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### Pt. 625, App. A

- 9. Multiply Column (F) times the factor in Column (G) and enter the product in Column (H).
- 10. Repeat steps 6-9 for the next higher unit price until the maximum quantity remaining is zero, then go to step 11.
- 11. Sum the amounts in Column (H) and enter the total in Row 8, Column (H). Sum this amount for all the worksheets. If the sum of all the worksheets is less than \$10,000,000, enter the sum in this spaces marked offer bond on the SPR Sales Offer Form. If the sum exceeds \$10,000,000, then enter \$10,000,000 on the offer form. Send with the offer or wire concurrently to the U.S. Treasury (refer to instructions in the Notice of Sale) an offer guarantee in the amount indicated on the offer form. These worksheets need not be submitted with the offer and should be retained for your files.

[63 FR 54198, Oct. 8, 1998]

## CHAPTER III—DEPARTMENT OF ENERGY

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## PART 706—SECURITY POLICIES AND PRACTICES RELATING TO LABOR-MANAGEMENT RELATIONS

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AUTHORITY: Sec. 161, 68 Stat. 948, as amended; 42 U.S.C. 2201.

SOURCE: 41 FR 56776, Dec. 30, 1976, unless otherwise noted.

### GENERAL

### § 706.1 Purpose.

The purpose of this part is to set forth Department of Energy, hereinafter "DOE," security policies and practices in the area of labor-management relations.

### § 706.2 Basis and scope.

The specific policies contained in this part are worked out within the framework of DOE's general objectives for labor-management relations in the DOE program, namely:

- (a) Wholehearted acceptance by contractors and by labor and its representatives of the moral responsibility inherent in participation in the DOE program;
- (b) Development of procedures to assure (1) that all participants in the program are loyal to the United States including those whose participation involves the exercise of negotiating and

disciplinary authority over bargaining units, and (2) that determination of unit, jurisdiction, and similar questions will not breach security;

- (c) Continuity of production at vital DOE installations;
- (d) Consistent with DOE's responsibility under the law, the least possible governmental interference with the efficient management expected from DOE contractors;
- (e) Minimum interference with the traditional rights and privileges of American labor.

SECURITY POLICIES AND PROCEDURES IN NATIONAL LABOR RELATIONS BOARD PROCEEDINGS

#### § 706.10 Policy.

It is policy of DOE that NLRB cases falling within the scope of the Labor Management Relations Act at the various DOE installations should be conducted in normal fashion whereever possible, on the basis of open hearings, unclassified records and published decisions. This policy does not preclude adoption of special arrangements which may be required for reasons of program security at any stage of the proceedings in particular areas.

### § 706.11 Consent elections.

In accordance with the recommendation of the President's Commission on Labor Relations in the Atomic Energy Installations, it is the policy of DOE to encourage every effort by management and labor at DOE installations to determine bargaining units and representatives by agreement and consent elections in preference to contested proceedings before the National Labor Relations Board.

### §706.12 Administrative Law Judges.

By agreement with the National Labor Relations Board, a panel of cleared NLRB administrative law judges is maintained to facilitate resolution of questions as to the materiality of classified information in NLRB hearings and to facilitate preparation of an unclassified record. The assignment of individual administrative law judges to DOE cases remains a matter within the discretion of the National Labor Relations Board.

### § 706.13

### § 706.13 Clearance of counsel.

It is recognized that clearance of counsel for the parties is sometimes desirable for proper preparation of a case even though the record is to be unclassified. Clearance of counsel makes possible their participation in any closed discussions needed preparatory to making an unclassified record. Each party is responsible for requesting clearance of its counsel well in advance so that clearance requirements will not delay the proceeding. The clearance of temporary special counsel will be terminated on completion of the proceeding.

### $\S 706.14$ DOE's role in proceedings.

If controversies within the scope of the Labor Management Relations Act arise which cannot be adjusted by mutual agreement, and contested proceedings before NLRB result, each party to such proceedings will present his own position and the evidence in support thereof with due regard for existing security rules. DOE will be continuously informed of the progress of such proceedings and will act as may appear desirable (a) to assure the protection of classified information; (b) to assure that material and relevant information is not withheld from the record on grounds of security if such information can be supplied in unclassified form; and (c) to assist in determining appropriate action where a decision may turn on data which can be expressed only in classified form.

#### LOYALTY OF PARTICIPANTS

### § 706.20 Policy.

Loyalty to the United States is a paramount factor applicable to all participants in DOE program including those whose participation (although not requiring access to restricted data) involves the exercise of administrative, negotiating and disciplinary authority over bargaining units composed of employees engaged on classified work. Individuals involved in questions of loyalty will be given full opportunity to explore the questions with DOE. DOE will take such further steps as may be appropriate in the circumstances.

### CONTRACT NEGOTIATION AND ADMINISTRATION

### § 706.30 Clearance of certain local union representatives.

It is recognized that security clearance of certain union representatives may be necessary to assure opportunity for effective representation of employees in collective bargaining relationships with DOE contractors. Accordingly, DOE managers may authorize investigation for "Q" clearance of union officials whose functions as representatives of employees may reasonably be expected to require access to Restricted Data under NLRB and other procedures according to applicable law (LMRA, 1947); to effectively perform their representation functions in the resolution of grievances and in other collective bargaining relationships with contractors; to effectuate the recommendation of the President's Commission on Labor Relations in the Atomic Energy Installations in respect to integration of the union into the plant organization "as to two-way channel of communication and a medium of understanding between management and workers".

- (a) In the pre-contract stage of union-management relations, the requirements of the Labor Management Relations Act normally will be the applicable criteria for determining which bargaining representatives, if any, will need access to classified material in the exercise of their functions as employee representatives.
- (b) After a bargaining relationship has been established between the contractor and the representatives of its employees the nature of this relationship and the procedures followed in it normally will be the controlling criteria for determination of the access to be granted to particular persons in carrying out their functions as employee representatives. For example, many contract grievance procedures designate by title certain union and management officials who are to have definite roles in the resolution of grievances under the procedure. Investigation for "Q" clearance will normally be

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in order for such officials, both company and union, employee, and non-employee. In addition, persons not so designated may be investigated for clearance where the company and the union advise DOE manager that their established relationships contemplate access for such persons.

#### § 706.31 Clearance of conciliators and arbitrators.

Conciliators and arbitrators who are regularly assigned to DOE cases may be processed for "Q" clearance at the discretion of the local DOE manager, either on the manager's initiative or at the request of a contractor.

#### § 706.32 Security indoctrination non-employee representatives.

All collective bargaining representatives, company and union, who are to have access to Restricted Data, will be given appropriate security indoctrina-

### § 706.40 Final responsibility of DOE in security matters.

On all matters of security at all Government-owned, privately operated DOE installations, DOE retains absolute and final authority, and neither the security rules nor their administration are matters for collective bargaining between management and labor, insofar as DOE security regulations affect the collective bargaining process, the security policies and regulations will be made known to both parties. To the fullest extent feasible DOE will consult with representatives of management and labor in formulating security rules and regulations that affect the collective bargaining process.

#### 707—WORKPLACE SUB-PART STANCE ABUSE PROGRAMS AT **DOE SITES**

### Subpart A—General Provisions

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- laboratory analysis for drug testing. 707.13 Medical review of results of tests for
- illegal drug use. 707.14 Action pursuant to a determination of illegal drug use.
- 707.15 Collective bargaining.
- 707.16 Records.
- 707.17 Permissible actions in the event of contractor noncompliance.

AUTHORITY: 41 U.S.C. 701 et seq.; 42 U.S.C. 2012, 2013, 2051, 2061, 2165, 2201b, 2201i, and 2201p; 42 U.S.C. 5814 and 5815; 42 U.S.C. 7151, 7251, 7254, and 7256.

Source: 57 FR 32656, July 22, 1992, unless otherwise noted.

### **Subpart A—General Provisions**

### § 707.1 Purpose.

The Department of Energy (DOE) promulgates this part in order to protect the environment, maintain public health and safety, and safeguard the national security. This part establishes policies, criteria, and procedures for developing and implementing programs that help to maintain a workplace free from the use of illegal drugs. It applies to DOE contractors and subcontractors performing work at sites owned or controlled by DOE and operated under the authority of the Atomic Energy Act of 1954, as amended, and to individuals with unescorted access to the control areas of certain DOE reactors. The procedures include detection of the use of illegal drugs by current or prospective contractor employees in testing designated positions.

### § 707.2 Scope.

(a) This part applies to the following contracts with DOE, at sites owned or controlled by DOE which are operated

### §707.3

under the authority of the Atomic Energy Act of 1954, as amended:

- (1) Management and operating contracts: and
- (2) Other contracts or subcontracts with a value of \$25,000 or more, and which have been determined by DOE to involve:
- (i) Access to or handling of classified information or special nuclear materials:
- (ii) High risk of danger to life, the environment, public health and safety, or national security; or
- (iii) Transportation of hazardous materials to or from a DOE site.
- (b) Individuals described in §707.7 (b) and (c) will be subject to random drug testing; to drug testing as a result of an occurrence, as described in §707.9; and to drug testing on the basis of reasonable suspicion, as described in §707.10.
- (c) Applicants for employment in testing designated positions will be tested in accordance with §707.8.

### § 707.3 Policy.

It is the policy of DOE to conduct its programs so as to protect the environment, maintain public health and safety, and safeguard the national security. This policy is advanced in this rule by requiring contractors and subcontractors within its scope to adopt procedures consistent with the baseline requirements of this part, and to impose significant sanctions on individuals in testing designated positions or with unescorted access to the control areas of certain DOE reactors, who use or are involved with illegal drugs.

### § 707.4 Definitions.

For the purposes of this part, the following definitions apply:

Collection Site Person means a technician or other person trained and qualified to take urine samples and to secure urine samples for later laboratory analysis.

Confirmed Positive Test means, for drugs, a finding based on a positive initial or screening test result, confirmed by another positive test on the same sample. The confirmatory test must be by the gas chromatography/mass spectrometry method.

Counseling means assistance provided by qualified professionals to employees, especially, but not limited to those employees whose job performance is, or might be, impaired as a result of illegal drug use or a medical-behavioral problem; such assistance may include short-term counseling and assessment, crisis intervention, referral to outside treatment facilities, and follow-up services to the individual after completion of treatment and return to work.

Drug Certification means a written assurance signed by an individual with known past illegal drug involvement, as a condition for obtaining or retaining a DOE access authorization, stating that the individual will refrain from using or being involved with illegal drugs while employed in a position requiring DOE access authorization (security clearance).

Employee Assistance means a program of counseling, referral, and educational services concerning illegal drug use and other medical, mental, emotional, or personal problems of employees, particularly those which adversely affect behavior and job performance.

Hazardous Material means any material subject to the placarding requirements of 49 CFR 172.504, table 1, and materials presenting a poison-inhalation hazard that must be placarded under the provisions of 49 CFR 172.505.

Illegal Drug means a controlled substance, as specified in Schedules I through V of the Controlled Substances Act, 21 U.S.C. 811, 812. The term "illegal drugs" does not apply to the use of a controlled substance in accordance with terms of a valid prescription, or other uses authorized by law.

Management and Operating Contract means an agreement for the operation, maintenance, or support, on behalf of the Government, of a Government-owned or controlled research, development, special production, or testing establishment wholly or principally devoted to one or more major programs of DOE.

Medical Review Officer (MRO) means a licensed physician, approved by DOE to perform certain functions under this part. The MRO is responsible for receiving laboratory results generated by an employer's drug testing program, has knowledge of illegal drug use and

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other substance abuse disorders, and has appropriate medical training to interpret and evaluate an individual's positive test result, together with that person's medical history and any other relevant biomedical information. For purposes of this part a physician from the site occupational medical department may be the MRO.

Occurrence means any event or incident that is a deviation from the planned or expected behavior or course of events in connection with any Department of Energy or Department of Energy-controlled operation, if the deviation has environmental, public health and safety, or national security protection significance. Incidents having such significance include the following, or incidents of a similar nature:

- (1) Injury or fatality to any person involving actions of a Department of Energy contractor employee.
- (2) Involvement of nuclear explosives under Department of Energy jurisdiction which results in an explosion, fire, the spread of radioactive material, personal injury or death, or significant damage to property.
- (3) Accidental release of pollutants which results or could result in a significant effect on the public or environment.
- (4) Accidental release of radioactive material above regulatory limits.

Random Testing means the unscheduled, unannounced urine drug testing of randomly selected individuals in testing designated positions, by a process designed to ensure that selections are made in a non-discriminatory manner.

Reasonable Suspicion means a suspicion based on an articulable belief that an employee uses illegal drugs, drawn from particularized facts and reasonable inferences from those facts, as detailed further in §707.10.

Referral means the direction of an individual toward an employee assistance program or to an outside treatment facility by the employee assistance program professional, for assistance with prevention of illegal drug use, treatment, or rehabilitation from illegal drug use or other problems. Referrals to an employee assistance program can

be made by the individual (self-referral), by contractor supervisors or managers, or by a bargaining unit representative.

Rehabilitation means a formal treatment process aimed at the resolution of behavioral-medical problems, including illegal drug use, and resulting in such resolution.

Special Nuclear Material has the same meaning as in section 11aa of the Atomic Energy Act of 1954 (42 U.S.C. 2014(aa)).

Specimen Chain of Custody Form is a form used to document the security of the specimen from time of collection until receipt by the laboratory. This form, at a minimum, shall include specimen identifying information, date and location of collection, name and signature of collector, name of testing laboratory, and the names and signatures of all individuals who had custody of the specimen from time of collection until the specimen was prepared for shipment to the laboratory.

Testing Designated Position names a position whose incumbents are subject to drug testing under this part.

### Subpart B—Procedures

## § 707.5 Submission, approval, and implementation of a baseline work-place substance abuse program.

- (a) Each contractor subject to this part shall develop a written program consistent with the requirements of this part and the guidelines of the Department of Health and Human Services and subsequent amendments to those guidelines ("Mandatory Guidelines for Federal Workplace Drug Testing Programs," 53 FR 11970, April 11, 1988; hereinafter "HHS Mandatory Guidelines"), and applicable to appropriate DOE sites. Such a program shall be submitted to DOE for review and approval, and shall include at least the following baseline elements:
- (1) Prohibition of the use; possession, sale, distribution, or manufacture of illegal drugs at sites owned or controlled by DOE;

### § 707.5

- (2) Plans for instruction of supervisors and employees concerning problems of substance abuse, including illegal drug use, and the availability of assistance through the employee assistance program and referrals to other resources, and the penalties that may be imposed upon employees for drug-related violations occurring on the DOE owned or controlled site;
- (3) Provision for distribution to all employees engaged in performance of the contract on the DOE owned or controlled site of a statement which sets forth the contractor's policies prohibiting the possession, sale, distribution, or manufacture of illegal drugs at the DOE owned or controlled site. The statement shall include notification to all employees that as a condition of employment under the contract, the employee will:
- (i) Abide by the terms of the statement; and
- (ii) Notify the employer in writing of the employee's conviction under a criminal drug statute for a violation occurring on the DOE owned or controlled site no later than 10 calendar days after such conviction:
- (4) Provision for written notification to the DOE contracting officer within 10 calendar days after receiving notice under paragraph (a)(3)(ii) of this section, from an employee or otherwise receiving actual notice of an employee's conviction of a drug-related offense;
- (5) Provision for imposing one of the following actions, with respect to any employee who is convicted of a drug-related violation occurring in the workplace, within 30 calendar days after receiving such notice of conviction under paragraph (a)(4) of this section;
- (i) Taking appropriate personnel action against such employee, up to and including termination; or
- (ii) Offering such employee, consistent with the contractor's policies, an opportunity to participate satisfactorily in a drug abuse assistance or rehabilitation program approved for such purposes by a Federal, State, or local health, law enforcement, or other appropriate agency. If the employee does not participate in such a rehabilitation program, the contractor must take appropriate personnel action, up to and

- including termination, in accordance with the contractor's policies.
- (6) Commitment to make a good faith effort to maintain a workplace free of substance abuse through implementation of paragraphs (a)(1) through (a)(5) of this section.
- (b) In addition, the following baseline elements must be included in programs developed by contractors that have identified testing designated positions (see § 707.7(b));
- (1) Notification to DOE of the positions subject to drug testing;
- (2) Prohibition of individuals in testing designated positions who are not free from the use of illegal drugs from working in those positions;
- (3) Sanctions for individuals in testing designated positions who violate the prohibitions of paragraphs (a)(1) or (b)(2) of this section:
  - (4) Provision for:
- (i) Notification, at least 60 days in advance of initiating testing, to those individuals subject to drug testing, unless the contractor is currently conducting a testing program.
- (ii) Urine drug analysis of applicants for testing designated positions before final selection for employment or assignment;
- (iii) Random urine drug analysis for employees in testing designated positions:
- (iv) Urine drug analysis for employees in testing designated positions on the basis of reasonable suspicion, as a result of an occurrence, or as a followup to rehabilitation; and
- (v) Random urine drug analysis and urine drug analysis on the basis of reasonable suspicion or as the result of an occurrence, for any individual with unescorted access to the control areas of certain DOE reactors (see §707.7(c)).
- (vi) Written notice to the contractor by an employee in a testing designated position of a drug-related arrest or conviction, or receipt of a positive drug test result regarding that employee, as soon as possible but within 10 calendar days of such arrest, conviction, or receipt; and
- (vii) Appropriate action, if any, to be taken regarding an employee who:
- (A) is arrested for or convicted of a drug-related offense; or

- (B) has a positive drug test result (consistent with §707.14).
- (5) Provision to employees of the opportunity for rehabilitation, consistent with the contractor's policies, under circumstances as provided in this part (see §707.14(b));
- (6) Immediate notification to DOE security officials whenever the circumstances in connection with procedures under this part raise a security concern as provided in DOE Orders, rules and regulations; such circumstances including, but are not necessarily limited to, a determination that an individual holding a DOE access authorization has used an illegal
- (c) Each contractor's written policy and procedures under this part shall comply with the requirements of 10 CFR part 710, "Criteria and Procedures for Determining Eligibility for Access to Classified Matter or Significant Quantities of Special Nuclear Material."
- (d) Contractors are required to submit all subcontracts they believe to be within the scope of this part to DOE for a determination as to whether the subcontract falls within the scope of this part. Subcontractors so determined to be within the scope of this part shall be required to agree to comply with its requirements, as a condition of eligibility for performing the subcontract work. Each subcontractor subject to this part shall submit its plan to the appropriate prime contractor for approval; the contractor shall be responsible for periodically monitoring the implementation of the subcontractor's program for effectiveness and compliance with this part.
- (e) In reviewing each proposed workplace substance abuse plan, DOE shall decide whether the program meets the applicable baseline requirements established by this part. The responsible DOE official will reject proposed workplace substance abuse plans that are deemed not to meet the baseline requirements. DOE shall provide the contractor with a written notification regarding the decision as to the acceptability of the plan. Nothing in this rule is intended to prohibit any contractor subject to this part from implementing workplace substance abuse require-

- ments additional to those of the baseline, including drug testing employees and applicants for employment in any position and testing for any illegal drugs. However, the contractor shall inform DOE of such additional requirements at least 30 days prior to implementation.
- (f) DOE shall periodically review and evaluate each contractor's program, including the contractor's oversight of the covered subcontractors, to assure effectiveness and compliance with this part.
- (g) Contractors or proposers will submit their program to DOE for review within 30 days of notification by DOE that the contract or proposed contract falls within the scope of this part. Workplace substance abuse programs, as provided in this part, shall be implemented within 30 days of approval by DOE. DOE may grant an extension to the notification or implementation period, as warranted by local conditions. Implementation may require changes to collective bargaining agreements as discussed in §707.15 of this part.
- (h) To assure consistency of application, DOE shall periodically review designated contracts and testing designated positions included in the workplace substance abuse plans approved by DOE. DOE will also periodically review implementation of programs conducted by prime contractors, to assure consistency of application among prime contracts (and subcontracts where appropriate) throughout DOE.
- (i) This part preempts any State or local law, rule, regulation, order, or standard to the extent that:
- (1) compliance with both the State or local requirement and any requirements in this part is not possible; or
- (2) compliance with the State or local requirement is an obstacle to the accomplishments and execution of any requirement in this part.

