

ENVIRONMENTAL PROTECTION AGENCY

[FRL-5672-8]

Retrofit/Rebuild Requirements for 1993 and Earlier Model Year Urban Buses; Approval of a Notification of Intent to Certify Equipment

AGENCY: Environmental Protection Agency.

ACTION: Notice of Agency Certification of Equipment for the Urban Bus Retrofit/Rebuild Program.

SUMMARY: The Agency received a notification of intent to certify equipment signed December 13, 1995, from Engine Control Systems Ltd. (ECS) with principal place of business at 165 Pony Dr., Newmarket, Ontario, Canada L3Y7V1 for certification of urban bus retrofit/rebuild equipment pursuant to 40 CFR 85.1401-85.1415. The equipment is applicable to petroleum-fueled Detroit Diesel Corporation (DDC) two-cycle engines originally installed in an urban bus from model year 1979 to model year 1993, exclusive of the DDC 6L71TA 1990 model year engines, all alcohol fueled engines, and models which were manufactured with particulate trap devices (see Table A). On August 8, 1996 EPA published a notice in the Federal Register that the notification had been received and made the notification available for public review and comment for a period of 45 days (60 F1 41408). EPA has completed its review of this notification, and the comments received, and the Director of the Engine Programs and Compliance Division has determined that it meets all the requirements for certification. Accordingly, EPA approves the certification of this equipment.

The certified equipment provides 25 percent or greater reduction in exhaust emissions of particulate matter (PM) for the engines for which it is certified.

The ECS notification, as well as other materials specifically relevant to it, are contained in Public Docket A-93-42,

category XIV-A, entitled "Certification of Urban Bus Retrofit/Rebuild Equipment". This docket is located in room M-1500, Waterside Mall (Ground Floor), U.S. Environmental Protection Agency, 401 M Street SW, Washington, DC 20460.

Docket items may be inspected from 8:00 a.m. until 5:30 p.m., Monday through Friday. As provided in 40 CFR Part 2, a reasonable fee may be charged by the Agency for copying docket materials.

DATES: The effective date of certification is established in a letter to ECS dated December 9, 1996 for the equipment described in the ECS notification. This certified equipment may be used immediately by urban bus operators. Operators who have chosen to comply with program 1 or program 2 can utilize this equipment or other equipment that is certified for any engine that is listed in Table A that undergoes rebuild.

FOR FURTHER INFORMATION CONTACT:

Anthony Erb, Engine Compliance Programs Group, Engine Program & Compliance Division (6403J), U.S. Environmental Protection Agency, 401 M St. SW, Washington, D.C. 20460. Telephone: (202) 233-9259.

SUPPLEMENTARY INFORMATION:

I. Background

By a notification of intent to certify signed December 13, 1995, ECS applied for certification of equipment applicable to petroleum-fueled Detroit Diesel Corporation (DDC) two-cycle engines originally installed in an urban bus from model year 1979 to model year 1993, exclusive of the DDC 6L71TA 1990 model year engines and models which were manufactured with particulate trap devices or alcohol fueled (see Table A). The notification of intent to certify states that the equipment being certified is an oxidation converter muffler (OCM). The OCM contains an oxidation catalyst developed specifically for diesel applications, packaged as a direct replacement for the muffler. The application demonstrates that the candidate equipment provides a 25

percent or greater reduction in emissions of particulate matter (PM) for petroleum fueled diesel engines relative to an original engine configuration with no after treatment installed.

Certification is applicable to engines that are rebuilt to original specifications, or in-use engines that are not rebuilt at the time the OCM is installed provided the engine meets engine oil consumption limits specified by ECS. ECS is also certifying a 25 percent reduction in PM for engines that are retrofit/rebuilt with certified rebuild kits that do not include after treatment devices if the OCM is installed at the same time the retrofit/rebuild occurs. Currently, this applies to the DDC retrofit/rebuild kit which was certified on October 2, 1995 (60 FR 51472) for the 6V92TA MUI model and to the kit certified on July 19, 1996 (61 FR 37738) for the 6V92TA DDEC II model.

