

Despite the fact that Dr. Crump obtained an excellent fit using a linear regression, a standard statistical technique, Dr. Lamm did not employ a regression analysis. He stated: "Our lines here connect the data points rather than being a line, which is a linear regression, to *represent* [emphasis added] the data points" (Ex. 247, corrected transcript p. 451). He notes that this method of analysis has the advantage that no assumptions on the behavior of the curve are made as they are in the regression analysis.

Based on his non-regression analysis, Dr. Lamm concluded that there appeared to be a threshold at approximately 500–800 $\mu g/m^3$-years. It should be noted, however, that for 45 years exposure this is a "safe" level of approximately 10 $\mu g/m^3$.

A further issue presented was the quality of the Ott et al. data and its facility for risk assessment. In the preamble to the final standard, OSHA concluded that due to methodological limitations, the Ott et al. data would not be used to "draw firm conclusions as to the exact nature of the dose-response curve." However OSHA also concluded that the Ott et al. study did provide "firm evidence of excess lung cancer mortality of workers exposed to arsenicals." (43 FR 19596). Because of the high percentage of pentavalent arsenic in the environment where the study took place, OSHA also relied on the Ott et al. study as evidence of the carcinogenicity of pentavalent arsenic.

Several experts made use of the Ott et al. data for risk assessment purposes subsequent to the publication of the preamble to the final standard. Based on this, in the April 9, 1982 document, OSHA stated that it was reasonable to use the Ott et al. study for risk assessment purposes but did not include estimates of risk based on the Ott et al. study in its preferred estimates.

The CMA-Arsenic Panel disagreed with the use of the Ott et al. study for risk assessment, citing the limitations that were discussed in the preamble to the final standard. While OSHA recognizes these problems with the Ott et al. study, still, a number of the experts during the proceedings reaffirmed the quality of the Ott et al. study noting that both dose and response were characterized well enough for it to be used for risk assessment. Both Dr. Chu and the EPA-CAG employed the Ott et al. data in their risk assessments.

Dr. Crump stated that because of its shortcomings he did not consider the study as well-suited for risk assessment as either the Pinto et al. or the Lee and Fraumeni studies. Nevertheless, he did not consider the shortcomings severe enough to prevent its use in quantitative risk assessment. Dr. Crump also cited consistency with estimates of risk from other studies as affirmation of the use of the Ott et al. study. Dr. Radford also cited the Ott study in his estimates of risk. In fact, he believed that the estimates of risk from Ott et al. data were, in fact, in the correct range of risk and that estimates from the other studies needed to be raised in light of new information.

Some commenters have stated that the arsenic trioxide present in the chemical plant, not the pentavalent arsenic , may be the active carcinogenic agent. If this were the case, given the small quantity of arsenic trioxide in the plant, this would suggest that trivalent arsenic was much more potent than previously thought. In view of the consistent data on the risk from arsenic, the best conclusion is that the pentavalent arsenic is the major factor.

OSHA concludes, in view of all the new expert opinion that the Ott et al. study is an adequate basis for risk assessment and produces estimates of risk consistent with those from other studies.

C. Conclusions

OSHA concurs with many of the experts that the linear regression analysis appears to be the most reasonable approach for estimating the risk presented by occupational exposure to inorganic arsenic. The linear model provides an excellent fit to the data and is consistent with current biologic interpretations. It has been utilized in prior estimates of risk at low levels based on epidemiologic data (41 FR 4673, October 22, 1976).

OSHA considers that relative risks, SMR's, and absolute risk measures are well-established and valid methods of estimating increased risk from exposure to an etiologic agent of disease. While absolute risk (also referred to as excess risk and attributable risk) is not as common a risk measure as the SMR, its use is recommended in epidemiologic textbooks (Ex. 237–J; Ex. 237–Z; Ex. 237–EE). OSHA considers Dr. Crump's absolute risk analysis of the Enterline and Marsh study valuable and has utilized it in reaching a conclusion about findings of the ASARCO studies.

It is clear that inorganic arsenic is a carcinogen, but, the evidence of whether it acts as a promoter or initiator, or both, is indeterminative. As stated earlier, the final determination on the mode of action does not affect the decision to regulate arsenic as a carcinogen and the use of a linear model in such a case is reasonable for making estimates of risk.

OSHA believes that the suggestion of a threshold for carcinogenicity is not nearly as well supported by the evidence, and consequently, OSHA accepts the more broadly supported no-threshold model; this also promotes the interest of worker protection.

OSHA concludes that reasonable estimates of risk for a 45-year working lifetime exposure at 10 $\mu g/m^3$ range from 2.2 excess deaths per 1000 workers to 29 per 1000, and from 148 to 767 excess deaths per 1000 at 500 $\mu g/m^3$. Within this range, OSHA believes the preferred estimate for a 45-year working lifetime is an excess risk of 8 deaths per 1000 at 10 $\mu g/m^3$, 40 per 1000 at 50 $\mu g/m^3$ and 400 deaths per 1000 at 500 $\mu g/m^3$. Additional rationale for these conclusions are stated below.

V. Other Health Issues

A. Animal Studies

The carcinogenicity of inorganic arsenic has been based on the strong evidence of human epidemiologic studies. Most animal studies have obtained negative results. These have been reviewed by IARC (1980) (Ex. 201–13). There have been some animal studies which have obtained positive results. A summary of several recent negative and positive studies and comments will be presented.

Furst (Ex. 202–3A; 232F) reviewed the animal studies concerning the question of carcinogenicity of inorganic arsenic. Furst concluded that "studies in which attempts were made to induce any cancer in experimental animals have proven uniformly negative." He further stated that "the very few experiments which propone to show positive effects do not stand up to any statistical analysis."

Berteau et al. (1978) reported in an abstract of their work on a long-term inhalation study of an arsenic aerosol on "tumor susceptible" mice. This study represents the only major long-term inhalation study involving inorganic arsenic reported in the published literature. His group exposed Strain A female mice to an aerosol (range 0.8 to 5 μm mass medium diameter) of 1% aqueous solution of sodium meta arsenite every working day for the first 26 days and for 20 minutes per day thereafter. The dose was 2.3 mg/kg/day. At the end of the experiment, 208 days, there were no significant differences in

the pulmonary adenomas found in the treated mice compared to the controls.

CMA-Arsenic Panel indicated during the hearings that more details of this study were available and submitted an unpublished report on this inhalation study by Berteau et. al. (Ex. 260). Berteau et al. concluded that sodium arsenite is probably not a carcinogen in mice. They also suggested some possible reasons for the negative findings, including potential inappropriate choices of strain of mice, species, chemical form of arsenic, and exposure level. The author suggested that arsenic may require a co-factor and pointed out that the study had not been conducted for the full lifetime of the animals.

Rodricks and Brett (Ex. 238) in post-hearing comments on the Berteau et al. study noted several deficiencies in the study. First, only one dosage was tested and the exposure level may be too high or too low. One dose level could not determine whether a dose-response relationship existed nor could a no-effect level be estimated. Second, the dosage was selected on the basis of the results of an acute inhalation study, but dosages are usually selected on the basis of subchronic studies, which more closely resemble long-term exposure situations. Third, the concentration of sodium arsenite was not adjusted during the exposure period, thus, the animal did not maintain a constant dose level. It was unclear whether animals were dosed five or seven days per week. Finally, Rodricks and Brett noted that no mortality data were given in the report. They noted that 27 percent of the treated group were sacrificed during the exposure period, only approximately one-third of the animals received gross or histopathological examinations for organs other than the lungs, and that the duration of the study was less than the generally accepted two-years minimum for cancer bioassays in rodents.

Knoth (1966) (Ex. 237–V) noted a significant frequency of tumors in 30 NMRI mice exposed to Fowler's solution (1 percent potassium arsenite) given orally one drop per week for 20 weeks. Adenocarcinomas of the skin, lung and lymph nodes were found. No tumors were seen in 15 control mice of both sexes or their offspring observed up to 2 years. There was an absence of experimental details provided which would be helpful for critical assessment.

Ossawald and Goerttler (1971) (Ex. 237–HH) administered daily subcutaneous doses of 0.5 mg/kg of sodium arsenate as a 0.005 percent aqueous solution of sodium arsenate to 24 female Swiss mice throughout pregnancy. Eleven of the treated mice developed lymphocytic leukemia or lymphomas within 24 months after the start of the experiment and none of 20 untreated females which died during the same period developed such tumors. During the 24 month observation period, 13 to 71 untreated progeny and 41 of 97 treated progeny developed lymphomas or lymphocytic leukemia. The IARC working group was critical of this experiment since 19 of 55 control animals and some of the experimental animals were still alive at the time of reporting.

Ishinishi et al. (1977) (Ex. 237–R) administered to groups of 14–23 Wistar King rats a total of 15 intratracheal instillations of 0.26 mg arsenic troxide, 2.5 mg copper ore (containing 3.95 percent arsenic) or 2 mg flue dust (containing 10.5 percent arsenic) alone or in combination with 0.4 mg benzopyrene (BP). No malignant lung tumors were observed in the rats treated with arsenic trioxide or copper ore alone and no statistically significant increase in the incidence of malignant lung tumors was found when these compounds were given in combination with BP. One adenocarcinoma by the lung occurred among 7 surviving rats given instillations of flue dust alone. Many commenters stated this study was only suggestive because of the small number of animals and would require more studies for proper evaluation.

Ivankovic et al. (1979) (Ex. 237–T) administered to a group of 25 male BD IX rats a single intratracheal instillation of 0.1 mlof an arsenic-containing mixture (calcium arsenate, copper sulfate and calcium hydroxide), which is known as Bordeau mixture (dose of arsenic, 0.07 mg). Ten rats died within the first week after treatment and the remaining 15 were observed for their lifespan. Nine treated rats developed lung lumors (7 bronchiogenic adenocarcinomas and 2 bronchiolar-alveolar-cell carcinomas). No lung tumors occurred in 25 controls given intratracheal instillations of saline. It should be noted that the experiments of Ivankovic et al. are incomplete since they do not include simultaneous studies on individual ingredients in the Bordeau mixture. That is, no copper sulphate or calcium hydroxide or copper sulphate plus calcium hydroxide exposure groups were studied (Exs. 201–13, 232F).

Rudnai and Borzsonyi (1981) (Ex. 237–LL) administered subcutaneously an aqueous solution of arsenic trioxide to lung tumor susceptible mice. A dose of 1.2 ug/g of arsenic trioxide was administered to pregnant LAJI: CFLP mice in a single dose on the 15, 16, 17 or 18th day of pregnancy. The offspring of the treated mice were given subcutaneouly 5 μg arsenic trioxide per day per animal for 3 days. Lung tumor incidence was significantly higher in animals treated on the 16th day and again during neonatal life (12/19, 63.1 percent) than in controls (3/17, 17.6 percent). Rudnai and Borzsonyi described the lung tumors histologically in part as papillary adenomas and as malignant adenocarcinomas.

IARC (Ex. 201–13) analyzed the animal studies and came to the conclusion that inorganic arsenic had not yet been demonstrated to be carcinogenic in animal studies. The CMA also reached that conclusion in its pre-hearing submission. Dr. Rodricks, an expert in toxicology, made the point that none of the studies were of the quality required for the National Cancer Institute Bioassay programs (Ex. 226).

OSHA concluded in the preamble to the final standard that a clear animal study demonstrating the carcinogenicity of inorganic arsenic had not been demonstrated and that continues to be OSHA's conclusion, though there are some studies indicating positive results.

OSHA does not believe that the lack of a good animal study detracts from its conclusion that arsenic is a human carcinogen. OSHA's statutory responsibility is to protect employees. The overwhelming evidence associating inorganic arsenic exposure with excess lung cancer in exposed employees clearly outweighs the lack of a clear definitive animal model. Dr. Furst in a post-hearing submission argued that agencies require positive animal, human and short-term tests before classifying a substance as a carcinogen. OSHA is not aware of any regulatory agency requiring all three types of evidence. OSHA along with NIOSH, IARC and WHO-AWG concludes that the strong human data alone is a strong basis justifying reducing employee exposure to inorganic arsenic.

B. Mutagenicity and Cytogenetic Effects

Mutagenicity is the property of inducing alterations in the information content (DNA) of an organism or cell that are not due to the normal process of recombination. Cytogenetic effects involve changes or damage to the genetic material which does not necessarily involve a mutational change. Many of these effects can be measured with short-term tests or assays. These changes in DNA or genetic material may be an early indicator that a substance may be a potential carcinogen.

Leonard and Lauwerys (1980) (Ex. 237–Y) concluded that most of the studies performed on the mutagenic and cytotoxic activity of arsenic have provided positive results. These studies

involve experiments on microorganisms, plant material and drosophila as well as observations on the ability of this metal to induce, in vitro and in vivo, chromosomal aberrations in mammalian cells. In contrast, a review by Simmon (1982) (Ex. 202–3A) concluded that the evidence for inorganic arsenic being a hazard because of its mutagenic activity is poor. This was the view of the CMA-Arsenic Panel. Simmon indicated that the majority of arsenic compounds are not capable of inducing point mutations in mammalian or microbial cells and suggested weaknesses in studies on DNA repair, as well as advising caution in interpreting the clastogenic effects. A summary of some of the literature will be presented.

Nishioka (1975) (Ex. 237–GG) and Kanematsu et al (1980) (Ex. 237–U) have demonstrated that arsenicals have caused an increase in unscheduled DNA repair (i.e. damaged the DNA so that repair activity was abnormally high). This is called the bacterial rec-assay system. The rec-assay system using recombination -proficient and deficient strains of Bacillus subtilis was used to screen a large number of metal compounds for mutagenicity. Nishioka found that both As+3 and As+5 produced positive rec-assay results. It was also shown that arsenic compounds ($AsCl_3$ $NaAsO_2$) having a valence of +3 seem to be more mutagenic than (Na_2HAsO_4) possessing a valence of +5 because more distinct rec-effect was seen in the former than in the latter. In 1980, Kanematsu et al. again demonstrated that strong positive rec effects were noted with both trivalent and pentavalent compounds of arsenic (As_2O_5, As_2O_3, $AsCl_3$, $2AsO_5$, Na_2HAsO_4).

Simmon (1982) (Ex. 202–3A) was critical of the two Japanese studies because, in an unpublished report to the Koppers Co., Pierce and Simmon (1981) could not reproduce their results. The report by Pierce and Simmon was not submitted to the record.

Simmon (1982) (Ex. 202–3A) had pointed out that a number of assay systems had demonstrated that arsenic was not mutagenic. Lofroth and Ames (1978) reported that neither arsenite nor arsenate was mutagenic in the Salmonella/microsome assay, commonly known as the Ames Test. Ikeshelashville et al. (1980) reported that sodium arsenate had no effect on the fidelity of DNA synthesis using E. Coli DNA polymerase activity. Rossman et al. (1980) reported results that showed arsenate was not mutagenic to either E. Coli or to Chinese hamster cell line V79, although Rossman et al (1977) (Ex. 237 KK) had previously reported on positive mutagenic effects of arsenite in E. coli.

In contrast, a number of recent studies have reported positive effects of both trivalent and pentavalent forms of arsenic. DiPaolo et al. (1979), found that arsenate causes cell transformation in Syrian hamster embryo cells and Castro et al. (1979) found arsenite to enhance the frequency of transformation induced by the Simian adenovirus SA 7. Paton and Allison (1972) found that both arsenite and arsenate significantly increased chromosmals aberrations in leukocyte culture. Petres et al. (1977) (Ex. 237 JJ) found that arsenates cause transformation in human peripheral lymphocytes. Ohno et al (1982) reported statistically significant increases in frequency of induced sister chromatid exchanges in Chinese hamster cells resulting from treatment with sodium arsenite, sodium arsenate and arsenic pentoxide. Larramendy et al. (1981) (Ex. 237 X) reported that non-toxic concentrations of inorganic arsenic salts (sodium arsenate and sodium arsenate) caused transformation of Syrian hamster embryo cells (HEC) and induced sister chromatid exchanges (SCE) and chromosome aberrations of HEC and human peripheral lymphocytes. The authors concluded that the induction of SCE and chromosomal aberrations by metals reemphasized the sensitivity of cytological assays and their importance for detecting genetic damage caused by carcinogens.

Some observations have been made on the somatic cells of people exposed to arsenic for medical or professional reasons and in the workplace. An increased frequency of chromosomal aberrations has been observed among workers exposed to inorganic arsenic compounds, as well as in patients who had taken drugs containing arsenic (Petres et al. 1977 (Ex. 237 JJ); Nordenson et al. 1978).

As the above review of the literature indicates, there is a growing number of studies which have demonstrated positive mutagenic and genetic effects by both trivalent and pentavalent forms of arsenic. The number of positive studies is sufficient to outweigh the contrary views of Simmon and CMA-Arsenic Panel which appeared to be based principally on negative results in some test systems. The Agency now believes that the positive mutagenicity results support the strong human evidence for the carcinogenicity of inorganic arsenic. However, the human carcinogenicity data are so strong that even if the mutagenicity data were consistently negative, OSHA would still conclude that inorganic arsenic is a human carcinogen.

C. Teratologic and Reproductive Studies

The reproductive or teratogenic effects of arsenicals were not addressed in the preamble to the final OSHA standard. A few human epidemiologic studies and animal studies have provided evidence of arsenic-induced reproductive or teratogenic effects. Animal studies have shown that sodium arsenate induces developmental malformations in a variety of test animals: embryo chick, hamster, rat, and mouse. Hood (1982) (Ex. 202–3A) has recently reviewed the toxicology of prenatal exposure to arsenic. A summary will be presented.

Ridgeway and Karnosky (1952) reported chicken embryos injected on the fourth day with sodium arsenate were stunted and had mild micromelia and abdominal edema. The first detailed report of arsenic teratogenicity in a mammal was that of Ferm and Carpenter (1968). They administered intravenously high doses of sodium arsenate to hamsters on gestation day eight which resulted in a high percentage of malformed fetuses, increased prenatal mortality and resorbed litters.

Hood et al. (1977) (Ex. 237 P) compared the prenatal effects of oral and intraperitoneal administration of sodium arsenate in mice. Intraperitoneal administration had a considerably greater effect than oral administration on prenatal mortality, reduction of fetal weights, and occurrence of fetal malformation. Hood et al. (1977) also studied the effects of intraperitoneal injection of sodium arsenite in mice and found increases in prenatal mortality and developmental malformations.

One important problem with most studies involving teratogenic effects of arsenic was the use of high doses which often resulted in more than 10% death rates. Several reproductive studies in animals have been negative involving exposure to low levels of arsenic. In one such study, Kojima (1974) administered arsenic trioxide at 10, 50, and 100 ppm in the food to Wistar rats prior to and during gestation. This treatment caused no significant effect on the number of litters. This study demonstrated no significant reproductive effects but did not assess the effects on the unborn fetuses. No teratogenic studies in animals exposed to inorganic arsenicals by inhalation have been reported.

Some human data have been reported on teratogenic and reproductive effects of workers employed in the smelting industry. Studies of pregnant women

employed at the Ronnskar smelter in Sweden provided information with direct bearing on the issue of human teratogenicity of inorganic arsenicals. Children born to women who worked during pregnancy at a Swedish copper smelter and were exposed to airborne arsenic showed a significantly higher frequency of congenital malformations (Nordstrom et al. 1979). The frequency of all malformations in the children of women employed at the smelter was twice as high as that in the children of other women in the region. A 5-fold higher frequency was noted for multiple malformations. At this stage the carcinogenicity data remain the best for basis for regulatory decision.

D. Interconversion of Pentavalent to Trivalent Arsenic

In the preamble to the final standard, OSHA concluded that though the available evidence went both ways, on balance the stronger data indicated that there was probably little or no conversion of pentavalent to trivalent arsenic in the body. Given the unknown relevance of acute toxicity and biochemical reactions of trivalent and pentavalent arsenic to the assessment of carcinogenic risk and the findings that pentavalent arsenic was probably not converted to trivalent arsenic, OSHA relied principally on the findings of the epidemiological studies, expert opinion and general policy considerations in deciding to regulate pentavalent arsenic as a carcinogen.

Since promulgation of the final regulation, new data concerning interconversion of pentavalent to trivalent arsenic have become available. Yamauchi and Yamamura (Ex. 211) and Vahter have studied the metabolism of pentavalent arsenic. Yamauchi and Yamamura studied three men who ingested seaweed known to be rich in pentavalent arsenic. Measuring the amount of arsenic excreted by the three subjects, Yamauchi and Yamamura concluded that most of the pentavalent arsenic was reduced to trivalent arsenic within the body and that the trivalent arsenic was subsequently methylated to monomethylarsonic acid and dimethylarsine acid. Vahter administered pentavalent arsenic in single oral or intravenous doses to mice and found trivalent arsenic in the urine of the mice. Vahter concluded that "it is evident from the data that trivalent inorganic arsenic is present in the plasma and urine of mice exposed to inorganic pentavalent arsenic."

Dr. Radford, at the July 1982 hearings stated, based on the new evidence: "arsenates are converted in significant amounts in the body to trivalent arsenic, perhaps as part of the pathway for excretion in the urine of methylated forms" (Ex. 207). Dr. Radford also noted that "there is yet no evidence that bronchial tissue can reduce inhaled pentavalent arsenic, nor is there evidence it does not" and he concluded that he supports OSHA's regulation of both trivalent and pentavalent inorganic arsenic as a carcinogen.

Dr. Edwin Woolson (Ex. 218) presented his analysis and conclusion that the evidence available did not indicate that pentavalent arsenic converted to trivalent in vivo. He presented an evaluation of Yamauchi and Yamamura, and Vahter and the reasons he disagreed with those author's conclusions. Regarding Yamauchi and Yamamura, he commented that they had only accounted for a small percentage of the arsenic ingested. The percentage of trivalent was greater excreted than ingested, but the total excreted was less than that ingested.

Dr. Woolson also commented on Vahter's report, suggesting that the small amounts of trivalent arsenic found in the urine of the mice could be due to experimental conditions. Dr. Woolson stated that studies by Crecelius (1977), Peoples and Parker (1979) and Tam et al. (1979) do not support the conversion of arsenate to arsenite in vivo.

There remains uncertainty on the question of conversion of arsenate to arsenite. OSHA believes that this question is not determinative of any major issue before it. Other types of evidence available, namely, studies in humans, are more relevant for regulatory action.

E. Carcinogenicity of Pentavalent Arsenic

As discussed above there is little controversy about the carcinogenicity of trivalent arsenic. In the preamble to the final standard, OSHA concluded that it was necessary to regulate pentavalent arsenic as a carcinogen as well. OSHA based its position primarily on the Ott et al. study which provided epidemiologic evidence that pentavalent arsenic is a carcinogen, and a significant body of expert opinion including representatives of the National Cancer Institute and the National Institute for Occupational Safety and Health who recommended that pentavalent arsenic be regulated as on occupational carcinogen.

The CMA-Arsenic Panel (Ex. 202-3, 232, 250) strongly contended that inorganic pentavalent arsenic is not carcinogen. CMA criticized the Ott el al. study and questioned the reliability of the data for quantitative risk assessment. Dr. Marsh (Ex. 202-8) in a review of the Ott study concludes:

> The overall weakness of the study design, the uncertainties associated with exposure determination, and the probable biases related to the magnitude of the computed risk ratios do not support the utilization of these epidemiologic data for risk assessment purposes.

OSHA in the final standard's preamble concluded that the Ott et al. study provided strong evidence associating excess respiratory cancer with pentavalent arsenic exposure but it would not be used to demonstrate dose-response because of limitations in the exposure data.

Several witnesses at the recent hearing stated that the Ott et al. study, despite its limitations, could be a basis for risk estimation. Dr. Crump stated:

> Because of these shortcomings, I do not consider the Ott study to be as suitable for quantitative risk assessment as either the Pinto et al. study or the Lee and Fraumeni study. However, I do not consider these shortcomings severe enough to prevent its use in quantitative risk assessment (Ex. 206, p. 12).

Dr. Radford (Ex. 207) stated that the Ott et al. study provided a sufficient basis for risk assessment and a published paper by Dr. Blejer and Wagner (Ex. 237 I) takes this position as well.

NIOSH has stated:

> With relation to the paper by Ott et al. it seems to be a reasonably valid study of the results from exposure to arsenates. Although it is true that the employees involved were exposed to both arsenites and arsenates the authors state that 95 percent of the exposure was to arsenates and only 5 percent to arsenites. It seems not to be illogical or unjustified to attribute most, if not all, the excess of malignancies in the exposed group (incidence rate almost 60 percent greater than that in the control group) to the pentavalent arsenical compounds (Ex. 192A).

CMA argued that OSHA should place more reliance on the Nelson et al. study of Washington State orchardists who were intermittently exposed to pentavalent arsenicals, which did not observe excess lung cancer risk. CMA stated that there was an attempt to quantify exposures. OSHA agrees now that there was an attempt to quantify exposures in that study. Nevertheless, the study does have problems with ascription of exposure, especially since orchard work is seasonal. Also, the study by Nelson et al. is limited by the small number of persons studied, as noted by the authors (Ex. 1A-28).

A draft of a later study of orchardists in Washington, submitted by Milham (Ex. 237 FF), does suggest some excess risk for this group. Excess lung cancers were observed among orchardists. Milham noted that lead arsenate

insecticide, which is a pentavalent form of arsenic, was used heavily in the orchard areas. This study lacks exposure data.