## § 707.6 Employee assistance, education, and training.

Contractor programs shall include the following or appropriate alternatives:

(a) Employee assistance programs emphasizing preventive services, education, short-term counseling, coordination and referral to outside agencies,

### § 707.7

and follow-up. These services shall be available to all contractor on-site employees involved in the DOE contract. The contractor has no obligation to pay the costs of any individual's counseling, treatment, or rehabilitation beyond those services provided by the contractor's employee assistance program, except as provided for in the contractor's benefits programs. DOE undertakes no obligation to pay for any individual's counseling, rehabilitation, or treatment, unless specifically provided for by contract.

- (b) Education and training programs for on-site employees on a periodic basis, which will include, at a minimum, the following subjects:
- (1) For all on-site employees: Health aspects of substance abuse, especially illegal drug use; safety, security, and other workplace-related problems caused by substance abuse, especially illegal drug use; the provisions of this rule; the employer's policy; and available employee assistance services.
  - (2) For managers and supervisors:
- (i) The subjects listed in paragraph (b)(1) of this section;
- (ii) Recognition of deteriorating job performance or judgment, or observation of unusual conduct which may be the result of possible illegal drug use;
- (iii) Responsibility to intervene when there is deterioration in performance, or observed unusual conduct, and to offer alternative courses of action that can assist the employee in returning to satisfactory performance, judgment, or conduct, including seeking help from the employee assistance program:
- (iv) Appropriate handling and referral of employees with possible substance abuse problems, especially illegal drug use; and
- (v) Employer policies and practices for giving maximum consideration to the privacy interests of employees and applicants.

#### § 707.7 Random drug testing requirements and identification of testing designated positions.

(a)(1) Each workplace substance abuse program will provide for random testing for evidence of the use of illegal drugs of employees in testing designated positions identified in this section.

- (2) Programs developed under this part for positions identified in paragraph (b)(3) of this section shall provide for random tests at a rate equal to 50 percent of the total number of employees in testing designated positions for each 12 month period. Employees in the positions identified in paragraphs (b)(1), (b)(2), and (c) of this section will be subject to random testing at a rate equal to 100 percent of the total number of employees identified, and those identified in paragraphs (b)(1) and (b)(2) of this section may be subject to additional drug tests.
- (b) The testing designated positions subject to random drug testing are:
- (1) Positions determined to be covered by the Personnel Security Assurance Program (PSAP), codified at 10 CFR part 710. PSAP employees will be subject to the drug testing standards of this part and any additional requirements of the PSAP rule.
- (2) Positions which entail critical duties that require an employee to perform work which affords both technical knowledge of and access to nuclear explosives sufficient to enable the individual to cause a detonation (high explosive or nuclear), in what is commonly known as the Personnel Assurance Program (PAP). PAP employees will be subject to the drug testing standards of this part and any additional requirements of the PAP program.
- (3) Positions identified by the contractor which entail duties where failure of an employee adequately to discharge his or her position could significantly harm the environment, public health or safety, or national security, such as:
  - (i) Pilots;
  - (ii) Firefighters;
- (iii) Protective force personnel, exclusive of those covered in paragraphs (b)(1) or (b)(2) of this section, in positions involving use of firearms where the duties also require potential contact with, or proximity to, the public at large:
- (iv) Personnel directly engaged in construction, maintenance, or operation of nuclear reactors: or
- (v) Personnel directly engaged in production, use, storage, transportation,

or disposal of hazardous materials sufficient to cause significant harm to the environment or public health and safe-

(4) Other positions determined by the DOE, after consultation with the contractor, to have the potential to significantly affect the environment, public health and safety, or national security.

(c) Each contractor shall require random testing of any individual, whether or not an employee, who is allowed unescorted access to the control areas of the following DOE reactors: Advanced Test Reactor (ATR); C Production Reactor (C); Experimental Breeder Reactor II (EBR-II); Fast Flux Test Facility (FFTF); High Flux Beam Reactor (HFBR): High Flux Isotope Reactor (HFIR); K Production Reactor (K); L Production Reactor (L); N Production Reactor (N); Oak Ridge Research Reactor (ORR); and P Production Reactor (P). A confirmed positive test shall result in such an individual being denied unescorted access. If such an individual is not an employee of the contractor, that individual may be granted unescorted access only after the individual meets the conditions established in §707.14(d) of this part. If, after restoration of unescorted access, such an individual is determined to have used illegal drugs for a second time, unescorted access shall be denied for a period of not less than three (3) years. Such an individual thereafter shall be granted unescorted access only upon a determination by DOE that a grant of unescorted access to the individual presents no unacceptable safety or security risk. If such an individual is an employee, that individual is subject to the other requirements of this part, including appropriate disciplinary measures.

(d) A position otherwise subject to testing under this part may be exempted from such testing if it is within the scope of another comparable Federal drug testing program, as determined by DOE, after consultation with the contractor, to avoid unnecessary multiple tests.

### $\S 707.8$ Applicant drug testing.

An applicant for a testing designated position will be tested for the use of il-

legal drugs before final selection for employment or assignment to such a position. Provisions of this part do not prohibit contractors from conducting drug testing on applicants for employment in any position.

### § 707.9 Drug testing as a result of an occurrence.

When there is an occurrence which is required to be reported to DOE by the contractor, under contract provisions incorporating applicable DOE Orders, rules, and regulations, it may be necessary to test individuals in testing designated positions, or individuals with unescorted access to the control areas of the DOE reactors listed in §707.7(c), for the use of illegal drugs, if such individuals could have caused or contributed to the conditions which caused the occurrence. For an occurrence requiring immediate notification or reporting as required by applicable DOE Orders, rules, and regulations, the contractor will require testing as soon as possible after the occurrence but within 24 hours of the occurrence, unless DOE determines that it is not feasible to do so. For other occurrences requiring notifications to DOE as required by applicable DOE Orders, rules, and regulations, the contractor may require testing.

## § 707.10 Drug testing for reasonable suspicion of illegal drug use.

(a)(1) It may be necessary to test any employee in a testing designated position, or individuals with unescorted access to the control areas of the DOE reactors listed in §707.7(c), for the use of illegal drugs, if the behavior of such an individual creates the basis for reasonable suspicion of the use of illegal drugs. Two or more supervisory or management officials, at least one of whom is in the direct chain of supervision of the employee, or is a physician from the site occupational medical department, must agree that such testing is appropriate. Reasonable suspicion must be based on an articulable belief that an employee uses illegal drugs, drawn from particularized facts and reasonable inferences from those facts.

(2) Such a belief may be based upon, among other things:

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- (i) Observable phenomena, such as direct observation of:
- (A) The use or possession of illegal drugs; or
- (B) The physical symptoms of being under the influence of drugs;
- (ii) A pattern of abnormal conduct or erratic behavior;
- (iii) Arrest for a conviction of a drug related offense, or the identification of the individual as the focus of a criminal investigation into illegal drug possession use, or trafficking;
- (iv) Information that is either provided by a reliable and credible source or is independently corroborated;
- (v) Evidence that an employee has tampered with a drug test; or
- (vi) Temperature of the urine specimen is outside the range of 32.5–37.7 degrees centigrade or 90.5–99.8 degrees Fahrenheit.
- (b) The fact that an employee had a confirmed positive test for the use for the use of illegal drugs at some prior time, or has undergone a period of rehabilitation or treatment, will not, in and of itself, be grounds for testing on the basis of reasonable suspicion.
- (c) The requirements of this part relating to the testing for the use of illegal drugs are not intended to prohibit the contractor from pursuing other existing disciplinary procedures or from requiring medical evaluation of any employee exhibiting aberrant or unusual behavior.

### § 707.11 Drugs for which testing is performed.

Where testing is performed under this part, at a minimum, contractors will be required to test for the use of the following drugs or classes of drugs: marijuana; cocaine; opiates; phencyclidine; and amphetamines. However, when conducting reasonable suspicion or occurrence testing, the contractor may test for any drug listed in Schedules I or II of the Controlled Substances Act.

## § 707.12 Specimen collection, handling and laboratory analysis for drug testing.

(a) Procedures for providing urine specimens must allow individual privacy, unless there is reason to believe that a particular individual may alter or substitute the specimen to be provided. Contractors shall utilize a chain of custody procedure for maintaining control and accountability from point of collection to final disposition of specimens, and testing laboratories shall use appropriate cutoff levels in screening specimens to determine whether they are negative or positive for a specific drug, consistent with the Mandatory Guidelines §707.5(a)). The contractor shall ensure that only testing laboratories certified by the Department of Health and Human Services, under subpart C of the HHS Mandatory Guidelines are utilized.

(b)(1) If the individual refuses to cooperate with the urine collection (e.g., refusal to provide a specimen, or to complete paperwork), then the collection site person shall inform the MRO and shall document the non-cooperation on the specimen chain of custody form. The MRO shall report the failure to cooperate to the appropriate management authority, who shall report to DOE if the individual holds an access authorization. Individuals so failing to cooperate shall be treated in all respects as if they had been tested and had been determined to have used an illegal drug. The contractor may apply additional sanctions consistent with its disciplinary policy.

(2) The collection site person shall ascertain that there is a sufficient amount of urine to conduct an initial test, a confirmatory test, and a retest, in accordance with the HHS Mandatory Guidelines. If there is not a sufficient amount of urine, additional urine will be collected in a separate container. The individual may be given reasonable amounts of liquid and a reasonable amount of time in which to provide the specimen required. The individual and the collection site person must keep the specimen in view at all times. When collection is complete, the partial specimens will be combined in a single container. In the event that the individual fails to provide a sufficient amount of urine, the amount collected will be noted on the "Urine Sample Custody Document." In this case, the collection site person will telephone the individual's supervisor who will determine the next appropriate action.

This may include deciding to reschedule the individual for testing, to return the individual to his or her work site and initiate disciplinary action, or both.

### § 707.13 Medical review of results of tests for illegal drug use.

(a) All test results shall be submitted for medical review by the MRO. A confirmed positive test for drugs shall consist of an initial test performed by the immunoassay method, with positive results on that initial test confirmed by another test, performed by the gas chromatography/mass spectrometry method (GC/MS). This procedure is described in paragraphs 2.4 (e) and (f) of the HHS Mandatory Guidelines.

(b) The Medical Review Officer will consider the medical history of the employee or applicant, as well as any other relevant biomedical information. When there is a confirmed positive test result, the employee or applicant will be given an opportunity to report to the MRO the use of any prescription or over-the-counter medication. If the MRO determines that there is a legitimate medical explanation for a confirmed positive test result, consistent with legal and non-abusive drug use, the MRO will certify that the test results do not meet the conditions for a determination of use of illegal drugs. If no such certification can be made, the MRO will make a determination of use of illegal drugs. Determinations of use of illegal drugs will be made in accordance with the criteria provided in the Medical Review Officer Manual issued by the Department of Health and Human Services [DHHS Publication No. (ADM) 88-1526].

## $\S\,707.14$ Action pursuant to a determination of illegal drug use.

(a) When an applicant for employment has been tested and determined to have used an illegal drug, processing for employment will be terminated and the applicant will be so notified.

(b)(1) When an employee who is in a testing designated position has been tested and determined to have used an illegal drug, the contractor shall immediately remove that employee from the testing designated position; if such employee also holds, or is an applicant

for, an access authorization, then the contractor shall immediately notify DOE security officials for appropriate adjudication. If this is the first determination of use of illegal drugs by that employee (for example, the employee has not previously signed a DOE drug certification, and has not previously tested positive for use of illegal drugs), the employee may be offered a reasonable opportunity for rehabilitation, consistent with the contractor's policies. If rehabilitation is offered, the employee will be placed in a non-testing designated position, which does not require a security clearance, provided there is such an acceptable position in which the individual can be placed during rehabilitation; if there is no acceptable non-testing designated position, the employee will be placed on sick, annual, or other leave status, for a reasonable period sufficient to permit rehabilitation. However, the employee will not be protected from disciplinary action which may result from violations of work rules other than a positive test result for illegal drugs.

(2) Following a determination by the site occupational medical department. after counseling or rehabilitation, that the employee can safely return to duty, the contractor may offer the employee reinstatement, in the same or a comparable position to the one held prior to the removal, consistent with the contractor's policies and the requirements of 10 CFR part 710. Failure to take the opportunity for rehabilitation, if it has been made available, for the use of illegal drugs, will require significant disciplinary action up to and including removal from employment under the DOE contract, in accordance with the contractor's policies. Any employee who is twice determined to have used illegal drugs shall in all cases be removed from employment under the DOE contract. Also, if an employee who has signed a DOE drug certification violates the terms of the certification, DOE shall conduct a timely review of the circumstances of such violation, and the individual's continued eligibility for a DOE access authorization shall be determined under the provisions of 10 CFR part 710,

### § 707.15

"Criteria and Procedures for Determining Eligibility for Access to Classified Matter or Significant Quantities of Special Nuclear Material."

- (c) An employee who has been removed from a testing designated position because of the use of illegal drugs may not be returned to such position until that employee has:
- (1) Successfully completed counseling or a program of rehabilitation;
- (2) Undergone a urine drug test with a negative result; and
- (3) Been evaluated by the site occupational medical department, which has determined that the individual is capable of safely returning to duty.
- (d) An individual who is not an employee of a contractor who has been denied unescorted access because of the use of illegal drugs may not have the unescorted access reinstated until that individual has:
- (1) Provided evidence of successful completion of counseling or a program of rehabilitation:
- (2) Undergone a urine drug test with a negative result; and
- (3) Been evaluated by the site occupational medical department, which has determined that the individual is capable of being permitted unescorted access to a reactor control area.
- (e) If a DOE access authorization is involved, DOE must be notified of a contractor's intent to return to a testing designated position an employee removed from such duty for use of illegal drugs. Positions identified in \$707.7(b)(1) and (2) will require DOE approval prior to return to a testing designated position.
- (f) An individual who has been notified of a positive test result may request a retest of the same sample at the same or another certified laboratory. The individual shall bear the costs of transportation and/or testing of the specimen. The contractor will inform employees of their right to request a retest under the provisions of this paragraph.
- (g) After an employee determined to have used illegal drugs has been returned to duty, the employee shall be subject to unannounced drug testing, at intervals, for a period of 12 months.

### § 707.15 Collective bargaining.

When establishing drug testing programs, contractors who are parties to collective bargaining agreements will negotiate with employee representatives, as appropriate, under labor relations laws or negotiated agreements. Such negotiation, however, cannot change or alter the requirements of this rule because DOE security requirements themselves are non-negotiable under the security provisions of DOE contracts. Employees covered under collective bargaining agreements will not be subject to the provisions of this rule until those agreements have been modified, as necessary; provided, however, that if one year after commencement of negotiation the parties have failed to reach agreement, an impasse will be determined to have been reached and the contractor will unilaterally implement the requirements of this rule.

### § 707.16 Records.

- (a) Confirmed positive test results shall be provided to the Medical Review Officer and other contractor and DOE officials with a need to know. Any other disclosure may be made only with the written consent of the individual.
- (b) Contractors shall maintain maximum confidentiality of records related to illegal drug use, to the extent required by applicable statutes and regulations (including, but not limited to, 42 U.S.C. 290dd-3, 42 U.S.C. 290ee-3, and 42 CFR part 2). If such records are sought from the contractor for criminal investigations, or to resolve a question or concern relating to the Personnel Assurance Program certification or access authorization under 10 CFR part 710, any applicable procedures in statute or regulation for disclosure of such information shall be followed. Moreover, owing to DOE's express environmental, public health and safety, and national security interests, and the need to exercise proper contractor oversight, DOE must be kept fully apprised of all aspects of the contractor's program, including such information as incidents involving reasonable suspicion, occurrences, and

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confirmed test results, as well as information concerning test results in the aggregate.