Certification of the OCM does not trigger any new program requirements for applicable engines, because the requirement to use equipment certified to achieve at least a 25% reduction has already been triggered for these engines.

Using engine dynamometer testing in accordance with the Federal Test Procedure for heavy-duty diesel engines on a 1991 DDC 6V92TA DDEC II engine, ECS documented a 26% reduction in PM emission after retrofit. The test results for this engine with the certified retrofit equipment installed meet applicable Federal emission standards for hydrocarbon (HC), carbon monoxide (CO), oxides of nitrogen (NOx), and smoke emissions. In chassis testing performed over the Central Business District (CBD) sequence on a 1987 DDC 6V71N engine, ECS demonstrated a 42% PM emission reduction after retrofit. Using chassis testing performed over the New York Composite (NYC) sequence on this same engine, ECS demonstrated a 37% reduction in PM emission.

Table A provides the PM emission certification levels for the ECS equipment for the specified models and model years.

TABLE A.—CERTIFICATION LEVELS

Engine models	Model year	PM Level ¹ with OCM	PM Level ² with OCM and DDC Certified Re-build kit	Code/Family
6V92TA MUI	1979-87 ..	0.38	0.22	All.
	1988-1989	0.23	0.17	All.
6V92TA DDEC I	1986-87 ..	0.23	N/A	All.
6V92TA DDEC II	1988-90 ..	0.23	0.17	All.
	1991	0.23	N/A	
	1992-93 ..	0.19	N/A	All.

TABLE A.—CERTIFICATION LEVELS—Continued

Engine models	Model year	PM Level ¹ with OCM	PM Level ² with OCM and DDC Certified Re-build kit	Code/Family
6V71N	1973–89 ..	0.38	N/A	All.
6V71T	1985–86 ..	0.38	N/A	All.
6L71TA	1988–89 ..	0.23	N/A	All.
6L71TA DDEC	1990–91 ..	0.23	N/A	All.

¹ The original PM certification levels for the 1991 6V92TA DDEC II, and 6L71TA DDEC engine models are based on Family Emission Limits (FELs) under EPA's averaging, banking and trading program (AB&T). These limits are higher than the 1991 PM standard of 0.25 g/bhp-hr. The PM level listed in this table for the engines that are equipped with the OCM provide at least a 25% reduction from the FEL. The 1992 to 1993 6V92TA DDEC II engine models were also certified using FELs under the AB&T program and likewise the PM levels for the engines equipped with the OCM represent at least a 25% reduction from the FEL.

² For 6V92TA MUI and 6V92TA DDEC II models that are rebuilt using a certified DDC emissions retrofit kit, ECS is certifying the PM engine emissions to reduced levels as provided in Table A, provided the OCM is installed at the same time the rebuild with the certified DDC upgrade kit takes place. The DDC upgrade kit certification notifications were published in the **Federal Register** on October 2, 1995 (60 FR51472) and July 19, 1996 (61 FR37738) respectively.

Under Program 1, all rebuilds or replacements of applicable engines must use equipment certified to reduce PM levels by at least 25 percent. This requirement will continue for the applicable engines until such time as it is superseded by equipment that is certified to trigger the 0.10 g/bhp-hr emission standard for less than a life cycle cost of \$7,940 (in 1992 dollars).

ECS has established PM certification levels as specified in Table A for this equipment. Operators who choose to comply with Program 2 and install this equipment, will use the specified PM emission levels in their calculation of fleet level attained.

II. Summary and Analysis of Comments

EPA received comments from two parties on this notification. The Detroit Diesel Corporation (DDC) had a number of comments in the following areas: test engine selection, extrapolation of test results, reductions in non-volatile particulate matter, certification of equipment for use on different stages of engine rebuild, certified emission levels, incomplete parts listing and representivity of test data. The Engelhard Corporation commented on the following areas: worst case demonstration, incomplete parts listing, representivity of test data to cover all engines and types, and the ability of the OCM to reduce PM emissions.