As discussed in Section III, Koppers Company submitted studies performed by Tabershaw Occupational Medicine Associates of workers at two wood-preserving plants using chromated copper arsenate (Ex. 202–6B). Both studies were cross-sectional health surveys of workers exposed to very low levels of pentavalent arsenic (less than 6 $\mu g/m^3$). Because of several methodologic limitations characteristic of cross-sectional surveys which limit their usefulness for studying occupational cancer, as well as the small numbers of employees surveyed, OSHA judged that no conclusions could be drawn from these studies concerning cancer risk of workers exposed to the chromated copper arsenate wood preserving process.

OSHA continues to conclude that pentavalent arsenic should be regulated as a human carcinogen. The Ott et al. study strongly demonstrates an association between exposure to pentavalent arsenic and excess lung cancer risk. The study is not as strong a basis for risk assessment as some of the others, but the opinions of several experts presented at the hearings indicated that the study can be a basis for risk assessment. The mutagenicity studies have shown that both pentavalent and trivalent arsenic can produce positive results in a number of short-term tests. OSHA now concludes that the positive mutagenic responses with pentavalent arsenic compounds add support to epidemiologic data and expert opinion which support the conclusion that pentavalent inorganic arsenic is a human carcinogen.

F. Essentiality

Uthus, et. al. (1982) (Ex. 202–3A) reviewed the effects of arsenic deprivation in laboratory animals and concluded that "arsenic is an essential element for several animal species." The authors suggested that arsenic appears to affect arginine metabolism, and that the signs of arsenic deprivation may be influenced by arginine, zinc and manganese.

Anke, et al. (1976) described arsenic deficiency in goats and minipigs fed semisythetic diets containing less than 50 ppb of arsenic. They reported impaired reproduction, decreased birth weights, increased prenatal mortality, and lower weight gains in second generation animals, which they attributed to deficiency of arsenic in the diet. These birth defects were not noticed in control animals fed the semisynthetic diet supplemented with arsenic at 350 ppb. Nielson et al. (1975) fed rats only 30 ppb of arsenic in a specially formulated diet, and observed the following effects attributed to arsenic deficiency: rough hair coat, low growth rate, decreased hematocrit, and increased osmotic fragility of red blood cells. Nielsen and Shuter (1978) have reported that dietary arsenic has a physiological function in growing chicks. Dr. Frost (Ex. 202–2) reported that feeding arsenic stimulated growth, is believed to control diseases in poultry and swine, and to improve feed efficiency.

Mertz (202–7C) in 1981 reviewed the data concerning a number of essential trace elements. Mertz pointed out that deficiency studies of inorganic arsenic in animals suggest that inorganic arsenic may be an essential trace element in animals. Mertz also pointed out that essentiality is generally acknowledged when it has been demonstrated by more than one independent investigator and in more than one animal species. By these criteria, arsenic is now considered an essential element for several species. Mertz reports that no deficiency role for arsenic in man is known and that the functional role for arsenic is unknown.

Dr. Nielsen believes that arsenic is essential for animal life but stated "today, the majority of nutrition community does not regard arsenic as an essential nutrient for any animal" (Ex. 202–3A, p. 15–16). Harding-Barlow (Ex. 202–3E) suggested that arsenic is an essential element in animals, and that it seems highly likely that it is essential in humans. Harding-Barlow suggested that there may be a threshold for carcinogenicity for essential elements.

Dr. Rodricks (Ex. 226) stated that there is no direct evidence that arsenic is essential for humans. Dr. Rodricks commented that "assuming that arsenic plays a nutritional role (and this is only an assumption) there is no reason to maintain that the beneficial properties of the element are somehow related to its carcinogenic properties. These two biological properties could be completely independent, and display quite distinct dose-response relationships."

Dr. Crump stated,

> The fact that known carcinogens are necessary constituents of mammalian systems is also consistent with a non-threshold hypothesis. A non-threshold hypothesis does not imply that individuals exposed to a carcinogen must get cancer, but only that they must have some chance of getting cancer. Some individuals do get cancer and it is impossible to rule out the possibility that some of these cancers are due to naturally occurring and even essential body constituents. A slight elevation in cancer incidences might be a small biological price that mammalian species must pay for larger benefits derived from substances such as estrogens or trace metals (Ex. 212, p. 6).

There is good evidence that arsenic in its organic form (which is not regulated by OSHA as a carcinogen and as for which there is no evidence indicating carcinogenicity) is a growth stimulant for poultry. Some experts believe that ingested arsenic is an essential nutrient for some species of animals and other experts have not been convinced. It should be noted that all of the essentiality experiments have utilized ingestion as the route of administration.

There is no evidence or tests that indicate that arsenic in any form is an essential element in humans though some experts have speculated on this. Humans do ingest some arsenic in organic form when eating some seafood. However, those metals, such as iron and manganese, for which there is proof of essentiality generally must be ingested to serve their physiologic function. They may be highly toxic when inhaled, however.

However, OSHA is regulating the inhalation of inorganic arsenic based on strong human evidence of carcinogenicity. There is no evidence available indicating that inorganic arsenic is an essential element in humans. In any case, a chemical can be essential and still be carcinogenic without a threshold. The very strong evidence associating inhalation of inorganic arsenic with excess risk of lung cancer and the well supported risk assessments are not affected by hypotheses that arsenic may be an essential trace element.

G. Mode of Action

CMA (Ex. 202–3, p. 90) contended that arsenic was not a genotoxic carcinogen and hence a no-threshold linear dose-extrapolation model was inappropriate for estimating risk from exposure to arsenic. As a basis for their statement that arsenic was not a genotoxic carcinogen, CMA maintained that arsenic had no effect on the accuracy of DNA synthesis, was an essential trace element, and that respiratory cancer risk declined 30 years after cessation of exposure.

Weisburger and Williams (1980) developed a classification system for carcinogenic agents placing them into two categories, namely, genotoxic agents and epigenetic agents. Genotoxic agents are those that are capable of causing DNA damage to cells that creates the potential for oncogenesis. In this category, Weisburger and Williams

included direct-acting carcinogens, procarcinogens and inorganic carcinogens. Epigenetic agents do not themselves damage the DNA but act through an indirect mechanism to increase the susceptibility of cells to genotoxic agents or to stimulate the carcinogenic action of a genotoxic agent. Promoters, co-carcinogens, immunosuppressors and hormonal mediators may be classified as epigenetic agents.

There is not consensus within the scientific community as to the criteria for distinguishing genotoxic from epigenetic carcinogens. Nor is there consensus as to whether genotoxic and epigenetic carcinogens should be regulated differently. OSHA does not have to decide if arsenic is a genotoxic or epigenetic carcinogen in order to determine whether arsenic poses a significant cancer risk to exposed workers. The epidemiologic evidence for the carcinogenicity of inorganic arsenic at relatively low exposure levels overrides theoretical arguments based on hypotheses of mode of carcinogenic action. As discussed in Section IV, Quantitative Risk Assessment, for many reasons, OSHA determined that a linear model was appropriate for predicting the risk of lung cancer mortality from inorganic arsenic exposure.

In addition, OSHA considers that CMA's contention that arsenic is not a genotoxic carcinogen is not supported by the available evidence. First, positive effects on DNA have been obtained when inorganic arsenic was tested for its mutagenicity and its ability to cause chromosomal aberrations. Second, as discussed in Section V-F, Essentiality, even if arsenic was definitely proven to be an essential trace element, which it has not been, a no-threshold model would not necessarily be inappropriate. Third, evidence for a decline in respiratory cancer risk after cessation of exposure is less than definitive, as discussed in Section III, Epidemiologic Studies. In summary, there is evidence that arsenic may affect the cell's genetic mechanism and damage DNA and consequently be genotoxic.

H. Power Plants

The Edison Electric Institute argued that significant risk was not demonstrated to power plant workers exposed to arsenic when cleaning boilers (Ex. 245). The Institute did not participate in any of the earlier stages of the proceeding, presented no evidence as to employee exposures, and only commented that exposures were intermittent. No information on processes was submitted either.

As in the smelter environment, power plant workers are exposed to arsenic released in a high temperature process with many other chemicals present. If the employees are exposed, as an example, to 100 $\mu g/m^3$ of arsenic for eight hours every two weeks, their cumulative exposures would be equivalent to an employee exposed every working day to 10 $\mu g/m^3$. The predicted level of risk of 8 excess deaths per 1000 exposed workers at this level would be significant. Further, the one study of power plant workers that OSHA is aware of does indicate excess lung cancer risk for employees working in a power plant utilizing coal containing arsenic as an impurity (Ex. 237H). Accordingly OSHA concludes a significant risk is presented to power plant workers and there is no basis for excluding them from the standard.

The Edison Electric Institute did not detail the cleaning process. If it is a maintenance operation with intermittent exposures, the arsenic standard indicates that a good respirator program with sign posting, training, and hygiene facilities to protect employees may be an appropriate control strategy. If exposures are continuous, additional control strategies would be appropriate.

VI. Summary of Evidence, Conclusions and Significant Risk

A. OSHA's Approach

OSHA's overall analytical approach for setting worker health standards is a four-step process consistent with recent court interpretations of the OSH Act and rational, objective policy formulation. In the first step, risk assessments are performed where possible and considered with other relevant factors to determine whether the substance to be regulated poses a significant risk to workers. Then, in the second step, OSHA considers which, if any, of the proposed standards being considered for that substance will substantially reduce the risk. In the third step, OSHA looks at the best available data to set the most protective exposure limit necessary to reduce significant risk that is both technologically and economically feasible. In the fourth and final step, OSHA considers the most cost-effective way to achieve the objective.

The Ninth Circuit's remand provides that OSHA consider the issues presented by the first two steps and some of the elements of the third step. This notice and rulemaking directly addresses those matters. A cooperative evaluation by technical experts from OSHA, the smelter companies and the United Steelworkers, which is not part of this rulemaking, gives additional consideration to the final steps.

It is appropriate to consider a number of different factors in arriving at a determination of significant risk with respect to inorganic arsenic. The Supreme Court gave some general guidance as to the process to be followed. It indicated that the Secretary is to make the initial determination of the existence of a significant risk, but recognized that "while the Agency must support its finding that a certain level of risk exists with substantial evidence, we recognize that its determination that a particular level of risk is 'significant' will be based largely on policy considerations." (*IUD v. API*, 448 U.S. 655, 656, n. 62). In order for such a policy judgment to have a rational foundation, it is appropriate to consider such factors as the quality of the underlying data, the reasonableness of the risk assessment, the statistical significance of the findings, the type of risk presented and the significance of the risk.

These factors were mentioned in the April 9, 1982 document as the basis to provide guidance for determining the significance of risk. No participant in the proceeding disagreed with this approach. OSHA continues to believe that those factors provide a good analytical framework for considering the issue of significant risk. OSHA's detailed analysis has been presented in the body of this document. The most important conclusions are summarized here.

B. Quality of Underlying Data

The first factor is the quality of the underlying data. The underlying data upon which the risk assessment for inorganic arsenic are based are high quality epidemiologic studies in an occupational environment. Three studies were available to OSHA and the other experts in published form for risk assessment purposes prior to the April 9, 1982 document. The studies by Lee and Fraumeni and by Pinto and Enterline involved workers exposed to inorganic arsenic in copper smelters. In the study by Ott et al., the workers studied were exposed to the pentavalent form of arsenic in a pesticide manufacturing plant. Subsequent to April, additional studies became available which could be used for quantitative risk assessment, including studies by Lee-Feldstein, Enterline and Marsh, and Higgins et al. All of the above studies are good epidemiologic studies. All clearly associated inorganic arsenic exposure with substantial excess risk of lung cancer, and their authors so conclude. All these studies have good follow-up,

generally reasonable exposure estimates and indicate that the risk was proportional to the degree of arsenic exposure.

There were also a number of studies in other chemical industries and smelters reported in the literature and discussed in the preamble to the final standard, which demonstrated an increase in lung cancer among workers exposed to inorganic arsenic but which are not as strong a basis for quantitative risk assessment. These studies included Baetjer et al., Kuratsune et al., Hill and Faning, and others.

Subsequent to 1977, new studies in this category have been completed which reach the same conclusion, that exposure to inorganic arsenic is associated with increased risk of lung cancer in the occupational setting. These studies, discussed above, are Mabuchi et al., Wall, and Axelson et al. However, the dose data were not quantified in these studies and therefore they do not constitute as good a basis for quantitative risk assessment as the other studies which provide better quantification of exposure.

The two studies which showed no excess risk, authored by Cooper and Tabershaw Occupational Medicine Associates, included small numbers of employees exposed to arsenic. In the study by Cooper, no attempt was made to analyze the mortality of employees known to be exposed to arsenic and the study by Tabershaw was a cross-sectional survey with extremely limited ability to detect any excess of cancer.

Based on both the high quality new human data and the high quality earlier human data associating arsenic exposure with increased risk of lung cancer, OSHA concludes, as discussed in detail above, that inorganic arsenic is a carcinogen in the occupational setting. These are the conclusions of the National Institute of Occupational Safety and Health, the International Agency for Research on Cancer, the Environmental Protection Agency Carcinogen Assessment Group, the World Health Organization-Arsenic Working Group, and many scientists whose views are discussed in this preamble, the data in the record and in the preamble to the final standard.

The Chemical Manufacturers Association-Arsenic Panel in their prehearing comment indicated that they might disagree with the conclusion that inorganic arsenic was carcinogenic in the occupational setting. However, Dr. Lederer, representing the CMA stated:

> I would like to make clear that I do not dispute that there is an association between arsenic exposure and respiratory cancer. Likewise, the evidence indicates that reducing arsenic exposure apparently reduces the carcinogenic risk (Tr. p. 356, 7/15/82).

In response to a question he stated that this was the CMA's view as well, though the CMA "feels there are various factors that also have to be considered" in addition. (Tr. p. 356, 7/15/82).

Several other factors, previously discussed in depth, will be briefly reviewed here. OSHA believes that the strong human data associating inorganic arsenic with excess lung cancer risk are much more important than the following factors.

The first factors concern experimental studies of arsenic. OSHA agrees with the position of CMA, IARC and others that there is no clear animal model demonstrating excess malignant tumors in test animals resulting from arsenic exposure. OSHA believes that the weight of the evidence now indicates that inorganic arsenic in both its trivalent and pentavalent forms is mutagenic in most types of short term tests. CMA's judgment to the contrary is based principally on negative results in "Ames" type tests. But a number of other kinds of mutagenicity tests indicate positive results.

Dr. Harding-Barlow (Ex. 202–3E) and Dr. Frost (Ex. 202–2) generally believed that arsenic is not carcinogenic. In addition to the above factors they refer to the presence of various other chemicals in the human studies, to the fact that organic arsenic is a growth stimulant for some animals and to the possibility that arsenic may be an essential nutrient for humans.

As discussed above, work by Brown and Chu, Lubin et al., Mabuchi et al., Enterline and Marsh and Higgins et al. provide clear evidence that smoking and other contaminants such as sulfur dioxide present in the work environment are not major factors in the carcinogenesis seen. These studies analyzed the effects of these potentially confounding factors and the results indicated that inorganic arsenic was likely to be the major contributing factor to the excess risk. There is no evidence that arsenic is an essential element for humans. It is also likely that an element can be essential at low levels and still be carcinogenic with no threshold.

OSHA also concludes as discussed above that pentavalent forms of inorganic arsenic are carcinogenic. The Ott et al. study clearly associates pentavalent arsenic exposure with substantial excess risk of lung cancer. In addition, the short term tests of pentavalent arsenic are mostly positive, a number of experts view pentavalent arsenic as carcinogenic, and considering the totality of evidence on inorganic arsenic leads to this conclusion.

To reiterate, there are strong data indicating that inorganic arsenic is carcinogenic in humans. Some of the human studies provide an excellent basis for quantitative risk assessment. Other issues do not call into question these conclusions, and in most cases support them.

For purposes of risk analysis, the data base for inorganic arsenic is of unusually high quality. The April 9, 1982 proposal regarding significance of risk stated that the studies relied upon for risk analysis "provide a sound data base for performing risk assessments because of their excellent follow-up, reasonable exposure estimates, and strong dose-response relationship. They provide considerably more than the minimum data necessary for attempting risk assessment" (47 FR 15364). OSHA also characterized the quality of the available data as "higher than that needed to place reasonable confidence in the risk assessment predictions" (47 FR 15365).

Most potential occupational carcinogens have not been studied with regard to their effects in humans. Even if there are epidemiologic studies of the effects of a carcinogen, such studies usually lack historical exposure data and may not be designed and conducted as well as the epidemiologic studies of populations exposed to inorganic arsenic. In the future, it is likely that OSHA will be determining the significance of risk from exposure to carcinogens and regulating carcinogens based on data that are not as strong as the arsenic data and based on animal studies. Therefore, OSHA's significant risk determination for inorganic arsenic should be viewed as having an exceptionally strong basis.

OSHA wishes to make clear that its determination as to the strong association between inorganic arsenic exposure and increased risk of lung cancer is in the occupational setting. As discussed above, it is reaching no conclusions about the effects of arsenic on drinking water or airborne exposure to the general (not occupationally exposed) population.

OSHA reiterated in the April 9th document its determination in the preamble to the final standard that the inorganic arsenic standard covers only occupational exposure to inorganic arsenicals. The estimates of risk would not be applicable to organic arsenicals for which OSHA has not data indicating carcinogenicity. In addition, OSHA pointed out at 43 FR 19613 that arsenic in preserved wood has substantial

chemical differences from other arsenicals, after the reaction, and therefore, based on the existing record, it did not believe it appropriate to regulate preserved wood. These matters were not specifically addressed by the parties in this proceeding and therefore OSHA is not reexamining this position.

C. Reasonableness of the Risk Assessment

The second factor to be considered after the strength of the underlying data, is the reasonableness of the risk assessment. In the April 9th document OSHA presented three risk assessments (47 FR 15362.) OSHA then stated its preliminary judgment that:

> * * * reasonable confidence can be placed in the estimates of the risk presented. In addition to the good exposure and response documentation, as discussed above the dose-response curves demonstrate a good fit of the linear model to the measured data, increasing confidence that a linear model through the origin is the appropriate model to use. It should be emphasized that the risk analyses are based on human data and not on animal data. Therefore, they do not have the uncertainties associated with extrapolating animal data to man (47 FR 15365).

OSHA stated as its preliminary estimate of risk that:

> OSHA believes that those estimates with Dr. Chu's high side estimates excluded (which were based on his estimates of exposure levels) are preferable for the reasons stated. These are the estimates presented above by OSHA as its preliminary analysis. * * * The(se) estimates from the risk analysis which OSHA believes are most reasonable based on the data now before it are (therefore) the following: The excess risk of lung cancer for a working lifetime of exposure is 500% to 620% (375 to 465 excess deaths per 1000 employees) at 500 $\mu g/m^3$, 50–68% excess risk (38 to 51 excess deaths per 1000) at 50 $\mu g/m^3$, and 10–14% excess risk (7.7–10 excess deaths per 1000 employees) at 10 $\mu g/m^3$ of inorganic arsenic based on the linear model (47 FR 15364–5).

OSHA's final estimates of risk for a working lifetime of exposure of 45 years range from 2.2 to 29 excess deaths per 1000 workers at 10 $\mu g/m^3$, 11.2 to 146 excess deaths per 1000 to 50 $\mu g/m^3$ and 148 to 767 excess deaths per 1000 at 500 $\mu g/m^3$. Within this range, OSHA's preferred estimates for a 45-year working lifetime are approximately 400 excess lung cancer deaths per 1000 exposed employees at 500 $\mu g/m^3$; 40 excess deaths per 1000 at 50 $\mu g/m^3$ and 8 excess deaths per 1000 at 10 $\mu g/m^3$. OSHA wants to make clear that these single point estimates are approximations and are not to be thought of as exact numbers. The science of risk assessment is not certain enough to permit exact estimates and the April 9 document made clear that OSHA's estimate was a range and that a range of estimates was reasonable. See also the discussion in section IIA.

The April 9th document discussed three specific questions about the risk assessments. The first was whether a linear or quadratic model was more appropriate. OSHA in the April 9th document preliminarily concluded that the linear model was preferred because it fit the data better but that a quadratic model would also be reasonable in the case of inorganic arsenic. Subsequent evidence strongly confirms that a linear model is more preferable to a quadratic model in the case of inorganic arsenic. Dr. Crump demonstrated by using a Chi-squared statistic that a linear model fits the data much better than a quadratic model. Dr. Crump stated "these analyses indicate that it is reasonable to use a linear model to assess risk from occupational exposure to arsenic, but it would not be reasonable to use a quadratic model" (Ex. 206, p.5).

A second question discussed was the correct estimates of dose at the Tacoma smelter in the past. Dr. Chu utilized estimates indicating that exposures were twice as high pre-1948 than in 1973, leading to higher estimates of risk than Clement Associates who utilized estimates by Pinto and Enterline that exposures were 5 to 10 times higher pre-1948 than in 1973. OSHA preliminarily concluded in the April 9th document that both estimates were reasonable but preferred Clement's. However, a table of urinary arsenic levels published in Enterline and Marsh (1982) (Ex. 201–9, p. 4) indicates that levels were roughly twice as high in 1948, tending to support Chu's higher estimates of risk. Dr. Enterline still believes exposures were 5 to 10 times higher pre-1948.

A third question presented was use of the Ott et al. study for risk assessment purposes. The Ott study clearly showed an association between pentavalent arsenic exposures and excess risk of lung cancer. OSHA indicated in the April 9th document that it was reasonable to utilize it, but preferred the estimates which did not incorporate it and used only the stronger studies. OSHA had stated in the preamble to the final standard that because of some analytic difficulties it would not use the Ott et al. study as a basis for a determination of whether dose-response existed. CMA in its prehearing brief argued the Ott et al. study was not adequate for risk assessment purposes because of the analytic difficulties and because it claimed that the excess risk might have been due to other chemicals. Dr. Crump and Dr. Radford, however, stated in this hearing that the Ott et al. study characterizes both dose and response well enough for it to be a basis for a quantitative risk assessment. Blejer and Wagner concluded this as well. The risk estimates based on the Ott et al. data are not very different than those based on the other studies. Based on these experts' views and the similarity of results, OSHA concludes that there is sufficient characterization of dose for the Ott et al. data to be utilized for risk assessment.

OSHA requested Dr. Crump, a leading expert in risk assessment and biostatistics, to perform risk assessment on the three studies available to OSHA before the April 9th document, which were the basis of the three risk assessments presented in that document. Dr. Crump included some refinements in his assessment discussed in his statement (Ex. 206) and above. His estimates of risk presented in Table 2 were 8.7 to 29 excess deaths per 1000 exposed employees at 10 $\mu g/m^3$, confirming the estimates of the three earlier assessments and OSHA's preliminary conclusion in the range of 7.7 to 25 per 1000.

OSHA also requested Dr. Crump to perform risk assessments on the studies which became available after the April 9th document. The first was the Enterline and Marsh cohort study of employees at the Tacoma smelter. This was an expansion and update of the earlier Pinto and Enterline study of Tacoma retirees. The Pinto and Enterline study showed clear dose-response. See 43 FR 19594. However, the dose-response relationship of the Enterline and Marsh study was not so clear upon initial inspection, though the authors considered that it exhibited some dose response relationship. Table 8 and 9 of the study (Ex. 201–9) indicated that while there were statistically significant excess risks for most exposure levels, the excess risks did not clearly increase with increased exposure.

Dr. Crump pointed out that when SMR's are used for analysis, age differences can sometimes confound the results if the disease in question (like lung cancer) increases with age and if the groups being compared have different age distributions. The retirees of the Pinto and Enterline study had similar ages; therefore, age confounding would not be a problem and indeed dose-response was clear for the retirees. Dr. Crump pointed out that since the Enterline and Marsh study included active employees as well as retirees, there were probably substantial age differences among the various dose

groups, and the high exposure cohorts would likely be older.

Dr. Crump also pointed out that an absolute risk model, another well-established statistical technique, could partially control for age confounding. Dr. Crump applied an absolute risk model to the Enterline and Marsh data. The following chart taken from Dr. Crump's Table 3, 10 year lag (Ex. 206) demonstrates a dose-response relationship.

TABLE 5.—SMR AND ABSOLUTE RISK BY CUMULATIVE EXPOSURE

Cumulative exposure μg As/l urine-years	SMR	Absolute risk × 104
Under 500	155	1.28
500 to 1,500	178	5.80
1,500 to 3,000	226	12.9
3,000 to 6,000	177	10.0
7000+	246	26.2

The excess risk shown by the absolute risk model (partially addressing age confounding) quite clearly increases with increases in cumulative exposure to arsenic while the dose-response relationship is not as clear when risk is measured by SMR. Crump characterized the linear fit as adequate. Using the risks presented in Table 5, Dr. Crump predicted at 10, 50 and 500 $\mu g/m^3$, 7.6, 37.3 and 303 excess deaths per 1000 exposed employees—estimates very similar to OSHA's estimate of 8, 40 and 400 at those levels respectively.

Dr. Crump also performed a risk assessment on the Lee-Feldstein study. He predicted at 10, 50 and 500 $\mu g/m^3$ excess risks of 8.3, 40.6, and 310 excess deaths per 1000 respectively using a relative risk model, and 3.2, 16 and 148 excess deaths per 1000 using an absolute risk model. These estimates are very similar to earlier predictions. However, in this particular case there was not a close fit between the data and model. Dr. Crump hypothesized that the poorer fit in the Lee-Feldstein data might result from the way exposure was characterized which would tend to overestimate total dose.