- (c) Unless otherwise approved by DOE, the contractors shall ensure that all laboratory records relating to positive drug test results, including initial test records and chromatographic tracings, shall be retained by the laboratory in such a manner as to allow retrieval of all information pertaining to the individual urine specimens for a minimum period of five years after completion of testing of any given specimen, or longer if so instructed by DOE or by the contractor. In addition. a frozen sample of all positive urine specimens shall be retained by the laboratory for at least six months, or longer if so instructed by DOE.
- (d) The contractor shall maintain as part of its medical records copies of specimen chain of custody forms.
- (e) The specimen chain of custody form will contain the following information:
  - (1) Date of collection;
  - (2) Tested person's name;
- (3) Tested employee/applicant's social security number or other identification number unique to the individual;
  - (4) Specimen number;
- (5) Type of test (random, applicant, occurrence, reasonable suspicion, follow-up, or other);
  - (6) Temperature range of specimen;
- (7) Remarks regarding unusual behavior or conditions;
  - (8) Collector's signature; and
- (9) Certification signature of specimen provider certifying that specimen identified is in fact the specimen the individual provided.

### § 707.17 Permissible actions in the event of contractor noncompliance.

Actions available to DOE in the event of contractor noncompliance with the provisions of this part or otherwise performing in a manner inconsistent with its approved program include, but are not limited to, suspension or debarment, contract termination, or reduction in fee in accordance with the contract terms.

## PART 708—DOE CONTRACTOR EMPLOYEE PROTECTION PROGRAM

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AUTHORITY: 42 U.S.C. 2201(b), 2201(c), 2201(i), and 2201(p); 42 U.S.C. 5814 and 5815; 42 U.S.C. 7251, 7254, 7255, and 7256; and 5 U.S.C. Appendix 3.

Source: 64 FR 12870, Mar. 15, 1999, unless otherwise noted.

### **Subpart A—General Provisions**

### § 708.1 What is the purpose of this part?

This part provides procedures for processing complaints by employees of DOE contractors alleging retaliation by their employers for disclosure of information concerning danger to public or worker health or safety, substantial violations of law, or gross mismanagement; for participation in Congressional proceedings; or for refusal to participate in dangerous activities.

### § 708.2 What are the definitions of terms used in this part?

For purposes of this part:

Contractor means a seller of goods or services who is a party to:

- (1) A management and operating contract or other type of contract with DOE to perform work directly related to activities at DOE-owned or -leased facilities, or
- (2) A subcontract under a contract of the type described in paragraph (1) of this definition, but only with respect to work related to activities at DOEowned or -leased facilities.

Day means a calendar day.

Discovery means a process used to enable the parties to learn about each other's evidence before a hearing takes place, including oral depositions, written interrogatories, requests for admissions, inspection of property and requests for production of documents.

DOE Official means any officer or employee of DOE whose duties include program management or the investigation or enforcement of any law, rule, or regulation relating to Government contractors or the subject matter of a contract.

EC Director means the Director of the Office of Employee Concerns at DOE Headquarters, or any official to whom the Director delegates his or her functions under this part.

Employee means a person employed by a contractor, and any person previously employed by a contractor if that person's complaint alleges that employment was terminated for conduct described in §708.5 of this subpart. Field element means a DOE field-based office that is responsible for the management, coordination, and administration of operations at a DOE facility.

Head of Field Element means the manager or head of a DOE operations office or field office, or any official to whom those individuals delegate their functions under this part.

Hearing Officer means an individual appointed by the OHA Director to conduct a hearing on a complaint filed under this part.

Management and operating contract means an agreement under which DOE contracts for the operation, maintenance, or support of a Government-owned or -leased research, development, special production, or testing establishment that is wholly or principally devoted to one or more of the programs of DOE.

Mediation means an informal, confidential process in which a neutral third person assists the parties in reaching a mutually acceptable resolution of their dispute; the neutral third person does not render a decision.

OHA Director means the Director of the Office of Hearings and Appeals, or any official to whom the Director delegates his or her functions under this part.

Party means an employee, contractor, or other party named in a proceeding under this part.

Retaliation means an action (including intimidation, threats, restraint, coercion or similar action) taken by a contractor against an employee with respect to employment (e.g., discharge, demotion, or other negative action with respect to the employee's compensation, terms, conditions or privileges of employment) as a result of the employee's disclosure of information, participation in proceedings, or refusal to participate in activities described in §708.5 of this subpart.

You means the employee who files a complaint under this part, or the complainant.

### § 708.3 What employee complaints are covered?

This part applies to a complaint of retaliation filed by an employee of a contractor that performs work on be-

half of DOE, directly related to activities at a DOE-owned or -leased site, if the complaint stems from a disclosure, participation, or refusal described in \$708.5

### § 708.4 What employee complaints are not covered?

If you are an employee of a contractor, you may not file a complaint against your employer under this part if:

- (a) The complaint is based on race, color, religion, sex, age, national origin, or other similar basis; or
- (b) The complaint involves misconduct that you, acting without direction from your employer, deliberately caused, or in which you knowingly participated; or
- (c) Except as provided in §708.15(a), the complaint is based on the same facts for which you have chosen to pursue a remedy available under:
- (1) Department of Labor regulations at 29 CFR part 24, "Procedures for the Handling of Discrimination Complaints under Federal Employee Protection Statutes;"
- (2) Federal Acquisition Regulations, 48 CFR part 3, "Federal Acquisition Regulation; Whistleblower Protection for Contractor Employees (Ethics);" or
- (3) State or other applicable law, including final and binding grievance-arbitration, as described in §708.15 of subpart B: or
- (d) The complaint is based on the same facts in which you, in the course of a covered disclosure or participation, improperly disclosed Restricted Data, national security information, or any other classified or sensitive information in violation of any Executive Order, statute, or regulation. This part does not override any provision or requirement of any regulation pertaining to Restricted Data, national security information, or any other classified or sensitive information; or
- (e) The complaint deals with "terms and conditions of employment" within the meaning of the National Labor Relations Act, except as provided in \$708.5.

### § 708.5

## § 708.5 What employee conduct is protected from retaliation by an employer?

If you are an employee of a contractor, you may file a complaint against your employer alleging that you have been subject to retaliation for:

- (a) Disclosing to a DOE official, a member of Congress, any other government official who has responsibility for the oversight of the conduct of operations at a DOE site, your employer, or any higher tier contractor, information that you reasonably believe reveals—
- (1) A substantial violation of a law, rule, or regulation;
- (2) A substantial and specific danger to employees or to public health or safety; or
- (3) Fraud, gross mismanagement, gross waste of funds, or abuse of authority; or
- (b) Participating in a Congressional proceeding or an administrative proceeding conducted under this part; or
- (c) Subject to §708.7 of this subpart, refusing to participate in an activity, policy, or practice if you believe participation would—
- (1) Constitute a violation of a federal health or safety law: or
- (2) Cause you to have a reasonable fear of serious injury to yourself, other employees, or members of the public.

[57 FR 7541, Mar. 3, 1992, as amended at 65 FR 6319, Feb. 9, 2000]

### § 708.6 What constitutes "a reasonable fear of serious injury?"

Participation in an activity, policy, or practice may cause an employee to have a reasonable fear of serious injury that justifies a refusal to participate if:

- (a) A reasonable person, under the circumstances that confronted the employee, would conclude there is a substantial risk of a serious accident, injury, or impairment of health or safety resulting from participation in the activity, policy, or practice; or
- (b) An employee, because of the nature of his or her employment responsibilities, does not have the training or skills needed to participate safely in the activity or practice.

 $[57 \; \mathrm{FR} \; 7541, \; \mathrm{Mar.} \; 3, \; 1992, \; \mathrm{as} \; \mathrm{amended} \; \mathrm{at} \; 65 \; \mathrm{FR} \; 6319, \; \mathrm{Feb.} \; 9, \; 2000]$ 

#### § 708.7 What must an employee do before filing a complaint based on retaliation for refusal to participate?

You may file a complaint for retaliation for refusing to participate in an activity, policy, or practice only if:

- (a) Before refusing to participate in the activity, policy, or practice, you asked your employer to correct the violation or remove the danger, and your employer refused to take such action; and
- (b) By the 30th day after you refused to participate, you reported the violation or dangerous activity, policy, or practice to a DOE official, a member of Congress, another government official with responsibility for the oversight of the conduct of operations at the DOE site, your employer, or any higher tier contractor, and stated your reasons for refusing to participate.

### § 708.8 Does this part apply to pending cases?

The procedures in this part apply prospectively in any complaint proceeding pending on the effective date of this part.

## § 708.9 When is a complaint or other document considered to be "filed" under this part?

Under this part, a complaint or other document is considered "filed" on the date it is mailed or on the date it is personally delivered to the specified official or office.

## Subpart B—Employee Complaint Resolution Process

### § 708.10 Where does an employee file a complaint?

- (a) If you were employed by a contractor whose contract is handled by a contracting officer located in DOE Headquarters when the alleged retaliation occurred, you must file two copies of your written complaint with the EC Director.
- (b) If you were employed by a contractor at a DOE field facility or site when the alleged retaliation occurred, you must file two copies of your written complaint with the Head of Field Element at the DOE field element with jurisdiction over the contract.

## § 708.11 Will an employee's identity be kept confidential if the employee so requests?

No. The identity of an employee who files a complaint under this part appears on the complaint. A copy of the complaint is provided to the contractor and it becomes a public document.

### § 708.12 What information must an employee include in a complaint?

Your complaint does not need to be in any specific form but must be signed by you and contain the following:

- (a) A statement specifically describing
- (1) The alleged retaliation taken against you and
- (2) The disclosure, participation, or refusal that you believe gave rise to the retaliation:
- (b) A statement that you are not currently pursuing a remedy under State or other applicable law, as described in §708.15 of this subpart;
- (c) A statement that all of the facts that you have included in your complaint are true and correct to the best of your knowledge and belief; and
- (d) An affirmation, as described in §708.13 of this subpart, that you have exhausted (completed) all applicable grievance or arbitration procedures.

## § 708.13 What must an employee do to show that all grievance-arbitration procedures have been exhausted?

- (a) To show that you have exhausted all applicable grievance-arbitration procedures, you must:
- (1) State that all available opportunities for resolution through an applicable grievance-arbitration procedure have been exhausted, and provide the date on which the grievance-arbitration procedure was terminated and the reasons for termination; or
- (2) State that you filed a grievance under applicable grievance-arbitration procedures, but more than 150 days have passed and a final decision on it has not been issued, and provide the date that you filed your grievance; or
- (3) State that your employer has established no grievance-arbitration procedures.
- (b) If you do not provide the information specified in \$708.13(a), your complaint may be dismissed for lack of ju-

risdiction as provided in §708.17 of this subpart.

### § 708.14 How much time does an employee have to file a complaint?

- (a) You must file your complaint by the 90th day after the date you knew, or reasonably should have known, of the alleged retaliation.
- (b) The period for filing a complaint does not include time spent attempting to resolve the dispute through an internal company grievance-arbitration procedure. The time period for filing stops running on the day the internal grievance is filed and begins to run again on the earlier of:
- (1) The day after such dispute resolution efforts end; or
- (2) 150 days after the internal grievance was filed if a final decision on the grievance has not been issued.
- (c) The period for filing a complaint does not include time spent resolving jurisdictional issues related to a complaint you file under State or other applicable law. The time period for filing stops running on the date the complaint under State or other applicable law is filed and begins to run again the day after a final decision on the jurisdictional issues is issued.
- (d) If you do not file your complaint during the 90-day period, the Head of Field Element or EC Director (as applicable) will give you an opportunity to show any good reason you may have for not filing within that period, and that official may, in his or her discretion, accept your complaint for processing.

## § 708.15 What happens if an employee files a complaint under this part and also pursues a remedy under State or other law?

- (a) You may not file a complaint under this part if, with respect to the same facts, you choose to pursue a remedy under State or other applicable law, including final and binding grievance-arbitration procedures, unless:
- (1) Your complaint under State or other applicable law is dismissed for lack of jurisdiction;
- (2) Your complaint was filed under 48 CFR part 3, Subpart 3.9 and the Inspector General, after conducting an initial inquiry, determines not to pursue it; or

### § 708.16

- (3) You have exhausted grievance-arbitration procedures pursuant to §708.13, and issues related to alleged retaliation for conduct protected under §708.5 remain.
- (b) Pursuing a remedy other than final and binding grievance-arbitration procedures does not prevent you from filing a complaint under this part.
- (c) You are considered to have filed a complaint under State or other applicable law if you file a complaint, or other pleading, with respect to the same facts in a proceeding established or mandated by State or other applicable law, whether you file such complaint before, concurrently with, or after you file a complaint under this part.
- (d) If you file a complaint under State or other applicable law after filing a complaint under this part, your complaint under this regulation will be dismissed under §708.17(c)(3).

[57 FR 7541, Mar. 3, 1992, as amended at 65 FR 6319, Feb. 9, 2000]

# § 708.16 Will a contractor or a labor organization that represents an employee be notified of an employee's complaint and be given an opportunity to respond with information?

- (a) By the 15th day after receiving your complaint, the Head of Field Element or EC Director (as applicable) will provide your employer a copy of your complaint. Your employer has 10 days from receipt of your complaint to submit any comments it wishes to make regarding the allegations in the complaint.
- (b) If you are part of a bargaining unit represented for purposes of collective bargaining by a labor organization, the Head of Field Element or EC Director (as applicable) will provide your representative a copy of your complaint by the 15th day after receiving it. The labor organization will be advised that it has 10 days from the receipt of your complaint to submit any comments it wishes to make regarding the allegations in the complaint.

### § 708.17 When may DOE dismiss a complaint for lack of jurisdiction or other good cause?

(a) The Head of Field Element or EC Director (as applicable) may dismiss

- your complaint for lack of jurisdiction or for other good cause after receiving your complaint, either on his or her own initiative or at the request of a party named in your complaint. Such decisions are generally issued by the 15th day after the receipt of your employer's comments.
- (b) The Head of Field Element or EC Director (as applicable) will notify you by certified mail, return receipt requested, if your complaint is dismissed for lack of jurisdiction or other good cause, and give you specific reasons for the dismissal, and will notify other parties of the dismissal.
- (c) Dismissal for lack of jurisdiction or other good cause is appropriate if:
  - (1) Your complaint is untimely; or
- (2) The facts, as alleged in your complaint, do not present issues for which relief can be granted under this part; or
- (3) You filed a complaint under State or other applicable law with respect to the same facts as alleged in a complaint under this part; or
- (4) Your complaint is frivolous or without merit on its face; or
- (5) The issues presented in your complaint have been rendered moot by subsequent events or substantially resolved: or
- (6) Your employer has made a formal offer to provide the remedy that you request in your complaint or a remedy that DOE considers to be equivalent to what could be provided as a remedy under this part.

## § 708.18 How can an employee appeal dismissal of a complaint for lack of jurisdiction or other good cause?

- (a) If your complaint is dismissed by the Head of Field Element or EC Director, the administrative process is terminated unless you appeal the dismissal to the OHA Director by the 10th day after you receive the notice of dismissal as evidenced by a receipt for delivery of certified mail.
- (b) If you appeal a dismissal to the OHA Director, you must send copies of your appeal to the Head of Field Element or EC Director (as applicable) and all parties. Your appeal must include a copy of the notice of dismissal, and state the reasons why you think the dismissal was erroneous.

- (c) The OHA Director will issue a decision on your appeal and notify the parties of the decision by the 30th day after it is received.
- (d) The OHA Director's decision, either upholding the dismissal by the Head of Field Element or EC Director or ordering further processing of your complaint, is the final decision on your appeal, unless a party files a petition for Secretarial review by the 30th day after receiving the appeal decision.

## § 708.19 How can a party obtain review by the Secretary of Energy of a decision on appeal of a dismissal?

- (a) By the 30th day after receiving a decision on an appeal under §708.18 from the OHA Director, any party may file a petition for Secretarial review of a dismissal with the Office of Hearings and Appeals.
- (b) By the 15th day after filing the petition for Secretarial review, a party must file a statement setting forth the arguments in support of its position. A copy of the statement must be served on the other parties, who may file a response by the 20th day after receipt of the statement. Any response must also be served on the other parties.
- (c) All submissions permitted under this section must be filed with the Office of Hearings and Appeals.
- (d) After a petition for Secretarial review is filed, the Secretary (or his or her delegee) will issue the final agency decision on jurisdiction over the complaint. The Secretary will reverse or revise an appeal decision by the OHA Director only under extraordinary circumstances. In the event he or she determines that a revision in the appeal decision is appropriate, the Secretary will direct the OHA Director to issue an order either upholding the dismissal by the Head of Field Element or EC Director or ordering further processing of your complaint.

#### § 708.20 Will DOE encourage the parties to resolve the complaint informally?

(a) Yes. The Head of Field Element or EC Director (as applicable) may recommend that the parties attempt to resolve the complaint informally, for example, through mediation.

- (b) The period for attempting informal resolution of the complaint may not exceed 30 days from the date you filed your complaint, unless the parties agree to extend the time.
- (c) The 30-day period permitted for informal resolution of the complaint stops running when a request to dismiss your complaint on jurisdictional grounds is filed with the Head of Field Element or EC Director, and begins to run again on the date the OHA Director returns the complaint to the Head of Field Element or EC Director for further processing.
- (d) If the parties resolve the complaint informally, the Head of Field Element or EC Director (as applicable) must be given a copy of the settlement agreement or a written statement from you withdrawing the complaint.