DDC stated that the test configuration of the 1991 DDC 6V92TA DDEC II engine was not clearly documented and that the original configuration of the test engine was a 1992 code 4T engine intended for use with a particulate trap. DDC questioned the relevance of testing performed on an engine with a unique calibration originally intended for use on trap equipped engines. DDC noted that test data it developed during new

engine certification testing for the 1991 4C rating (a non-trap configuration) had a total PM level of 0.218 g/bhp-hr with a soluble fraction (SOF) of 21.5%. DDC questioned how this engine could be considered "worst case". Given that oxidation catalysts primarily reduce the SOF portion of PM, DDC questioned whether the OCM could reduce PM emissions on the 1991 code 4C rating by 25% when the entire SOF fraction is only 21.5%.

Based on the information presented by ECS, it is unclear whether the engine rating at the time of testing was in the 4T or the 4C configuration. It was not clear from ECS that the engine had been converted from its original 4T rating. Also, background historical information for this engine could not be provided. Since there is nothing in the record which indicates that the engine was converted to the 4C configuration, the Agency assumes that it was tested in the original 4T configuration. Therefore, it is apparent that DDC's comments relative to SOF content of the 4C configuration relative to the test performed on the 4T configuration would not be relevant in the certification being discussed. However, it is noted that because an oxidation catalyst mainly reduces only the SOF portion of PM, it would not be possible to obtain a 25% reduction in PM for any engine for which the SOF portion of PM is less than 25%. EPA requests information from industry and the general public with regard to the percentage of SOF that particular in-use engines produce. This information would be considered for the certification being discussed in this notice and in regard to the previous certifications of oxidation catalysts under the urban bus retrofit/rebuild program.

In regard to DDC's and Engelhard's contention that the 1991 6V92TA DDEC II engine would not represent the worst case according to the regulations, EPA agrees. However, the 1987 6V71N does qualify as a "worst case" engine for testing purposes under the urban bus retrofit regulations, and test results from this engine provide the basis for the certification discussed herein.

DDC questioned the relevancy of the chassis dynamometer test results obtained on the 6V71N engine using the Central Business District (CBD) and New York Composite (NYC) cycles and noted that EPA should not rely on the chassis test results in assessing whether the OCM technology meets requirements to reduce PM emission by 25%. In response, the regulations allow a certifier to use chassis based test procedures representative of typical urban bus operation to show compliance with the 25% or greater PM reduction requirement. The CBD simulates stop and go performance of urban buses in the city and the NYC was incorporated to represent some higher average speeds not seen in the CBD which an urban bus may on occasion encounter. After review, EPA found the proposed chassis testing plan to be acceptable and approved the use of chassis testing to demonstrate the 25% reduction in PM.

EPA agrees with the comment from Engelhard and DDC that it is tenuous to base certification of OCMs, intended for engines using non-particulate trap ratings, on testing where the 4T-trap based rating was utilized. However, ECS provided acceptable chassis test results performed on a non-trap engine that demonstrate reduction of PM by at least 25%.

Engelhard also stated that the reduction of 26% demonstrated on the

6V92TA DDEC II engine does not demonstrate a sufficient margin beyond the 25% level to account for in-use deterioration of the catalyst over the 150,000 mile performance warranty period. EPA finds that the results of this test are not conclusive because the engine configuration tested apparently does not represent an urban bus engine that could be used to demonstrate PM reduction under the retrofit/rebuild program since it was apparently in a calibration for a particulate trap equipped engine. However, chassis testing data presented by ECS shows a decrease in PM of at least 37% providing ample margin beyond the required 25% reduction.

In the notification, ECS sought to use the OCM kit on engines which were not in need of rebuild at the time of OCM installation based on a review of specified engine conditions. DDC commented that certification should be approved only with respect to engines that have been rebuilt to original specifications as the retrofit/rebuild requirements do not apply until the operator rebuilds an engine. DDC agreed that under Program 2 operators could conceivably install certified add-on equipment without rebuilding the base engine and use the certified emission level in their fleet averaging, but expressed concerns that the engine may have worn cylinders or fuel injection components in need of rebuild and, as a result, the engine out PM emissions may be high. DDC stated that engine wear conditions would create difficulty in achieving the certification level when applying the OCM to an engine which has not been rebuilt.