The exposure classification system of Higgins et al. included average exposures and cumulative exposures, as well as ceiling exposures. The risk assessment performed by Dr. Crump utilizing the cumulative exposures estimated by Higgins et al. indicated at 10, 50, and 500 $\mu g/m^3$ respectively, an excess risk of 9.4, 45.8 and 342 per 1000 using a relative risk model and 5.2, 25.9 and 228 per 1000 utilizing an absolute risk model. The data fit the model well and the predictions of risk again were very similar to OSHA's risk estimates. This tends to support Crump's conclusion that there is linearity in the Anaconda data and the poorer fits seen with the Lee-Feldstein data result from less precise estimates of cumulative exposure.

Dr. Radford also submitted estimates of risk. Dr. Radford, who is an expert in epidemiology, was Chairman of the National Academy of Science Advisory Committee on Ionizing Radiation (BEIR III) where he was involved in estimating risk from radiation exposure. Dr. Radford's estimates of 19 to 38 excess deaths per 1000 employees at 10 $\mu g/m^3$ were on the high side of the range OSHA considered reasonable. The basis for his higher estimate was that the Lee-Feldstein data led to overestimates of dose and consequently underestimated risk per unit of exposure. He made various adjustments to correct for this. He also believed that the Chu high side estimates of risk were better supported because the 1948 urinary arsenic levels (see above) tended to confirm Chu's estimate of exposure. Finally, his estimates based on Ott et al. were about the same as Chu's high side estimate. Dr. Radford believed that the fact that data from three independent locations indicated very similar levels of excess risk strengthened confidence that these estimates were reasonable.

Dr. Enterline, an expert in epidemiology, submitted estimates of risk somewhat lower than the other estimates of risk (2 to 3 excess deaths per 1000 at 10 $\mu g/m^3$). He believed that the high level of risks that the raw data from his studies indicated should be reduced because of three factors. He believed that exposures were higher in the past than his urinary data indicated. He also believed that a somewhat higher smoking rate existed for smelter workers and that there was the possible existence of other carcinogens in smelters which would be cause of some of the excess risk.

OSHA's conclusion is that the substantial body of additional data and analyses submitted during the hearing process confirms the estimates of risk which OSHA preliminarily presented in the April 9, 1982 document. In that document OSHA indicated that estimates of risk for a working lifetime exposure were in the range of 7.7 to 25 excess deaths per 1000 employees at 10 $\mu g/m^3$, 38 to 51 at 50 $\mu g/m^3$ and 375 to 465 at 500 $\mu g/m^3$ and that these were reasonable estimates. OSHA believed that the most reasonable were estimates towards the lower end of the range.

The new data expand the range of reasonable estimates somewhat from about 2.2 to 29 excess deaths at 10 $\mu g/m^3$ and 148–767 excess deaths at 500 $\mu g/m^3$. OSHA considers the preferred point estimates for a working lifetime to be approximately 8 excess lung cancer deaths per 1000 exposed employees at 10 $\mu g/m^3$ exposure, 40 excess deaths per 1000 exposed employees at 50 $\mu g/m^3$ and 400 excess deaths per 1000 exposed employees at 500 $\mu g/m^3$. (It should be kept in mind that these estimates are an approximation of a range of estimates).

The preferred estimate of 8 excess lung cancer deaths per 1000 exposed workers was the median of all the estimates presented in this document. The estimates of 40 excess deaths per 1000 at 50 $\mu g/m^3$ and 400 excess deaths per 1000 at 500 $\mu g/m^3$ are derived by using a linear model assuming that 8 excess deaths per 1000 was the best estimate at 10 $\mu g/m^3$. Estimates of risk presented in this document clustered around 8 excess deaths at 10 $\mu g/m^3$. It should be noted, however, that the best-fitting dose extrapolation curve yielded an estimate of 19 excess deaths per 1000 exposed workers. Also, there is now greater support for Chu's high side estimates. See also the discussion in the April 9, 1982 document.

Estimates in this range are supported by a number of experts in the field, Drs. Chu, Crump, Radford, Enterline, Rodricks, EPA–CAG, Clement Associates, NIOSH and others. Estimates in these ranges are derived both from the earlier epidemiology studies and the later studies available after the April 9 document. In general the underlying studies are of high quality and well suited for risk assessment. The linear model fits the data well, in some cases exceedingly well. (It should be recalled that fit is a statistical concept which indicates how close the measured data is to the curve or line which the dose extrapolation model predicts as the one best quantifying the risk).

The risk assessments performed by Dr. Crump quite clearly demonstrate that the linear model is much more appropriate than the quadratic model for arsenic risk assessment purposes. Based on this OSHA does not believe at this time that a risk assessment based on a quadratic model would be reasonable for inorganic arsenic.

These estimates of risk are appropriate for all inorganic forms of arsenic. The Ott et al. study is an adequate basis for risk assessment and risk assessments based on it predict risk towards the higher end of the range. However, in view of the similarity of results, it is most appropriate to treat all the studies together and utilize the same estimates for both trivalent and pentavalent forms.

The range of estimates from 2.2 to 29 excess lung cancer deaths per 1000 at 10 $\mu g/m^3$ and similar ranges at higher exposure levels is a remarkably narrow range of estimates in the context of risk assessment. These estimates are derived from 6 separate studies at 3 separate work places. They are dependent on estimates of exposures taking place 20 to 50 years ago which are somewhat uncertain. Therefore a variation of one order of magnitude is quite narrow and lends additional support to the validity of these estimates.

Further supporting OSHA's conclusion are measured data in the record indicating statistically significant excess risk at levels well under 500 $\mu g/m^3$. Lee and Fraumeni showed a statistically significant 114% excess risk for employees whose average exposure was 290 $\mu g/m^3$ for an average of approximately 5 years (Ex. 201-2B) and a 150-210% excess risk for long term employees. Lee-Feldstein demonstrated a statistically significant 131% excess risk for employees who averaged 290 $\mu g/m^3$. Pinto and Enterline indicated a statistically significant excess risk of 173% for long term employees who averaged 68 $\mu g/m^3$. Enterline and Marsh demonstrated a statistically significant excess risk of 168% for employees whose exposure averaged 49 $\mu g/m^3$ for a period of employment of 10-19 years.

Consultants in Epidemiology and Occupational Health, Inc. (CEOH represented by Dr. Lamm) took the position that there was little or no excess risk for workers who had never been exposed to peak exposures over 500 $\mu g/m^3$. The principal basis for its view were findings from the Higgins et al. study that employees whose average exposure was less than 500 $\mu g/m^3$ and who had no peak exposures over 500 $\mu g/m^3$ did not have statistically significant excesses of lung cancer. Dr. Lamm also referred to a "plateau" effect in some of the other studies which he felt indicated that there was not a clear dose-response relationship for lower exposure workers with short or medium term employment. He believed his conclusions were based on the latest and best data. Dr. Higgins, the CMA-Arsenic Panel, ASARCO and Kennecott supported CEOH's analysis.

The CEOH conclusions are not nearly as well supported as the risk assessments by the other experts and the estimates OSHA accepts. The results from the Higgins et al. study upon which CEOH relied had very low statistical power because of the small numbers of workers included. Higgins et al. studied only 22% of the cohort at risk. They only had a 16% to 37% chance of demonstrating a 50% excess risk which actually existed (Method I analysis). Also, the workers who had no peak exposure over 500 $\mu g/m^3$ probably had relatively low average exposures. A reasonable estimate would be 150 $\mu g/m^3$ for 15 years. Methods OSHA considers reasonable would predict about 150 SMR for this group.[6]. That risk is close to the actual SMR's of 116 to 129 which were observed in the study by Higgins et al. (Method I analysis). The statistical power of the Higgins results is so low the results can neither support nor refute the hypothesis that there is no excess risk below 500 $\mu g/m^3$ in the Anaconda cohort.

The Brown and Chu analysis, which was more statistically robust, indicated that duration of exposure and not intensity was the more important factor contributing to the excess risk. This contradicts the CEOH and others' contention that duration of exposure and hence cumulative exposure had little effect on excess risk. Also, as just discussed, measured data of excess risk down to 49 $\mu g/m^3$ tends to refute the CEOH conclusions.

Most importantly, Lee and Fraumeni, and Lee-Feldstein showed a statistically significant excess risk ranging from 86% to 213% for their low exposure groups who averaged 290 $\mu g/m^3$. These studies excluded from the low exposure group employees who ever had short term exposures in higher categories (that is, excluding employees who had average exposures over approximately 500 $\mu g/m^3$). Therefore, these data indicated that workers with no peak exposures over 500 $\mu g/m^3$ had statistically significant excess risk. The Lee and Fraumeni and Lee-Feldstein results were for all the Anaconda employees, not just a 22% sampling as the Higgins et al. study was. Consequently, the Lee and Fraumeni and Lee-Feldstein data are better for purposes of analysis of risk from low exposures.

Dr. Lamm argues that the Higgins et al. study does a better job of describing an individual's exposures than can be done from the Lee and Fraumeni and Lee-Feldstein data. The Higgins et al. study in some of its analyses estimates year by year exposures for employees and that does permit better estimates of average and cumulative exposures. However, the study does not necessarily do a better job of ascribing dose classifications to particular work areas than can be done by utilziging the Lee and Fraumeni and Lee-Feldstein classifications in conjunction with the Morris data in the OSHA record. The much larger size of the Lee and Fraumeni and Lee-Feldstein studies in conjunction with their reasonable dose ascription entitles their findings to much greater weight.

The risk assessments of most of the experts and which OSHA generally relies on utilize regression analysis which is a standard technique for this kind of analysis. When appropriate, fit of the regression line is then tested using correlation coefficient squared (R^2) or Chi-squared. CEOH did not use regression analysis. CEOH concluded there was a "plateau" effect by selecting data points from several of the epidemiologic studies and stating that risks did not increase substantially between those points. Regression analysis is a more reliable approach and permits, when appropriate, one to statistically test the fit of the data to the predicted risk. There are circumstances where regression analyses are not appropriate, but the arsenic data clearly permit it.

In addition CEOH and CMA argue that the Higgins et al. study was the best and latest study and should be given more weight because of this. But as discussed elsewhere that study, Pinto and Enterline, Lee and Fraumeni, Enterline and Marsh, and Lee-Feldstein are all good studies giving reasonable estimates of risk for the time frame covered and the latter two are just as recent and more complete than the Higgins et al. study. The studies, like all studies, have relative strengths and weaknesses, and the Higgins et al. study does not negate the earlier studies. All of those studies need to be considered together along with all relevant information in estimating the risk presented by inorganic arsenic.

Finally, Dr. Crump and Dr. Radford point out that there is not a well established biologic model to support the ceiling hypothesis. Dr. Lamm and Dr. Higgins briefly speculate on possible mechanisms. However, the Higgins result is a single result. At the present time, there are not other epidemiologic studies to support the hypothesis that ceiling exposures can be the major determinant of risk.

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[6] In Lee and Fraumeni, short term workers averaged 5.4 years, medium term 16.1 years and long term 31.7 years for an overall average slightly over 15 years (Ex. 201-2B). Workers towards the low end of the medium group include converter workers at 240 $\mu g/m^3$ and zinc roaster workers at 111 $\mu g/m^3$. Workers towards the high end of the low exposure group include ferromanganese workers at 82 $\mu g/m^3$ and casting workers at 74 $\mu g/m^3$. Workers in these categories would be included in the low end of the medium exposure group and 150 $\mu g/m^3$ is a reasonable overall estiamte for them (Ex. 202-3B, p. 78). 150 $\mu g/m^3$ for 15 years is equivalent to 50 $\mu g/m^3$ for 45 years. A reasonable estimate for the latter is 50% excess risk or an SMR of approximately 150 (47 FR 15362, Table 1, EPA-CAG).

D. Further Research

The Chemical Manufacturers Association in its post-hearing brief suggested an extension of the Higgins et al. study. (Ex. 250, pp.21–22). ASARCO also suggested this in its post hearing brief. In several meetings with OSHA staff after the close of the period for post-hearing comments (minutes of which have been placed in the Docket Office), CMA recommended that OSHA delay a final decision on the degree of risk presented by inorganic arsenic (and make an appropriate request of the Ninth Circuit for an extension) until the Higgins et al. analysis could be extended to the entire cohort of Anaconda employees. CMA estimated that the study would take 12–18 months and, if so, the entire process would take approximately 24–30 months including time for public comments and OSHA review. CMA suggested they would be willing to have the standard remain in effect with existing stays and variances for that period.

OSHA has carefully considered this suggestion, but it has decided not to request the Ninth Circuit for a further extension. An expanded analysis using the methods of Higgins et al. might provide additional useful information. However, it would not be determinative or definitive on the question of low-dose risk from arsenic exposure. For the reasons discussed, the expanded study fits in the category of "sophisticated research [which] could be attempted but might not shed new light on the subject." *American Petroleum Institute* v. *OSHA*, 581 F. 2d 493, 507 (5th Cir. 1978).

First, as just discussed above, the already completed Lee-Feldstein and Lee and Fraumeni studies have analyzed the entire Anaconda cohort, not just 22%, and indicate statistically significant excess risks of between 86% and 213% for employees who had no peak exposure over approximately 500 $\mu g/m^3$. Second, there is measured excess risk for workers whose average exposure was as low as 49 $\mu g/m^3$, which also tends to refute a threshold at 500 $\mu g/m^3$.

Third, while expanding the Higgins analysis to the entire cohort would increase its statistical power and would permit further exploration of the low end of the dose response curve, it would not definitively resolve whether the ceiling hypothesis is correct. The results might support the Lee-Feldstein and Lee and Fraumeni results and the cumulative dose model, or the results might be inconclusive or they might provide greater support for Higgins et al.'s ceiling hypothesis. In the latter case, it would be results of one study inconsistent with the results of two studies of high quality of the same population.

Fourth, any differences between an expanded Higgins study and the Lee and Fraumeni and Lee-Feldstein studies would probably be attributable to how different experts estimated exposures for work areas taking place 20 to 50 years ago. The divergence in exposure ascription could not be definitively resolved, particularly since there are no air measurements to determine which exposure estimates are correct in some areas. The Lee and Fraumeni and Lee-Feldstein studies in conjunction with the Morris data (Ex. 28b) provide reasonable estimates of early exposures. Higgins et al. changed some of the Lee-Feldstein classifications. One of the changes Higgins et al. made—moving the masons into a higher category—is probably justified. However the change Higgins et al. made by moving the slag workers into a higher category was probably not justified since the high smelter temperatures would remove the arsenic before the stage in the process that the slag workers became involved. In addition, hooding or respirators would be used because of the sulfur dioxide, which would also decrease arsenic exposure. Mr. Nelson of ASARCO, a leading expert, indicated exposures are low in slag tapping (Tr. p. 304–305). Some other changes Higgins et al. made were based on assumptions about the nature of exposure rather than actual air measurements.

Fifth, a cumulative dose model has generally been used in risk assessments and has considerable scientific acceptance. The ceiling exposure hypothesis for carcinogens has not been widely explored and one result supporting it would not validate it because of the possibility of uniqueness at that one location. Replication of findings at several other workplaces probably would be necessary before this hypothesis would gain general acceptance in the scientific community. This would take a number of years. There is not now a widely accepted biologic model supporting the ceiling hypothesis.

One further observation is relevant to the question of expanding the study by Higgins et al. Enterline and Marsh expanded the study of Pinto and Enterline. Pinto and Enterline studies only 526 retirees whereas Enterline and Marsh studies all 2802 workers with one year or more of exposure during 1940-1964. Based on a SMR below 100 observed in the 99 workers who had 50–199 μg As/l with less than 25 years of exposure, Pinto and Enterline suggested that there may be a threshold for arsenic—induced lung cancer (See Table 2, 43 FR 19594). However, Enterline and Marsh observed elevated SMRs ranging from 169.9 to 268.2 for workers with an average exposure of 163 μg As/l with 1–19 years of employment. Therefore, expanding the study cohort and increasing the statistical power was associated with detecting an increased risk at an exposure level previously hypothesized to be a threshold.

For all these reasons OSHA concludes it should not delay submitting its estimates of risks, while waiting the approximately 24–30 months for completion and review of an expanded study by Higgins et al.

E. Statistical Significance and Type of Risk

The April 9th document referred to a third factor to be analyzed in a risk assessment, that is, statistical significance. That document pointed out that the first time that statistical significance is important is the determination in the individual studies that an excess risk from exposure to inorganic arsenic exists in the observed population. The statistical significance of the results are discussed in the preamble to the final standard, in the April 9th document and in this document. In general there is a high degree of statistical significance in the underlying epidemiologic studies which are the basis for the risk assessments with exceptions which are also discussed above.

The next stage at which statistical significance is important is the determination of the statistical significance of the dose-response relationship. The April 9th document pointed out that using a standard statistical test (Student's t-test), the dose-response relationships for the Lee and Fraumeni and for the Pinto and Enterline studies are highly significant (approximately the 0.0001 level). While the p value for the Ott et al. study is not as significant as it is for the other two studies, there is still less than a 0.10 chance that the dose-response relationship seen would occur by chance.

The April 9th document and this document also discuss the statistical concept of the fit of data to a regression line either with a R^2 or Chi-squared statistic. The above discussion indicates when fits are good and when they are not. Several of the risk assessments which are the basis for OSHA's estimates of risk have very good fits.

The fourth factor in risk assessment discussed in the April 9th document is the type of risk presented. The

epidemiological evidence has clearly demonstrated that inorganic arsenic is strongly associated with increased risk of lung cancer in humans. Lung cancer is usually a fatal disease. It evades early detetion and, according to the American Cancer Society, only about 9% of lung cancer patients live five or more years after diagnosis. No one at the hearing contested the seriousness of the risk of lung cancer. Inorganic arsenic is also associated with other diseases which are discussed above.

F. Significance of Risk

1. *Significance of Risk at 500 μg/m³.* The fifth factor in OSHA's approach to regulation is determination of the significance of the risk. OSHA stated in the Federal Register notice of April 9, 1982 as its preliminary analysis that:

> Briefly, measured data already in the inorganic arsenic record from the Lee and Fraumeni study show for long term employees (cohort 1 and 2, 15 or more years of exposure) a 455–567% excess risk (334–425 excess deaths from arsenic exposure per 1000 exposed employees) at 580 μg/m³ [and] a 150–210% excess risk (112–158 excess deaths per 1,000 employees) at 290 μg/m³. * * *
>
> OSHA concludes that exposure to inorganic arsenic clearly presents a significant risk of harm at the 500 μg/m³ level. As noted, the risk assessments estimate 375 to 465 excess deaths per 1,000 exposed workers for a working lifetime exposure (45 years) at 500 μg/m³. These estimates indicate a very high risk of death at the level of the old standard and comport with the conclusion of the Ninth Circuit Court of Appeals in the case that "it is undisputed that exposure to inorganic arsenic at the level of 500 μg/m³ poses a 'significant' health risk (*ASARCO* v. *OSHA*, 647 F. 2d 1 (1981) (47 FR 15365).

Much new data have been entered into the record to support the preliminary analysis. First, additional data points indicate substantial excess risk in the 500 μg/m³ range. For example, Lee-Feldstein demonstrates an excess risk of 346% (446 SMR) for employees who averaged 580 μg/m³, the medium exposure group. Higgins et al. indicate a 203% (303 SMR) excess risk for employees who averaged between 100–500 μg/m³.

In addition as discussed above OSHA's estimate of the excess risk at 500 μg/m³ from the risk assessments is approximately 400 excess deaths per 1000 employees. Dr. Crump made estimates of excess deaths per 1000 employees at 500 μg/m³ of between 321 and 578 based on the studies available before the April 9th document and from 148 to 342 based on the 3 updated studies.

Third, supporting the conclusion of excess risk at 500 μg/m³ is the substantial excess risks measured at levels well below 500 μg/m³. Dr. Chu estimated earlier that excess risk existed at the 68 μg/m³ level among the Pinto and Enterline retirees (Ex. 201–2B, p. 5). The Lee-Feldstein study covering 8045 men and 39 years of observation shows a statistically significant excess risk of 131% (231 SMR) for 4448 employees exposed to an average of 290 μg/m³, the light category (Ex. 203–3 A, p. 20–6). The Enterline and Marsh data indicates that employees with between 10 and 19 years employment at or below 290 μg/l with a mean level of 163 μg/l (or an average airborne exposure of 163 × 0.3 = 49 μg/m³) had a statistically significant 168% excess risk (268.2 SMR). There are also other measured data of excess risk at and well below 500 μg/m³ discussed in section III above.

All the above data very strongly confirms OSHA's original judgment that a significant risk exists at 500 μg/m³. However an alternate analysis has been presented by Dr. Lamm supported by the CMA-Arsenic Panel and others that 500 μg/m³ might be a threshold, and that there would be little or no excess risk for employees whose exposures were kept below 500 μg/m³. This conclusion was based principally on the peak exposure analysis of Higgins et al. showing no statistically significant excess risk for employees who did not have peak exposure over 500 μg/m³. Based on this result several participants recommended that OSHA set an exposure limit of 50 to 100 μg/m³ to provide a safety factor.

If these particular data in the Higgins et al. study were stronger and if they were not contradicted by other epidemiologic evidence, OSHA might have to reconsider its 10 μg/m³ PEL. However, as discussed above, this particular result of Higgins et al. had very low statistical power, not enough statistical power to support its conclusion. The Lee-Feldstein and Lee and Fraumeni studies of much greater size and statistical power indicate that employees in the low exposure group who had no peak exposures over approximately 500 μg/m³ had a statistically significant excess risk ranging from 86% to 213% depending upon study and length of employment. In addition, there is the evidence of measured excess risk at levels at and well below 500 μg/m³ in other studies and the clear dose-response relationship in many studies. The cumulative dose risk assessments generally have very good fit indicating additional confidence in the cumulative dose model, that excess risk is linearly proportional to the amount of arsenic to which an employee is exposed.

For all the above reasons and others discussed in Section VI–D, the hypothesis that excess risk is low if peak exposures are kept under 500 μg/m³ is not well supported. By far, the weight of evidence indicates that a very high and significant excess risk exists at 500 μg/m³ which can be reduced by lowering exposures.

2. *Substantial Reduction in Significant Risk.* The Second significant risk question discussed in the April 9th document is whether reducing exposures to 10 μg/m³ would substantially reduce risk. OSHA stated in that document:

> There appears to be little doubt that reducing exposures to inorganic arsenic from 500 μg/m³ to 10 μg/m³ will substantially lessen the level of risk of development of cancer. The most reasonable estimates predict that the reduction would be from 375–465 excess deaths per 1,000 exposed employees to 7.7–10 excess deaths per 1,000 exposed employees over a working lifetime. Confidence can be placed in the predicted lessening of risk since both the Lee and Fraumeni study, and the Pinto and Enterline study demonstrated dose-response relationships. (See the tables at 43 FR 19549–5). For example, measured data from the Lee and Fraumeni study indicate substantially less excess risk at 290 μg/m³ than at 580 μg/m³. Clearly lower exposure substantially reduces risk (47 FR 153656).

Substantial additional evidence supports that conclusion. The newer studies continue to show dose-response. The Lee-Feldstein study shows a 512 SMR for high exposure employees, 446 for medium exposure employees and 231 SMR for low exposure employees. The Enterline and Marsh study did not show quite so clear dose-response, but, when corrected for potential age confounding through use of an absolute risk model, indicated clear dose-response. The studies by Lubin et al. and Higgins et al. also showed a clear dose-response based on average exposure. Dr. Crump's risk assessment had very good data fits with the models indicating that excess risk is reduced directly proportional to reductions in exposure. OSHA's estimate of 400 excess lung cancer deaths per 1000 exposed employees at 500 μg/m³, 40 excess deaths at 50 μg/m³ and 8 excess deaths at 10 μg/m³ demonstrates a very substantial 98% reduction in risk by reducing exposures to 10 μg/m³. The great weight of the evidence indicates that reducing exposures from 500 μg/m³ to 10 μg/m³ will very substantially reduce significant risk.

3. Risk at 10 μg/m³.

In the April 9, 1982 document, OSHA preliminarily concluded as follows concerning the predicted remaining risk

of 7.7 to 10 excess deaths per 1000 exposed workers at 10 $\mu g/m^3$:

The linear model estimates a risk level of 7.7 to 10 excess cases of cancer per 1,000 exposed workers at the 10 $\mu g/m^3$ limit. OSHA's preliminary conclusion is that significant risk is not eliminated at this risk level and that a reasonable person would take steps to reduce it if feasible.*

Some guidance for this conclusion is presented by an examination of other occupational risk rates and legislative intent. For example in the high risk occupations of fire fighting and mining and quarrying the average risk of death from an occupational injury or an acute occupationally related illness from a lifetime of employment (45 years) is 27.45 and 20.16 per 1000 employees respectively. Typical risk in occupations of average risk are 2.7 per 1000 for all manufacturing and 1.62 per 1000 for all service employment. Typical risks in occupations of relatively low risk are 0.48 per 1000 in electric equipment and 0.07 per 1000 in retail clothing. (These rates are derived from 1979 and 1980 Bureau of Labor Statistics data from employers with 11 or more employees adjusted to 45 years of employment for 46 weeks per year.)

There are relatively little data on risk rates for occupational cancer as distinguished from occupational injury and acute illness. The estimated cancer fatality rate from the maximum permissible occupational exposure to ionizing radiation is 17 to 29 per 1000. (47 years at 5 rems; Committee on the Biological Effects of Ionizing Radiation (BEIR) III predictions.) However, most radiation standards (unlike OSHA standards) require that exposure limits be reduced to the lowest level reasonably achievable below the exposure (the ALARA principle). Approximately 95% of radiation workers have exposures less than one-tenth the maximum permitted level. The risk at one-tenth the permitted level is 1.7 to 2.9 per 1000 exposed employees. (BEIR I estimates are 30 to 60 per 1000 at 5 rem per year and 3 to 6 per 1000 at one-tenth that level.)