### Subpart C—Investigation, Hearing and Decision Process

## § 708.21 What are the employee's options if the complaint cannot be resolved informally?

- (a) If the attempt at informal resolution is not successful, the Head of Field Element or EC Director (as applicable) will notify you in writing that you have the following options:
- (1) Request that your complaint be referred to the Office of Hearings and Appeals for a hearing without an investigation; or
- (2) Request that your complaint be referred to the Office of Hearings and Appeals for an investigation followed by a hearing.
- (b) You must notify the Head of Field Element or EC Director (as applicable), in writing, by the 20th day after receiving notice of your options, whether you request referral of your complaint to the Office of Hearings and Appeals for a hearing without an investigation, or an investigation followed by a hearing.
- (c) If the Head of Field Element or EC Director does not receive your response to the notice of options by the 20th day after your receipt of that notice, DOE will consider your complaint withdrawn.
- (d) If you timely request referral to the Office of Hearings and Appeals, the Head of Field Element or EC Director

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(as applicable) will forward your complaint to the OHA Director by the 5th day after receipt of your request.

(e) The Head of the Field Element or EC Director (as applicable) will notify all parties that the complaint has been referred to the Office of Hearings and Appeals, and state whether you have requested a hearing without an investigation or requested an investigation followed by a hearing.

## § 708.22 What process does the Office of Hearings and Appeals use to conduct an investigation of the complaint?

- (a) If you request a hearing without an investigation, the OHA Director will not initiate an investigation even if another party requests one.
- (b) If you request an investigation followed by a hearing, the OHA Director will appoint a person from the Office of Hearings and Appeals to conduct the investigation. The investigator may not participate or advise in the initial or final agency decision on your complaint.
- (c) The investigator will determine the appropriate scope of investigation based on the circumstances of the complaint. The investigator may enter and inspect places and records; make copies of records; interview persons alleged to have been involved in retaliation and other employees of the charged contractor who may have relevant information; take sworn statements; and require the production of any documents or other evidence
- (d) A contractor must cooperate fully with the investigator by making employees and all pertinent evidence available upon request.
- (e) A person being interviewed in an investigation has the right to be represented by a person of his or her choosing.
- (f) Parties to the complaint are not entitled to be present at interviews conducted by an investigator.
- (g) If a person other than the complainant requests that his or her identity be kept confidential, the investigator may grant confidentiality, but must advise such person that confidentiality means that the Office of Hearings and Appeals will not identify the person as a source of information to

anyone outside the Office of Hearings and Appeals, except as required by statute or other law, or as determined by the OHA Director to be unavoidable.

## § 708.23 How does the Office of Hearings and Appeals issue a report of investigation?

- (a) The investigator will complete the investigation and issue a report of investigation by the 60th day after the complaint is received by the Office of Hearings and Appeals, unless the OHA Director, for good cause, extends the investigation for no more than 30 days.
- (b) The investigator will provide copies of the report of investigation to the parties. The investigation will not be reopened after the report of investigation is issued.
- (c) If the parties informally resolve the complaint (e.g., through mediation) after an investigation is started, you must notify the OHA Director in writing of your decision to withdraw the complaint.

## § 708.24 Will there always be a hearing after a report of investigation is issued?

- (a) No. An employee may withdraw a hearing request after the report of investigation is issued. However, the hearing may be canceled only if all parties agree that they do not want a hearing.
- (b) If the hearing is canceled, the Hearing Officer will issue an initial agency decision pursuant to §708.31 of this subpart.

### § 708.25 Who will conduct the hearing?

- (a) The OHA Director will appoint a Hearing Officer from the Office of Hearings and Appeals to conduct a hearing.
- (b) The Hearing Officer may not be subject to the supervision or direction of the investigator.

## § 708.26 When and where will the hearing be held?

(a) The Hearing Officer will schedule a hearing to be held by the 90th day after receipt of the complaint, or issuance of the report of investigation, whichever is later. Any extension of the hearing date must be approved by the OHA Director.

(b) The Hearing Officer will schedule the hearing for a location near the site where the alleged retaliation occurred or your place of employment, or at another location that is appropriate considering the circumstances of a particular case.

### § 708.27 May the Hearing Officer recommend mediation to the parties?

The Hearing Officer may recommend, but may not require, that the parties attempt to resolve the complaint through mediation or other informal means at any time before issuance of an initial agency decision on the complaint.

## § 708.28 What procedures govern a hearing conducted by the Office of Hearings and Appeals?

- (a) In all hearings under this part:
- (1) The parties have the right to be represented by a person of their choosing or to proceed without representation. The parties are responsible for producing witnesses in their behalf, including requesting the issuance of subpoenas, if necessary;
- (2) Testimony of witnesses is given under oath or affirmation, and witnesses must be advised of the applicability of 18 U.S.C. 1001 and 1621, dealing with the criminal penalties associated with false statements and perjury;
- (3) Witnesses are subject to cross-examination;
- (4) Formal rules of evidence do not apply, but OHA may use the Federal Rules of Evidence as a guide; and
- (5) A court reporter will make a transcript of the hearing.
- (b) The Hearing Officer has all powers necessary to regulate the conduct of proceedings:
- (1) The Hearing Officer may order discovery at the request of a party, based on a showing that the requested discovery is designed to produce evidence regarding a matter, not privileged, that is relevant to the subject matter of the complaint;
- (2) The Hearing Officer may permit parties to obtain discovery by any appropriate method, including deposition upon oral examination or written questions; written interrogatories; production of documents or things; permission to enter upon land or other prop-

erty for inspection and other purposes; and requests for admission:

- (3) The Hearing Officer may issue subpoenas for the appearance of witnesses on behalf of either party, or for the production of specific documents or other physical evidence;
- (4) The Hearing Officer may rule on objections to the presentation of evidence; exclude evidence that is immaterial, irrelevant, or unduly repetitious; require the advance submission of documents offered as evidence; dispose of procedural requests; grant extensions of time; determine the format of the hearing; direct that written motions, documents, or briefs be filed with respect to issues raised during the course of the hearing; ask questions of witnesses; direct that documentary evidence be served upon other parties (under protective order if such evidence is deemed confidential); and otherwise regulate the conduct of the hearing:
- (5) The Hearing Officer may, at the request of a party or on his or her own initiative, dismiss a claim, defense, or party and make adverse findings upon the failure of a party or the party's representative to comply with a lawful order of the Hearing Officer, or, without good cause, to attend a hearing;
- (6) The Hearing Officer, upon request of a party, may allow the parties a reasonable time to file pre-hearing briefs or written statements with respect to material issues of fact or law. Any pre-hearing submission must be limited to the issues specified and filed within the time prescribed by the Hearing Officer.
- (7) The parties are entitled to make oral closing arguments, but post-hearing submissions are only permitted by direction of the Hearing Officer.
- (8) Parties allowed to file written submissions must serve copies upon the other parties within the time prescribed by the Hearing Officer.
- (9) The Hearing Officer is prohibited, beginning with his or her appointment and until a final agency decision is issued, from initiating or otherwise engaging in *ex parte* (private) discussions with any party on the merits of the complaint.

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### § 708.29 What must the parties to a complaint prove?

The employee who files a complaint has the burden of establishing by a preponderance of the evidence that he or she made a disclosure, participated in a proceeding, or refused to participate, as described under §708.5, and that such act was a contributing factor in one or more alleged acts of retaliation against the employee by the contractor. Once the employee has met this burden, the burden shifts to the contractor to prove by clear and convincing evidence that it would have taken the same action without the employee's disclosure, participation, or refusal.

## § 708.30 What process does the Hearing Officer follow to issue an initial agency decision?

- (a) The Hearing Officer will issue an initial agency decision on your complaint by the 60th day after the later of:
- (1) The date the Hearing Officer approves the parties' agreement to cancel the hearing:
- (2) The date the Hearing Officer receives the transcript of the hearing; or
- (3) The date the Hearing Officer receives post-hearing submissions permitted under §708.28(b)(7) of this subpart.
- (b) The Hearing Officer will serve the initial agency decision on all parties.
- (c) An initial agency decision issued by the Hearing Officer will contain appropriate findings, conclusions, an order, and the factual basis for each finding, whether or not a hearing has been held on the complaint. In making such findings, the Hearing Officer may rely upon, but is not bound by, the report of investigation.
- (d) If the Hearing Officer determines that an act of retaliation has occurred, the initial agency decision will include an order for any form of relief permitted under §708.36.
- (e) If the Hearing Officer determines that an act of retaliation has not occurred, the initial agency decision will state that the complaint is denied.

## § 708.31 If no hearing is conducted, what is the process for issuing an initial agency decision?

- (a) If no party wants a hearing after the issuance of a report of investigation, the Hearing Officer will issue an initial agency decision by the 60th day after the hearing is canceled pursuant to \$708.24. The standards in \$708.30, governing the issuance of an initial agency decision, apply whether or not a hearing has been held on the complaint.
- (b) The Hearing Officer will serve the initial agency decision on all parties.

### § 708.32 Can a dissatisfied party appeal an initial agency decision?

- (a) Yes. By the 15th day after receiving an initial agency decision from the Hearing Officer, any party may file a notice of appeal with the OHA Director requesting review of the initial agency decision.
- (b) A party who appeals an initial agency decision (the appellant) must serve a copy of the notice of appeal on all other parties.
- (c) A party who receives an initial agency decision by a Hearing Officer has not exhausted its administrative remedies until an appeal has been filed with the OHA Director and a decision granting or denying the appeal has been issued.

### § 708.33 What is the procedure for an appeal?

- (a) By the 15th day after filing a notice of appeal under §708.32, the appellant must file a statement identifying the issues that it wishes the OHA Director to review. A copy of the statement must be served on the other parties, who may file a response by the 20th day after receipt of the statement. Any response must also be served on the other parties.
- (b) In considering the appeal, the OHA Director:
- (1) May initiate an investigation of any statement contained in the request for review and utilize any relevant facts obtained by such investigation in conducting the review of the initial agency decision;

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- (2) May solicit and accept submissions from any party that are relevant to the review. The OHA Director may establish appropriate times to allow for such submissions;
- (3) May consider any other source of information that will advance the evaluation, provided that all parties are given an opportunity to respond to all third person submissions; and
- (4) Will close the record on appeal after receiving the last submission permitted under this section.

### § 708.34 What is the process for issuing an appeal decision?

- (a) If there is no appeal of an initial agency decision, and the time for filing an appeal has passed, the initial agency decision becomes the final agency decision.
- (b) If there is an appeal of an initial agency decision, the OHA Director will issue an appeal decision based on the record of proceedings by the 60th day after the record is closed.
- (1) An appeal decision issued by the OHA Director will contain appropriate findings, conclusions, an order, and the factual basis for each finding, whether or not a hearing has been held on the complaint. In making such findings, the OHA Director may rely upon, but is not bound by, the report of investigation and the initial agency decision.
- (2) If the OHA Director determines that an act of retaliation has occurred, the appeal decision will include an order for any form of relief permitted under § 708.36.
- (3) If the OHA Director determines that the contractor charged has not committed an act of retaliation, the appeal decision will deny the complaint.
- (c) The OHA Director will send an appeal decision to all parties and to the Head of Field Element or EC Director having jurisdiction over the contract under which you were employed when the alleged retaliation occurred.
- (d) The appeal decision issued by the OHA Director is the final agency decision unless a party files a petition for Secretarial review by the 30th day after receiving the appeal decision.

## § 708.35 How can a party obtain review by the Secretary of Energy of an appeal decision?

- (a) By the 30th day after receiving an appeal decision from the OHA Director, any party may file a petition for Secretarial review with the Office of Hearings and Appeals.
- (b) By the 15th day after filing a petition for Secretarial review, the petitioner must file a statement identifying the issues that it wishes the Secretary to consider. A copy of the statement must be served on the other parties, who may file a response by the 20th day after receipt of the statement. Any response must also be served on the other parties.
- (c) All submissions permitted under this section must be filed with the Office of Hearings and Appeals.
- (d) After a petition for Secretarial review is filed, the Secretary (or his or her delegee) will issue the final agency decision on the complaint. The Secretary will reverse or revise an appeal decision by the OHA Director only under extraordinary circumstances. In the event the Secretary determines that a revision in the appeal decision is appropriate, the Secretary will direct the OHA Director to issue a revised decision which is the final agency action on the complaint.

## § 708.36 What remedies for retaliation may be ordered in initial and final agency decisions?

- (a) General remedies. If the initial or final agency decision determines that an act of retaliation has occurred, it may order:
  - (1) Reinstatement;
  - (2) Transfer preference;
  - (3) Back pay;
- (4) Reimbursement of your reasonable costs and expenses, including attorney and expert-witness fees reasonably incurred to prepare for and participate in proceedings leading to the initial or final agency decision; or
- (5) Such other remedies as are deemed necessary to abate the violation and provide you with relief.
- (b) *Interim relief*. If an initial agency decision contains a determination that

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an act of retaliation occurred, the decision may order the contractor to provide you with appropriate interim relief (including reinstatement) pending the outcome of any request for review of the decision by the OHA Director. Such interim relief will not include payment of any money.

# § 708.37 Will an employee whose complaint is denied by a final agency decision be reimbursed for costs and expenses incurred in pursuing the complaint?

No. If your complaint is denied by a final agency decision, you may not be reimbursed for the costs and expenses you incurred in pursuing the complaint.

### § 708.38 How is a final agency decision implemented?

(a) The Head of Field Element having jurisdiction over the contract under which you were employed when the alleged retaliation occurred, or EC Director, will implement a final agency decision by forwarding the decision and order to the contractor, or subcontractor, involved.

(b) A contractor's failure or refusal to comply with a final agency decision and order under this regulation may result in a contracting officer's decision to disallow certain costs or terminate the contract for default. In the event of a contracting officer's decision to disallow costs or terminate a contract for default, the contractor may file a claim under the disputes procedures of the contract.

# § 708.39 Is a decision and order implemented under this regulation considered a claim by the government against a contractor or a decision by the contracting officer under sections 6 and 7 of the Contract Disputes Act?

No. A final agency decision and order issued pursuant to this regulation is not considered a claim by the government against a contractor or "a decision by the contracting officer" under sections 6 and 7 of the Contract Disputes Act (41 U.S.C. 605 and 606).

## § 708.40 Are contractors required to inform their employees about this program?

Yes. Contractors who are covered by this part must inform their employees about these regulations by posting notices in conspicuous places at the work site. These notices must include the name and address of the DOE office where you can file a complaint under this part.

[64 FR 37397, July 12, 1999]

#### § 708.41 Will DOE ever refer a complaint filed under this part to another agency for investigation and a decision?

Notwithstanding the provisions of this part, the Secretary of Energy retains the right to request that a complaint filed under this part be accepted by another Federal agency for investigation and factual determinations.

[64 FR 37397, July 12, 1999]

#### § 708.42 May the deadlines established by this part be extended by any DOE official?

Yes. The Secretary of Energy (or the Secretary's designee) may approve the extension of any deadline established by this part, and the OHA Director may approve the extension of any deadline under \$708.22 through \$708.34 of this subpart (relating to the investigation, hearing, and OHA appeal process).

[64 FR 37397, July 12, 1999]

## § 708.43 Does this rule impose an affirmative duty on DOE contractors not to retaliate?

Yes. DOE contractors may not retaliate against any employee because the employee (or any person acting at the request of the employee) has taken an action listed in  $\S708.5(a)$ –(c).

[65 FR 6319, Feb. 9, 2000; 65 FR 9201, Feb. 24, 2000]

## PART 709—POLYGRAPH EXAMINATION REGULATIONS

### Subpart A—General Provisions

Sec.

709.1 What is the purpose of this part?

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- 709.2 What is the scope of this part?
- 709.3 What are the definitions of the terms used in this part?
- 709.4 To whom does the polygraph examination requirement under this part apply?
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### Subpart B—Polygraph Examination Protocols and Protection of National Security

- 709.11 What types of topics are within the scope of a polygraph examination?
- 709.12 How does DOE determine the wording of questions?
- 709.13 May an individual refuse to take a polygraph examination?
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## Subpart C—Safeguarding Privacy and Employee Rights

- 709.21 When is an individual notified that a polygraph examination is scheduled?
- 709.22 What rights to counsel or other representation does an individual have?
- 709.23 How does DOE obtain an individual's consent to a polygraph examination?
- 709.24 What other information is provided to the individual prior to a polygraph examination?
- 709.25 Are there limits on use of polygraph examination results that reflect "deception indicated" or "no opinion"?
- 709.26 How does DOE protect the confidentiality of polygraph examination records?

### Subpart D—Polygraph Examination and Examiner Standards

- 709.31 What are the DOE standards for polygraph examinations and polygraph examiners?
- 709.32 What are the training requirements for polygraph examiners?

AUTHORITY: 42 U.S.C. 2011,  $et\ seq.$ , 42 U.S.C. 7101,  $et\ seq.$ , 42 U.S.C. 7383h.

Source: 64 FR 70975, Dec. 17, 1999, unless otherwise noted.

### **Subpart A—General Provisions**

### § 709.1 What is the purpose of this part?

This part:

- (a) Describes the categories of individuals who are eligible for counter-intelligence-scope polygraph testing; and
- (b) Provides guidelines for the use of counterintelligence-scope polygraph examinations and for the use of exculpatory polygraph examinations, upon the request of an individual, in order to resolve counterintelligence investigations and personnel security issues; and
- (c) Provides guidelines for protecting the rights of individual DOE, and DOE contractor, and employees subject to this rule.

### § 709.2 What is the scope of this part?

This part includes:

- (a) A description of the conditions under which DOE may administer and use polygraph examinations;
- (b) A description of the positions which DOE may subject to polygraph examination;
- (c) Controls on the use of polygraph examinations; and
- (d) Safeguards to prevent unwarranted intrusion into the privacy of individuals.

### § 709.3 What are the definitions of the terms used in this part?

For purposes of this part:

Accelerated Access Authorization Program or AAAP means the program for granting interim access to classified matter and special nuclear material based on a drug test, a National Agency Check, a psychological assessment, and a counterintelligence-scope polygraph examination consistent with this part.

Access means the admission of DOE and contractor employees and applicants for employment, and other individuals assigned or detailed to Federal positions at DOE to the eight categories of positions identified in §709.4(a)(1)–(8).