DDC's claim that program requirements do not apply until an operator rebuilds an engine concerns compliance programs. Operators choosing to comply with Program 1 are not required to take any action until an affected engine is rebuilt or replaced. However, operators choosing to comply with Program 2 must ensure their fleet is equal to or less than their target fleet level at all times. Thus, program requirements apply continuously to Program 2 operators. In addition, if an operator desires to be able to change between programs, the regulations require that both programs be complied with prior to the switch.

While it is true that Program 1 requirements become effective when the engine is rebuilt, EPA encourages the installation of certified equipment prior to the time it is required under the regulations in accordance with the manufacturer's instructions.

In regard to DDC's concern that engine wear needs to be evaluated prior

to installing this equipment, ECS has modified its application to remove the language referring to "specified engine calibrations" which DDC stated was vague and unenforceable and will instead require that operators determine the oil consumption rate for an engine to determine engine wear and condition prior to installing the OCM. If the rate of oil consumption exceeds 1.5 quarts of consumption per 10 hours of operation, ECS will require that the engine be rebuilt prior to OCM installation. Furthermore, ECS is responsible for meeting the performance warranty for a period of 150,000 miles for each engine under this certification. EPA believes that operators will rebuild engines when necessary in order to keep their fleet in reasonable operating condition. The decision to rebuild will not be affected by the option to install a catalyst. Rather, operators will only choose to install the catalyst in order to reduce emissions, and not in place of a needed rebuild. It is noted that the chassis testing data presented demonstrates a 37% to 42% reduction in the case where the engine was rebuilt. Based on these levels of reduction, it is apparent there should be ample margin between the in-use emissions of an engine that the operator finds is not in need of a rebuild to reasonably project that the levels stated in Table A can be met.

DDC questioned reported reductions in the non-volatile PM fraction with the OCM, noting that it is commonly accepted that oxidation catalysts are effective in oxidizing volatile particulate, but have little effect on the non-volatile component. In response, ECS explains that effective diesel oxidation catalysts will have some activity towards reduction of the non-volatile or insoluble portion of diesel particulate. This activity allows the catalyst to clean itself from carbon build-up and prevents catalyst fouling, particulate build-up and eventual plugging of the substrate. ECS also stated that it is important to recognize that, in the measurements taken, the volatile organic fraction and non-volatile organic fractions were made using the direct filter injection gas chromatography analysis DFI/GC technique developed by Southwest Research Institute. Using this procedure some small amount of high molecular weight solubles that did not volatilize may exist in the unvolatilized particulate sample which would account for the reduction seen. ECS stated that since diesel engine oxidation catalysts all operate on the same basic principle, the points being made relative to volatile vs. non-volatile components of urban bus

PM emissions apply to the industry as a whole and should not be confined to the ECS certification review process. EPA concurs that this issue should be addressed on an industry-wide basis. Further, EPA does not have sufficient information to resolve this issue based on the comments submitted. Therefore, EPA requests that industry and the public provide any additional information on this matter so that resolution may be reached in the future.

DDC and Engelhard commented that the rebuild on the 6V71N engine appeared to be incomplete. DDC noted that the rebuild performed did not include fuel injectors, piston rings, or cylinder liners all of which would be replaced during a normal rebuild and which, if not replaced, would cause inflated PM levels. DDC stated that if the Agency is to rely on the chassis test data for certification of the OCM, it should first make certain that it was properly rebuilt to the original engine configuration prior to the testing. In response, ECS has provided additional documentation that the piston rings, cylinder liners and injectors were replaced at the time of rebuild and that the engine was rebuilt to standard specifications. The failure to include this in the original notification materials was an oversight.

With regard to certified emission levels, DDC commented that the proposed certification levels do not represent a full 25% reduction. For example, for the 1991 6V92TA DDEC engine codes 3C and 4C, the original certification testing yielded PM emission levels of 0.25 and 0.22 g/bhp-hr, respectively, and the proposed certification level of 0.23 g/bhp-hr given in Table A represents only a 8% reduction on average from the original certification test levels.