The linear model predicts a 7.7 to 10 per 1000 excess death rate from arsenic at 10 $\mu g/m^3$. This ¼ to ½ the death rate in the riskiest occupations, 2 to 5 times higher than the risks in occupations of average risk, and 10 to 100 times the risk of the low risk occupations. It is also ⅓ of the maximum permitted radiation cancer risk but about 3 times higher than the cancer risk which 95% of the radiation workers are under. It must also be noted that this risk of 7.7–10 excess deaths per 1000 employees due to lung cancer is in addition to the risk of accidental death in copper smelters of 8.69 per 1000 (1978–80 BLS data).

Congress passed the Occupational Safety and Health Act of 1970 because of a determination that occupational safety and health risks were too high. Based on this it is clear that Congress gave OSHA authority to reduce risks of average or above average magnitude when feasible. Therefore OSHA believes that the 10 $\mu g/m^3$ standard for arsenic, which should reduce risk from several hundred per thousand to approximately ten per thousand is carrying out the Congressional intent within the limits of feasibility and does not attempt to reduce insignificant risks.

Under the both Congressional intent and the Supreme Court rationale, OSHA could if it were feasible, seek to reduce risks below those estimated by the linear model at 10 $\mu g/m^3$. However, OSHA expects that there will be reduction of risk beyond that estimated using the mathematical model. The estimates do not take into account the other protective provisions (protective clothing, showers, clean lunch rooms, etc.) that will reduce exposure to arsenic in nonwork areas and during nonwork hours, reduce the possibility of arsenic ingestion and ensure proper respiratory and bodily protection. With the 10 $\mu g/m^3$ level and these protective provisions lowering risks below the predicted level, OSHA concludes that its arsenic standard is protecting employees and that employers who fulfill the provisions of the standard will have taken all reasonable steps to protect their employees from the hazards presented by occupational exposure to inorganic arsenic (47 FR 15366).

This analysis still remains applicable. After reviewing all the comments and new data OSHA's preferred estimate of risk for a working lifetime of exposures is approximately 8 deaths from respiratory cancer per 1000 exposed employees at 10 $\mu g/m^3$, with a range of reasonable estimates from 2.2 to 29 per 1000. This estimate is very similar to the estimate which was the basis of the above discussion on significance of risk.

Relatively little comment and no detailed analysis was submitted on the above discussion of significance of risk. The Chemical Manufacturers' Association—Arsenic Panel stated that,

OSHA drew inappropriate comparisons between acute risks, such as those in the 'hazardous occupations' OSHA lists, and chronic risks such as carcinogenesis. The appropriate comparison therefore is not to occupational mortality rates for firemen, but to the rate for radiation workers, who also are exposed to a chronic health hazard. As OSHA notes in the **Federal Register**, the risk of increased mortality at maximum permissible occupational exposure under the radiation standard is 17–29 per 1000. Thus this risk level should be considered acceptable by OSHA in setting a standard to protect workers against other long-term health risk (Ex. 202–3, pp. 101–102, fn. 50).

One of the arguments that Kennecott Minerals Company made in support of a 50 $\mu g/m^3$ level is that,

Dr. Enterline's new data show that the excess risk at 50 $\mu g/m^3$ is approximately the same as that found by the OSHA assessments at 10 $\mu g/m^3$ [Dr. Enterline's estimate is 11.2 to 13.4 excess cases per 1000 employees at 50 $\mu g/m^3$] * * * Thus, Dr. Enterline's new data show that a PEL of 50 $\mu g/m^3$ would provide approximately the same level of protection deemed adequate by OSHA under the current 10 $\mu g/m^3$ PEL (Ex. 202–8, p. 38).

The United Steelworkers of America specifically addressed this argument, pointing out that OSHA had stated that its "preliminary conclusion is that significant risk is not eliminated at this risk level" and further noting that "Enterline's risk at 50 $\mu g/m^3$ is an order of magnitude higher than the risk considered significant by the Supreme Court in *IUD* v. *API*." (Ex. 249, p. 14, fn. 24). The United Steelworkers stated with regard to OSHA's analysis of significant risk:

OSHA's risk assessments used human studies, with relatively good estimates of dose compared to most epidemiological studies. These data permitted the use of quantitative methods. OSHA then compared its derived risk of arsenic-induced lung cancer at the PEL to the risk of death from other occupations concluding that the risk is significant because it is higher than average. This procedure works very well for arsenic, but we would caution against generalizing it to other toxic substances considered for regulation. Human studies are not always available. When they are, they may not include adequate information of exposure. The risk in question may not be death. . . . Reliable quantitative risk assessment may not be possible, nor do we believe the Supreme Court's benzene decision requires their use. Nor do we believe a risk is significant only if it exceeds the average risk of death from occupational causes. Congress intended OSHA to reduce the rate of injury, death, and disease throughout American industry, not just to flatten out the peaks. Indeed, the average risk of death from occupational causes in manufacturing of 2.7/1000 is considerably higher than the risk of 1/1000 the Supeme Court considered significant in the benzene decision. OSHA's risk comparisons clearly demonstrate that the risk of arsenic-induced cancer is significant even at the 10 $\mu g/m^3$ level. But they should not be used in the future to demonstrate that a given risk is insignificant (Ex. 231, p. 5–6).

The National Institute for Occupational Safety and Health stated that "NIOSH accepts the OSHA conclusion of significant risk to 10 μg arsenic/m^3" (Ex. 227, p. 2). Dr. Radford,

*This level of risk is also above the level at which the Supreme Court indicated a reasonable person might well consider the risk significant and take steps to decrease it. The Court stated: "It is the Agency's responsibility to determine in the first instance what it considers to be a "significant" risk. Some risks are plainly acceptable and others are plainly unacceptable. If for example the odds are one in a billion that a person will die from cancer by taking a drink of chlorinated water the risk clearly could not be considered significant. On the other hand, if the odds are one in a thousand that regular inhalation of gasoline vapors that are two percent benzene will be fatal a reasonable person might well consider the risk significant and take appropriate steps to decrease or eliminate it" (*IUD* V. *API* 448 U.S. 655) The Supreme Court's language indicates that the examples given were of excess risk over a lifetime. It speaks of "regular inhalation" which implies that it takes place over a substantial period of time and refers to the "odds * * * that a person will die," obviously a once in a lifetime occurrence.

who had been actively involved as chairman of BEIR III in considering questions of acceptable levels of risk in the context of ionizing radiation stated:

> I conclude that the risk estimates presented in the OSHA April 9 summary must be raised in the light of the new information. Whether the above risk estimates for the standard are acceptable is problematic. Certainly on the basis of the assumptions made they are significant, even if the current standard (10 $\mu g/m^3$) is retained (Ex. 207, p. 13).

After reviewing these comments, OSHA concludes that its analysis in the April 9, 1982 document is correct. By setting the PEL at 10 $\mu g/m^3$ OSHA is very substantially reducing the risk of lung cancer for employees within the limits of feasibility and it is not reducing risk to the level of insignificance. The risk assessments and significant risk analysis clearly demonstrate that the 10 $\mu g/m^3$ level should not be raised.

In response to the comments, OSHA believes it is appropriate to reduce both acute and chronic risks of deaths. OSHA also believes, as stated in the April 9th document, that Congress did not intend OSHA to limit reductions in death to the highest existing levels, but intended OSHA to reduce significant risk to the extent feasible.

In addition the NRC regulations which cover employees exposed to higher levels of radiation require employers to reduce each employee's exposure below the level stated in the regulation to as low a level as is reasonably achievable. This is not the case with OSHA regulations.

Finally, Dr. Enterline's estimates of risk of 11 to 13 at 50 $\mu g/m^3$ and 2 to 3 at 10 $\mu g/m^3$ are lower than OSHA's estimates although they are reasonable estimates. His estimate of 11 to 13 excess deaths per 1000 at 50 $\mu g/m^3$ is still an above average level of risk and his 10 $\mu g/m^3$ estimate of 2 to 3 excess deaths per 1000 is an average level of risk. Therefore Dr. Enterline's risk estimates are not a basis to raise the exposure level to a level which would result in above average risks.

Those participants who advocated a 50 or 100 $\mu g/m^3$ level generally did not do so because they believed that OSHA's predicted level of risk at those levels would be acceptable or insignificant. Rather, based on the CEOH analysis, they argued that a "threshold" existed at higher levels. As stated above the great weight of the studies and evidence supports the estimates of risk presented by OSHA, and therefore that very substantial body of high quality evidence must be the basis of OSHA's significant risk determinations.

VII. Regulatory Analysis

This supplemental statement of reasons for the final rule was issued pursuant to a court order limiting the issues to estimates of risk, analysis of its significance and any changes to the permissible exposure limit resulting from analysis of those factors. The analysis indicates that no changes in the PEL are justified and accordingly no changes are being made to the standard. A limited time was granted by the Court for this review. Accordingly, as the remand limited OSHA to specified issues and as all required reviews occurred at earlier stages in the rulemaking, this is not an action for which a further environmental impact statement, regulatory flexibility analysis or regulatory impact analysis is required.

VIII. Authority

This notice was prepared under the direction of Thorne G. Auchter, Assistant Secretary for Occupational Safety and Health, Frances Perkins Labor Department Building, 200 Constitution Avenue, N.W., Washington, D.C. 20210.

List of Subjects in 29 CFR Part 1910

Arsenic, Occupational safety and health, Chemicals, Cancer, Health, Risk assessment.

(Secs. 6, and 8, of the Occupational Safety and Health Act of 1970 (29 U.S.C. 655, 657, Secretary of Labor's order 8-76 (41 FR 25059); 29 CFR Part 1911))

Signed at Washington, D.C. this 6th day of January 1983.

Thorne G. Auchter,

Assistant Secretary of Labor.

[FR Doc. 83-759 Filed 1-7-83; 9:10 am]

BILLING CODE 4510-26-M

federal register

Friday
January 14, 1983

Part III

Department of Labor

Employment Standards Administration, Wage and Hour Division

Minimum Wages for Federal and Federally Assisted Construction; General Wage Determination Decisions

DEPARTMENT OF LABOR

Employment Standards Administration, Wage and Hour Division

Minimum Wages for Federal and Federally Assisted Construction; General Wage Determination Decisions

General wage determination decisions of the Secretary of Labor specify, in accordance with applicable law and on the basis of information available to the Department of Labor from its study of local wage conditions and from other sources, the basic hourly wage rates and fringe benefit payments which are determined to be prevailing for the described classes of laborers and mechanics employed on construction projects of the character and in the localities specified therein.

The determinations in these decisions of such prevailing rates and fringe benefits have been made by authority of the Secretary of Labor pursuant to the provisions of the Davis-Bacon Act of March 3, 1931, as amended (46 Stat. 1494, as amended, 40 U.S.C. 276a) and of other Federal statutes referred to in 29 CFR 1.1 (including the statutes listed at 36 FR 306 following Secretary of Labor's Order No. 24–70) containing provisions for the payment of wages which are dependent upon determination by the Secretary of Labor under the Davis-Bacon Act; and pursuant to the provisions of part 1 of subtitle A of title 29 of Code of Federal Regulations, Procedure for Predetermination of Wage Rates (37 FR 21138) and of Secretary of Labor's Orders 12–71 and 15–71 (36 FR 8755, 8756). The prevailing rates and fringe benefits determined in these decisions shall, in accordance with the provisions of the foregoing statutes, constitute the minimum wages payable on Federal and federally assisted construction projects to laborers and mechanics of the specified classes engaged on contract work of the character and in the localities described therein.

Good cause is hereby found for not utilizing notice and public procedure thereon prior to the issuance of these determinations as prescribed in 5 U.S.C. 553 and not providing for delay in effective date as prescribed in that section, because the necessity to issue construction industry wage determination frequently and in large volume causes procedures to be impractical and contrary to the public interest.

General wage determination decisions are effective from their date of publication in the **Federal Register** without limitation as to time and are to be used in accordance with the provisions of 29 CFR Parts 1 and 5. Accordingly, the applicable decision together with any modifications issued subsequent to its publication date shall be made a part of every contract for performance of the described work within the geographic area indicated as required by an applicable Federal prevailing wage law and 29 CFR, Part 5. The wage rates contained therein shall be the minimum paid under such contract by contractors and subcontractors on the work.

Modifications and Supersedeas Decisions to General Wage Determination Decisions

Modifications and supersedeas decisions to general wage determination decisions are based upon information obtained concerning changes in prevailing hourly wage rates and fringe benefit payments since the decisions were issued.

The determinations of prevailing rates and fringe benefits made in the modifications and supersedeas decisions have been made by authority of the Secretary of Labor pursuant to the provisions of the Davis-Bacon Act of March 3, 1931, as amended (46 Stat. 1494, as amended, 40 U.S.C. 276a) and of other Federal statutes referred to in 29 CFR 1.1 (including the statutes listed at 36 FR 306 following Secretary of Labor's Order No. 24–70) containing provisions for the payment of wages which are dependent upon determination by the Secretary of Labor under the Davis-Bacon Act; and pursuant to the provisions of part 1 of subtitle A of title 29 of Code of Federal Regulations, Procedure for Predetermination of Wage Rates (37 FR 21138) and of Secretary of Labor's orders 13–71 and 15–71 (36 FR 8755, 8756). The prevailing rates and fringe benefits determined in foregoing general wage determination decisions, as hereby modified, and/or superseded shall, in accordance with the provisions of the foregoing statutes, constitute the minimum wages payable on Federal and federally assisted construction projects to laborers and mechanics of the specified classes engaged in contract work of the character and in the localities described therein.

Modifications and supersedeas decisions are effective from their date of publication in the **Federal Register** without limitation as to time and are to be used in accordance with the provisions of 29 CFR Parts 1 and 5.

Any person, organization, or governmental agency having an interest in the wages determined as prevailing is encouraged to submit wage rate information for consideration by the Department. Further information and self-explanatory forms for the purpose of submitting this data may be obtained by writing to the U.S. Department of Labor, Employment Standards Administration, Wage and Hour Division, Office of Government Contract Wage Standards, Division of Government Contract Wage Determinations, Washington, D.C. 20210. The cause for not utilizing the rulemaking procedures prescribed in 5 U.S.C. 553 has been set forth in the original General Determination Decision.

Modifications to General Wage Determination Decisions

The numbers of the decisions being modified and their dates of publication in the **Federal Register** are listed with each State.

Arkansas:	
AR82–4036; AR82–4037	July 9, 1982.
AR82–4038	July 23, 1982.
AR82–4039	July 13, 1982.
Iowa: IA82–4049	Oct. 8, 1982.
Kentucky:	
KY82–1053	Oct. 1, 1982.
KY82–1060	Oct. 8, 1982.
KY82–1062; KY82–1064; KY82–1065; KY82–1066; KY82–1067.	Oct. 15, 1982.
Louisiana:	
LA82–4021	May 7, 1982.
LA82–4053	Nov. 5, 1982.
Maryland:	
MD80–3047	Aug. 29, 1980.
MD81–3031	Nov. 5, 1982.
New York NY81–3062	Sept. 11, 1981.
Texas:	
TX82–4025	June 18, 1982.
TX82–4065	Dec. 17, 1982.

Supersedeas Decisions to General Wage Determination Decisions

The numbers of the decisions being superseded and their dates of publication in the **Federal Register** are listed with each State. Supersedeas decision numbers are in parentheses following the numbers of the decisions being superseded.

Minnesota: MN81-2042 (MN83-2001)	July 24, 1981.
Oklahoma:	
OK82–4035 (OK83–4011)	June 25, 1982.
OK82–4059 and OK82–4060 (OK83–4011).	Nov. 19, 1982.
OK82–4063 (OK83–4011)	Nov. 26, 1982.
OK81–4072 and OK81–4069 (OK83–4011).	Sept. 4, 1981.
OK82–4051 (OK83–4012)	Oct. 22, 1982.
OK82–4055 and OK82–4056 (OK83–4012).	Nov. 12, 1982.

Cancellation of General Wage Determination Decision

General Wage Decision TX80–4002 is cancelled. Agencies with construction projects pending to which the cancelled decision would have been applicable should utilize the project determination

procedure by submitting form SF-308. See Regulations Part 1 (29 CFR), Section 1.5. Contracts for which bids have been opened shall not be affected by this notice. Also consistent with 29 CFR, 1.7(b)(2) the incorporation of the cancelled decision in contract specifications, the opening of bids which is within ten (10) days of this notice, need not be affected.

Signed at Washington, D.C. this 7th day of January 1983.

Dorothy P. Come,

Assistant Administrator, Wage and Hour Division.

BILLING CODE 4510-30-M

MODIFICATION P. 1

DECISION #AR82-4036-Mod.#3
47FR29974-July 9, 1982
Pulaski County, Arkansas

CHANGE:	Basic Hourly Rates	Fringe Benefits
ASBESTOS WORKERS	$16.00	2.05
BOILERMAKERS	16.35	2.415
BRICKLAYERS-STONEMASONS	12.55	1.44
CEMENT MASONS	12.50	.64
PAINTERS:		
Painters, paperhangers, steam cleaners, sheet-rock finishers and wall hangers	10.75	.53
Spray gun operator and sandblasterers	11.35	.53
All skeleton steel and all work on stages, structural steel over 30 feet high	11.00	.53
PLASTERERS	12.50	.64
LABORERS FRINGE BENEFITS FOR ALL GROUPS (I--VII)		1.40

DECISION #AR82-4037-Mod.#2
47FR29975-July 9, 1982
Jefferson County, Arkansas

CHANGE:		
ASBESTOS WORKERS	$16.00	2.05
BOILERMAKERS	16.35	2.415
BRICKLAYERS-STONEMASONS	12.55	1.44
CEMENT MASONS	12.50	.64
PAINTERS:		
Painters, paperhangers, steam cleaners, sheet-rock finishers and wall hangers	10.75	.53
Spray gun operator and sandblasterers	11.35	.53
All skeleton steel and all work on stages, structural steel over 30 feet high	11.00	.53
LABORERS FRINGE BENEFITS FOR ALL GROUPS (I - VII)		1.40

DECISION #AR82-4038-Mod.#2
47FR32032-July 23, 1982
Union and Ouachita Counties, Arkansas

CHANGE:		
ASBESTOS WORKERS	16.00	2.05
BOILERMAKERS	16.35	2.415
CEMENT MASONS	12.50	.64
PLASTERERS	12.50	.64
PLUMBERS-PIPEFITTERS	14.50	1.60

DECISION #AR82-4036-Mod.#3
(cont'd)

CHANGE:	Basic Hourly Rates	Fringe Benefits
LABORERS FRINGE BENEFITS FOR ALL GROUPS (I - VII)		$1.40
ELECTRICIANS AND LINE CONSTRUCTION:		
Electrical contracts $20,000.00 or less:		
ELECTRICIAN-LINEMEN	$14.91	5%%+.80
CABLE SPLICERS	15.41	5%%+.80
Electrical contracts over $20,000.00:		
ELECTRICIANS-LINEMEN	15.70	5%%+.80
CABLE SPLICERS	16.20	5%%+.80

DECISION #AR82-4039-Mod.#2
47FR32033-July 13, 1982
Garland, Clark and Hot Springs Counties, Arkansas

CHANGE:		
ASBESTOS WORKERS	16.00	2.05
BOILERMAKERS	16.60	2.415
LABORERS FRINGE BENEFITS FOR ALL GROUPS (I - VII)		1.40
PLASTERERS	12.50	.64

DECISION NO. IA82-4049 - Mod. #4
(47 FR 44667 - 10/8/82)
Scott County, Iowa

CHANGE:		
Electricians:		
Electricians	16.64	1.36+8%
Cable Splicers	17.74	1.36+8%
Plasterers	17.00	

MODIFICATIONS P. 2

DECISION #KY82-1055 - Mod. #1
(47 FR 43521 - October 1, 1982)
Allen County etc., Kentucky

CHANGE:	Basic Hourly Rates	Fringe Benefits
Painters:		
Brush & Roller	$14.90	$ 1.45
Spray & Sandblast	15.90	1.45

DECISION #KY82-1060 - Mod. #1
(47 FR 44668 - October 8, 1982)
Fort Campbell (Christian County, Kentucky & Montgomery County, Tennessee)

CHANGE:		
Boilermakers	$18.15	$ 3.015
Electricians:		
Kentucky Portion:		
Wiremen	15.89	13%%+.65
Cable splicers	16.14	13%%+.65
Power Equipment Operators:		
Kentucky Portion:		
Class A	14.97	2.13
Class B	12.23	2.13
Class C	11.46	2.13

DECISION #KY82-1062 - Mod. #1
(47 FR 46225 - October 15, 1982)
Warren County, Kentucky

CHANGE:		
Boilermakers	$18.15	$ 3.015
Cement masons & Plasterers	14.00	.01
Elevator Constructors:		
Mechanics	16.585	2.69 + a
Helpers	11.61	2.69 + a
Probationary helpers	8.29	
Pipefitters	17.25	3.22
Power Equipment Operators:		
Class A	14.97	2.13
Class B	12.23	2.13
Class C	11.46	2.13

DECISION #KY82-1064 - Mod. #1
(47 FR 46230 - October 15, 1982)
McCracken County, Kentucky

CHANGE:		
Boilermakers	$18.15	$ 3.015
Electricians:		
Wiremen	15.89	13%%+.65
Cable splicers	16.14	13%%+.65
Power Equipment Operators:		
Class A	14.97	2.13
Class B	12.23	2.13
Class C	11.46	2.13

DECISION #KY82-1065 - Mod. #1
(47 FR 46229 - October 15, 1982)
Boyd County, Kentucky

CHANGE:		
Power Equipment Operators:		
Class A	$14.97	$ 2.13
Class B	12.23	2.13
Class C	11.46	2.13
Sheet metal workers	16.575	3.045

DECISION #KY82-1067 - Mod. #1
(47 FR 46227 - October 15, 1982)
Hardin, Jefferson, & Meade Counties, Kentucky

CHANGE:		
Asbestos workers	$17.19	$ 2.45
Boilermakers	18.15	3.015
Elevator Constructors:		
Mechanics	16.585	2.69 + a
Helpers	11.61	2.69 + a
Probationary helpers	8.29	
Pipefitters:		
Area 1	17.25	3.22
Area 2	17.85	3.22
Area 3	18.10	3.22
Plasterers	15.20	.77
Power Equipment Operators:		
Class A	14.97	2.13
Class B	12.23	2.13
Class C	11.46	2.13

MODIFICATION P. 3

DECISION #KY82-1066 - Mod. #1 (47 FR 46226 - October 15, 1982) Fayette & Franklin Counties, Kentucky	Basic Hourly Rates	Fringe Benefits
CHANGE:		
Asbestos workers	$17.19	$ 2.45
Boilermakers	18.15	3.015
Electricians	16.81	3% + 2.00
Elevator Constructors:		
Mechanics	16.565	2.69 + a
Helpers	11.61	2.69 + a
Probationary helpers	8.29	
Plumbers & Pipefitters:		
Fayette County	16.68	2.30
Remainder of Franklin Co.	17.68	2.30
Pipefitters - West 3/4 of Franklin Co. including the City of Frankfort	18.30	3.22
Power Equipment Operators:		
Class A	14.97	2.13
Class B	12.23	2.13
Class C	11.46	2.13
Roofers - Fayette Co. Only	12.40	1.25

DECISION NO. LA82-4021 - MOD. #7 (47 FR 19877 - 5/7/82) Bossier & Caddo Pars., Louisiana	Basic Hourly Rates	Fringe Benefits
CHANGE:		
Electricians:		
Electricians	$14.80	2.40+ 4%
Cable splicers	15.30	*

DECISION NO. LA82-4053 - MOD. #6 (47 FR 50421 - 11/5/82) Statewide Louisiana	Basic Hourly Rates	Fringe Benefits
CHANGE:		
Electricians:		
Zone 7 - Electricians	14.80	2.40+ 4%
Cable splicer	15.30	*
Plumbers & pipefitters:		
Zone 2	15.865	2.585

MODIFICATION P. 4

DECISION NO. MD80-3047-Mod #8 (45 FR 57922-August 29, 1980) Allegany & Garrett Counties, Maryland	Basic Hourly Rates	Fringe Benefits
CHANGE:		
POWER EQUIPMENT OPERATORS:		
HEAVY CONSTRUCTION:		
Group 1	$15.07	2.95
Group 2	14.55	2.95
Group 3	14.00	2.95
Group 4	13.56	2.95
Group 5	13.14	2.95
Group 6	12.63	2.95
HIGHWAY CONSTRUCTION:		
Group 1	14.87	2.95
Group 2	14.31	2.95
Group 3	13.71	2.95
Group 4	13.32	2.95
Group 5	12.86	2.95
Group 6	12.41	2.95

DECISION NO. MD81-3031-Mod. #3 (46 FR 27051-May 15,1981) ALLEGANY & GARRETT COS. MD.	Basic Hourly Rates	Fringe Benefits
CHANGE:		
POWER EQUIPMENT OPERATORS:		
Group 1	14.71	2.95
Hourly additional pay for long boom cranes (including jibs), pile driver machines with leads:		
130' to 169' plus $.40		
170' to 209' plus .60		
210' to 249' plus .80		
250' to 299' plus 1.00		
300' & over plus $1.25		
Group 2	14.16	2.95
Group 3	13.71	2.95
Group 4	13.71	2.95
Group 5	13.24	2.95
Group 6	12.78	2.95
Group 7	15.24	2.95