Access authorization means an administrative determination that an individual is eligible for access to classified

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matter or is eligible for access to, or control over, special nuclear material.

Adverse personnel action means

- (1) With regard to a DOE employee, the removal, suspension for more than 14 days, reduction in grade or pay, or a furlough of 30 days or less as described in 5 U.S.C. Chapter 75; or
- (2) With regard to a contractor employee, the discharge, discipline, or denial of employment or promotion, or any other discrimination in regard to hire or tenure of employment or any term or condition of employment.

Contractor means a DOE contractor or a subcontractor at any tier.

Control questions means questions used during a polygraph examination that are designed to produce a physiological response, which may be compared to the physiological responses to the relevant questions.

Counterintelligence means information gathered and activities conducted to protect against espionage, other intelligence activities, sabotage, or assassinations conducted by or on behalf of foreign governments or elements thereof, foreign organizations, or foreign persons, or international terrorist activities.

Deception indicated means an opinion that indicates that an analysis of the polygraph charts reveal physiological responses to the relevant questions that were indicative of evasion.

DOE means the Department of Energy.

Eligibility evaluation means the process employed by the Office of Counter-intelligence to determine whether DOE and contractor employees and applicants for employment, and other individuals assigned or detailed to Federal positions at DOE will be recommended for access or continued access to the eight categories of positions identified in § 709.4(a)(1)–(8).

Intelligence means information relating to the capabilities, intentions, or activities of foreign governments or elements thereof, foreign organizations or foreign persons.

Local commuting area means the geographic area that usually constitutes one area for employment purposes. It includes any population center (or two or more neighboring ones) and the surrounding localities in which people live and can reasonably be expected to travel back and forth daily to their usual employment.

No deception indicated means an opinion that indicates that an analysis of the polygraph charts revealed the physiological responses to the relevant questions were not indicative of evasion.

No opinion refers to an evaluation of a polygraph test in which the polygraph examiner cannot render an opinion based upon the physiological data on the polygraph charts.

Personnel Assurance Program or PAP means the human reliability program set forth under 10 CFR part 711 designed to ensure that individuals assigned to nuclear explosive duties do not have emotional, mental or physical incapacities that could result in a threat to nuclear explosive safety.

Personnel Security Assurance Program or PSAP means the program in subpart B of 10 CFR part 710.

Personnel security clearance means an administrative determination that an individual is eligible for access to classified matter or is eligible for access to, or control over, special nuclear material.

Polygraph means an instrument that (1) Records continuously, visually, permanently, and simultaneously changes in cardiovascular, respiratory, and electrodermal patterns as minimum instrumentation standards; and

(2) Is used, or the results of which are used, for the purpose of rendering a diagnostic opinion regarding the honesty or dishonesty of an individual.

Polygraph examination means a process that encompasses all activities that take place between a polygraph examiner and individual during a specific series of interactions, including the pretest interview, the use of the polygraph instrument to collect physiological data from the individual while the polygraph examiner is presenting a series of tests, the test data analysis phase, and the post-test phase.

Polygraph examination records means all records of the polygraph examination, including the polygraph report, audio-video recording, and the polygraph consent form.

Polygraph report refers to a polygraph document that may contain identifying

data of the individual, a synopsis of the basis for which the examination was conducted, the relevant questions utilized and the polygraph examiner's conclusions.

Polygraph test means that portion of the polygraph examination during which the polygraph instrument collects physiological data based upon the individual's responses to test questions from the examiner.

Relevant questions are those questions used during the polygraph examination that pertain directly to the issues for which the examination is being conducted.

Special Access Program or SAP means a program established under Executive Order 12958 for a specific class of classified information that imposes safeguarding and access requirements that exceed those normally required for information at the same classification level

Unresolved issues refers to an opinion which indicates that the analysis of the polygraph charts revealed consistent, significant, timely physiological responses to the relevant questions in personnel screening.

## § 709.4 To whom does the polygraph examination requirement under this part apply?

- (a) Except as provided in paragraph (b) of this section, this part applies to DOE and contractor employees and applicants for employment, and other individuals assigned or detailed to Federal positions at DOE, who are in:
- (1) Positions that DOE has determined include counterintelligence activities or access to counterintelligence sources and methods;
- (2) Positions that DOE has determined include intelligence activities or access to intelligence sources and methods:
- (3) Positions requiring access to information that is protected within a non-intelligence special access program (SAP) designated by the Secretary of Energy;
- (4) Positions that are subject to the Personnel Security Assurance Program (PSAP):
- (5) Positions that are subject to the Personnel Assurance Program (PAP);

- (6) Positions that DOE has determined have a need-to-know or access to information specifically designated by the Secretary regarding the design and operation of nuclear weapons and associated use control features;
- (7) Positions within the Office of Independent Oversight and Performance Assurance, or any successor thereto, involved in inspection and assessment of safeguards and security functions, including cyber security, of the Department:
- (8) Positions within the Office of Security and Emergency Operations, or any successor thereto;
- (9) The Accelerated Access Authorization Program (AAAP); and
- (10) Positions where the applicant or incumbent has requested a polygraph examination in order to respond to questions that have arisen in the context of counterintelligence investigations or personnel security issues. These examinations are referred to in this part as exculpatory polygraph examinations.
  - (b) This part does not apply to:
- (1) Any individual for whom the Director of the Office of Counterintelligence (D/OCI), gives a waiver, based upon certification from another Federal agency that the individual has successfully completed a full scope or counterintelligence-scope polygraph examination administered within the last five years;
- (2) Any individual who is being treated for a medical or psychological condition or is taking medication that, based upon consultation with the individual, the DOE Test Center determines would preclude the individual from being tested; or
- (3) Any individual for whom the Secretary of Energy gives a written waiver in the interest of national security.
- (c) The Program Manager responsible for each program with positions identified in paragraphs (a)(1)–(8) of this section identifies in the first instance, in order of priority, those specific positions that will be polygraphed.
- (d) The Program Manager submits positions identified under paragraph (c) of this section to the D/OCI for review and concurrence. The D/OCI forwards the positions, with suggested additions

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or deletions, to the Secretary for approval.

## § 709.5 How will an individual know if his or her position will be eligible for a polygraph examination?

- (a) All positions in the programs described in \$709.4(a)(1)-(8) are eligible for polygraph examination. When a polygraph examination is scheduled, DOE must notify the individual, in accordance with \$709.21.
- (b) Any job announcement or posting with respect to any position in those programs must indicate that the selection of an individual for the position may be conditioned upon his or her successful completion of a counter-intelligence-scope polygraph examination.

### § 709.6 How often will an individual be subject to polygraph examination?

Positions identified in §709.4(a)(1)–(8) are subject to a five year periodic, as well as an aperiodic, reinvestigation polygraph.

### Subpart B—Polygraph Examination Protocols and Protection of National Security

#### § 709.11 What types of topics are within the scope of a polygraph examination?

- (a) DOE may ask questions that are appropriate to a counterintelligence-scope examination or that are relevant to the matter at issue in an exculpatory examination.
- (b) A counterintelligence-scope polygraph examination is limited to topics concerning the individual's involvement in espionage, sabotage, terrorism, unauthorized disclosure of classified information, unauthorized foreign contacts, and deliberate damage to or malicious misuse of a U.S. government information or defense system.
  - (c) DOE may not ask questions that:
- (1) Probe a person's thoughts or beliefs:
- (2) Concern conduct that has no counterintelligence implication; or
- (3) concern conduct that has no direct relevance to an investigation.

### § 709.12 How does DOE determine the wording of questions?

The examiner determines the exact wording of the polygraph questions based on the examiner's pretest interview of the individual, the individual's understanding of the questions, and other input from the individual.

### § 709.13 May an individual refuse to take a polygraph examination?

- (a) Yes. An individual may refuse to take a counterintelligence-scope or exculpatory polygraph examination, and an individual being examined may terminate the examination at any time.
- (b) If an individual terminates a counterintelligence-scope or exculpatory polygraph examination prior to the completion of the examination, DOE may treat that termination as a refusal to take a polygraph examination under § 709.14.

## § 709.14 What are the consequences of a refusal to take a polygraph examination?

- (a) If an individual is an applicant for employment, assignment, or detail to one of the positions described in §709.4(a)(1)–(8), and the individual refuses to take a counterintelligence polygraph examination required by statute as an initial condition of access, DOE and its contractors must refuse to employ, assign, or detail the individual to the identified position.
- (b) If the individual is an applicant for employment, assignment, or detail to one of the positions described in §709.4(a)(1)–(8) and the individual refuses to take a counterintelligence polygraph examination otherwise required by this part, DOE and its contractors may refuse to employ, assign, or detail the individual to the identified position.
- (c) If an individual is an incumbent in a position described in §709.4(a)(1)–(8) and the individual refuses to take a counterintelligence polygraph examination required by statute as a condition of continued access, DOE and its contractors must deny the individual access to the information or involvement in the activities that justified conducting the examination, consistent with §709.15. If the individual is a DOE employee, DOE may reassign or

realign the individual's duties, within the local commuting area, or take other action, consistent with that denial of access.

- (d) If the individual is an incumbent in a position described in §709.4(a)(1)–(8), and the individual refuses to take a counterintelligence polygraph examination as required by this part, DOE and its contractors may deny that individual access to the information or involvement in the activities that justified conducting the examination, consistent with §709.15. If the individual is a DOE employee, DOE may reassign or realign the individual's duties, within the local commuting area, or take other action, consistent with that denial of access.
- (e) If the individual is a DOE employee whose current position does not require a counterintelligence polygraph examination and is an applicant for employment, assignment, or detail to one of the positions described in §709.4(a)(1)-(8), the individual's refusal to take a polygraph examination will not affect the individual's current employment status.
- (f) If an individual refuses to take a polygraph examination as part of the Accelerated Access Authorization Program, DOE must terminate the accelerated authorization process and the individual may continue to be processed for access authorization under the standard DOE personnel security process.
- (g) Since an exculpatory polygraph examination is administered at the request of an individual, DOE and its contractors may not take any adverse personnel action against an individual for refusing to request or take an exculpatory polygraph examination. DOE and its contractors may not record an individual's refusal to take an exculpatory polygraph examination in the individual's personnel security file, or any investigative file. DOE also may not record the fact of that refusal in a DOE employee's personnel file.
- (h) If a DOE employee refuses to take a counterintelligence polygraph examination, DOE may not record the fact of that refusal in the employee's personnel file.

### § 709.15 How does DOE use polygraph examination results?

- (a) If, following the completion of the polygraph test, there are any unresolved issues, the polygraph examiner must conduct an in-depth interview of the individual to address those unresolved issues.
- (b) If, after the polygraph examination, there are remaining unresolved issues that raise significant questions relevant to the individual's access to the information or involvement in the activities that justified the polygraph examination, DOE must so advise the individual and provide an opportunity for the individual to undergo an additional polygraph examination. If the additional polygraph examination is not sufficient to resolve the matter, DOE must undertake a comprehensive investigation of the individual, using the polygraph examination as an investigative lead.
- (c) The Office of Counterintelligence (OCI) will conduct an eligibility evaluation that considers examination results, the individual's personnel security file, and other pertinent information. If unresolved issues remain at the time of the eligibility evaluation, DOE will interview the individual if it is determined that a personal interview will assist in resolving the issue. No denial or revocation of access will occur until the eligibility evaluation is completed.
- (d) Following the eligibility evaluation, D/OCI must recommend, in writing, to the Program Manager responsible for the access that the individual's access be approved or retained, or denied or revoked.
- (1) If the Program Manager agrees with the recommendation, the Program Manager will notify the individual, in writing, that the individual's access has been approved or retained, or denied or revoked.
- (2) If the Program Manager disagrees with the D/OCI's recommendation the matter will be referred to the Secretary for a final decision.
- (3) If the Program Manager denies or revokes the individual's access, and the individual is a DOE employee, DOE may reassign the individual or realign the individual's duties within the local commuting area or take other actions consistent with the denial of access.

### § 709.21

- (4) If the Program Manager denies the individual's access and the individual is an applicant for employment, assignment, or detail to one of the positions described in 709.4(a)(1)–(8), DOE and its contractors may refuse to employ, assign or detail the individual to the identified position.
- (5) If the Program Manager revokes the access of an individual assigned or detailed to DOE, DOE may remove the individual from access to the information that justified the polygraph examination and return the individual to the agency of origin.
- (6) If the Program Manager denies or revokes the access for an individual applying for a DOE access authorization or already holding a DOE access authorization, DOE may initiate an administrative review of the individual's clearance eligibility under the DOE regulations governing eligibility for a security clearance at 10 CFR part 710.
- (7) For cases involving a question of loyalty to the United States, DOE may refer the matter to the FBI as required by section 145d of the AEA.
- (e) DOE and contractor employees, applicants for employment, and other individuals assigned or detailed to Federal positions within DOE whose access the categories described \$709.4(a)(1)-(8) is denied or revoked may request reconsideration by the relevant head of the departmental element, as identified in the notice of denial or revocation. Individuals who decline to take the counterintelligence scope polygraph examination will not be afforded these reconsideration rights.
- (f) Utilizing the DOE security criteria used to grant or deny access to classified information, OCI will make a determination whether an individual completing a counterintelligence polygraph examination has made disclosures that warrant referral, as appropriate, to the Office of Security and Emergency Operations or the Manager of the applicable Operations Office. OCI will not report minor security infractions that do not create a serious question as to the individual's eligibility for a personnel security clearance.

## Subpart C—Safeguarding Privacy and Employee Rights

## § 709.21 When is an individual notified that a polygraph examination is scheduled?

When a polygraph examination is scheduled, DOE must notify the individual, in writing, of the date, time, and place of the polygraph examination, and the individual's right to obtain and consult with legal counsel or to secure another representative prior to the examination. DOE must provide a copy of this part to the individual. The individual must receive the notification at least ten days, excluding weekend days and holidays, before the time of the examination except when good cause is shown or when the individual waives the advance notice provision.

## § 709.22 What rights to counsel or other representation does an individual have?

- (a) At the individual's own expense, an individual has the right to obtain and consult with legal counsel or another representative prior to the polygraph examination. The counsel or representative may not be present during the polygraph examination. No one other than the individual and the examiner may be present in the examination room during the polygraph examination.
- (b) At the individual's own expense, an individual has the right to obtain and consult with legal counsel or another representative at any time during an interview conducted in accordance with §709.15(c).

#### § 709.23 How does DOE obtain an individual's consent to a polygraph examination?

DOE may not administer a polygraph examination unless DOE has:

- (a) Notified the individual of the polygraph examination in writing in accordance with § 709.21; and
- (b) Obtained written consent from the individual.

## § 709.24 What other information is provided to the individual prior to a polygraph examination?

Before administering the polygraph examination, the examiner must:

- (a) Inform the individual of the use of audio and video recording devices and other observation devices, such as two-way mirrors and observation rooms;
- (b) Explain to the individual the characteristics and nature of the polygraph instrument and examination;
- (c) Explain the physical operation of the instrument and the procedures to be followed during the examination;
- (d) Review with the individual the control questions and relevant questions to be asked during the examination:
- (e) Advise the individual of the individual's privilege against self-incrimination; and
- (f) Provide the individual with a preaddressed envelope addressed to the D/ OCI in Washington, D.C., which may be used to submit comments or complaints concerning the examination.

## § 709.25 Are there limits on use of polygraph examination results that reflect "deception indicated" or "no opinion"?

- (a) DOE or its contractors may not:
- (1) Take an adverse personnel action against an individual solely on the basis of a polygraph examination result of "deception indicated" or "no opinion"; or
- (2) Use a polygraph examination that reflects "deception indicated" or "no opinion" as a substitute for any other required investigation.
- (b) The Secretary or the D/OCI may suspend an individual's access based upon a written determination that the individual's admission of involvement in one or more of the activities covered by the counterintelligence polygraph, when considered in the context of the individual's access to one or more of the high risk programs identified in §709.4(a)(1)–(8), poses an unacceptable risk to national security or defense. In such cases, DOE will investigate the matter immediately and make a determination of whether to revoke the individual's access.

## § 709.26 How does DOE protect the confidentiality of polygraph examination records?

- (a) DOE owns all polygraph examination records and reports.
- (b) Except as provided in paragraph (c) of this section, the Office of Counterintelligence maintains all polygraph examination records and reports in a system of records established under the Privacy Act of 1974, 5 U.S.C. 552a.
- (c) The Office of Intelligence also may maintain polygraph examination reports generated with respect to individuals identified in §709.4(a)(2) in a system of records established under the Privacy Act.
- (d) Polygraph examination records and reports used to make AAAP determinations or generated as a result of an exculpatory personnel security polygraph examination are maintained in a system of records established under the Privacy Act of 1974.
- (e) DOE must afford the full privacy protection provided by law to information regarding an employee's refusal to take a polygraph examination.
- (f) With the exception of the polygraph report, all other polygraph examination records are destroyed ninety days after the eligibility evaluation is completed, provided that a favorable recommendation has been made to grant or continue the access to the position. If a recommendation is made to deny or revoke access to the information or involvement in the activities that justified conducting the polygraph examination, then all the records are retained at least until the final resolution of any request for reconsideration by the individual or the completion of any ongoing investigation.

### Subpart D—Polygraph Examination and Examiner Standards

## § 709.31 What are the DOE standards for polygraph examinations and polygraph examiners?

- (a) DOE adheres to the procedures and standards established by the Department of Defense Polygraph Institute (DODPI). DOE administers only DODPI approved testing formats.
- (b) A polygraph examiner may administer no more than five polygraph examinations in any twenty-four hour

### § 709.32

period. This does not include those instances in which an individual voluntarily terminates an examination prior to the actual testing phase.