In response, the pre-rebuild levels listed in section 85.1403 (c)(1)(iii)(A) were determined by EPA based on certification results or engineering data and judgement. In Table A, of today's notice, ECS has listed the PM levels to which it is certifying for listed models and years. In a number of instances the certification levels shown represent a 25% reduction from the pre-rebuild levels that were listed in section 85.1403(c)(1)(iii)(A) or the regulations. In other instances, the number reflects a 25% reduction from the level that was certified by DDC during new engine certification.

In the case of the 1991 6V92TA DDEC II 4C engine configuration, the new engine certification testing by DDC yielded a PM emission level of 0.22 g/bhp-hr. However, DDC certified the engine to a family emission level (FEL)

of 0.30 g/bhp-hr. The certification level of 0.23 g/bhp-hr PM provides for more than a 25% reduction from the original DDC certification level or FEL for this engine and from the pre-rebuild level of section 85.1403(c). In previous urban bus retrofit/rebuild certifications, EPA has based certification on the FEL which the original manufacturer certified to meet in-use. In fact, the ECS certification levels for the models listed are identical to those for which oxidation catalyst kits have been certified to date. In declaring a FEL, the engine manufacturer states the emission level it will achieve in-use. That is to say, even though the certification test level is determined, the engine manufacturer declares a different emission level that it can meet in-use. Because the urban bus retrofit/rebuild program applies to in-use buses, and since the rebuild certifier is certifying that a rebuilt engine with the retrofit equipment will meet the rebuild certification level during the warranty period, it makes sense to apply the in-use certification level or FEL as a basis for the reduction. To require certifiers of urban bus retrofit/rebuild equipment to reduce emissions from an initial level that the original manufacturer did not use during the original certification would not be reasonable. As stated, EPA used the FEL as a basis for the 25% reduction in previous decisions. EPA does not believe it would be reasonable to change the basis for the 25% reduction as DDC has requested.

DDC noted that in order to ensure optimum engine performance, emissions durability and fuel economy, DDC specifies maximum exhaust back pressure limits for all DDC engines. DDC noted that there was a small backpressure increase during testing and questioned whether the catalyst used in testing had been aged prior to the test. DDC also noted that the instructions to be given to operators did not include backpressure specifications or procedures for checking backpressure after the catalyst is installed. ECS has stated that careful attention will be paid to optimizing the exhaust backpressure to a level comparable to the original muffler. The catalyst used during testing was aged or degreened to provide representative in-use performance. ECS stated that it does not anticipate that checking the backpressure should be required under normal circumstances. However, the converter mufflers certified in this notice and produced by ECS include a port to allow in-use backpressure checks and ECS has developed a procedure for checking and cleaning the converter muffler that will

be distributed to operators who purchase the kit.

DDC commented that EPA should seek assurances that the certified hardware will be available for all engine bus combinations. ECS has indicated it has completed design work on the majority of converter mufflers required for this market. If any specific design should be encountered for which a converter muffler cannot be provided which will meet the performance criterion, it will be reported to EPA. This coupled with the fact that other companies have already certified equipment for the engines covered under this application should provide adequate coverage of the marketplace.

Engelhard commented that because thermal insulation was required on the pre-catalyst exhaust on testing performed on the 6V92TA DDEC II engine, insulation should be required on all pre-catalyst components for ECS converter mufflers to be covered by certification. In response, ECS explained that no insulation was used during the chassis tests performed on the 6V71 engine for which PM reductions were demonstrated. Insulation of the exhaust system is not necessary for OCM installation on 6V71, 6V92 and 6L71 mechanical engine families as the exhaust temperatures are sufficient for proper unit function. For the engine dynamometer testing performed on the 6V92TA DDEC II engine, the entire exhaust system was insulated. ECS subsequently performed additional testing which indicates that the temperature loss between the turbocharger and converter muffler is insignificant and that insulation on the piping between the turbocharger outlet and the converter muffler is not needed. However, ECS has determined that the actual converter muffler must be insulated in order to maintain minimum catalyst temperature for the DDEC II engine. Accordingly, ECS has designed all converter mufflers for use on these engines to include either insulation located within the muffler shell or via an external wrap/blanket over the muffler casing.