DECISION NO. NY81-3062 - MOD. #2 (46 FR 45530 September 11, 1981) WESTCHESTER COUNTY, NEW YORK	Basic Hourly Rates	Fringe Benefit
CHANGE:		
CARPENTERS:		
Building	15.35	5.95

DECISION NO. TX82-4025 - MOD. #4 (47 FR 26550 - 6/18/82) Brazos County, Texas	Basic Hourly Rates	Fringe Benefit
CHANGE:		
Boilermakers	$16.60	2.415
Marble, tile & terrazzo workers	16.42	1.75
Painters - Group 1	15.535	2.725
Group 2	15.91	2.725
Group 3	15.66	2.725
Group 4	16.16	2.725

DECISION NO. TX82-4065 - MOD. #1 (47 FR 56604 - 12/17/82) Bell,Bosque,Coryell, Falls,Hill & McLennan Cos., Texas	Basic Hourly Rates	Fringe Benefit
CHANGE:		
Building Construction:		
Asbestos workers-Zone 2	15.90	2.94
Bricklayers	14.05	1.80
Carpenters:		
Zone 1 - Carpenters	13.05	
Millwrights	13.30	
Plasterers	14.79	1.61

SUPERSEDEAS DECISION

STATE: Minnesota
COUNTIES: *See Below
DECISION NUMBER: MN83-2001
DATE: Date of Publication
Supersedes Decision No. MN81-2042 dated July 24, 1981 in 46 FR 38250
DESCRIPTION OF WORK: Heavy and Highway Construction Projects
*Anoka, Benton, Blue Earth, Carlton, Carver, Chisago, Cook, Dakota, Dodge, Faribault, Fillmore, Freeborn, Goodhue, Hennepin, Houston, Lake, LeSueur, Mower, Nicollet, Olmsted, Ramsey, Rice, St. Louis, Scott, Sherburne, Sibley, Stearns, Steele, Wabasha, Waseca, Washington, Winona, & Wright

	Basic Hourly Rates	Fringe Benefits
CARPENTERS & PILEDRIVERMEN:		
AREA 1	$15.56	$2.05
AREA 2	15.02	
AREA 3	13.57	1.45
AREA 4	14.53	.85
AREA 5	15.38	
AREA 6	14.56	1.60
AREA 7	14.03	2.15
AREA 8	15.58	1.80
AREA 9	13.18	2.20
AREA 10	14.18	1.20
AREA 11	13.98	1.40
AREA 12	14.58	.80
AREA 13	14.23	1.95
AREA 14	15.38	
AREA 15	14.28	2.15
AREA 16	15.48	.70
AREA 17	15.18	1.00
AREA 18	12.82	.85
AREA 19	13.67	
CEMENT MASONS:		
AREA 1	15.43	1.82
AREA 2	12.45	.50
AREA 3	15.20	
AREA 4	12.93	.40
AREA 5	15.20	
AREA 6	14.15	1.20
AREA 7	13.85	1.50
AREA 8	15.20	
AREA 9	14.60	1.50
AREA 10	15.48	.70
IRONWORKERS:		
AREA 1	16.05	2.59
AREA 2	15.22	3.22
LABORERS:		
Landscape and Sodlayers	6.80	1.10
LINE CONSTRUCTION:		
AREA 1:		
Linemen; Cable Splicers; Dynamiter; & Special Equipment Operator	16.74	1.71
Equipment Operators	14.39	1.53
Truck Driver; Groundman; & Pole Treating Truck Driver	11.58	1.32
LINE CONSTRUCTION (CONT'D):		
AREA 2:		
Linemen; Cable Splicers; Dynamiter; & Special Equipment Operators	$15.07	$1.58
Equipment Operators	13.11	1.43
Truck Driver; Groundman; & Pole Treating Truck Driver	10.56	1.24
PAINTERS:		
AREA 1:		
Brush & Roller	15.06	1.93
Structural Steel & Bridges	15.76	1.93
AREA 2:		
Brush & Roller	10.98	1.59
Spray; Structural Steel	11.88	1.59
AREA 3:		
Brush & Tapers	13.87	1.35
Structural Steel & Bridges	14.62	1.35
AREA 4:		
Brush	14.61	1.53
Structural Steel & Bridges	15.21	1.53
AREA 5:		
Brush	15.12	1.82
Structural Steel & Bridges	15.82	1.82
AREA 6:		
Brush & Roller	13.95	1.47
Steel	14.20	1.47
Spray	14.45	1.47
WELL DRILLING:		
(Construction or Repair of Water Wells & Apurtenances):		
AREA 1:		
Driller - Pumpman	10.30	.20
General - Tender; Driver or Service Man	8.36	.20
Mechanic Welder	9.52	.20
AREA 2:		
Driller - Pumpman	10.30	.20
General - Tender	7.31	.20
Mechanic Welder	8.92	.20
Driver or Service Man	7.84	.20

SEE PAGES 4 THROUGH 6 FOR GEOGRAPHICAL JURISDICTIONS

	Basic Hourly Rates	Fringe Benefits
LABORERS:		
AREA 1:		
Class 1	$12.35	$2.25
Class 2	12.50	2.25
Class 3	12.55	2.25
Class 4	12.70	2.25
Class 5	12.80	2.25
Class 6	13.05	2.25
AREA 2:		
Class 1	11.42	2.15
Class 2	11.60	2.15
Class 3	11.65	2.15
Class 4	11.80	2.15
Class 5	11.90	2.15
Class 6	12.15	2.15
AREA 3:		
Class 1	12.15	1.20
Class 2	12.30	1.20
Class 3	12.35	1.20
Class 4	12.50	1.20
Class 5	12.60	1.20
Class 6	12.85	1.20
AREA 4:		
Class 1	11.88	2.40
Class 2	12.03	2.40
Class 3	12.08	2.40
Class 4	12.23	2.40
Class 5	12.33	2.40
Class 6	12.58	2.40
AREA 5:		
Class 1	12.68	1.60
Class 2	12.83	1.60
Class 3	12.88	1.60
Class 4	13.03	1.60
Class 5	13.13	1.60
Class 6	13.33	1.60
AREA 6:		
Class 1	10.00	.95
Class 2	10.15	.95
Class 3	10.20	.95
Class 4	10.35	.95
Class 5	10.45	.95
Class 6	10.70	.95

	Basic Hourly Rates	Fringe Benefits
POWER EQUIPMENT OPERATORS:		
AREA 1:		
Group 1	$15.85	$1.90
Group 2	15.35	1.90
Group 3	15.18	1.90
Group 4	15.07	1.90
Group 5	13.11	1.90
Group 6	12.40	1.90
AREA 2:		
Group 1	15.33	1.90
Group 2	14.82	1.90
Group 3	14.67	1.90
Group 4	14.55	1.90
Group 5	12.60	1.90
Group 6	11.90	1.90
AREA 3:		
Group 1	13.67	1.90
Group 2	12.81	1.90
Group 3	12.63	1.90
Group 4	12.53	1.90
Group 5	11.22	1.90
Group 6	10.74	1.90
TRUCK DRIVERS:		
AREA 1:		
Group 1	10.90	1.30
Group 2	10.45	1.30
Group 3	10.35	1.30
Group 4	10.15	1.30
AREA 2:		
Group 1	9.72	1.30
Group 2	9.27	1.30
Group 3	9.17	1.30
Group 4	8.97	1.30
AREA 3:		
Group 1	10.32	1.30
Group 2	9.67	1.30
Group 3	9.77	1.30
Group 4	9.57	1.30
AREA 4:		
Group 1	10.85	1.30
Group 2	10.40	1.30
Group 3	10.30	1.30
Group 4	10.10	1.30

SEE PAGE 6 FOR GEOGRAPHICAL JURISDICTIONS

LABORERS CLASSIFICATIONS:

CLASS 1: Unskilled; Bituminous Batcherman (stationary plant); Blacksmith Tenders; Cement Coverman Batch Truck; Cement Handler - Bulk, Bag; Carpenter Tender; Concrete Batchermen; Concrete Handler, Caisson, Footings, Columns, Piling, Slabs, etc.; Concrete Shoveler, Tamper & Puddler (paving); Concrete Longitudinal Floatman (manual bullfloat on paving); Dump Proofer below grade; Drill Runner Tender; Dumpman (dirt, paver, dumping batchtrucks, etc.); Hydrant & Valve Setter; Joint Filler (concrete pavement); Kettleman (bituminous or lead); Labor Wrecking Demolition; Landscape Gardener, sod, etc.; Pipe Derrickman (tripod, manual); Pipe Handler; Power Buggy Operator; Powder Monkey; Reinforced Steel Laborer; Reinforced Steel Setter (paving); Service Connection Maker (water, gas); Squeegeeman; Stabilizing Batchermen (stationary plant); Temporary Heater & Blower Tender; Tool Crib Checker; Top Man (sewer, water or gas trench); Winch Handler (manual)

CLASS 2: Bituminous Worker - Shoveler, Raker, Floater, Squeegee, Utility; Brick Tender; Compaction Equipment (hand operated); Conduit Layer; Curb Setter; Mortar Mixer; Sand Cushion Bedmaker; Torchman - gas, electric, thermal or similar device

CLASS 3: Chain Saw; Concrete Drilling; Concrete Mixer Operator; Concrete Sawer; Concrete Vibrator; Ditch & other work more than 8 ft. below starting level of manual work; Formsetter; Joint Sawer, Mortar; Pneumatic Tools, Jackhammer, Paving Buster, Chipping Hammer, etc.; Stone Tender; & Mason Tender

CLASS 4: Bottom Man (sewer, water or gas trench) (more than 8 ft. below starting level of manual work); Brick or Block Paving Setter; Caisson Work; Cofferdam Work; Tunnel Laborer; Underground Laborer; & Underpinning

CLASS 5: Cement Gun Operator (1½" or over); Driller - Air Track or similar; Nozzleman (gunite, sandblasting, cement); & Pipelayer, Laser Beam (sewer, water, gas)

CLASS 6: Blaster Powder Man (dynamite or substitute products); Tunnel Miner (atmospheric); & Tunnel Miner Tender

POWER EQUIPMENT OPERATORS CLASSIFICATIONS:

GROUP 1: Helicopter Pilot; Crane with over 135' Boom, excluding jib; Dragline and/or other similar equipment with Shovel-type controls 3 cu. yds. & over Mfg. rated cap.; Pile Driving when 3 Drums are in use

GROUP 2: Cableway; Concrete Mixer, Stationary Plant over 34E; Derrick (Guy or Stiffleg) (Power) (Skids or stationary); Dragline and/or similar equipment with Shovel-type controls, up to 3 cu. yds. Mfg. rated cap.; Dredge or Engineers, Dredge (power) & Engineer; Front End Loader, 5 cu. yds. & over; Grader or Motor Patrol, Finishing Earthwork & Bituminous; Locomotive Crane; Master Mechanic; Mixer (Paving) Concrete Paving, Road; Mole, inclu. Power Supply; Mucking Machine, inclu. Mucking Operations, Conway or similar type; Pileditving; Refrigeration Plant Engineer; Tandem Scraper; Tractor - Boom type; Truck Crane - Crawler Crane; & Tugboat - 100 HP & over

GROUP 3: Dual Tractor; Elevating Grader; Pumpcrete; Scraper - Struck Cap. 32 cu. yds. & over; Self-propelled Traveling Soil Stabilizer

GROUP 4: Air Track Rock Drill; Asphalt Bituminous Stabilizer Plant; Automatic Road Machine (CMI or similar); Backfiller; Batch Plant (Concrete); Bituminous Spreader & Finishing (Power); Boom Truck (Power operated Boom); Cat Tractors with Rock Wagons or similar types; Chip Harvester & Tree Cutter over 150 HP; Concrete Mixer on jobsite over 14S; Concrete Mobile; Crushing Plant (gravel & stone) or Gravel Washing, Crushing & Screening Plant; Curb Machine; Dope Machine (Pipeline); Drill Rigs, Heavy Rotary or Churn or Cable Drill; Fork Lift or Straddle Carrier; Fork Lift or Lumber Stacker; Front End Loader, over 1 cu. yd.; Hoist Engineer (power); Launchermen (Tankerman or Pilot License); Lead Greaser; Locomotive; Mechanic or Welder; Multiple Machines, such as Air Compressors, Welding Machines, Generators, Pumps; Paving Breaker or Tamping Machine (Power Driven) Mighty Mite or similar type; Paving Milling Machine; Pickup Sweeper, 1 cu. yd. & over Hopper cap.;

POWER EQUIPMENT OPERATORS CLASSIFICATIONS (CONT'D):

Pipeline Wrapping, Cleaning or Bending Machine; Power Plant Engineer, 100 K.W.H. & over; Power Actuated Horizontal Boring Machine, over 6"; Pugmill; Roller, 8 tons & over; Rubber-tired Farm Tractor, Backhoe Attach.; Sheep Foot Rollers; Slip Form (Power Driven) (paving); Tie Tamper & Ballast Machine; Tractor, over D2, TD6 or similar HP with Power Take-off; Tractor, over 50 HP without Power Take-off; Trenching Machine (sewer, water, gas); Turnapull (or similar type); Well Point Installation, Dismantling or Repair Mechanic; Hydraulic Tree Planter

GROUP 5: Air Compressor, 450 CFM or over; Bituminous Spreader & Bituminous Finishing Machine (Tender) (Power); Concrete Distributor & Spreader Finishing Machine; Longitudinal Float, Joint Machine, & Spray; Concrete Mixer on jobsite 14S & under; Concrete Saw (multiple blade) (power operated); Form Trench Digger (power); Front End Loader, up to & inclu. 1 cu. yd.; Grader (motor patrol); Gunite Gunall; Hydraulic Log Splitter; Loader (Barber Greene or similar type); Payhauler or similar type; Power Actuated Augers & Boring Machine; Power Actuated Jacks; Pump; Roller; Self-propelled Chip Spreader (Flaherty or similar); Shouldering Machine (Power) Apoco or similar type inclu. self-propelled Sand & Chip Spreader; Stump Chipper; Tractor, D2, TD6 or similar HP without power take-off; & Tree Farmer

GROUP 6: Conveyor; Dredge Dock Hand; Fireman or Tank Car Heater; Gravel Screening Plant (portable not crushing or washing); Greaser (Truck or Tractor); Lowermen; Mechanic Tender; Mechanic, Space Heater (Temporary Heat); Oiler (Power Shovel, Crane, Dragline); Self-Propelled Vibrating Packer (Pad type) (35 HP & over); Tractor, 50 HP or less w/o Power take-off; & Truck Crane Oiler

TRUCK DRIVERS CLASSIFICATIONS:

GROUP 1: Truck Driver (Operation of Hand & Power Operated winches); Truck Trains; Mechanic-Welder; Tractor Trailer; & Off Road

GROUP 2: Tri Axle (Inclu. 4 Axles)

GROUP 3: Bituminous Distributor; & Tandem Axle

GROUP 4: Bituminous Distributor Spray Operator (Rear End Oiler); Dumpman; Tank Truck Tender (gas, oil, road oil & water); Teamster & Stablemen; Tractor Operator (wheel type used for any purpose); Pilot Car; Self-propelled Packer; Slurry Operator; Single Axle; Dump; Dry Batch Hauler; Boom & "A" Frame; & Ready-Mix Concrete

GEOGRAPHICAL JURISDICTIONS FOR CLASSIFICATIONS:

CARPENTERS & PILEDRIVERMEN:

AREA 1: Anoka, Carver, Chisago, Dakota, Hennepin, Ramsey, Scott (Exclu. SW Tip), Sherburne (SE ¼, inclu. Big Lake, Elk River & Zimmerman), Sibley (NE Corner, inclu. Green Isle), Washington, & Wright (SE part, inclu. Delano, Buffalo & Montrose) Cos.

AREA 2: Benton (N ½, exclu. Foley) Co.

AREA 3: Benton (S 3/4, inclu. Foley), Sherburne (NW 3/4, inclu. Clear Lake & Becker), Stearns, & Wright (NW part, inclu. S. Haven & Maple Lake) Cos.

AREA 4: Blue Earth (Except NW Corner), LeSueur (W. ½, inclu. LeSueur, LeCenter, & Kasota), Nicollet (E ½, inclu. St. Peter, & Nicollet), & Scott (SW Tip) Cos.

AREA 5: Blue Earth (NW Corner, inclu. Cambria), & Nicollet (W ½, inclu. Courland, & Lafayette) Cos.

AREA 6: Carlton County

AREA 7: Cook, Lake (S ½, inclu. Two Harbors, Isabella, & Finland), & St. Louis (S 1/3, inclu. Fond du Lac, Floodwood, Cotton, & Proctor) Cos.

AREA 8: Dodge (NW ½, inclu. Claremont, & W. Concord), Goodhue (W. strip, inclu. Dennison & Kenyon), LeSueur (E ½, exclu. LeSueur, LeCenter, & Kasota), Rice, Steele (N 5/6, inclu. Owatonna), & Waseca (Waldorf & Waseca) Cos.

CARPENTERS & PILEDRIVERMEN (CONT'D):

AREA 9: Dodge (NE ½, inclu. Kasson, & Dodge Center), Fillmore (W ½, inclu. Harmony & Preston), Goodhue (S. strip, inclu. Pine Island), Mower (NW Tip, inclu. Racine), Olmsted (exclu. extreme SW Tip), Wabasha (SW 1/3, inclu. Mazeppa, & Theilman), & Winona (St. Charles) Cos.
AREA 10: Faribault, Freeborn, & Steele (SW Corner, inclu. Ellendale), & Waseca (S. strip, inclu. New Richland) Cos.
AREA 11: Fillmore (E ½, inclu. Lanesboro, Canton, & Mabe), Houston, Wabasha (E. part, inclu. Wabasha, Kellogg & Minneiska), & Winona (exclu. St. Charles) Cos.
AREA 12: Goodhue (Wanamingo, Zumbrota, & Cannon Falls) & Wabasha (NW 1/3, inclu. Lake City) Cos.
AREA 13: Lake (N ½), & St. Louis (NE 2/3, inclu. Cook, Cusson, & Ely) Cos.
AREA 14: Mower (exclu. Racine), Olmsted (extreme SW Tip), & Steele (SE strip, inclu. Blooming Prairie) Cos.
AREA 15: St. Louis (City Limits of Duluth) Co.
AREA 16: St. Louis (N. part, inclu. Rainy Lake Area) Co.
AREA 17: St. Louis (W. strip, inclu. Chisholm, Orr, & Cromey) Co.
AREA 18: Sibley (SE part, inclu. Arlington & Henderson) Co.
AREA 19: Sibley (Winthrop) Co.

CEMENT MASONS:
AREA 1: Anoka, Carver, Chisago, Dakota, Hennepin, Ramsey, Scott, Sherburne, Sibley, Washington, & Wright Cos.
AREA 2: Benton & Stearns Cos.
AREA 3: Blue Earth, LeSueur (W ½, inclu. cities of Cleveland, Elysian, Kasota, LeCenter, LeSueur, Lexington, Ottawa, & St. Thomas), Nicollet, & Waseca (W ½, inclu. cities of Alma City, Janesville, Smithmill & Waldorf) Cos.
AREA 4: Carlton, Cook, Lake, & St. Louis (S. of T-55-N) Cos.
AREA 5: Dodge (W. of Hwy #56), LeSueur (E ½), Rice, Steele, & Waseca (E ½) Cos.
AREA 6: Dodge (E. of Hwy #56), Fillmore (W. of a line drawn N & S established E. of Dodge Center), Freeborn (E ½), Mower, & Olmsted Cos.
AREA 7: Faribault & Freeborn (W. of a line running N & S from Geneva to Gordonsville) Cos.
AREA 8: Fillmore (E. of a line drawn N & S established E. of Dodge Center), Houston, & Winona Cos.
AREA 9: Goodhue & Wabasha Cos.
AREA 10: St. Louis (N. of T-55-N) Co.

IRONWORKERS:
AREA 1: Anoka, Benton, Blue Earth, Carver, Chisago, Dakota, Dodge, Faribault, Fillmore, Freeborn, Goodhue, Hennepin, Houston, LeSueur, Mower, Nicollet, Olmsted, Ramsey, Rice, Scott, Sherburne, Sibley, Stearns, Steele, Wabasha, Waseca, Washington, Winona, & Wright Cos.
AREA 2: Carlton, Cook, Lake, & St. Louis Cos.

LINE CONSTRUCTION:
AREA 1: Anoka, Benton, Blue Earth, Carlton, Carver, Chisago, Cook, Dakota, Goodhue, Hennepin, Lake, LeSueur, Nicollet, Ramsey, Rice, St. Louis, Scott, Sherburne, Sibley, Stearns, Wabasha, Washington, Winona, & Wright Cos.
AREA 2: Dodge, Faribault, Fillmore, Freeborn, Houston, Mower, Olmsted, Steele & Waseca Cos.

PAINTERS:
AREA 1: Anoka, Carver, Hennepin, Scott, Sherburne (E 2/3), & Wright Cos.
AREA 2: Benton, Sherburne (W 1/3), & Stearns Cos.
AREA 3: Blue Earth, Faribault, Freeborn, LeSueur, Nicollet, Rice, Sibley, Steele, & Waseca Cos.

PAINTERS (CONT'D):

AREA 4: Carlton, Cook, Lake, & St. Louis Cos.
AREA 5: Chisago, Dakota, Ramsey & Washington Cos.
AREA 6: Dodge, Fillmore, Goodhue, Houston, Mower, Olmsted, Wabasha & Winona Cos.

WELL DRILLING:
AREA 1: Anoka, Carver, Chisago (S. of T-35N), Dakota, Hennepin, Ramsey, Scott, Sherburne (S. of T-34N & E. of R-27W), Washington, & Wright (E. of T.H. 25) Cos.
AREA 2: Benton, Blue Earth, Carlton, Chisago (Rem. of Co.), Cook, Dodge, Faribault, Fillmore, Freeborn, Goodhue, Houston, Lake, LeSueur, Mower, Nicollet, Olmsted, Rice, St. Louis, Sherburne (Rem. of Co.), Sibley, Stearns, Steele, Wabasha, Waseca, Winona, & Wright (Rem. of Co.) Cos.

LABORERS:
AREA 1: Anoka, Carver, Chisago, Dakota, Hennepin, Ramsey, Scott, Sherburne, Washington, & Wright Cos.
AREA 2: Benton & Stearns Cos.
AREA 3: Blue Earth, Dodge, Faribault, Fillmore, Freeborn, Goodhue, Houston, LeSueur, Mower, Nicollet, Olmsted, Rice, Steele, Wabasha, Waseca, & Winona Cos.
AREA 4: Carlton, Cook, Lake, & St. Louis (S. of T-55) Cos.
AREA 5: St. Louis (N. of T-55) Co.
AREA 6: Sibley Co.

POWER EQUIPMENT OPERATORS:
AREA 1: Anoka, Carver, Chisago (S. of the Northern boundary of T. 34-N, inclu. Thompson, Cloquet, Scanlon, & Carlton), Cook, Dakota, Hennepin, Lake, Ramsey, St. Louis, Scott, Sherburne (S. of the northern boundary of T. 33-N & E. of the western boundary of R. 27-W), Washington & Wright (E. of & inclu. Hwy #25) Cos.
AREA 2: Benton (E. of the western right-of-way of US Hwy #10), Blue Earth, Carlton, Chisago (Rem. of Co.), Dodge, Faribault, Fillmore, Freeborn, Goodhue, Houston, LeSueur, Mower, Nicollet (E. of the western right-of-way of Minn. Hwy #15), Olmsted, Rice, Sherburne (Rem. of Co.), Sibley (E. of the western right-of-way of Minn. Hwy #15), Stearns (E. of the western right-of-way of Minn. Hwy #15), Steele, Wabasha, Waseca, Winona, & Wright (Rem. of Co.) Cos.
AREA 3: Benton (Rem. of Co.), Nicollet (Rem. of Co.), Sibley (Rem. of Co.), & Stearns (Rem. of Co.) Cos.

TRUCK DRIVERS:
AREA 1: Anoka, Carlton, Carver, Chisago, Cook, Dakota, Hennepin, Lake, Ramsey, St. Louis, Scott, Sherburne, Washington, & Wright Cos.
AREA 2: Benton, Faribault, Sibley, & Stearns Cos.
AREA 3: Blue Earth, LeSueur, Nicollet, & Waseca Cos.
AREA 4: Dodge, Fillmore, Freeborn, Goodhue, Houston, Mower, Olmsted, Rice, Steele, Wabasha, & Winona Cos.

Unlisted classifications needed for work not included within the scope of the classifications listed may be added after award only as provided in the labor standards contract clauses (29 CFR, 5.5 (a) (1) (ii)).

SUPERSEDEAS DECISION

STATE: OKLAHOMA

COUNTIES: Adair, Atoka, Bryan, Cherokee, Coal, Craig, Creek, Delaware, Haskell, Hughes, Latimer, LeFlore, McIntosh, Mayes, Muskogee, Nowata, Okfuskee, Okmulgee, Osage, Ottawa, Pawnee, Pittsburg, Pushmataha, Rogers, Sequoyah, Tulsa, Wagoner, Washington

DECISION NO. OK82-4011 Date of Publication:

SUPERSEDES DECISION NO. OK82-4035 dated June 25, 1982; OK82-4059 dated November 19, 1982; OK82-4060 dated November 19, 1982; OK82-4063 dated November 26, 1982, OK81-4072 dated September 4, 1982 and OK81-4069 dated September 4, 1981.