- (c) The polygraph examiner must be certified to conduct polygraph examinations under this part by the DOE Psychophysiological Detection of Deception/Polygraph Program Quality Control Official.
- (d) To be certified under paragraph (c) of this section, an examiner must have the following minimum qualifica-
- (1) The examiner must be an experienced counterintelligence or criminal investigator with extensive additional training in using computerized instrumentation in Psychophysiological Detection of Deception and in psychology, physiology, interviewing, and interrogation.
- (2) The examiner must have a favorably adjudicated single-scope background investigation, complete a counterintelligence-scope polygraph examination, and must hold a "Q" access authorization, which is necessary for access to Secret Restricted Data and Top Secret National Security Information. In addition, he or she must have been granted SCI access approval.
- (3) The examiner must receive basic Forensic Psychophysiological Detection of Deception training from the DODPI.
- (4) The examiner must be certified by DOE to conduct the following tests:
- (i) Test for Espionage, Sabotage, and Terrorism:
- (ii) Counterintelligence-Scope Polygraph Tests:
  - (iii) Zone Comparison Tests;
  - (iv) Modified General Question Tests;
- (v) Peak of Tension Tests; and,
- (vi) Relevant and Irrelevant and Directed Lie Control Tests.

### § 709.32 What are the training requirements for polygraph examiners?

- (a) Examiners must complete an initial training course of thirteen weeks, or longer, in conformance with the procedures and standards established by DODPI.
- (b) Examiners must undergo annual continuing education for a minimum of forty hours training within the discipline of Forensic

Psychophysiological Detection of Deception.

- (c) The following organizations provide acceptable curricula to meet the training requirement of paragraph (b) of this section:
  - (1) American Polygraph Association,
- (2) American Association of Police Polygraphists, and
- (3) Department of Defense Polygraph Institute.

### PART 710—CRITERIA AND PROCE-**DURES FOR DETERMINING ELIGI-**BILITY FOR ACCESS TO CLASSI-FIED MATTER OR SPECIAL NU-CLEAR MATERIAL

### Subpart A-General Criteria and Procedures for Determining Eligibility for Access to Classified Matter or Special **Nuclear Material**

#### GENERAL PROVISIONS

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- Purpose. 710.1
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CRITERIA AND PROCEDURES FOR DETERMINING ELIGIBILITY FOR ACCESS TO CLASSIFIED MATTER OR SPECIAL NUCLEAR MATERIAL

- 710.6 Cooperation by the individual.
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- 710.32 Terminations
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### **Department of Energy**

APPENDIX A TO SUBPART A OF PART 710-SE-LECTED PROVISIONS OF THE ATOMIC EN-ERGY ACT OF 1954, AS AMENDED, SEC. 141 (42 U.S.C. 2161), SEC. 145 (42 U.S.C. 2165), SEC. 161 (42 U.S.C. 2201)

Subpart B—Criteria and Procedures for Establishment of the Personnel Security Assurance Program and Determinations of an Individual's Eligibility for Access to a Personnel Security Assurance Program Position

#### GENERAL PROVISIONS

- 710.50 Purpose.
- 710.51 Scope.
- 710.52 References.
- 710.53 Policy
- 710.54 Definitions.

#### PROCEDURES

- 710.55 Designation of PSAP positions.
- 710.56Program process.
- 710.57 Supervisory review.
- 710.58 Medical assessment.
- 710.59 Management evaluation.
- 710.60 DOE security review and clearance determination.

AUTHORITY: Sec. 145, 68 Stat. 942 (42 U.S.C. 2165) and sec. 161, 68 Stat. 948 (42 U.S.C. 2201); E.O. 10450, 3 CFR 1949-1953 Comp., p. 936, as amended; E.O. 10865, 3 CFR 1959-1963 Comp., p. 398, as amended, 3 CFR Chap. IV; sec. 104(c), 38 Stat. 1237 (42 U.S.C. 5814); sec. 105(a), 88 Stat. 1238 (42 U.S.C. 5815); secs. 641, 644, 646, 91 Stat. 598, 599 (42 U.S.C. 7251, 7254, and 7256).

### Subpart A—General Criteria and **Procedures for Determining** Eligibility for Access to Classified Matter or Special Nuclear Material

Source: 59 FR 35185, July 8, 1994, unless otherwise noted.

#### GENERAL PROVISIONS

#### §710.1 Purpose.

(a) This subpart establishes the criteria, procedures, and methods for resolving questions concerning the eligibility of individuals who are employed by, or applicants for employment with, Department of Energy (DOE) contractors, agents, and access permittees, individuals who are DOE employees or applicants for DOE employment, and other persons designated by the Secretary of Energy, for access to Restricted Data or special nuclear material, pursuant to the Atomic Energy Act of 1954, as amended, or for access to national security information.

(b) This subpart is published to implement Executive Order 12356, 47 FR 14874 (April 2, 1982), Executive Order 10865, 25 FR 1583 (February 24, 1960), and Executive Order 10450, 18 FR 2489 (April 27, 1954), all as amended.

#### § 710.2 Scope.

The criteria and procedures outlined in this subpart shall be used in those cases in which there are questions of eligibility for DOE access authorization involving:

- (a) Employees (including consultants) of, and applicants for employment with, contractors and agents of the DOE:
- (b) Access permittees of the DOE and their employees (including consultants) and applicants for employment;
- (c) Employees (including consultants) of, and applicants for employment with, the DOE; and
- (d) Other persons designated by the Secretary of Energy.

### § 710.3 Reference.

The pertinent sections of the Atomic Energy Act of 1954, as amended, relative to this regulation are set forth in Appendix A to this subpart.

### § 710.4 Policy.

- (a) It is the policy of DOE to provide for the security of its programs in a manner consistent with traditional American concepts of justice and fairness. To this end, the Secretary has established criteria for determining eligibility for access authorization and procedures that will afford those individuals described in §710.2 the opportunity for administrative review of questions concerning their eligibility for access authorization.
- (b) It is also the policy of DOE that none of the procedures established by DOE for determining eligibility for access authorization shall be used for an improper purpose, including any attempt to coerce, restrain, threaten, intimidate, or retaliate against individuals for exercising their rights under

any statute, regulation or DOE directive. Any DOE officer or employee violating, or causing the violation of this policy, shall be subject to appropriate disciplinary action.

- (c) In instances where the individual has been convicted of a crime punishable by imprisonment of six (6) months or longer, or the individual is currently awaiting or serving a form of preprosecution probation, or suspended or deferred sentencing, court ordered probation, or parole in conjunction with an arrest or criminal charges initiated against the individual for a crime that is punishable by imprisonment of six (6) months or longer, the DOE may suspend processing an application for access authorization until such time as the criminal prosecution. suspended sentence, deferred sentencing, probation, or parole has been completed.
- (d) DOE may suspend processing an application for access authorization if sufficient information about the individual's background cannot be obtained to meet the investigative scope and extent requirements for the access authorization requested.
- (e) DOE may suspend processing an application for access authorization until such time as a question regarding an individual's national allegiance is resolved. For example, if an individual is exercising rights of citizenship conferred by a country other than the United States, DOE will be concerned with whether granting access authorization to that individual constitutes an unacceptable national security risk.
- (f) DOE may suspend processing an application for access authorization whenever an individual fails to fulfill the responsibilities described in §710.6.

#### § 710.5 Definitions.

(a) As used in this subpart:

Access authorization means an administrative determination that an individual is eligible for access to classified matter or is eligible for access to, or control over, special nuclear material.

DOE Counsel means a DOE attorney assigned to represent DOE in proceedings under this subpart. DOE Counsel shall be a U.S. citizen and shall have been subject to a favorably adjudicated background investigation.

Hearing Officer means a DOE attorney or senior management official appointed by the Director, Office of Hearings and Appeals, pursuant to §710.25. A Hearing Officer shall be a U.S. citizen and shall have been subject to a favorably adjudicated background investigation.

Local Director of Security means the Operations Office or Naval Reactors Office Division Director of Security, or other similar title; for Washington, DC area cases, the Director, Headquarters Operations Division; for the Oak Ridge Operations Office, the Director of Personnel; for the Albuquerque Operations Office, the Director of the Personnel Security Division; for the Savannah River Operations Office, the Director of Internal Security Division; and any person designated in writing to serve in one of the aforementioned positions in an "acting" capacity.

National Security Information means any information that has been determined, pursuant to Executive Order No. 12356 or any predecessor Order, to require protection against unauthorized disclosure and that is so designated.

Operations Office Manager or Manager means the Manager of a DOE Operations Office, the Manager of the Rocky Flats Office, the Manager of the Pittsburgh Naval Reactors Office, the Manager of the Schenectady Naval Reactors Office, and, for Washington, DC area cases, the Director, Office of Safeguards and Security.

Secretary means the Secretary of Energy, as provided by section 201 of the Department of Energy Organization Act.

Special nuclear material means plutonium, uranium enriched in the isotope 233, or in the isotope 235, and any other material which, pursuant to the provisions of Section 51 of the Atomic Energy Act of 1954, as amended, has been determined to be special nuclear material, but does not include source material; or any material artificially enriched by any of the foregoing, not including source material.

(b) Throughout this subpart the use of the male gender shall include the female gender and vice versa.

CRITERIA AND PROCEDURES FOR DETERMINING ELIGIBILITY FOR ACCESS TO CLASSIFIED MATTER OR SPECIAL NUCLEAR MATERIAL

#### §710.6 Cooperation by the individual.

(a) It is the responsibility of the individual to cooperate by providing full, frank, and truthful answers to DOE's relevant and material questions, and when requested, to furnish or authorize others to furnish information that the DOE deems pertinent to the individual's eligibility for DOE access authorization. This obligation to cooperate applies when completing security forms, during the course of a personnel security background investigation or reinvestigation, and at any stage of DOE's processing of the individual's access authorization, including but not limited to, personnel security interviews, DOE-sponsored mental evaluations, and other authorized DOE investigative activities under this subpart. The individual may elect not to cooperate; however, such refusal may prevent DOE from reaching an affirmative finding required for granting or continuing access authorization. In this event, any access authorization then in effect may be terminated, or, for applicants, further processing may be suspended.

(b) If the individual believes that the provisions of paragraph (a) of this section have been inappropriately applied in his case, he may file a written appeal of the action with the Director, Office of Safeguards and Security, DOE Headquarters, within 30 calendar days of the date he was notified of the action.

(c) Upon receipt of the written appeal, the Director, Office of Safeguards and Security, shall conduct an inquiry as to the circumstances involved in the action and shall, within 30 calendar days of receipt of the written appeal, notify the individual, in writing, as to whether the action to terminate or suspend processing of access authorization was appropriate. If the Director, Office of Safeguards and Security, determines that the action was inappropriate, he shall direct that the individual continue to be processed for access authorization, or that access authorization for the individual be reinstated.

#### §710.7 Application of the criteria.

(a) The decision as to access authorization is a comprehensive, commonsense judgment, made after consideration of all the relevant information, favorable or unfavorable, as to whether the granting of access authorization would not endanger the common defense and security and would be clearly consistent with the national interest.

(b) To assist in making these determinations, on the basis of all the information in a particular case, there are set forth in this subpart criteria consisting of a number of specific types of derogatory information. These criteria are not exhaustive but contain the principal types of derogatory information which create a question as to the individual's eligibility for access authorization. DOE is not limited to these criteria or precluded from exercising its judgment that information or facts in a case under its cognizance are derogatory although at variance with, or outside the scope of, the stated categories. These criteria are subject to continuing review and may be revised from time to time as experience and circumstances may make desirable.

(c) In resolving a question concerning an individual's eligibility for access authorization, all DOE officials involved in the decision-making process shall consider: the nature, extent, and seriousness of the conduct; the circumstances surrounding the conduct, to include knowledgeable participation; the frequency and recency of the conduct; the age and maturity of the individual at the time of the conduct: the voluntariness of participation; the absence or presence of rehabilitation or reformation and other pertinent behavioral changes; the motivation for the conduct; the potential for pressure, coercion, exploitation, or duress; the likelihood of continuation or recurrence; and other relevant and material factors.

#### §710.8 Criteria.

Derogatory information shall include, but is not limited to, information that the individual has:

(a) Committed, prepared or attempted to commit, or aided, abetted or conspired with another to commit or

attempt to commit any act of sabotage, espionage, treason, terrorism, or sedition.

- (b) Knowingly established or continued a sympathetic association with a saboteur, spy, terrorist, traitor, seditionist, anarchist, or revolutionist, espionage agent, or representative of a foreign nation whose interests are inimical to the interests of the United States, its territories or possessions, or with any person advocating the use of force or violence to overthrow the Government of the United States or any state or subdivision thereof by unconstitutional means.
- (c) Knowingly held membership in or had a knowing affiliation with, or has knowingly taken action which evidences a sympathetic association with the intent of furthering the aims of, or adhering to, and actively participating in, any foreign or domestic organization, association, movement, group, or combination of persons which advocates or practices the commission of acts of force or violence to prevent others from exercising their rights under the Constitution or Laws of the United States or any state or subdivision thereof by unlawful means.
- (d) Publicly or privately advocated, or participated in the activities of a group or organization, which has as its goal, revolution by force or violence to overthrow the Government of the United States or the alteration of the form of Government of the United States by unconstitutional means with the knowledge that it will further those goals.
- (e) Parent(s), brother(s), sister(s), spouse, or offspring residing in a nation whose interests may be inimical to the interests of the United States.
- (f) Deliberately misrepresented, falsified, or omitted significant information from a Personnel Security Questionnaire, a Questionnaire for Sensitive Positions, a personnel qualifications statement, a personnel security interview, written or oral statements made in response to official inquiry on a matter that is relevant to a determination regarding eligibility for DOE access authorization, or proceedings conducted pursuant to §710.20 through §710.31.

- (g) Failed to protect classified matter, or safeguard special nuclear material; or violated or disregarded security or safeguards regulations to a degree which would be inconsistent with the national security; or disclosed classified information to a person unauthorized to receive such information.
- (h) An illness or mental condition of a nature which, in the opinion of a board-certified psychiatrist, other licensed physician or a licensed clinical psychologist, causes, or may cause, a significant defect in judgment or reliability.
- (i) Refused to testify before a Congressional Committee, Federal or state court, or Federal administrative body, regarding charges relevant to eligibility for DOE, or another Federal agency's access authorization.
- (j) Been, or is, a user of alcohol habitually to excess, or has been diagnosed by a board-certified psychiatrist, other licensed physician or a licensed clinical psychologist as alcohol dependent or as suffering from alcohol abuse.
- (k) Trafficked in, sold, transferred, possessed, used, or experimented with a drug or other substance listed in the Schedule of Controlled Substances established pursuant to section 202 of the Controlled Substances Act of 1970 (such as marijuana, cocaine, amphetamines, barbiturates, narcotics, etc.) except as prescribed or administered by a physician licensed to dispense drugs in the practice of medicine, or as otherwise authorized by law.
- (1) Engaged in any unusual conduct or is subject to any circumstances which tend to show that the individual is not honest, reliable, or trustworthy; or which furnishes reason to believe that the individual may be subject to pressure, coercion, exploitation, or duress which may cause the individual to act contrary to the best interests of the national security. Such conduct or circumstances include, but are not limited to, criminal behavior, a pattern of financial irresponsibility, or violation of any commitment or promise upon which DOE previously relied to favorably resolve an issue of access authorization eligibility.

## § 710.9 Action on derogatory informa-

(a) When the reports of investigation of an individual or other reliable information reasonably tend to establish the validity and significance of one or more of the items in the criteria, or of other reliable information or facts which are derogatory, although outside the scope of the stated categories, such information shall be regarded as substantially derogatory and create a question as to the individual's eligibility for access authorization. The Local Director of Security will authorize the conduct of an interview with the individual, or request other appropriate actions, and, on the basis of such interview and/or actions, may authorize the granting or continuation of access authorization. If the question as to the individual's eligibility is not resolved through interview, and/or other actions, which may include a DOEsponsored mental evaluation, the Local Director of Security will submit the matter to the Manager. If the Manager agrees that unresolved derogatory information is present, and that appropriate attempts to resolve such derogatory information have failed, the Manager shall forward the individual's case to the Director, Office of Safeguards and Security, with a request for authority to conduct an administrative review proceeding. If the Manager believes that the derogatory information has been favorably resolved, the Manager shall direct that the individual be granted access authorization. A decision in the matter shall be rendered by the Manager within 10 calendar days after receipt. Following the decision of the Manager, the Director, Office of Safeguards and Security, may author-

- (1) The granting of access authorization.
- (2) The institution of administrative review procedures set forth in §§710.20 through 710.31, or
- (3) Such other action as the Director deems appropriate.
- (b) The Director, Office of Safeguards and Security, must authorize one of these options within 30 calendar days of the receipt of the case from the Manager, unless an extension is granted by the Director, Office of Security Affairs.

# § 710.10 Suspension of access authorization.

- (a) In those cases where information is received which raises a question concerning the continued eligibility of an individual for DOE access authorization, the Local Director of Security may authorize action(s) to resolve the question pursuant to §710.9. Such action(s) shall be taken on an expedited basis. If the question as to the individual's continued eligibility for access authorization is not resolved in favor of the individual, the Local Director of Security will submit the matter to the Manager with a recommendation that the individual's DOE access authorization be suspended pending the final determination resulting from the operation of the procedures provided in this subpart.
- (b) Within two working days of receipt of the recommendation from the Local Director of Security to suspend the individual's DOE access authorization, the Manager shall review the matter and authorize continuation or suspension of access authorization. The access authorization of an individual shall not be suspended except by the direction of the Manager. This authority to suspend access authorization may not be delegated but may be exercised by a person who has been designated in writing as Acting Manager.
- (c) Upon suspension of an individual's access authorization pursuant to paragraph (b) of this section, the individual, the individual's employer, any other DOE Operations Office having an access authorization interest in the individual, and, if known, any other government agency where the individual holds an access authorization, security clearance, or access approval, or to which the DOE has certified the individual's DOE access authorization, shall be notified immediately. The Central Personnel Clearance Index shall also be updated. Notification to the individual shall be made in writing and shall reflect, in general terms, the reason(s) why the suspension has been effected. Pending final determination of the individual's eligibility for access authorization from the operation of the procedures provided in this subpart,

the individual shall not be afforded access to classified matter, special nuclear material, or unescorted access to security areas that require the individual to possess a DOE access authorization.