Engelhard raised a concern based on the different exhaust temperature profiles and engine out emissions that exist relative to engines that are naturally aspirated, turbo charged or turbo-charged after-cooled engines. Engelhard questioned whether an engine that achieves a 25% reduction on a naturally aspirated engine could achieve the same on a turbo-charged engine. Engelhard stated that without a demonstration that 25% reduction in total PM could be obtained on all versions of the 6V71, engine

certification should not be granted for all engines. Unfortunately, while Engelhard raised some interesting questions in this area, it did not provide any data or information on catalyst efficiency as it relates to different temperatures that could be used to substantiate its claim. At this point, EPA does not have information which would lead it to conclude that the ECS catalyst would not be able to provide the 25% reduction on the models it has identified. However, it is noted that in testing the 1991 6V92TA DDEC II engine, ECS provides information that the OCM reduces emissions by 26% on an engine where the temperature reached a maximum of 320 degrees Centigrade. These results address the concern relative to the ability of the OCM to reduce PM emissions on engines that operate at the lower end of the temperature spectrum. In regard to the issue of differing emission rates, EPA needs information to conclusively deal with this on an industry-wide basis and EPA welcomes such information from the public and industry.

DDC commented that certification of the ECS equipment should not cause DDC to have additional liability. DDC cited language in the preamble to the final rule published in the Federal Register on April 21, 1993, page 21381. DDC's concern was centered around the following statement, "'* * * However, if an engine manufacturer supplies retrofit/rebuild equipment, it is responsible for the emissions performance of the equipment.'" DDC suggested that it was EPA's intent to make engine manufacturers accept additional liability for rebuild hardware which they sell and which is subsequently used in a rebuild which has been approved under the program. The statement simply means that if the engine manufacturer supplies retrofit equipment as part of a certified rebuild kit (such as the DDC certified upgrade kit) then the manufacturer is responsible for the warranties associated with the retrofit/rebuild regulations. If, on the other hand, the manufacturer sells equipment for rebuild through its normal sales process, and such sale is not part of a certified kit with which the manufacturer is affiliated, the manufacturer is not liable for equipment performance beyond its normal liability. That is to say, for equipment not sold by the manufacturer to be included in a certified kit under the retrofit/rebuild program, the manufacturer is not responsible for the defect warranty or the performance warranty that is associated with the retrofit/rebuild program. The retrofit/rebuild equipment

certifier, however, is responsible for these warranties.

III. Certification Approval

The Agency has reviewed this notification, along with comments received from interested parties, and finds that the equipment described in this notification of intent to certify:

(1) Reduces particulate matter exhaust emissions by at least 25 percent, without causing the applicable engine families to exceed other exhaust emissions standards;

(2) Will not cause an unreasonable risk to the public health, welfare, or safety;

(3) Will not result in any additional range of parameter adjustability; and,

(4) Meets other requirements necessary for certification under the Retrofit/Rebuild Requirements for 1993 and Earlier Model Year Urban Buses (40 CFR Sections 85.1401 through 85.1415). The Agency hereby certifies this equipment for use in the urban bus retrofit/rebuild program as discussed below in section IV.

IV. Operator Requirements and Responsibilities

This equipment may be used immediately by urban bus operators who have chosen to comply with either Program 1 or Program 2, but must be properly applied. Currently, operators having certain engines who have chosen to comply with Program 1 must use equipment certified to reduce PM emissions by 25 percent or more when those engines are rebuilt or replaced. Today's Federal Register notice certifies the above-described ECS equipment as meeting that PM reduction requirement. Only equipment that has been certified to reduce PM by 25% or more may be used by operators with applicable engines who have chosen Program 1. Urban bus operators who choose to comply with Program 1 may use the certified ECS equipment (or other certified equipment) until such time as the 0.10 g/bhp-hr standard is triggered for the applicable engines.

Operators who choose to comply with Program 2 and use the ECS equipment will use the appropriate PM emission level from Table A when calculating their fleet level attained (FLA).

As stated in the program regulations (40 CFR 85.1400 through 85.1415), operators are required to maintain records for each engine in their fleet to demonstrate that they are in compliance with the program requirements beginning January 1, 1995. These records include purchase records, receipts, and part numbers for the parts

and components used in the rebuilding of urban bus engines.