DESCRIPTION OF WORK: BUILDING PROJECTS (excluding single family homes and apartments up to and including 4 stories): Heavy Construction within the City of Muskogee and exclusion of Water and Sewer Treatment Plants in Tulsa, Creek, Craig, Delaware, Ottawa, Mayes and Roger Counties, Oklahoma

	Basic Hourly Rates	Fringe Benefits
ASBESTOS WORKERS:		
Area I	$15.86	2.60
Area II	16.45	2.08
BOILERMAKERS	16.60	2.415
BRICKLAYERS-STONEMASONS:		
Area I	15.60	1.75
Area II	15.48	2.08
Area III	14.84	2.04
Area IV	15.31	1.54
Area V	16.90	
Area VI	14.50	1.23
CARPENTERS - AREA I		
Carpenters	12.00	1.55
Millwrights - Pile-drivermen	13.35	1.55
CARPENTERS - AREA II		
Carpenters	12.98	.75
Millwrights - Pile-drivermen	14.43	.75
CARPENTERS - AREA III		
Carpenters	12.05	1.15
Piledrivermen	12.875	1.15
CARPENTERS - AREA IV		
Carpenters	14.18	1.62
Millwrights - Pile-drivermen	14.48	1.62
CARPENTERS - AREA V		
Carpenters	13.00	
Piledrivermen	14.25	
CARPENTERS - AREA VI		
Carpenters	12.28	1.48
Millwrights - Pile-drivermen	12.78	1.48
CARPENTERS - AREA VII		
Carpenters	12.80	1.00
Millwrights - Pile-drivermen	14.48	1.00
Power saw operator	13.05	1.00
CARPENTERS - AREA VIII		
Carpenters	12.42	1.10
Millwrights - Pile-drivermen	12.67	1.10

	Basic Hourly Rates	Fringe Benefits
CEMENT MASONS:		
Area I	$10.80	
Area II	13.13	.75
Area III	14.94	.76
POWER TOOL OPERATOR:		
Area I	11.05	
Area II	13.48	.75
Area III	15.34	.76
ELECTRICIANS:		
Area I - Zone I	14.55	3½% + .80
Zone II	14.95	3½% + .80
Area II	15.15	3% + 1.58
Area III	14.40	3.8% + 2.20
Area IV	17.10	9% + .80
CABLE SPLICERS:		
Area I - Zone I	14.95	7½% + .80
Zone II	15.35	3½% + .80
Area II	19.35	3% + 1.58
Area III	14.65	3.8% + 2.20
Area IV	18.81	9% + .80
ELEVATOR CONSTRUCTORS:		
AREA I		
Journeymen	15.12	2.465 + A
Helpers	70% Jr.	2.465 + A
Probationary helper	50% Jr.	
AREA II		
Journeymen	14.665	2.465 + A
Helpers	70% Jr.	2.465 + A
Probationary Helper	50% Jr.	
GLAZIERS		
Area I	14.00	.30
Area II	12.94	
Area III	12.62	1.11
IRONWORKERS		
Area I	15.15	2.92
Area II	14.60	2.37
LABORERS - AREA I		
Group I	10.65	1.00
Group II	10.95	1.00
LABORERS - AREA II		
Group I	9.65	1.00
Group II	9.95	1.00

	Basic Hourly Rates	Fringe Benefits
LABORERS - AREA III		
Group I	$ 9.25	1.00
Group II	9.55	1.00
LABORERS - AREA IV		
Group I	9.30	1.00
Group II	9.55	1.00
PAINTERS - AREA I		
Brush	14.70	.90
Highwork & stage	15.10	.90
Spray & sandblasting	15.70	.90
Hot & bituminous	16.00	.90
Sheetrock handtools	14.70	.90
Sheetrock power tools	15.70	.90
PAINTERS - AREA II		
Brush & roller	11.05	.70
Highwork & stage	11.65	.70
Sandblasting & spray	11.90	.70
Hot or bituminous	12.55	.70
PAINTERS - AREA III		
Brush & roller	9.90	1.03
Brush - roller (Strl. steel)	10.15	1.03
Spray	10.55	1.03
Swing stage, boson chair	10.15	1.03
Taping & bedding (hand tools)	10.20	1.03
Sandblasting	10.25	1.03
PAINTERS - AREA IV		
Brush, roller, tapers & paperhangers	12.72	.60
Spray, steamclean, sandblast & pot tenders	13.22	.60
PLUMBERS - PIPEFITTERS		
AREA I	15.12	1.73
AREA II	17.40	2.20
AREA III	16.39	2.02
AREA IV		
Mechanical contracts up to $150,000.00	14.15	2.40
Mechanical contracts of $150,000.00 & over	15.65	2.40
AREA V	15.20	2.16
ROOFERS	13.40	1.39
SHEET METAL WORKERS		
AREA I	14.80	2.32
AREA II	16.85	1.47
SOFT FLOOR LAYERS		
AREA I	13.10	1.80
AREA II	13.47	1.88+8
SPRINKLER FITTERS	16.17	2.83

	Basic Hourly Rates	Fringe Benefits
TILE LAYERS & TERRAZZO WORKERS		
AREA I	$15.84	1.10
AREA II	14.38	2.20
TILE FINISHERS		
AREA I	12.15	
AREA II	11.90	1.40
TERRAZZO FINISHERS		
AREA I	13.00	
AREA II	11.90	1.40
TERRAZZO FLOOR MACHINE		
AREA I	13.30	
AREA II	12.16	1.40
TERRAZZO BASE MACHINE		
AREA I	13.70	
AREA II	12.46	1.40
LINE CONSTRUCTION		
Linemen	14.90	3½%+.45
Cable Splicers	16.09	3½%+.45
Hole digger operator and Heavy equipment op. (pole or cat equivalent)	13.24	3½%+.45
Jack Hammerman	10.62	3½%+.45
Line truck (winch op.)	11.68	3½%+.45
Powderman	12.86	3½%+.45
Groundman	9.54	3½%+.45
Truck driver (flat bed ton & half & under)	10.13	3½%+.45 +
POWER EQUIPMENT OPERATORS:		
Group I	15.75	2.18
Group II	15.25	2.18
Group III	14.75	2.18
Group IV	14.50	2.18
Group V	14.25	2.18
Group VI	14.00	2.18
Group VII	13.75	2.18
Group VIII	13.75	2.18
Group IX	13.35	2.18
TRUCK DRIVERS:		
AREA I		
Group I	10.48	
Group II	10.53	
Group III	10.63	
AREA II		
Group I	10.43	
Group II	10.53	
Group III	10.63	
Group IV	10.58	
Group V	10.73	

CLASSIFICATION AREAS, GROUPS AND DEFINITIONS AS FOLLOWS:

ASBESTOS WORKERS:
AREA I - Coal, Atoka and Bryan Counties
AREA II - Remaining Counties

BRICKLAYERS - STONEMASONS:
AREA I - Wagoner, Cherokee, Adair, Muskogee, Sequoyah, Haskell, Le Flore, Latimer and Pushmataha Counties
AREA II - Hughes, Coal, Atoka and Bryan Counties
AREA III - Creek, Tulsa, Rogers, Mayes, Craig, Ottawa and Delaware Counties
AREA IV - Okfuskee, Okmulgee, McIntosh and Pittsburg Counties
AREA V - Osage, Washington and Nowata Counties
AREA VI - Pawnee County

CARPENTERS - MILLWRIGHTS & PILEDRIVERMEN:
AREA I - Okmulgee, Okfuskee, Pittsburg, Latimer, Le Flore, the western part of McIntosh County - the line running straight south from the east line of Okmulgee County, Haskell County south of Highway #9 and north one-half of Atoka County
AREA II - Pushmataha, Bryan and south one-half of Atoka County
AREA III - Coal and Hughes County
AREA IV - Tulsa, Rogers, Mayes, Creek, Craig and Delaware Counties
AREA V - Washington, Nowata and Eastern two-thirds of Osage County
AREA VI - Muskogee, Wagoner, Adair, Cherokee, Sequoyah, Eastern part of McIntosh and Haskell County north of Highway #9
AREA VII - Pawnee and western one-third of Osage County
AREA VIII - Ottawa County

CEMENT MASONS - POWER TOOL OPERATORS:
AREA I - Western one-third of Osage County
AREA II - Pawnee County west of a line running due north from the western boundry of Creek County
AREA III - Remaining Counties

ELECTRICIANS - CABLE SPLICERS:
AREA I - Cherokee, Adair, Muskogee, Sequoyah, McIntosh, Haskell, Le Flore, Latimer, Atoka and Pushmataha Counties
ZONE I - 30-mile radius from Post Office of the City of Muskogee
ZONE II - Area outside Zone I
AREA II - Washington, Nowata, Craig, Ottawa, Rogers, Mayes, Delaware, Creek, Tulsa, Wagoner, Okmulgee, Okfuskee, Hughes, Pittsburg, Coal, Osage and Pawnee east of Highway #18
AREA III - Osage and Pawnee Counties west of Highway #18
AREA IV - Bryan County

ELEVATOR CONSTRUCTORS:
AREA I - Osage, Washington, Nowata, Craig, Ottawa, Rogers, Mayes, Delaware, Pawnee, Creek, Tulsa, Wagoner, Cherokee, Adair, Okmulgee, Muskogee, and Sequoyah Counties
AREA II - Remaining Counties

GLAZIERS:
AREA I - Hughes, Coal, Atoka and Bryan Counties
AREA II - Ottawa and that portion of Craig County east of Vineta
AREA III - Remaining Counties

CLASSIFICATION AREAS, GROUPS AND DEFINITIONS AS FOLLOWS:

IRONWORKERS:
AREA I - Bryan County
AREA II - Remaining Counties

LABORERS:
AREA I - Creek, Tulsa, Nowata, Craig, Ottawa, Rogers, Mayes, Delaware and Okmulgee Counties
AREA II - Wagoner, Cherokee, Adair, Muskogee, Sequoyah, Okfuskee, McIntosh, Haskell, Le Flore Counties
AREA III - Hughes, Pittsburg, Latimer, Coal, Atoka, Pushmataha and Bryan Counties
AREA IV - Osage, Washington and Pawnee Counties
GROUP I - All digging and dirt work, firing of salamanders and smuge pots; loading and unloading of materials and equipment; loading and unloading of materials to and from hoist or cages for stock piling only; wheeling and placing concrete; handling of lumber, steel, cement and distribution of materials; all cleaning, including cleaning of windows; wrecking and razing of building and all structures; cleaning when the man is directly tenders; and common laborers.
GROUP II - All machine tool operators; all sewer and drain tile layers and handling at the ditch, excluding distribution; oprs. of water pumps up to 4 inches and slip form jacks; men erecting scaffolds and directly tending lathers, masons, cement masons and plasterers, mortar mixers, hod carriers and dry mixers; high work over 30 ft. from the ground or floors; cement finisher laborer; work on swinging scaffold; all kettle & potmen, tank cleaning, all pipe doping treating & wrapping, including all men working with dope; mortar & plaster mixing machine, pump-crete machines, and gunite mixing machines including concrete, creosoted or treated materials, liquid acids, or like materials, when injurious to health, eye and skin or clothes; all newly developed mechanical equipment which replaces wheel barrows or plants; all laborers screening sand, running sand drier, and feeding oper. sandblasterer, except nozzle; and cutting torch oprs. in connection with laborers work; concrete grader.

PAINTERS:
AREA I - Pawnee, Osage, Washington, Nowata, Rogers, Mayes, Creek Tulsa, Okfuskee, Okmulgee and Northwestern half of Wagoner county
AREA II - Cherokee, Adair, Muskogee, Sequoyah, McIntosh, Haskell, Pittsburg, Latimer, Le Flore, Pushmataha and the Southeastern half of Wagoner County
AREA III - Hughes, Coal, Atoka and Bryan Counties
AREA IV - Craig, Ottawa and Delaware Counties

PLUMBERS - PIPEFITTERS:
AREA I - Ottawa, Delaware, Craig, Mayes, Nowata, Rogers, Tulsa, Creek and Osage and Pawnee Counties east of Highway #18
AREA II - Adair, Cherokee, Haskell, Latimer, Le Flore, McIntosh, Muskogee, Okfuskee, Pittsburg, Sequoyah and Wagoner Counties
AREA III - Hughes, Coal, Atoka, Pushmataha and Bryan Counties
AREA IV - Osage and Pawnee Counties west of Highway #18
AREA V - Washington County

SHEET METAL WORKERS:
AREA I - Hughes and Coal Counties
AREA II - Remaining Counties

SOFT FLOOR LAYERS:
AREA I - Hughes, Coal, Atoka and Bryan Counties
AREA II - Remaining Counties

CLASSIFICATION AREAS, GROUPS AND DEFINITIONS AS FOLLOWS:

TILE LAYERS & TERRAZZO WORKERS:
AREA I - Bryan County
AREA II - Remaining Counties

TILE & TERRAZZO FINISHERS - TERRAZZO FLOOR MACHINE - TERRAZZO BASE MACHINE:
AREA I - Bryan County
AREA II - Remaining Counties

POWER EQUIPMENT OPERATORS:
GROUP I - All crane type equipment with 300' of boom or over (including jib).
GROUP II - All crane type equipment with 200-300' of boom (including jib).
GROUP III - All crane type equipment with 100-200' of boom (including jib, all tower cranes and all crane type equipment of 3 cu. yards or more).
GROUP IV - Side boom (booms 30' and over); Guy Derrick.
GROUP V - Heavy duty mechanic, welder; crane-hook and overhead monorail; whirley; panel board batch plant operator; piledriver engineer, dragline, shovel; clamshell; backhoe (3/4 yd. & over); gradall; hydro crane; cherry picker; hoists while operating 2 or more drums; hoists while doing stack and chimney work (1 or 2 drums); power driven hole digger (with 30' & longer mast); motor patrol (blade); side boom (under 30').
GROUP VI - Fork lift (35' and over); dozer (engine hp 65 or over); Ferdson tractor or like equipment with hoe or loader equipment or ditcher; scraper type equipment; loader operator or hi-lift (engine hp 65 or over); asphalt lay machine; tail boom; conveyor-multiple, panel board control; power driven hole digger with less than 30' mast; trenching machine; concrete pump-boom type; roller & compactors with dozer blade.
GROUP VII - Locomotive engineer; boring machine; tug boat; mixer 18 cu. ft. and over; sand barge; dredging machine; tugger; hoist-when operating one drum; welding machine, 3 to 6; air compressor, 3 to 500 cu. ft. & under; air compressor, over 500 cu. ft. (1); pumps, battery, 3 to 6; fork-lift, bobcat and similar equipment, generator plant engineers, Diesel elec.; winch truck with A-frame; roller all types; outside elevator or building type of personnel hoist; concrete buster/or tamper; beaters under jurisdiction of operating engineers; firemen; boiler operator, crushing plants; oiler distributor; pulviminer; farmer tractor-with or without attachments; batch plant operator (portable); conveyor operator-duel, continuous or belt bulk handling; screed op.; concrete pump; form grader; screening plant; well point pump op.; signal man or large whirleys when and if required; operator for rotary drilling machines when operated from console or machines.
GROUP VIII - Permanent elevator - building type (automatic); concrete mixer, with hopper less than 18 cu. ft.; air compressor, 500 cu. ft. and under (1 or 2); welding machine (1 or 2); pump (1 or 2); fuelman; truck crane oiler driver or crane oiler; conveyor operator-single continuous belt bulk handling; asphalt lay machine back end man.
GROUP IX - Greaser and tilt top trailer operator.

TRUCK DRIVERS CLASSIFICATION DEFINITION AND AREA:
AREA I - Osage, Washington, Nowata, Craig, Ottawa, Pawnee, Rogers, Creek, Tulsa, Okmulgee, Okfuskee and Mayes and Wagoner Counties west of Highway #69.

CLASSIFICATION AREAS, GROUPS AND DEFINITIONS AS FOLLOWS:

GROUP I - Truck drivers, including pick-up, 1½ tons or 2½ yards up to but not including 3 tons or 4 yards, such as dump trucks, flat beds, stake body or bus driver.
GROUP II - 3 tons or 4 yards up to but not including 4 tons or 6 yards.
GROUP III - Ready mix concrete truck; Tractor-trailer and similar equipment.

AREA II - Bryan, Atoka, Pushmataha, Coal, Hughes, Pittsburg, Latimer, Le Flore, McIntosh, Haskell, Sequoyah, Muskogee, Cherokee, Adair, Delaware, and Mayes and Wagoner Counties east of Highway #69.

WELDERS: receive rate prescribed for craft performing operation to which welding is incidental.

UNLISTED classifications needed for work not included within the scope of the classifications listed may be added after award only as provided in the labor standards contract clauses (29CFR, 5.5 (a) (1) (ii)).

FOOTNOTES:
A - 6 months to 5 years 6%; over 5 years 8% of basic hourly rate plus seven paid holidays - A through G.
B - 7 paid holidays - A through E plus G

PAID HOLIDAYS:
A - New Year's Day; B - Memorial Day; C - Independence Day; D - Labor Day; E - Thanksgiving Day; F - Friday after Thanksgiving Day; G - Christmas Day

SUPERSEDES DECISION

STATE OF OKLAHOMA

COUNTIES: Alfalfa, Beckham, Blaine, Caddo, Canadian, Carter, Cleveland, Comanche, Cotton, Custer, Dewey, Ellis, Garfield, Garvin, Grady, Grant, Greer, Harmon, Harper, Jackson, Jefferson, Johnston, Kay, Kingfisher, Kiowa, Lincoln, Logan, Love, McClain, Major, Marshall, Murray, Noble, Oklahoma, Payne, Pontotoc, Pottawatomie, Roger Mills, Seminole, Stephens, Tillman, Washita, Woods and Woodward.

DECISION NO. OK83-4012

DATE: Date of Publication

SUPERSEDES DECISION NO. OK82-4051 dated October 22, 1982; OK82-4055 dated November 12, 1982 and OK82-4055 dated November 12, 1982:

DESCRIPTION OF WORK: Building Projects (excluding single family homes and apartments up to and including four stories)

	Basic Hourly Rates	Fringe Benefits
ASBESTOS WORKERS		
AREA I	$15.20	$2.37
AREA II	16.45	2.08
AREA III	15.86	2.60
BOILERMAKERS	16.60	2.415
BRICKLAYERS-STONEMASONS		
AREA I	15.48	2.23
AREA II	15.65	
AREA III	13.18	2.17
AREA IV	15.48	2.08
AREA V	14.50	1.23
AREA VI	14.74	2.15
AREA VII	13.00	1.37
CARPENTERS - AREA I		
Carpenters	13.85	1.64
Millwrights	14.35	1.64
Piledrivermen	14.35	1.64
Power saw operator	14.35	1.64
CARPENTERS - AREA II		
Carpenters	11.05	1.64
Millwrights	14.35	1.64
Piledrivermen	14.35	1.64
Power saw operator	11.55	1.64

	Basic Hourly Rates	Fringe Benefits
CARPENTERS - AREA III		
Carpenters	$11.05	$1.64
Millwrights	14.35	1.64
Piledrivermen	14.35	1.64
Power saw operator	11.55	1.64
CARPENTERS - AREA IV		
Carpenters	12.30	1.40
Millwrights	13.05	1.54
Piledrivermen	13.05	1.54
CARPENTERS - AREA V		
Carpenters	14.65	
Millwrights	14.90	
Piledrivermen	14.90	
Power saw operator	14.90	
CARPENTERS - AREA VI		
Carpenters	12.05	1.15
Piledrivermen	12.875	1.15
Power saw operator	12.30	1.15
CARPENTERS - AREA VII		
Carpenters	12.45	1.49
Piledrivermen	12.95	1.49
Power saw operator	12.575	1.49

	Basic Hourly Rates	Fringe Benefits
CARPENTERS - AREA VIII		
Carpenters	$12.55	$1.27
Millwrights	13.05	1.27
Piledrivermen	13.05	1.27
Power saw operator	12.80	1.27
CARPENTERS - AREA IX		
Carpenters	11.70	1.00
Millwrights	12.525	1.00
Piledrivermen	12.525	1.00
Power saw operator	12.525	1.00
CARPENTERS - AREA X		
Carpenters	12.80	1.00
Millwrights	14.48	1.00
Piledrivermen	14.48	1.00
Power saw operator	13.05	1.00
CARPENTERS - AREA XI		
Carpenters	12.98	.75
Millwrights	14.43	.75
Piledrivermen	14.43	.75
Power saw operator	13.48	.75
CEMENT MASONS - AREA I		
Cement Masons	12.45	
Power tool operator	12.70	
CEMENT MASONS - AREA II		
Cement Masons	14.94	.76
Power tool operator	15.34	.76
CEMENT MASONS - AREA III		
Cement Masons	13.83	.75
Power tool operator	14.08	.75
ELECTRICIANS		
AREA I - ZONE I	15.00	5%+.80
ZONE II	15.25	5%+.80
ZONE III	15.50	5%+.80
AREA II	14.40	3.8%+2.20
AREA III	14.03	3½%+1.20
AREA IV	16.15	5%+.80
AREA V	15.15	1.58
CABLE SPLICERS		
AREA I - ZONE I	15.25	5%+.80
ZONE II	15.50	5%+.80
ZONE III	15.75	5%+.80
AREA II	14.65	3.8%+2.20
AREA IV	17.17	5%+.80

	Basic Hourly Rates	Fringe Benefits
ELEVATOR CONSTRUCTORS		
Journeymen	$14.665	2.465+A
Helpers	70%Jr.	2.465+A
Probationary helper	50%Jr.	
GLAZIERS	14.00	.30
IRONWORKERS		
AREA I	14.60	2.37
AREA II	12.625	2.95
AREA III	13.50	3.00
AREA IV	15.20	2.87
LABORERS - AREA I		
GROUP I	10.65	1.00
GROUP II	10.90	1.00
LABORERS - AREA II		
GROUP I	8.95	1.00
GROUP II	9.20	1.00
LABORERS - AREA III		
GROUP I	9.10	1.00
GROUP II	9.35	1.00
LABORERS - AREA IV		
GROUP I	9.30	1.00
GROUP II	9.55	1.00
LABORERS - AREA V		
GROUP I	9.25	1.00
GROUP II	9.55	1.00
LABORERS - AREA VI		
GROUP I	5.35	
GROUP II	6.59	
LATHERS		
AREA I	13.85	1.64
AREA II	12.55	1.54
MARBLE MASONS, TILE SETTERS AND TERRAZO WORKERS	15.84	1.10
MARBLE & TILE FINISHERS	12.15	
TERRAZO FINISHERS	13.00	
TERRAZO FLOOR MACHINE MAN	13.30	
TERRAZO BASE MACHINE MAN	13.70	
PAINTERS - AREA I		
Brush & Roller	9.90	1.03
Brush & Roller (Strl. steel)	10.15	1.03

	Basic Hourly Rates	Fringe Benefits
PAINTERS - AREA I		
Spray	$10.55	$1.03
Swing, stage, Bosun Chair	10.15	1.03
Taping & Bedding (hand tools)	10.20	1.03
Sandblasting	10.25	1.03
PAINTERS - AREA II		
Brush	12.50	2.03
Spray under 30 ft.	13.00	2.03
Spray over 30 ft.	13.50	2.03
Paper hanging	13.50	2.03
Tapers using machine tools	13.00	2.03
PLASTERS	15.60	.01
PLUMBERS - AREA I		
Mechanical contracts up to $150,000	14.15	2.40
Mechanical contracts of $150,000 and over	15.65	2.40
PLUMBERS - AREA II	16.39	2.02
ROOFERS	13.40	1.39
SHEET METAL WORKERS	14.80	2.52
SOFT FLOOR LAYERS	13.10	1.80
SPRINKLER FITTERS	16.17	2.83
LINE CONSTRUCTION		
Linemen	14.90	3%+.45
Cable splicers	16.09	3%+.45
Hole Digger operator	13.24	3%+.45
Heavy equipment operator	13.24	3%+.45
Line truck driver (winch (operator)	11.68	3%+.45
Jackhammerman	10.61	3%+.45
Powderman	12.86	3%+.45
Groundman	9.54	3%+.45
Truck driver (flat bed, ton-half and under)	10.13	3%+.45
POWER EQUIPMENT OPERATORS		
Group I	15.75	2.18
Group II	15.25	2.18
Group III	14.75	2.18

	Basic Hourly Rates	Fringe Benefits
POWER EQUIPMENT OPERATORS		
Group IV	$14.50	$2.18
Group V	14.25	2.18
Group VI	14.00	2.18
Group VII	13.75	2.18
Group VIII	12.75	2.18
Group IX	13.35	2.18
TRUCK DRIVERS		
AREA I		
Group I	9.70	
Group II	9.70	
Group III	9.40	
AREA II		
Group I	10.48	
Group II	10.53	
Group III	10.63	
AREA III		
Group I	10.43	
Group II	10.53	
Group III	10.63	
Group IV	10.58	
Group V	10.73	

CLASSIFICATION AREAS, GROUPS AND DEFINITIONS AS FOLLOWS:

ASBESTOS WORKERS:

AREA I Harper, Ellis, Roger Mills, Beckham, Greer and Harmon Counties.
AREA II Kay County
AREA III Remaining Counties.

BRICKLAYERS - STONEMASONS:

AREA I Logan, Payne, Canadian, Oklahoma, Cleveland and McClain Counties

BRICKLAYERS - STONEMASONS:

AREA II Harper, Woods, Alfalfa, Grant, Ellis, Woodward, Major, Garfield, Blaine and Kingfisher Counties.