(d) Following the decision to suspend an individual's DOE access authorization, the Manager shall immediately notify the Director, Office of Safeguards and Security, of the action and the reason(s) therefore. In addition, the Manager, within 10 calendar days of the date of suspension, shall submit a request for authority to conduct an administrative review proceeding, accompanied by an explanation of its basis and a duplicate Personnel Security File, to the Director, Office of Safeguards and Security.

#### ADMINISTRATIVE REVIEW

## § 710.20 Purpose of administrative review.

These procedures establish methods for the conduct of the administrative review of questions concerning an individual's eligibility for access authorization when it is determined that such questions cannot be favorably resolved by interview or other action.

#### § 710.21 Notice to individual.

- (a) When the Director, Office of Safeguards and Security, has authorized the institution of administrative review procedures with respect to an individual's questioned eligibility for access authorization, in accordance with §710.9, the Manager shall direct the preparation of a notification letter, approved by the local Office of Chief Counsel, or the Office of General Counsel for Headquarters cases, for delivery to the individual within 30 calendar days of the receipt of such directive from the Office of Safeguards and Security, unless an extension has been authorized by the Director, Office of Safeguards and Security. Where practicable, such letter shall be presented to the individual in person.
  - (b) The letter shall state:
- (1) That reliable information in the possession of DOE has created a substantial doubt concerning the individ-

ual's eligibility for access authorization.

- (2) The information which creates a substantial doubt regarding the individual's eligibility for access authorization (which shall be as comprehensive and detailed as the national interest permits).
- (3) That the individual has the option to have the substantial doubt regarding eligibility for access authorization resolved in one of two ways:
- (i) By the Manager, without a hearing, on the basis of the existing information in the case;
- (ii) By personal appearance before a Hearing Officer (a "hearing").
- (4) That, if the individual desires a hearing, the individual must, within 20 calendar days of the date of receipt of the notification letter, indicate this in writing to the Manager from whom the letter was received.
- (5) That the individual may also file with the Manager the individual's written answer to the reported information which raises the question of the individual's eligibility for access authorization, and that, if the individual requests a hearing without filing a written answer, the request shall be deemed a general denial of all of the reported information.
- (6) That, if the individual so requests, a hearing will be scheduled before a Hearing Officer, with due regard for the convenience and necessity of the parties or their representatives, for the purpose of affording the individual an opportunity of supporting his eligibility for access authorization;
- (7) That, if a hearing is requested, the individual will have the right to appear personally before a Hearing Officer; to present evidence in his own behalf, through witnesses, or by documents, or both; and, subject to the limitations set forth in §710.26(g), to be present during the entire hearing and be accompanied, represented, and advised by counsel or representative of the individual's choosing and at the individual's own expense;

- (8) That the individual's failure to file a timely written request for a hearing before a Hearing Officer in accordance with paragraph (b)(4) of this section, unless time deadlines are extended for good cause, will be considered as a relinquishment by the individual of the right to a hearing provided in this subpart, and that in such event a final decision will be made by the Manager; and
- (9) That in any proceedings under this subpart DOE Counsel will be participating on behalf of and representing the Department of Energy, and that any statements made by the individual to DOE Counsel may be used in subsequent proceedings.

#### §710.22 Additional information.

The notification letter referenced in \$710.21 shall also:

- (a) Describe the individual's access authorization status until further notice:
- (b) Advise the individual of the right to counsel at the individual's own expense at each and every stage of the proceeding;
- (c) Provide the name and telephone number of the designated DOE official to contact for any further information desired, including an explanation of the individual's rights under the Privacy Act of 1974: and
- (d) Include a copy of 10 CFR Part 710, Subpart A.

# § 710.23 Extensions of time by the Operations Office Manager.

The Manager may, for good cause shown, at the written request of the individual, extend the time for filing a written request for a hearing, and/or the time for filing a written answer to the matters contained in the notification letter. The Manager shall notify the Director, Office of Safeguards and Security, when such extensions have been approved.

### § 710.24 Appointment of DOE Counsel.

- (a) Upon receipt from the individual of a written request for a hearing, an attorney shall forthwith be assigned by the Manager to act as DOE Counsel.
- (b) DOE Counsel is authorized to consult directly with the individual if he is not represented by counsel, or with the

individual's counsel or representative if so represented, to clarify issues and reach stipulations with respect to testimony and contents of documents and other physical evidence. Such stipulations shall be binding upon the individual and the DOE Counsel for the purposes of this subpart.

#### § 710.25 Appointment of Hearing Officer; prehearing conference; commencement of hearings.

- (a) Upon receipt of a request for a hearing, the Manager shall in a timely manner transmit that request to the Office of Hearings and Appeals, and identify the DOE Counsel. The Manager shall at the same time transmit a copy of the notification letter and the individual's response to the Office of Hearings and Appeals.
- (b) Upon receipt of the hearing request from the Manager, the Director, Office of Hearings and Appeals, shall appoint, as soon as practicable, a Hearing Officer.
- (c) Immediately upon appointment of the Hearing Officer, the Office of Hearings and Appeals shall notify the individual and DOE Counsel of the Hearing Officer's identity and the address to which all further correspondence should be sent.
- (d) The Hearing Officer shall have all powers necessary to regulate the conduct of proceedings under this subpart, including, but not limited to, establishing a list of persons to receive service of papers, issuing subpoenas for witnesses to attend the hearing or for the production of specific documents or other physical evidence, administering oaths and affirmations, ruling upon motions, receiving evidence, regulating the course of the hearing, disposing of procedural requests or similar matters, and taking other actions consistent with the regulations in this subpart. Requests for subpoenas shall be liberally granted except where the Hearing Officer finds that the grant of subpoenas would clearly result in evidence or testimony that is repetitious, incompetent, irrelevant, or immaterial to the issues in the case. The Hearing Officer may take sworn testimony, sequester witnesses, and control the dissemination or reproduction of any record or testimony taken pursuant to

this part, including correspondence, or other relevant records or tangible evidence including, but not limited to, information retained in computerized or other automated systems in possession of the subpoenaed person.

- (e) The Hearing Officer will determine the day, time, and place for the hearing. Hearings will normally be held at or near the appropriate DOE facility, unless the Hearing Officer determines that another location would be more appropriate. Normally the location for the hearing will be selected for the convenience of all participants. In the event the individual fails to appear at the time and place specified, the record in the case shall be closed and returned to the Manager, who will then make a final determination regarding the eligibility of the individual for DOE access authorization.
- (f) At least 7 calendar days prior to the date scheduled for the hearing, the Hearing Officer will convene a prehearing conference for the purpose of discussing stipulations and exhibits, identifying witnesses, and disposing of other appropriate matters. The conference will usually be conducted by telephone.
- (g) Hearings shall commence within 90 calendar days from the date the individual's request for hearing is received by the Office of Hearings and Appeals. Any extension of the hearing date past 90 calendar days from the date the request for hearing is received by the Office of Hearings and Appeals shall be approved by the Director, Office of Hearings and Appeals.

#### §710.26 Conduct of hearings.

(a) In all hearings conducted under this subpart, the individual shall have the right to be represented by a person of his own choosing. The individual is responsible for producing witnesses in his own behalf, including requesting the issuance of subpoenas, if necessary, or presenting other proof before the Hearing Officer to support his defense to the allegations contained in the notification letter. With the exception of procedural or scheduling matters, the Hearing Officer is prohibited from initiating or otherwise engaging in exparte discussions about the case during

the pendency of proceedings under this part.

- (b) Unless the Hearing Officer finds good cause for granting a waiver of this paragraph or granting an extension of time, in the event that the individual unduly delays the hearing, such as by failure to meet deadlines set by the Hearing Officer, the record shall be closed, and a final decision shall be made by the Manager on the basis of the record in the case.
- (c) Hearings shall be open only to DOE Counsel, duly authorized representatives of the staff of DOE, the individual and his counsel or other representatives, and such other persons as may be authorized by the Hearing Officer. Unless otherwise ordered by the Hearing Officer, witnesses shall testify in the presence of the individual but not in the presence of other witnesses.
- (d) DOE Counsel shall assist the Hearing Officer in establishing a complete administrative hearing record in the proceeding and bringing out a full and true disclosure of all facts, both favorable and unfavorable, having a bearing on the issues before the Hearing Officer. The individual shall be afforded the opportunity of presenting evidence, including testimony by the individual in the individual's own behalf. The proponent of a witness shall conduct the direct examination of that witness. All witnesses shall be subject to cross- examination, if possible. Whenever reasonably possible, testimony shall be given in person.
- (e) The Hearing Officer may ask the witnesses any questions which the Hearing Officer deems appropriate to assure the fullest possible disclosure of relevant and material facts.
- (f) During the course of the hearing, the Hearing Officer shall rule on all questions presented to the Hearing Officer for the Hearing Officer's determination.
- (g) In the event it appears during the course of the hearing that Restricted Data or national security information may be disclosed, it shall be the duty of the Hearing Officer to assure that disclosure is not made to persons who are not authorized to receive it.

- (h) Formal rules of evidence shall not apply, but the Federal Rules of Evidence may be used as a guide for procedures and principles designed to assure production of the most probative evidence available. The Hearing Officer shall admit into evidence any matters, either oral or written, which are material, relevant, and competent in determining issues involved, including the testimony of responsible persons concerning the integrity of the individual. In making such determinations, the utmost latitude shall be permitted with respect to relevancy, materiality, and competency. The Hearing Officer may also exclude evidence which is incompetent, immaterial, irrelevant, or unduly repetitious. Every reasonable effort shall be made to obtain the best available. Subject §§ 710.26(1), 710.26(m), 710.(n), 710.26(o), hearsay evidence may in the discretion of the Hearing Officer and for good cause shown be admitted without strict adherence to technical rules of admissibility and shall be accorded such weight as the circumstances warrant.
- (i) Testimony of the individual and witnesses shall be given under oath or affirmation. Attention of the individual and each witness shall be directed to 18 U.S.C. 1001 and 18 U.S.C. 1621.
- (j) The Hearing Officer shall endeavor to obtain all the facts that are reasonably available in order to arrive at findings. If, prior to or during the proceedings, in the opinion of the Hearing Officer, the allegations in the notification letter are not sufficient to cover all matters into which inquiry should be directed, the Hearing Officer shall recommend to the Operations Office Manager concerned that, in order to give more adequate notice to the individual, the notification letter should be amended. Any amendment shall be made with the concurrence of the local Office of Chief Counsel or the Office of General Counsel in Headquarters cases. If, in the opinion of the Hearing Officer, the circumstances of such amendment may involve undue hardships to the individual because of limited time to answer the new allegations in the notification letter, an appropriate adjournment shall be granted upon the request of the individual.

- (k) A written or oral statement of a person relating to the characterization in the notification letter of any organization or person other than the individual may be received and considered by the Hearing Officer without affording the individual an opportunity to cross-examine the person making the statement on matters relating to the characterization of such organization or person, provided the individual is given notice that it has been received and may be considered by the Hearing Officer, and is informed of its contents provided such is not prohibited by paragraph (g) of this section.
- (1) Any oral or written statement adverse to the individual relating to a controverted issue may be received and considered by the Hearing Officer without affording an opportunity for cross-examination in either of the following circumstances:
- (1) The head of the agency supplying the statement certifies that the person who furnished the information is a confidential informant who has been engaged in obtaining intelligence information for the Government and that disclosure of the informant's identity would be substantially harmful to the national interest:
- (2) The Secretary or his special designee for that particular purpose has preliminarily determined, after considering information furnished by the investigative agency as to the reliability of the person and the accuracy of the statement concerned, that:
- (i) The statement concerned appears to be reliable and material; and
- (ii) Failure of the Hearing Officer to receive and consider such statement would, in view of the access sought to Restricted Data, national security information, or special nuclear material, be substantially harmful to the national security and that the person who furnished the information cannot appear to testify
- (A) Due to death, severe illness, or similar cause, in which case the identity of the person and the information to be considered shall be made available to the individual, or
- (B) Due to some other specified cause determined by the head of the agency to be good and sufficient.

- (m) Whenever procedures under paragraph (l) of this section are used:
- (1) The individual shall be given a summary or description of the information which shall be as comprehensive and detailed as the national interest permits, and
- (2) Appropriate consideration shall be accorded to the fact that the individual did not have an opportunity to cross-examine such person(s).
- (n) Records compiled in the regular course of business, or other physical evidence other than investigative reports obtained by DOE, may be received and considered subject to rebuttal without authenticating witnesses provided that such information has been furnished to DOE by an investigative agency pursuant to its responsibilities in connection with assisting the Secretary to safeguard Restricted Data, national security information, or special nuclear material.
- (o) Records compiled in the regular course of business, or other physical evidence other than investigative reports, relating to a controverted issue which, because they are classified, may not be inspected by the individual, may be received and considered provided that:
- (1) The Secretary or his special designee for that particular purpose has made a preliminary determination that such physical evidence appears to be material:
- (2) The Secretary or his special designee for that particular purpose has made a determination that failure to receive and consider such physical evidence would, in view of the access sought to Restricted Data, national security information, or special nuclear material sought, be substantially harmful to the national security; and
- (3) To the extent that national security permits, a summary or description of such physical evidence is made available to the individual. In every such case, information as to the authenticity and accuracy of such physical evidence furnished by the investigative agency shall be considered.
- (p) The Hearing Officer may request the Local Director of Security to arrange for additional investigation on any points which are material to the deliberations of the Hearing Officer

- and which the Hearing Officer believes need further investigation or clarification. In this event, the Hearing Officer shall set forth in writing those issues upon which more evidence is requested, identifying where possible persons or sources from which the evidence should be sought. The Local Director of Security shall make every effort through appropriate sources to obtain additional information upon the matters indicated by the Hearing Officer.
- (q) A written transcript of the entire proceedings shall be made and, except for portions containing Restricted Data or national security information, a copy of such transcript shall be furnished the individual without cost.
- (r) Whenever information is made a part of the record under the exceptions authorized by paragraphs (l) or (o) of this section, the record shall contain certificates evidencing that the determinations required therein have been made.

#### §710.27 Opinion of the Hearing Officer.

- (a) The Hearing Officer shall carefully consider the record in view of the standards set forth herein and shall render an initial opinion as to whether the grant or restoration of access authorization to the individual would not endanger the common defense and security and would be clearly consistent with the national interest. In resolving a question concerning the eligibility of an individual for access authorization under these procedures, the Hearing Officer shall consider the factors stated in paragraph 710.7(c) to determine whether the findings will be adverse or favorable.
- (b) In reaching the findings, the Hearing Officer shall consider the demeanor of the witnesses who have testified at the hearing, the probability or likelihood of the truth of their testimony, their credibility, and the authenticity and accuracy of documentary evidence, or lack of evidence on any material points in issue. If the individual is, or may be, handicapped by the non-disclosure to the individual of confidential information or by lack of opportunity to cross-examine confidential informants, the Hearing Officer shall take that fact into consideration.

Possible impact of the loss of the individual's access authorization upon the DOE program shall not be considered by the Hearing Officer.

- (c) The Hearing Officer shall make specific findings based upon the record as to the validity of each of the allegations contained in the notification letter and the significance which the Hearing Officer attaches to such valid allegations. These findings shall be supported fully by a statement of reasons which constitute the basis for such findings.
- (d) The Hearing Officer's opinion shall be predicated upon the Hearing Officer's findings of fact. If, after considering all the factors in light of the criteria set forth in this subpart, the Hearing Officer is of the opinion that it will not endanger the common defense and security and will be clearly consistent with the national interest to grant or continue access authorization to the individual, the Hearing Officer shall render a favorable opinion; otherwise, the Hearing Officer shall render an adverse opinion.
- (e) The Office of Hearings and Appeals shall issue the opinion of the Hearing Officer within 30 calendar days of the receipt of the hearing transcript by the Hearing Officer, or the closing of the record, whichever is later, unless an extension is granted by the Director, Office of Hearings and Appeals. Copies of the Hearing Officer's opinion will be provided to the Office of Security Affairs, the Manager, the individual concerned and his counsel or other representatives, DOE Counsel, and any other party identified by the Hearing Officer. At that time, the individual shall also be notified of his right to request further review of his case pursuant to §710.28.
- (f) In the event the Hearing Officer's opinion is favorable to the individual, a copy of the administrative record in the case shall also be provided to the Office of Security Affairs. The Director, Office of Security Affairs will determine whether:
- (1) To grant or reinstate the individual's access authorization, or
- (2) To refer the case to the Director, Office of Hearings and Appeals, for further review.

(g) In the event the Hearing Officer's opinion is adverse to the individual, and the individual does not file a request for further review pursuant to §710.28, a copy of the administrative record shall be provided to the Director, Office of Security Affairs, who shall make a final determination on the basis of the material contained in the administrative record.