Richard D. Wilson,
Acting Assistant Administrator for Air and Radiation.

[FR Doc. 97-41 Filed 1-3-97; 8:45 am]

BILLING CODE 6560-50-P

[FRL-5673-4]

Notice of Federal Advisory Committee Meeting, ORD Board of Scientific Counselors

AGENCY: Environmental Protection Agency (EPA).

ACTION: Notice of meeting.

SUMMARY: Pursuant to the Federal Advisory Committee Act, Public Law 92-463, as amended (5 U.S.C., App. 2), notice is hereby given that the Environmental Protection Agency (EPA), Office of Research and Development's (ORD), Board of Scientific Counselors (BOSC), will hold its Executive Committee Meeting, January 13-14, 1997, at the Ritz-Carlton Hotel, 1250 South Hayes Street, Arlington, Virginia. On Monday, the meeting will begin at 1:00 p.m. and will recess at 5:00 p.m., and on Tuesday, January 14, the meeting will begin at 8:00 a.m. and will adjourn at 4:30 p.m. All times noted are Eastern Time. Agenda items include, but are not limited to, BOSC Operating Principles, Laboratory Peer Review Discussion, ORD Research Plan Evaluation: Methods Development and Process and Procedures for Formulating Research Plans. Anyone desiring a draft BOSC agenda may fax their request to Shirley R. Hamilton (202) 260-0929. The meeting is open to the public. Any member of the public wishing to make comments at the meeting, should contact Shirley Hamilton, Designated Federal Official, Office of Research and Development (8701), 401 M Street, SW., Washington, DC 20460; by telephone at (202) 260-0468. In general, each individual making an oral presentation will be limited to a total time of three minutes.

FOR FURTHER INFORMATION CONTACT: Shirley R. Hamilton, Designated Federal Official, U.S. Environmental Protection Agency, Office of Research and Development, NCERQA (MC8701), 401 M Street, SW., Washington, DC 20460, 202-260-0468.

Dated: December 24, 1996.

Joseph K. Alexander,
Acting Assistant Administrator for Research and Development.

[FR Doc. 97-104 Filed 1-3-97; 8:45 am]

BILLING CODE 6560-50-M

FEDERAL COMMUNICATIONS COMMISSION

Notice of Public Information Collections Being Reviewed by the Federal Communications Commission

December 24, 1996.

SUMMARY: The Federal Communications Commission, as part of its continuing effort to reduce paperwork burden invites the general public and other Federal agencies to take this opportunity to comment on the following information collection, as required by the Paperwork Reduction Act of 1995, Public Law 104-13. An agency may not conduct or sponsor a collection of information unless it displays a currently valid control number. No person shall be subject to any penalty for failing to comply with a collection of information subject to the Paperwork Reduction Act (PRA) that does not display a valid control number. Comments are requested concerning (a) whether the proposed collection of information is necessary for the proper performance of the functions of the Commission, including whether the information shall have practical utility; (b) the accuracy of the Commission's burden estimate; (c) ways to enhance the quality, utility, and clarity of the information collected; and (d) ways to minimize the burden of the collection of information on the respondents, including the use of automated collection techniques or other forms of information technology.

DATES: Persons wishing to comment on this information collection should submit comments March 7, 1997.

ADDRESSES: Direct all comments to Dorothy Conway, Federal Communications Commission, Room 234, 1919 M St., N.W., Washington, DC 20554 or via internet to dconway@fcc.gov.

FOR FURTHER INFORMATION CONTACT: For additional information or copies of the information collections contact Dorothy Conway at 202-418-0217 or via internet at dconway@fcc.gov.

SUPPLEMENTARY INFORMATION:

OMB Approval No.: 3060-0599.

Title: Implementation of Sections 3(n) and 332 of the Communications Act.

Form No.: N/A.

Type of Review: Revision of an existing collection.

Respondents: State or local governments; Businesses or other for-profit; Small businesses or organizations.

Number of Respondents: 85.

Estimated Time Per Response: 1.66 hours.