AREA III Harmon, Jackson, Tillman, Comanche, Cotton and Jefferson Counties.
AREA IV Lincoln, Pottawatomie, Seminole, Pontotoc, Johnston and Marshall Counties.
AREA V Kay and Noble Counties.
AREA VI Caddo, Grady, Stephens, Garvin, Murray, Carter and Love Counties.
AREA VII Roger Mills, Beckham, Greer, Dewey, Custer, Washita and Kiowa Counties.

CARPENTERS - MILLWRIGHTS - PILEDRIVERMEN - POWER SAW OPERATORS:

AREA I Oklahoma, Logan, Canadian, Kingfisher, Pottawatomie, and Lincoln County south of the Turner Turnpike.
AREA II Dewey, Custer, Washita and Blaine Counties.
AREA III Caddo and Grady Counties
AREA IV Alfalfa, Grant, Major and Garfield Counties.
AREA V Cleveland and McClain Counties.
AREA VI Love, Murray, Carter, Pontotoc, Seminole, Johnston, Garvin and Marshall County west of highway #99.
AREA VII Beckham, Jefferson, Comanche, Cotton, Greer, Harmon, Jackson, Kiowa, Stephens and Tillman Counties.
AREA VIII Payne County, Northern Half of Lincoln County and Noble County east of Interstate 35 and south of Black Bear Creek.
AREA IX Woodward, Woods, Harper, Ellis and Roger Mills Counties.
AREA X Kay and Noble Counties north of Blackbear Creek and west of Interstate 35.
AREA XI Marshall County east of highway #99.

CEMENT MASONS - POWER TOOL OPERATOR:

AREA I Kay County
AREA II Johnston and Marshall Counties.
AREA III Ellis, Roger Mills, Beckham, Dewey, Custer, Grady, Carter, Oklahoma, McClain, Washita, Blaine, Caddo, Kingfisher, Canadian, Long, Cleveland, Garvin, Lincoln, Payne, Noble, Pawnee, Woodward and Murray Counties.

ELECTRICIANS - CABLE SPLICERS:

AREA I Oklahoma, Cleveland, Canadian, Grady, McClain, Garvin, Carter, Murray, Johnston, Pontotoc, Seminole, Pottawatomie, Lincoln, Logan, Kingfisher, Garfield, Grant, Alfalfa, Major, Blaine, Caddo, Washita, Custer, Dewey, Woodward, Woods, Harper, Ellis, Roger Mills, Beckham, Love and that portion of Payne County which is closer to Oklahoma City than Tulsa.
ZONE I The area within the twelve mile radius of the Main Post Office located in one of the cities listed as follows: Ada, Alva, El Reno, Enid, Moore, Arapaho, Tecumseh, Norman, Midwest City, Ardmore, Oklahoma City, Stillwat Sulphur, and Tuttle.
ZONE II The area between the twelve mile radius of the Zone I Post Office, except where Zone II intercepts another Zone I area.

ELECTRICIANS - CABLE SPLICERS:

ZONE III The area outside Zone I and Zone II.
AREA II Kay and Noble Counties.
AREA III Comanche, Jackson, Harmon, Greer, Kiowa, Tillman, Cotton, Jefferson and Stephens County.
AREA IV Marshall County.
AREA V That portion of Payne County closer to Tulsa than Oklahoma City.

IRONWORKERS:

AREA I Blaine, Caddo, Canadian, Carter, Cleveland, Comanche, Custer, Dewey, Garfield, Garvin, Grady, Johnston, Kingfisher, Kiowa, Lincoln, Major, Logan, McClain, Murray, Noble, Oklahoma, Pontotoc, Pottawatomie, Roger Mills,, Seminole, Stephens, Washita, Woodward, and western Payne County to a line due north of state highway #177 and 33.
AREA II Beckham, Greer, Harmon, Jackson, Tillman, Cotton, Jefferson and Love Counties.
AREA III Harper and Ellis Counties.
AREA IV Marshall County.

LABORERS:

AREA I Logan, Canadian, Oklahoma, Lincoln, Cleveland and Pottawatomie Counties.
AREA II Harper, Woods, Alfalfa, Grant, Ellis, Woodward, Major, Garfield, Dewey, Blaine and Kingfisher Counties.
AREA III Roger Mills, Custer, Beckham, Washita, Caddo, Grady, McClain, Harmon, Greer, Kiowa, Comanche, Stephens, Garvin, Tillman, Cotton, Jefferson, Murray, Carter, Love and Marshall Counties.
AREA IV Kay, Noble, and Payne Counties.
AREA V Seminole, Pontotoc and Johnston Counties.
AREA VI Jackson County.

GROUP I - All digging and dirt work, firing of salamanders and smudge pots; loading and unloading of materials and equipment; loading and unloading of materials to and from hoist or cages of stock piling only; wheeling and placing concrete; handling of lumber, steel, cement and distribution of materials; all cleaning, including cleaning windows; wrecking and razing of building and all structures; cleaning when the man is directly tendering, lathers, masons or plasters; and common laborers.
GROUP II - All machine tools operators; all sewer and drain tile layers and handling at the ditch, excluding distribution; operators of water pumps up to 4 inches and slip form jacks; men erecting scaffolds and directly tending lathers, masons, cement masons and plasterers, mortar mixers, hod carriers and dry mixers; high work over 30 ft. from the ground or floors; cement finishers laborer; work on swinging scaffold; all kettle and potmen, tank cleaning, all pipe doping treating and wrapping, including all men working with dope; mortar and plaster mixing machine, pump-crete machines, and gunite mixing machines including concrete, creosoted or treated materials, liquid acids, or like materials, when injurious to health, eye and skin or clothes; all newly developed mechanical equipment which replaces wheel barrows or plants; all laborers screening sand, running sand drier, and feeding operator sand blasterer, except nozzle; and cutting torch operators in connection with laborers' work; concrete grader.

LATHERS:

AREA I Oklahoma, Logan, Canadian, Kingfisher, Custer, Washita, Blaine, Pottawatomie, Dewey, Atoka, Beckham, Caddo, Cleveland, Coal, Ellis, Garfield, Garvin, Grady, Hughes, Johnston, Lincoln, McClain, Major, Murray, Noble, Pontotoc, Roger Mills, Seminole, Woodward, Lincoln County south of Turner Turnpike and Payne county up to and including the city of Cushing.
AREA II Alfalfa and Grant Counties.

PAINTERS:

AREA I Harmon, Greer, Kiowa, Jackson, Tillman, Comanche, Cotton, Stephens, Jefferson, Carter, Love, Pontotoc, Johnston, and Marshall Counties.
AREA II Remaining Counties.

PLASTERERS: Ellis, Roger Mills, Beckham, Greer, Harmon, Jackson, Dewey, Custer, Washita, Kiowa, Tillman, Blaine, Caddo, Comanche, Cotton, Kingfisher, Canadian, Grady, Stephens, Jefferson, Logan, Oklahoma, Cleveland, McClain, Garvin, Murray, Carter, Love, Payne, Lincoln, Pottawatomie, Seminole, Pontotoc, Johnston and Marshall Counties.

PLUMBERS - PIPEFITTERS

AREA I Kay County.
AREA II Remaining Counties.

POWER EQUIPMENT OPERATORS:

GROUP I All crane type equipment with 300' of boom or over (including jib).
GROUP II All crane type equipment with 200-300' of boom (including jib).
GROUP III All crane type equipment with 100-200' of boom (including jib), all tower cranes and all crane type equipment of 3 cu. yd. or more.
GROUP IV Side boom (booms 30' and over); Guy Derrick.
GROUP V Heavy duty mechanic; welder; crane-hook and overhead monorail; whirley; panel board batch plant operator; piledriver engineer; dragline, shovel; clamshell; blackhoe (3/4 yd. and over); gradall; hydro crane; cherry picker; hoists while operating 2 or more drums; hoists while doing stack and chimney work (1 or 2 drums); power driven hole digger (with 30' and longer mast); motorpatrol (blade); side boom (under 30').
GROUP VI Fork lift (35' and over); dozer (engine hp 65 or over; Fordson tractor or like equipment with hoe or loader equipment or ditcher; scraper type equipment; loader operator or hi-lift (engine hp 65 or over); asphalt lay machine; tail boom; conveyor-multiple, panel board control; power driven hole digger with less than 30' mast; trenching machine; concrete pump-boom type; roller and compactors with dozer blade.
GROUP VII Locomotive engineer; boring machine; tug boat; mixer 18 cu. ft. and over; sand barge; dredging machine; tugger; hoist-when operating one drum; welding machine, 3 to 6; air compressor, 3 to 500 cu. ft. and under; air compressor, over 500 cu. ft. (1); pumps, battery, 3 to 6; fork-lift bobcat and similar equipment; generator plant engineers, Diesel elec.; winch truck with A-frame; roller all types; outside elevator or building type of personnel hoist; concrete buster/or tamper; heaters under

GROUP VII Jurisdiction of operating engineers; firemen; boiler operator; crushing plants; oiler distributor, pulvimixer; farmer tractor with or without attachments; batch plant operator (portable); conveyor operator-fuel, continuous or belt bulk handling; screed operator; concrete pump; form grader; screening plant; well point pump operator; signal man on large whirleys when and if required; operator for rotary drilling machines when operated from console or machines.

GROUP VIII Permanent elevator - building type (automatic); concrete mixer, with hopper less than 18 cu. ft.; air compressor, 500 cu. ft. and under (1 or 2); welding machine (1 or 2); pump (1 or 2); fuelman; truck crane oiler driver or crane oiler; conveyor operator-single continuous belt bulk handling; asphalt lay machine back end man.

GROUP IX Greaser and tilt top trailer operator.

TRUCK DRIVERS:

AREA I Alfalfa, Beckham, Blaine, Caddo, Carter, Canadian, Cleveland, Comanche, Cotton, Custer, Dewey, Ellis, Garfield, Garvin, Grady, Grant, Greer, Harmon, Harper, Jackson, Jefferson, Johnston, Kingfisher, Kiowa, Logan, Love, Major, McLain, Murray, Oklahoma, Pontotoc, Pottawatomie, Roger Mills, Seminole, Stephens, Tillman, Washita, and Woodward Counties

GROUP I Truck drivers for heavy equipment such as lowboys, heavy winch and floats.

GROUP II Heavy earth moving equipment such as dump trucks and Euclids.

GROUP III Truck drivers and swampers, such as dump trucks, flat beds, stake bodies, and 3/4 and 1/2 ton pick-up trucks.

AREA II Kay, Noble and Lincoln Counties.

GROUP I Truck drivers, including pick-up, 1½ tons or 2½ yards up to but not including 3 tons or 4 yards, such as dump trucks, flat beds, stake body or bus driver.

GROUP II 3 tons or 4 yards up to but not including 4 tons or 6 yards.

GROUP III Ready mix concrete truck; tractor trailer and similar equipment.

AREA III Marshall County.

GROUP I Pick-Up, 1½ tons or 2½ yards and up to but not including 3 tons or 4 yards, such as dump trucks, flat beds, state bodies and buses.

GROUP II 3 tons or 4 yards and up to but not including 4 tons or 6 yards.

GROUP III 5 tons or 6 yards and over including heavy equipment such as pole trucks, winch trucks, euclids, Mississippi wagons, semi-dumps, turner pulls, or other heavy material moving equipment; tractor trailer drivers and similar equipment, such as tractors, ten wheelers.

GROUP IV Ready-mix concrete trucks up to but not including 3 yards.

GROUP V Ready-mix concrete trucks 3 yards and over.

WELDERS - receive rate prescribed for craft performing operation to which welding is incidental.

[FR Doc. 83-854 Filed 1-13-83; 8:45 am]
BILLING CODE 4510-30-C

UNLISTED classifications needed for work not included within the scope of the classifications listed may be added after award only as provided in the labor standards contract clauses (29CFR, 5.5 (a)(1)(ii).

FOOTNOTES:

A - 6 mos. to 5 yrs. 6%; over 5 years 8% of basic hourly rate plus seven paid holidays - A through G.

PAID HOLIDAYS:

A-New Year's Day; B-Memorial Day; C-Independence Day; D-Labor Day; E-Thanksgiving Day; F-Friday after Thanksgiving Day; G-Christmas Day.

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Part IV

Department of Health and Human Services

Food and Drug Administration

New Animal Drug Applications; Safety and Effectiveness Data Supporting the Approval of Minor Use New Animal Drugs

DEPARTMENT OF HEALTH AND HUMAN SERVICES

Food and Drug Administration

21 CFR Part 514

[Docket No. 79N-0019]

New Animal Drug Applications; Safety and Effectiveness Data Supporting the Approval of Minor Use New Animal Drugs

AGENCY: Food and Drug Administration.

ACTION: Final rule.

SUMMARY: The Food and Drug Administration (FDA) is amending the animal drug regulations by codifying agency policy regarding data collection requirements for the approval of certain new animal drug applications (NADA's) for: (1) New animal drugs used in minor animal species or (2) new animal drugs used in any animal species for the control of a disease that occurs infrequently or in limited geographic areas. The amended regulation allows sponsors, where appropriate, to use data supporting an approved major use of a drug to support an NADA for a minor use of the same drug. This action is being taken by the agency in the interest of the public health to encourage the submission of applications for needed minor use animal drugs. The agency also is announcing the addition of human food safety to the revised animal safety, effectiveness, and environmental considerations guidelines in response to comments. Comments on the guideline are also requested.

EFFECTIVE DATE: February 14, 1983.

ADDRESS: Written comments on the guidelines are to be sent to the Dockets Management Branch (HFA-305), Food and Drug Administration, Rm. 4-62, 5600 Fishers Lane, Rockville, MD 20857. Copies of the guidelines are available from the Information and Education Resources Management Staff (HFV-13), Bureau of Veterinary Medicine, Food and Drug Administration, 5600 Fishers Lane, Rockville, MD 20857.

FOR FURTHER INFORMATION CONTACT: Thomas V. Raines, Bureau of Veterinary Medicine (HFV-149), Food and Drug Administration, 5600 Fishers Lane, Rockville, MD 20857, 301-443-4913.

SUPPLEMENTARY INFORMATION:

In the **Federal Register** of July 20, 1979 (44 FR 42714), FDA published a proposal to amend § 514.1 (21 CFR 514.1) of the new animal drug regulations. Section 514.1 describes general data requirements for obtaining approvals of new drug animal applications. The agency proposed to include in § 514.1 a description of the type of data the agency will consider adequate for approval of minor use new animal drugs as specified in section 512 of the Federal Food, Drug, and Cosmetic Act (the act) (21 U.S.C. 360b).

The proposal defined minor use new animal drugs as drugs: (1) Used in minor species of animals or (2) used in any animal species for the control of a disease that occurs infrequently and in limited geographic areas. "Minor species" was defined as animals other than cattle, horses, swine, chickens, turkeys, dogs, and cats. Sheep were defined as a minor species for the purpose of the data necessary to demonstrate animal safety and effectiveness but as a major species for the purpose of the data necessary to show human food safety. The agency proposed to allow, where scientifically appropriate, new animal drug applications for minor use drugs to be supported by data collected to establish the safety and effectiveness of the same drug for the same approved use in a major species. Sponsors of minor use drugs, however, may have access to data supporting the safety and effectiveness of the approved major use drug only if the holder of the approval agrees or if the data are publicly available.

The proposal provided for a comment period of 60 days. At the request of the Animal Health Institute, FDA extended the comment period an additional 30 days (44 FR 53539; September 14, 1979). The agency received 28 comments on the proposed regulation from new animal drug manufacturers, universities, trade associations, producer groups, other government agencies, and interested individuals. The majority of comments endorsed the proposed regulation. Many comments contended, however, that the proposed procedures for demonstrating human food safety were unnecessarily stringent.

The agency has carefully evaluated the comments received and, in response to these comments, has modified certain aspects of the proposed regulation.

As discussed in the preamble to the proposal, there is currently little or no economic incentive for sponsors to develop the data necessary for the approval of drugs for minor species. Consequently, few drugs are approved in minor species or for minor use. Accordingly, producers of minor species are forced to use unapproved drugs which carry no assurance of being safe or effective. If diseases in minor species are left untreated, there may be severe injury to target animals as well as potential public health hazards to man. Even if a disease is not directly transmissible to man, food products of diseased animals could be unwholesome for human consumption. For these reasons, the agency considers it important to provide special guidance to sponsors on how to obtain approvals for new animal drugs for use in minor species.

The agency may only approve new animal drugs if they are supported by "adequate tests by all methods reasonably applicable" to show safety (including human safety if the drug is for use in food-producing animals) and by "adequate and well-controlled investigations" to demonstrate effectiveness (21 U.S.C. 360b(d)). This minor use regulation does not negate or alter the legal requirements that must be satisfied before a new animal drug can be approved. The regulation does, however, provide for the agency's interpretation as to what data for minor use drugs will be sufficient to meet the legal standards. The agency has concluded that data provided in support of a drug approved for use in a major species may also be used to support the approval of an application for the same or a similar indication in a closely related minor species. The resulting regulation is not intended to provide a mechanism for approving every minor use drug by merely referencing an approved drug in a closely related major species. The agency expects, however, that many drugs will now be economically viable candidates for approval where the procedures and provisions of the minor use regulation and attendant guidelines are applicable and are met.

1. Comments contended that the proposal was both too strict and ambiguous as to what data are necessary to resolve human food safety concerns raised by an application for a minor use animal drug.

The agency has prepared a guideline for determining the data that will be necessary to establish that the minor use of a drug will be safe to humans consuming the edible parts of treated animals. An overview of the guideline, which is available with the publication of this document, is presented below. FDA solicits comments on both the human food safety guideline and the revised animal safety and effectiveness guideline for minor drug use. The agency will review and act upon any comments as they are received.

2. Comments endorsing the proposal stated that the proposed regulation would: (1) Benefit producers of minor species animals; (2) improve disease control in such animals; and (3) result in better quality food for consumers.

Several comments also observed that the regulation would, in all likelihood, reduce drug research and development costs involved in securing the approval of new animal drugs for use in minor species.

3. Many comments addressed the proposed criteria and procedures for demonstrating human food safety for minor use drugs.

These comments were carefully evaluated by the agency and have formed the basis for several helpful modifications of the originally proposed criteria. Accordingly, the agency believes it would be helpful to present a concise statement of the revised procedures it intends to follow before addressing specific comments in this area. The agency believes that the following procedures must be applied to demonstrate the safety of a minor use drug:

a. *Toxicity data.* A new animal drug application for minor drug use must contain or reference toxicity data on the sponsored compound(s) that are sufficient to establish a tolerance for residues of the drug in animal-derived food. This tolerance will be determined using the established procedures and safety factors the agency uses in setting all tolerances. When the proposed minor use of a compound is similar to an already approved use of the same compound in a related major species, the agency will normally be able to affirm that approval of the minor use application will not result in an increased risk to the public. When this condition is met, and the minor use sponsor has access to the data in the approved major use application, a tolerance for residues for the minor use will be established at the level prescribed in connection with the approved major use of the compound. The agency will not normally reevaluate the toxicity data that support the tolerance unless important questions have arisen concerning the safety of residues of the drug.

b. *Residue data.* The agency's standards and guidelines for residue depletion and metabolism studies currently required to support approval of an NADA will be applied to minor use applications. However, when a compound that is approved for use in a major species of food-producing animal is the subject of a minor use application, the agency will require additional information on metabolism of the sponsored compound in the minor species only when information exists that raises, but does not adequately address, human food safety concerns about the level or toxicity of metabolic transformation products in the minor target species. If adequate information does not exist on metabolism of the sponsored compound in the minor species, the agency may conduct a search of the scientific literature and may consider known metabolic reactions of the administered compound and the class of drugs of which the administered compound is a member to determine if a unique metabolite of toxicological concern is likely to result from the minor use.

c. *Analytical methodology.* When the conditions of safe use of a sponsored compound require withholding animals from slaughter for a prescribed period of time following treatment, the agency will require the sponsor of the minor use application to provide a regulatory method of analysis for residues suitable for monitoring compliance with the approved conditions of use. It is expected that a regulatory method for a similar approved major use of a compound can be adapted, with little or no modification, to serve as the regulatory method for minor use of the drug. The sponsor must provide validation data, however, to demonstrate that the use of the compound in a minor species does not introduce variables that affect the reliability of the assay. In those cases where a previously validated regulatory method is shown by the sponsor to be adequate to monitor the minor use of a compound, the agency will not require a method validation trial in government laboratories as a condition of approval of a minor use application.

This regulation is based on the requirements found in section 512 of the act that adequate tests and data supporting human food safety (and animal safety and effectiveness) are required by the act before a minor use product may be approved. In the case of a minor use drug, the agency will, to the extent that is scientifically appropriate, extrapolate from studies supporting an approved major species drug to support an unapproved minor use drug. When the agency determines that extrapolation to a minor use drug from the human food safety data supporting an approved major species drug is appropriate, the agency may conclude that the statutory requirement for adequate tests establishing the safety of residues of the minor use is met when the sponsor also: (1) Can establish that approval of the minor use drug will pose no likelihood of an increase in human risk from exposure to residues of the drug; (2) can establish that existing information does not raise significant concerns regarding the safety of the drug or residues of the drug in food; and (3) can provide an adequate regulatory method of anlaysis suitable for monitoring compliance with the new approved conditions of the minor use. Whether adequate tests do exist to support approval of a minor use drug can only be decided on a case-by-case basis. The agency will conclude that adequate tests do not exist when any significant human safety concerns associated with the approved major use of the drug or any significant foreseeable problems resulting from its intended minor use are believed to exist. Furthermore, to approve the minor use of a drug which is not the subject of an approved major use, the agency will have no alternative but to apply the same standards for demonstrating human safety that it would normally apply for a sponsored compound intended for use in food-producing animals.

4. Several comments suggested that the agency broaden its willingness to use data from studies in major species to demonstrate the safety to humans of drugs for minor use. Some comments reasoned, however, that data supporting the use of a drug in a major species alone would normally be sufficient to demonstrate the safety of the minor use of the drug because consumption of food from minor species is insignificant in comparison to consumption of food derived from major species. Another comment stated that data on tissue residues in the minor species should be the only additional information required to support a minor use application for an already regulated major use compound. Several comments stated that the metabolism data requirements, in particular, were incompatible with the agency's stated intention of fostering minor drug use applications.

The agency has prepared guidelines which further delineate general criteria for demonstrating the safety of minor use drug residues in edible tissue. The agency has attempted in this final rule and guidelines to establish more reasonable data collection procedures for minor use drugs. In certain instances, however, to ensure the safety of human food, the agency may require information on metabolites and other information to address specific concerns that exist for a particular drug. As stated above, the agency will normally be able to treat approval of a minor use application as not significantly increasing the risk to humans from residues. This decision will serve as the basis for extrapolating from data in the major use application to support the minor use application.

5. One comment stated that if sheep are considered a major species in terms

of human safety requirements, then the sheep industry will not benefit from the regulation. Another comment argued that both sheep and trukeys should be considered as minor species on the basis of per capita consumption figures. To reach this conclusion, this comment compared consumption of lamb/mutton (1.7 pounds per year) and turkeys (9.2 pounds per year) with per capita meat consumption of 193.3 pounds. The comment contended that when human safety of an approved drug has been established in cattle, it is a waste of valuable resources to demand the same studies in sheep. Likewise, the comment argued that when the human safety of drug residues has been established in chickens, exhaustive studies in turkeys should not be required.

The agency does not agree with these comments. Simple per capita consumption data cannot be used to estimate consumption by consumers who have a preference for particular food items that are less popular among the general population. In using data on consumption to estimate human exposure to a commodity, FDA: (1) Selects data from eaters only, i.e., those who actually consumed the product during the survey period and (2) estimates the upper 90th percentile intake for eaters. By following these criteria, adequate safety is assured for consumers with a preference for a particular food.

The agency has made some preliminary estimates of daily gram intake for 90th percentile eaters, age 25 to 44 years, based on survey data of frequency of eating occasions developed by the Market Research Corporation of America (Menu Census IV, 1973–1974) and data on serving size developed by the U.S. Department of Agriculture during the spring of 1965. The daily gram intake estimates are beef—160 grams, pork—112 grams, chicken—68 grams, lamb/mutton—38 grams, and turkey—26 grams.

Calculated in this manner, consumption of turkey and lamb/mutton is 16 and 24 percent that of beef, high enough, in the agency's opinion, that an expanded use into either of these two species could result in an increased risk to the public from residues. Accordingly, the agency's criteria to permit extrapolation of data are not met in these cases. The agency will reexamine this conclusion if contrary information on consumption becomes available.

6. One comment stated that sheep are considered a minor species by the pharmaceutical industry and that, unless the agency similarly placed this species in the minor category with respect to human safety requirements, the sheep industry and the public will not benefit from the regulation.

The agency is aware of the problems sheep producers face in medicating animals with approved drug products. Difficulties currently faced by manufacturers in securing approval for drugs in sheep will be eased because this regulation permits the extrapolation of adequate animal safety and effectiveness data from cattle to sheep. As discussed in comment 5 above, however, given the levels of consumption of lamb/mutton by those in the population who do eat these products, any relaxation of human food safety data requirements for drugs intended for use in sheep raised for human food is not, in the agency's view, sufficiently protective of the public health. Sponsors of applications for new animal drug approvals in sheep should investigate the possibility that a drug claim for a limited production class of sheep might be considered a minor use.

7. One comment observed that the proposed regulation contained no provision to reduce the requirements for approval of drugs needed to treat conditions unique to minor species or of drugs not currently the subject of approved new animal drug applications for similar uses in major species. The comment stated that the low level of exposure to residues resulting from such minor use approvals should be a critical factor in determining the number, type, and duration of studies needed to show safety of these drugs.

The agency agrees that the minor use regulation does not provide relief from the usual standard of data collection needed to support a new animal drug approval for the two types of minor use applications specified. Although it is true that consumption of residues from the minor use would be comparatively infrequent, this consideration alone does not override the legally and scientifically mandated requirements for adequate and well-controlled studies demonstrating: (1) That drug residues in edible tissues from treated animals are safe; (2) that the drug is effective for its claimed use; and (3) that the drug is not detrimental to the health of animals to which it is administered. The minor use drug regulation is designed to permit extrapolation of the results of such studies conducted in connection with a major use application to support a minor use new animal drug application. In cases where there is no existing data base demonstrating safety and effectiveness of a drug, this regulation cannot and will not apply.

8. A comment pointed out that, from the standpoint of human safety, the regulation favors the selection of minor use drugs that are unlikely to cause concerns related to residue and/or metabolism issues.

Although the proposed regulation and guidelines do not specify that such a selection be made, the agency agrees that early consideration by a drug sponsor of potential residue problems as well as the availability of analytical methodology and effectiveness data for a particular minor use candidate would facilitate approval.

9. Several comments raised specific human food safety issues relating to the approval of fishery drugs and chemicals. One such comment, citing the need to define "food fish" as it was used in the proposed regulation, suggested a definition for the term that excluded eggs, sac fry, fingerlings, and broodstock fish. This comment stated that human food safety requirements for NADA approval should be limited to catchable sport fish and market-size fish from commercial fish farms.

The agency recognizes that in their early stages of life many food-producing animals are not normally used for human food. Accordingly, when the agency evaluates an application for a drug for use in the nonedible life stage of the target animal, the agency adjusts on a case-by-case basis the type and extent of human food safety data needed to support approval of the drug. This adjustment may result in a significant lessening of the extent of information required to show safety. The adjustment seems especially appropriate in the case of food fish that may remain in nonedible form for months or even years. Accordingly, the agency will continue to define as a food-producing animal any species that may be used for human food at some stage of its life cycle and will adjust on a case-by-case basis the extent of data required to show the safety of a drug used only in the early or nonedible stages of life of the target animal.

10. Another comment suggested that muscle be considered as the only edible tissue in food fish.

The agency agrees that, unless animals are being reared for some special purpose such as collection of their edible oils or eggs, edible fish muscle will be the only tissue that must be examined for residues of administered compounds.

11. Several comments concerned issues relative to the control of diseases that occur infrequently and in limited geographic areas, namely the lack of guidelines and wording that seems, on the one hand, to cover the localized disease conditions, but, on the other,

seems explicit in not providing any relief in requirements for such uses.

The agency agrees that statements contained in the proposal need clarification. The document is intended to apply to new animal drug applications for the control of diseases that occur infrequently or in limited geographic areas. As stated elsewhere in this document, the types of data required must satisfy the requirements of the act. Also, although there are no guidelines available at this time for animal safety or effectiveness requirements pertaining to localized disease conditions, FDA's Bureau of Veterinary Medicine will advise interested persons of the types of data that will be needed to satisfy the requirements of section 512 of the act on a case-by-case basis. With regard to guidelines, the agency has, in response to comments 21 and 23 below, discussed the reasons for the lack of guidelines covering each and every area to which the regulation applies.

12. One comment argued that the rationale behind the proposed regulation appeared to be contradictory to an earlier FDA position taken on a specific industry proposal to revise the combination drug policy.

The agency disagrees with the comment. It is true that the agency rejected an industry proposal that the agency not require detailed proof of efficacy of each component of a combination drug product intended for use in a major species. FDA rejected the proposal because it believed, and continues to believe, that to meet the substantial evidence burden found in section 512(d)(3) of the act, a sponsor must demonstrate the effectiveness of each active ingredient of a combination drug product.

The minor use regulation and guidelines, where scientifically appropriate, provide for extrapolation of data, including data required by the agency's combination drug policy, from an approved major species to a minor species. Under these circumstances, the agency does not believe that dose titration studies will always be necessary for each component of a minor use combination drug already approved for a major use. This is consistent with the combination drug policy which has been interpreted as not mandating additional dose titration studies when adequate existing data can be reliably used.

13. Another comment suggested that adequate and scientifically appropriate effectiveness data collected in foreign countries should serve as a basis for approval of a minor use drug.

The agency agrees with this suggestion, provided that the data satisfy the efficacy requirements of both section 512 of the act and its implementing regulations.

14. One comment suggested that the agency should grant limited immediate approvals for minor use new animal drugs provided that special commitments have been obtained on the part of drug sponsors to conduct postapproval studies. The studies would require close monitoring and reporting to the agency on uses of drugs under actual field conditions.

The agency is precluded by the act from providing the kind of conditional approval suggested by this comment. Sponsored compounds must be demonstrated to be safe and effective as a condition of approval.

15. One comment asked for clarification of the word "species" as it is used in the proposal. The comment stated, if interpreted broadly, the regulation would permit extrapolation of data between any two animals regardless of their taxonomic placement.

The agency has clarified the word "species" to correct the implication that data may be extrapolated between any two animals regardless of their taxonomic placement. The agency may allow extrapolation between physiologically similar species. For example, extrapolation of effectiveness data may be permitted among ruminants such as cattle, sheep, and goats and between species in the same family of fish such as salmonids (trout and salmon). However, extrapolation of effectiveness data would not normally be permitted between cattle and fish, fish and chickens, or chickens and horses.

16. Another comment expressed concern over the terminology "where scientifically appropriate" which appeared in the proposal. Apparently fearing that the decision of one agency reviewer would be controlling, the comment requested that determinations of "scientific appropriateness" be made by at least three qualified individuals.

Agency decisions related to the approvals of new animal drug applications are reached on the basis of reviews by several qualified individuals. "Minor use" new animal drug applications are reviewed using the same administrative procedures as those used for other animal drugs, which in turn are similar to those procedures followed by the agency in approving new human drugs. Determinations of "scientific appropriateness" of data are never made solely by an individual.

17. A comment proposed joint participation by interested parties in developing "minor use" new animal drugs. The comment suggested that animal producers could make their facilities, animals, and personnel available to drug sponsors, and the agency could control the conditions under which the new drugs are developed.

The agency encourages joint participation among drug sponsors in developing minor use new animal drugs. Agency participation, however, in developing data supporting the approvals of sponsored compounds is not ordinarily contemplated under the act but may be considered for an important new minor use for which commercial support is unlikely.

18. One comment requested that all minor use applications be accorded "fast track" status to shorten the time the agency takes to evaluate these submissions.

The agency opposes giving a general authorization for expedited review to any group of drugs outside the tenets of the existing guideline for doing so. The conditions for an application being placed on a fast track are purposely quite restrictive to avoid the danger of having so many applications on a fast track that the time taken to review routine applications is significantly increased. Any minor use applications that qualify under the fast track guidlines, however, will certainly be placed on a fast track.

Minor Use Effectiveness and Animal Safety Guidelines

Where it is scientifically appropriate, the agency will allow the extrapolation of data from one species to a related minor species to satisfy the animal safety and effectiveness requirements of the act. The agency will also encourage the use of animal disease models even where extrapolation is not appropriate. Accompanying the July 20, 1979 proposal were specific guidelines prepared by the agency that delineated the type of minor use data necessary to satisfy the animal safety and effectiveness requirements of the act for the approval of certain types of minor use drugs. Comments received on the guidelines will be addressed in this section.

19. Many comments endorsed the agency's proposal to extrapolate data from approved species to support uses in minor species. One comment expressed concern, however, that the proposal did not provide as much opportunity as possible to extrapolate between species. Another comment also contended that pharmacological technology has progressed to a level

where reasonable confidence can be placed in data extrapolation.

The ability to extrapolate reliably between species will depend on the amount of information available to the agency regarding the species involved, the nature of the disease or infection, the metabolism of the species involved, etc. The regulation contemplates a great deal of extrapolation between species. The guidelines for animal safety and effectiveness contain many specific examples in which extrapolation of data between species is scientifically appropriate. However, even when extrapolation is appropriate, the agency must be in a position to make a decision that the available information adequately meets the statutory standards of demonstrating safety and effectiveness. Accordingly, in some instances questions about safety or effectiveness will remain. The comment's emphasis on the progress in pharmacological technology is undue. Pharmacological technology has indeed progressed about not to the level where reasonable confidence can always be placed in the extrapolation of data from one species to support an approval of the same drug in another species. For example, some anticoccidials that are effective in chickens are ineffective against coccidiosis in turkeys. In one instance the agency is aware of a drug which was shown to be effective in pigeons against erysipelas but was subsequently found to be ineffective against the same disease in turkeys as well as in swine. Likewise, some drugs have been found to be effective agents against helminth parasites and found later to be ineffective against related helminths in domestic animals and in man. Finally, a drug found to be effective in treating staphylococcosis when evaluated in laboratory animal models was found to be ineffective against the same disease in turkeys and in man.

Concerning animal safety, a sufficient number of examples exist of turkeys being more sensitive than chickens to the toxic effects of drugs to make this particular extrapolation quite hazardous.

In summary, the agency, under this final rule and the implementing guidelines, encourages the use of animal disease models and data extrapolation to support the approval of minor use drugs. Data available must be adequate within the meaning of the act. Furthermore, for extrapolation to be allowed in the first place, the agency must be assured that there is sufficient compatibility between the species in the context of a given drug and given disease to support extrapolation.

20. Several comments expressed concern that the animal safety and effectiveness guidelines were incorporated by direct reference into the final minor use regulation.

The agency believes that it is appropriate to have the regulations incorporate the guidelines because the guidelines delineate for individual species the nature and extent of the information required to support approval of a minor use drug. The guidelines thus serve a critical role in the effectuation of the regulation. Under these circumstances, it is advisable to refer to the guidelines specifically in the regulation.

21. Several comments contended that the agency simply had not provided the opportunity for interested parties to comment on the guidelines. Comments also suggested that the guidelines should be modified as experience is gained in the area of the minor use drug regulation. Comments also criticized the proposal because the animal safety and effectiveness guidelines were "incomplete."

The agency disagrees with these comments. The proposal explicitly called for comment on the guidelines. Moreover, a guideline may be amended at any time by the agency and as they become more familiar with the available minor use guidelines, sponsors are encouraged to submit suggested changes that may improve the guidelines. Accordingly, the agency agrees with those comments that suggested that guidelines should be modified as experience is gained in the area of the minor use regulation. The agency disagrees with the choice of the word "incomplete" to describe the status of the agency's guidelines. The guidelines that the agency has prepared are complete for the subjects with which they deal. Additions to the guidelines will be made as the agency gains experience with minor use animal drugs.

Section 10.90 (21 CFR 10.90) discusses agency policy regarding guidelines. Guidelines provide a course of action declared by the agency to be acceptable as a means of satisfying given statutory or regulatory requirements; there is no legal requirement that they be followed. The "minor use" guidelines generally represent a commitment from the agency that if a sponsor follows the procedures outlined in the guidelines, the sponsor can be assured that the data collected will be sufficient to serve as a basis for an evaluation by the agency as to whether the product is safe or effective. However, the guidelines do not prevent a sponsor from attempting to satisfy statutory requirements by collecting data or information in some other manner. The agency cannot refuse to approve an application simply on the basis that the data were not collected in the manner suggested in the guidelines.

22. A related comment contended that the animal safety and effectiveness guidelines "created inflexibility in dealing with situations involving multiple species."

The agency interprets this comment to mean that, instead of preparing specific guidelines dealing with specific species, the agency should prepare more general guidelines applicable to a greater number of "multiple" species. The agency disagrees. As discussed in comment 19 above, reasonable confidence cannot always be placed in the extrapolation of data from one animal species to support approval in another. Accordingly, the agency reaffirms its position that each minor use approval must stand on its own data base—on its own merit. Whether approval is appropriate and whether extrapolation is appropriate may only be determined on a case-by-case basis.

23. Several comments suggested that separate specific guidelines should be developed for certain species; for example, nonfood fish and for coccidiosis in sheep and goats.

The agency cannot, before adopting the regulation, develop guidelines to cover every possible minor use drug. This is true not only because of the agency's limited resources but also, as discussed in response to comment 19 above, the determination of whether extrapolation between species is indeed possible is a scientific question that demands in-depth experience with the species involved, the disease involved, the area of the country in question, and other related matters. There has simply not been a sufficient number of new animal drug applications, nor is there sufficient information in the published scientific literature, on some minor species of food-producing animals for the agency to make a decision on the correctness of extrapolating data to these species.

24. Another comment questioned the particular use in one of the animal safety and effectiveness guidelines of the California Mastitis Test. The comment stated that the California Mastitis Test is not a reliable test for determining mastitis infections in goats and that the genera and species or organisms causing mastitis in goats are different from those causing mastitis in cattle.

The agency agrees the genus and species of mastitis organisms isolated from caprine mastitis are not identical to those of bovine mastitis. However, the products currently approved for treatment of bovine mastitis are approved only for the following organisms, *Staphylococcus aureus, Streptococcus agalactiae, S. dysgalactia,* and *S. uberus*. These organisms are routinely isolated from both bovine and caprine mastitis. The agency would approve applications for caprine mastitis if the proposed indications are identical to those in an approved bovine product label and if one of the following types of supporting information is provided: (1) Adequate documentation from published literature that demonstrates the same or similar effectiveness between the caprine and bovine mastitis treatments, or (2) results from at least one adequate and well-controlled field study which is conducted on goats and which uses the approved dosage schedule for cattle.

If approval is sought for indications for any other organisms causing caprine mastitis, the application must be supported by effectiveness data in a goat against the specific organisms claimed. Further, the agency agrees that the California Mastitis Test may not be a reliable goat-side test to determine the degree of mastitis infection. However, the guidelines recommend that the California Mastitis Test be used only as one of several screening tests for diagnosing mastitis. The other tests include palpation and observation of inflamed udders, direct microscopic somatic cell count, leucocyte count, and milk culture. The agency has modified the guidelines to clarify any misunderstanding on this issue.

25. Another comment suggested, without any supporting data, that in situations where information is available to support the effectiveness of a drug for the treatment of a specific disease in chickens, only subsequent confirmatory studies should be required for a similar disease in turkeys.

The agency disagrees. Consumption data, discussed in comment 5 above, clearly support the classification of turkeys as a major species. Furthermore, as discussed above, a sufficient number of examples exist of differences in the effectiveness and safety of drugs in turkeys and chickens to preclude this extrapolation being made with any reasonable degree of confidence.

26. Several comments took issue with Part D of the proposed guidelines entitled "Guidelines for Food Fish." One comment stated that these guidelines, permitting extrapolation of data only within families of fish, was too restrictive and in direct conflict with other sections of the guidelines, where, for example, extrapolation between cattle and sheep, two distinct families, is permitted. Another comment asked whether the new rule would permit extrapolation of efficacy data on a drug approved to treat tapeworms in cattle to support the same claim in fish. Unless this type of extrapolation were permitted, the comment continued, the regulation did little to reduce data requirements for fish.

The agency disagrees with these comments. Extrapolation of data between certain species of the suborder *Ruminatia*, such as cattle and sheep, may be scientifically justified because of their physiological similarities and the agency's experience gained from evaluating the effectiveness of a significant number of drugs in both species. On the other hand, extrapolation of safety and effectiveness data between cattle and fish would not be scientifically justified on the basis of the extreme physiological and environmental differences which exist between these two species. Similarly, the little scientific evidence that is available on the manner in which different families of fish react to various drugs provides no support to the premise that safety and effectiveness information can be extrapolated from one family of fish to another.

Environmental Impact Requirements

Guidelines accompanied the July 20, 1979 proposal that were intended to aid in the preparation of publicly available environmental impact documents for minor use applications as required by the National Environmental Policy Act of 1969 (NEPA) (Pub. L. 91-190, 42 U.S.C. 4321-4347). NEPA requires that Federal agencies examine and consider the environmental impacts directly or indirectly resulting from contemplated actions. The agency first implemented NEPA in 1973. These regulations appear in 21 CFR Part 25. These regulations are currently being revised to reflect the requirements of the Council on Environmental Quality (CEQ) regulations (40 CFR Parts 1500-1508, 43 FR 55978-56007, November 29, 1978). The objectives of the CEQ regulations include making the NEPA process more consistent among Federal agencies, improving NEPA documents for use in decisionmaking, and reducing paperwork and delays. The agency proposed revisions to 21 CFR Part 25 on December 11, 1979 (44 FR 71742 -71752).

In general, the determining factor for the types and extent of information required to identify the potential environmental impacts resulting from the approval of a new animal drug application is the amount of the product that will be introduced into the environment as a result of its manufacture and use. Environmental introductions are, in turn, a function of the potential market for the product; the mode, dosage, and frequency at which the product will be administered; the metabolic transformations of the drug that occur in the target animal before it is excreted; the conditions under which the target animals are reared; and the environmental character of the location at which the product is manufactured and used. The physicochemical, biological, and physiological properties of the substances expected to enter the environment can be used to predict their environmental fate and effects.

Environmental introductions may be unique for the requested minor use of a veterinary product. Therefore, it may be necessary to prepare estimates and calculations relating to the potential environmental introduction resulting from the requested minor use. However, it is envisioned that the data used to predict probable environmental fate and effects of a minor use may be obtained from environmental documents prepared for other uses of the drug product and from the scientific literature.

27. Two comments were concerned that no general exemptions from requirements for determining environmental effects of drugs for minor use were proposed. The comments reasoned that minor use drugs were exempt from NEPA requirements because such drugs would be used sporadically and would be limited to scattered geographic areas, thereby resulting in minimal environmental impact.

FDA may, under the CE regulations, identify classes of actions which do not individually or cumulatively have a significant impact on the human environment and, therefore, require neither an environmental assessment nor an environmental impact statement. In proposing as well as in adopting this regulation, the agency considered whether minor use drugs should be identified as categorically excluded as a class from environmental review and determined that this action could not be justified.

Integral in the agency's considerations is that, although minor species animals may not be reared in large numbers on a national basis, they are frequently located in dense concentrations in particular regions of the country; e.g., duck, catfish, and other aquaculture industries. Drugs may enter specific localities in environmentally significant

quantities and these sites of introduction are often ecologically sensitive or valuable; e.g., estuaries, rivers, and prime farmlands. Most environmental impact statements prepared by FDA as well as by other Federal agencies address potential local disruptions to the physical environment. In the agency's view, this mitigates against any categorical exclusion of minor use drugs. However, a categorical exclusion may be appropriate for certain minor species drugs. (See proposed 21 CFR 25.24 or the conditional exemption process in 21 CFR 25.1 (f). See 40 CFR 1507.3, 1508.4, and FDA proposed NEPA-implementing regulations (21 CFR 25.23 and 25.24; 44 FR 71742; December 11, 1979).) Furthermore, the guidelines developed for assessing new animal drugs for minor uses and the agency's proposed implementing environmental policies and procedures attempt to reduce the amount of new data required by using the environmental data available in other new drug applications and in the scientific literature.

28. One comment expressed the opinion that the requirement for an environmental assessment will impose adverse economic incentives on persons submitting new animal drug applications for minor species. Consequently, the comment argued that the potential for adverse environmental impacts will be greater than if approval of minor species drugs were granted without environmental review because humans and animals will not be protected from hazards of disease in minor species.

The agency does not agree with the comment. Some new animal drug applications for minor use may qualify for an already proposed categorical exclusion or conditional exemption under 21 CFR 25.1(f). The agency expects that approval of many drugs for minor use will have beneficial environmental effects because drugs will be available for disease control. However, minor use approvals can also result in possible adverse environmental effects because of residues of drugs and animal wastes entering the environment, shifts in land use, or detrimental changes in water quality. Accordingly, applications for approval of minor use drugs must be subject to an environmental assessment on a case-by-case basis with the objective weighing of benefits and adverse effects.

29. Three comments suggested the proposed regulation should address extrapolation of environmental impact data from major use to minor species use. The comments contended no scientific evidence exists for assuming that the environmental impact of a minor use drug could exceed that of the major species use of the drug.

The agency cannot provide detailed guidance on extrapolation of environmental data previously developed for other species to proposed minor species use due to the varied types of extrapolations that may be necessary. The guidelines state, however, that, to the extent applicable, petitioners for minor use drugs may apply environmental data contained in the environmental assessment document for other species or uses. The environmental impact of a drug is not dependent solely upon whether the drug is for a major or minor use but rather upon many factors, including the number of animals receiving the drug, the mode and frequency of administration, the pattern of drug metabolism and excretion, the density of the medicated animals within particular facilities and regions, and animal waste management practices. Thus, a drug administered continuously to food fish would result in environmental introductions and potential impacts different from a single oral administration of the same drug to cattle. Under these circumstances, the potential environmental impact resulting from approval of a minor use drug could exceed that accompanying approval of a major use drug.

30. One comment stated that the proposed rule impermissibly overlapped with the jurisdiction of the Environmental Protection Agency (EPA) and exceeded EPA criteria for judging environmental impact of substances by that agency.

FDA disagrees that impermissible overlapping occurs between the statutes administered by FDA and EPA. FDA has addressed the issue of overlapping regulatory jurisdiction in its proposed NEPA implementing regulations (21 CFR 25.31(e)(8), proposed December 11, 1979, 44 FR 71742)).

Conclusion

In response to comments received on the notice of proposed rulemaking, the agency has: (1) Revised § 514.1(d)(3), (2) amended the proposed animal safety and effectiveness guidelines and the proposed guidelines for environmental impact considerations, and (3) provided guidelines for the development of data to support human safety. Written comments concerning the guidelines should be sent to the Dockets Management Branch (HAF-305), Food and Drug Administration, Rm. 4-62, 5600 Fishers Lane, Rockville, MD 20857.

The agency has designated this action as a "nonmajor" action in accordance with Executive Order 12291. It will not result in an annual effect on the economy of $100 million or more. There will be no major increase in costs or prices for consumers; individual industries; Federal, State, or local government agencies; or geographic regions. It will not have a significant adverse effect on competition, employment, investment, productivity, or the ability of United States-based enterprises to compete with foreign-based enterprises in domestic or export markets.

The requirement for a regulatory flexibility analysis under the Regulatory Flexibility Act does not not apply to this final rule because the proposed rule was issued prior to January 1, 1981, and is therefore exempt.

The agency has determined pursuant to 21 CFR 25.24(b)(13) (proposed December 11, 1979; 44 FR 71742) that this action is of a type that does not individually or cumulatively have a significant impact on the human environment. Therefore, neither an environmental assessment nor an environmental impact statement is required.

List of Subjects in 21 CFR Part 514

Administrative practice and procedure, Animal drugs.

Therefore, under the Federal Food, Drug, and Cosmetic Act (secs. 512, 701(a), 52 Stat. 1055, 82 Stat. 343-351 (21 U.S.C. 360b, 371(a))) and under 21 CFR 5.11 as revised (see 47 FR 16010; April 14, 1982), Part 514 is amended in § 514.1 by adding new paragraphs (d) and (e), to read as follows:

PART 514—NEW ANIMAL DRUG APPLICATIONS

§ 514.1 Applications.

* * * * *

(d) *Minor use applications.* Applications for minor use new animal drugs:

(1) *Definitions.* For the purpose of this section:

(i) "Minor use" means the use of: (*a*) New animal drugs in minor animal species, or (*b*) new animal drugs in any animal species for the control of a disease that (*1*) occurs infrequently or (*2*) occurs in limited geographic areas.

(ii) "Minor species" means animals other than cattle, horses, swine, chickens, turkeys, dogs, and cats. Sheep are a minor species with respect to effectiveness and animal safety data collection requirements; sheep are a major species with respect to human safety data collection requirements arising from the possible presence of drug residues in food.

(2) *Animal safety, effectiveness, human food safety, and environmental considerations.* Guidelines for the preparation and submission of data to satisfy the requirements of section 512 of the act regarding animal safety, effectiveness, human food safety, and environmental considerations for new animal drugs intended for a "minor use" (as defined in paragraph (d)(1)(i) of this section) are available from the Information and Education Resources Management Staff (HFV-13), Bureau of Veterinary Medicine, Food and Drug Administration, 5600 Fishers Lane, Rockville, MD 20857.

(i) *Animal safety and effectiveness.* Where the guidelines do not specifically provide for a particular "minor use," the Bureau of Veterinary Medicine, upon request, will advise interested persons on the effectiveness and animal safety data regarding the minor use that will be needed to satisfy the requirements of section 512 of the act. Where scientifically appropriate, the Bureau of Veterinary Medicine will allow the use of animal models and the extrapolation of data from a major species to a minor species to satisfy the requirements of the act.

(ii) *Human food safety and environmental considerations.* These guidelines do not specifically provide for a particular "minor use." Therefore, the Bureau of Veterinary Medicine will, upon request, advise interested persons of the data that will be needed. Where scientifically appropriate, the Bureau of Veterinary Medicine will allow the extrapolation of data from a major species to a minor species to satisfy the requirements of the act.

(e) Reporting/recordkeeping requirements contained in this Part 514 have been approved by the Office of Management and Budget and assigned number 0910-0032.

Effective date. February 14, 1983.

(Secs. 512, 701(a), 52 Stat. 1055, 82 Stat. 343-351 (21 U.S.C. 360b 371(a)))

Arthur Hull Hayes, Jr.,
Commissioner of Food and Drugs.
Richard S. Schweiker,
Secretary of Health and Human Services.

Dated: December 3, 1982.

[FR Doc. 83-1058 Filed 1-13-83; 8:45 am]
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