# $\S\,710.28$ Action on the Hearing Officer's opinion.

- (a) The Office of Security Affairs or the individual involved may file a request for review of the Hearing Officer's opinion issued under §710.27 within 30 calendar days of receipt of the opinion. Any such request shall be filed with the Director, Office of Hearings and Appeals, and served on the other party.
- (b) Within 15 calendar days after filing a request for review under this section, the party seeking review shall file a statement identifying the issues on which it wishes the Director, Office of Hearings and Appeals, to focus. A copy of such statement shall be served on the other party, who may file a response within 20 days of receipt of the statement.
- (c) The Director, Office of Hearings and Appeals, may initiate an investigation of any statement contained in the request for review and utilize any relevant facts obtained by such investigation in conducting the review of the Hearing Officer's opinion. The Director, Office of Hearings and Appeals, may solicit and accept submissions from either the individual or the Office of Security Affairs, that are relevant to the review. The Director, Office of Hearings and Appeals, may establish appropriate time frames to allow for such responses. In reviewing the Hearing Officer's opinion, the Director, Office of Hearings and Appeals, may consider any other source of information that will advance the evaluation, provided that both parties are afforded an opportunity to respond to all third person submissions. All information obtained under this section shall be made part of the administrative record.
- (d) Within 45 days of the closing of the record, the Director, Office of Hearings and Appeals, shall make specific

findings disposing of each substantial issue identified in a written statement in support of the request for review and the written response submitted by either the individual or the Office of Security Affairs, and shall predicate his opinion on the administrative record, including any new evidence that may have been submitted pursuant to §710.29. If, after considering all the factors in light of the criteria set forth in this subpart, the Director, Office of Hearings and Appeals, is of the opinion that it will not endanger the common defense and security and will be clearly consistent with the national interest to grant or continue access authorization to the individual, the Director, Office of Hearings and Appeals, shall render an opinion favorable to the individual; otherwise, the Director, Office of Hearings and Appeals, shall render an opinion adverse to the individual. The written opinion of the Director, Office of Hearings and Appeals, shall be provided to the Director, Office of Security Affairs, accompanied by the administrative record in the case. The Director, Office of Hearings and Appeals, shall notify the individual of the foregoing action.

(e) Within 30 calendar days of receipt of the opinion of the Director, Office of Hearings and Appeals, the Director, Office of Security Affairs, will make the final determination, based on a complete review of the record, whether access authorization shall be granted or denied, or reinstated or revoked. If, after considering all of the factors in light of the criteria set forth in this subpart, the Director, Office of Security Affairs, determines that it will not endanger the common defense and security and will be clearly consistent with the national interest, access authorization shall be granted to or reinstated for the individual; otherwise, the Director, Office of Security Affairs, shall determine that access authorization shall be denied to or revoked for the individual.

(f) The Director, Office of Security Affairs, shall, through the Director, Office of Safeguards and Security, inform the individual involved and his counsel or representative in writing of the final determination and provide a copy of the written opinion rendered by the Director, Office of Hearings and Appeals. Copies of the correspondence shall also be provided to the Director, Office of Hearings and Appeals, the Manager, DOE Counsel, and any other party. In the event of an adverse determination, the correspondence shall indicate the findings by the Director, Office of Security Affairs, with respect to each allegation contained in the notification letter.

#### § 710.29 New evidence.

(a) In the event of the discovery of new evidence relevant to the allegations contained in the notification letter prior to final determination of the individual's eligibility for access authorization, such evidence shall be submitted by the offering party to the Director, Office of Safeguards and Security. DOE Counsel shall notify the individual of any new evidence submitted by DOE.

(b) The Director, Office of Safeguards and Security, shall:

(1) Refer the matter to the Hearing Officer appointed in the individual's case if the Hearing Officer has not yet issued an opinion. The Hearing Officer getting the application for the presentation of new evidence shall determine the appropriate form in which any new evidence, and the other party's response, shall be received, e.g., by testimony before the Hearing Officer, by deposition or by affidavit.

(2) In those cases where the Hearing Officer's opinion has been issued, the application for presentation of new evidence shall be referred to the Director, Office of Hearings and Appeals, or the Director, Office of Security Affairs, depending upon where the case resides. In the event that the Director, Office of Hearings and Appeals, or Director, Office of Security Affairs, determines that the new evidence should be received, he shall determine the form in which it, and the other party's response, shall be received.

(c) When new evidence submitted by either party is received into the record, the opposing party shall be afforded the opportunity to cross-examine the source of the new information or to submit a written response, unless the information is subject to the exceptions in §710.26 (1) or (o).

#### §710.30 Action by the Secretary.

- (a) Whenever an individual has not been afforded an opportunity to cross-examine witnesses who have furnished information adverse to the individual under the provisions of §710.26 (1) or (0), only the Secretary may issue a final determination denying or revoking the access authorization after personally reviewing the record.
- (b) When the Secretary makes a final determination regarding the individual's eligibility for DOE access authorization, the individual will be notified, by the Director, Office of Security Affairs, of that decision and of the Secretary's findings with respect to each allegation contained in the notification letter and each substantial issue identified in the statement in support of the request for review.
- (c) Nothing contained in these procedures shall be deemed to limit or affect the responsibility and powers of the Secretary to issue subpoenas or the deny or revoke access to Restricted Data, national security information, or special nuclear material if the security of the nation so requires. The Secretary's authority may not be delegated and may be exercised only when the Secretary determines that the procedures prescribed in §710.26 (1) or (0) cannot be invoked consistent with the national security, and such determination shall be conclusive.

#### § 710.31 Reconsideration of access eligibility.

- (a) Where, pursuant to the procedures set forth in §§ 710.20 through 710.30, the Director, Office of Security Affairs, or the Secretary has made a determination granting or reinstating access authorization to an individual, the individual's eligibility for access authorization shall be reconsidered as a new administrative review under the procedures set forth in this subpart when previously unconsidered substantially derogatory information is identified, or the individual violates a commitment or promise upon which the DOE previously relied to favorably resolve an issue of access eligibility.
- (b) Where, pursuant to those procedures, the Manager, Director, Office of Security Affairs, or the Secretary has made a determination denying or re-

- voking access authorization to an individual, the individual's eligibility for access authorization may be reconsidered when there is a bona fide offer of employment requiring access to Restricted Data, national security information or special nuclear material, and there is either:
- (1) Material and relevant new evidence which the individual and the individual's representatives are without fault in failing to present earlier, or
- (2) Convincing evidence of reformation or rehabilitation.
- (c) A request for reconsideration shall be submitted in writing to the Manager having jurisdiction over the position for which access authorization is required. A request for reconsideration shall be accompanied by an affidavit setting forth in detail the new evidence or evidence of reformation or rehabilitation. The Manager shall notify the individual as to whether the individual's eligibility for access authorization will be reconsidered and, if so, the method by which such reconsideration will be accomplished.
- (d) Final determinations regarding eligibility for DOE access authorization in reconsideration cases shall be made by the Director, Office of Security Affairs.

### MISCELLANEOUS

#### §710.32 Terminations.

In the event the individual is no longer an applicant for access authorization or no longer requires access authorization, the procedures of this subpart shall be terminated without a final determination as to the individual's eligibility for access authorization.

#### §710.33 Attorney representation.

In the event the individual is represented by an attorney or other representatives, the individual shall file with the Hearing Officer and DOE Counsel a document designating such attorney or representatives and authorizing one such attorney or representative to receive all correspondence, transcripts, and other documents pertaining to the proceeding under this subpart.

#### §710.34 Time frames.

Statements of time established for processing aspects of a case under this subpart are the agency's desired time frames in implementing the procedures set forth in this subpart. They shall have no impact upon the final disposition of an access authorization by an Operations Office Manager, the Director, Office of Security Affairs, or the Secretary, and shall confer no rights upon an individual whose eligibility for access authorization is being considered.

APPENDIX A TO SUBPART A OF PART 710—SELECTED PROVISIONS OF THE ATOMIC ENERGY ACT OF 1954, AS AMENDED, SEC. 141 (42 U.S.C. 2161), SEC. 145 (42 U.S.C. 2165), SEC. 161 (42 U.S.C. 2201)

(By authority of the Department of Energy Organization Act, 42 U.S.C. 7151(a), the Secretary of Energy or her designated representative is to be substituted for the "Commission" and "General Manager" as appropriate.)

Sec. 141. Policy. It shall be the policy of the Commission to control the dissemination and declassification of Restricted Data in such a manner as to assure the common defense and security. \* \* \*

Sec. 145. Restriction. (a) No arrangement shall be made under section 31, no contract shall be made or continued in effect under section 141, and no license shall be issued under section 103 or 104, unless the person with whom such arrangement is made, the contractor or prospective contractor, or the prospective licensee agrees in writing not to permit any individual to have access to Restricted Data until the Civil Service Commission shall have made an investigation and report to the Commission on the character, associations, and loyalty of such individual, and the Commission shall have determined that permitting such person to have access to Restricted Data will not endanger the common defense and security.

(b) Except as authorized by the Commission or the General Manager upon a determination by the Commission or General Manager that such action is clearly consistent with the national interest, no individual shall be employed by the Commission nor shall the Commission permit any individual to have access to Restricted Data until the Civil Service Commission shall have made an investigation and report to the Commission on the character, associations, and loyalty of such individual, and the Commission shall have determined that permitting such person to have access to Restricted

Data will not endanger the common defense and security.

(c) In lieu of the investigation and report to be made by the Civil Service Commission pursuant to subsection (b) of this appendix, the Commission may accept an investigation and report on the character, associations, and loyalty of an individual made by another Government agency which conducts personnel security investigations, provided that a security clearance has been granted to such individual by another Government agency based on such investigation and report.

(d) In the event an investigation made pursuant to subsections (a) and (b) of this appendix develops any data reflecting that the individual who is the subject of the investigation is of questionable loyalty, the Civil Service Commission shall refer the matter to the Federal Bureau of Investigation for the conduct of a full field investigation, the results of which shall be furnished to the Civil Service Commission for its information and appropriate action.

(e) If the President deems it to be in the national interest he may from time to time determine that investigations of any group or class which are required by subsections (a), (b), and (c) of this appendix be made by the Federal Bureau of Investigation.

(f) Notwithstanding the provisions of subsections (a), (b), and (c) of this appendix, a majority of the members of the Commission shall certify those specific positions which are of a high degree of importance or sensitivity, and upon such certification, the investigation and reports required by such provisions shall be made by the Federal Bureau of Investigation.

(g) The Commission shall establish standards and specifications in writing as to the scope and extent of investigations, the reports of which will be utilized by the Commission in making the determination, pursuant to subsections (a), (b), and (c) of this appendix, that permitting a person access to Restricted Data will not endanger the common defense and security. Such standards and specifications shall be based on the location and class or kind of work to be done, and shall, among other considerations, take into account the degree of importance to the common defense and security of the Restricted Data to which access will be permitted.

(h) Whenever the Congress declares that a state of war exists, or in the event of a national disaster due to enemy attack, the Commission is authorized during the state of war or period of national disaster due to enemy attack to employ individuals and to permit individuals access to Restricted Data pending the investigation report, and determination required by section 145b, to the extent that and so long as the Commission finds that such action is required to prevent

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impairment of its activities in furtherance of the common defense and security.

Sec. 161. General provisions. In the performance of its functions the Commission is authorized to:

- (a) Establish advisory boards to advise with and make recommendations to the Commission on legislation, policies, administration, research, and other matters, provided that the Commission issues regulations setting forth the scope, procedure, and limitations of the authority of each such board;
- (b) Establish by rule, regulation, or order, such standards and instructions to govern the possession and use of special nuclear material, source material, and byproduct material as the Commission may deem necessary or desirable to promote the common defense and security or to protect health or to minimize danger to life or property:
- (c) Make such studies and investigations, obtain such information, and hold such meetings or hearings as the Commission may deem necessary or proper to assist it in exercising any authority provided in this chapter, or in the administration or enforcement of this Act, or any regulations or orders issued thereunder. For such purposes the Commission is authorized to administer oaths and affirmations, and by subpoena to require any person to appear and testify, or to appear and produce documents, or both, at any designated place. Witnesses subpoenaed under this subsection, shall be paid the same fees and mileage as are paid witnesses in the district courts of the United States.

\* \* \* \* \* \*

(i) Prescribe such regulations or orders as it may deem necessary (1) to protect Restricted Data received by any person in connection with any activity authorized pursuant to this Act, (2) to guard against the loss or diversion of any special nuclear material acquired by any person pursuant to section 53 or produced by any person in connection with any activity authorized pursuant to the Act, to prevent any use or disposition thereof which the Commission may determine to be inimical to the common defense and security, including regulations or orders designating activities, involving quantities of special nuclear material which in the opinion of the Commission are important to the common defense and security, that may be conducted only by persons whose character, associations, and lovalty shall have been investigated under standards and specifications established by the Commission and as to whom the Commission shall have determined that permitting each such person to conduct the activity will not be inimical to the common defense and security, and (3) to govern any activity authorized pursuant to this Act, including standards and restrictions governing the design, location, and operation of facilities used in the conduct of such activity, in order to protect health and to minimize danger to life or property;

\* \* \* \* \* \*

(n) Delegate to the General Manager or other officers of the Commission any of those functions assigned to it under this Act except those specified in sections 51, 57b, 61, 108, 123, 145b (with respect to the determination of those persons to whom the Commission may reveal Restricted Data in the national interest), 145f, and 161a;

\* \* \* \* \*

(p) Make, promulgate, issue, rescind, and amend such rules and regulations as may be necessary to carry out the purposes of this Act.

Subpart B—Criteria and Procedures for Establishment of the Personnel Security Assurance Program and Determinations of an Individual's Eligibility for Access to a Personnel Security Assurance Program Position

Source: 60 FR 20368, Apr. 25, 1995, unless otherwise noted

### GENERAL PROVISIONS

### §710.50 Purpose.

- (a) This subpart establishes the policies and procedures for implementing the Department of Energy (DOE) Personnel Security Assurance Program (PSAP) for individuals in positions:
- (1) Which afford direct access to or have direct responsibility for transportation or protection of Category I quantities of special nuclear materials (SNM);
- (2) Which afford unescorted access to the control areas of a nuclear material production reactor; or
- (3) With the potential for causing unacceptable damage to national security.
- (b) The DOE Personnel Security Assurance Program is designed to establish the procedures for DOE and DOE contractors to utilize in the selection and continuing evaluation of individuals for assignment to positions described by paragraph (a) of this section.

Individuals selected for assignment to such positions must be granted access authorization in accordance with the procedures and requirements set forth in subparts A and B of this part.

#### §710.51 Scope.

The criteria and procedures establishing the Personnel Security Assurance Program shall apply to:

- (a) Those employees of, and applicants for employment with, DOE who either occupy or make application for PSAP positions, as described by paragraph (a) of §710.50.
- (b) Those employees of, and applicants for employment with, contractors and agents of the DOE who either occupy or make application for PSAP positions, as described by paragraph (a) of §710.50.

#### § 710.52 References.

- (a) Atomic Energy Act of 1954, as amended, section 11, "Definitions"; section 141, "Policy"; section 143, "Department of Defense Participation"; section 145, "Restrictions"; section 161 b., "General Provisions"; which provide statutory authority for establishing and implementing a DOE security program for controlling access to Restricted Data and special nuclear material. Copies of selected provisions appear as appendix A to subpart A of this part.
- (b) Executive Orders 10450, April 29, 1953, "Security Requirements for Government Employment," 10865, February 20, 1960, "Safeguarding Classified Information Within Industry," and 12564, September 15, 1986, "Drug-Free Federal Workplace," all as amended.
- (c) 10 CFR part 707, "Workplace Substance Abuse Programs at DOE Sites," which requires DOE contractors to establish workplace substance abuse prevention programs, including urine drug testing for individuals who occupy sensitive positions such as those requiring a PSAP access authorization.
- (d) Implementing directives (DOE Orders) which provide Departmental guidance on the PSAP and related areas are available from the U.S. Department of Energy, Washington, DC 20585, Attention: Directives Distribution.

#### §710.53 Policy.

The protection of certain of the DOE's security interests, with the potential, if compromised, of causing unacceptable damage to the national security requires the implementation of a program designed to assure that individuals occupying positions affording access to certain material, facilities, and programs meet the highest standards of reliability. This objective is accomplished under this subpart through a system of continuous evaluation which identifies those individuals whose judgment may be impaired by physical and/or emotional disorders, substance abuse, or the use of alcohol habitually to excess. This process will reduce the risk resulting from the potential threat represented by such employees to an acceptable level. The determination to grant initially and to continue annually the access authorization to a PSAP position is based upon a DOE security assessment of any information of security concern developed in the course of an initial and annual security review process.

#### §710.54 Definitions.

As used in this part:

Contractor means the contractor and subcontractors at all tiers.

Direct access means access to Category I quantities of SNM which would permit an individual to remove, divert, or misuse that material in spite of any controls that have been established to prevent such unauthorized actions.

Illegal drugs means a controlled substance included in Schedules I, II, III, IV, or V, as defined by 21 U.S.C. 802(6), the possession of which is unlawful under chapter 13 of that title. The term "illegal drugs" does not apply to the use of a controlled substance in accordance with the terms of a valid prescription, or other uses authorized by law.

Management official means an individual designated by the DOE or a DOE contractor, as appropriate, who has programmatic responsibility for PSAP positions.

Occurrence means any event or incident that is a deviation from the planned or expected behavior or course of events in connection with any Department of Energy or Department of

### **Department of Energy**

Energy-controlled operation, if the deviation has environmental, public health and safety, or national security protection significance. Incidents having such significance include the following, or incidents of a similar nature:

- (1) Injury or fatality to any person involving actions of a Department of Energy contractor employee.
- (2) Involvement of nuclear explosives under Department of Energy jurisdiction which results in an explosion, fire, the spread of radioactive material, personal injury or death, or significant damage to property.
- (3) Accidental release of pollutants which results or could result in a significant effect on the public or environment.
- (4) Accidental release of radioactive material above regulatory limits.

PSAP Approving Official means a senior DOE official with direct personnel security responsibilities appointed by an operations office manager to review all relevant information, including DOE F 5631.35, "PSAP Management, Medical, and Security Report" as part of the DOE security review process, and who is responsible for granting or continuing the PSAP access authorization, or determining that an individual be processed under the provisions of subpart A of this part.

PSAP position means a position that affords direct access to or has direct responsibility for transportation or protection of Category I quantities of SNM, affords unescorted access to nuclear material production reactor control areas, or with the potential to cause unacceptable damage to national security.

Reasonable suspicion means a suspicion based on an articulable belief that an employee uses illegal drugs, drawn from particularized facts and reasonable inferences from those facts, as detailed further in part 707 of this chapter.

Security concern means the presence of information, regarding an individual applying for or holding a PSAP position, that may be considered derogatory under the criteria in subpart A of this part.

Selecting official means the management official responsible for making the final employment decision regarding an individual seeking a PSAP position.

Site occupational Medical Director means a physician responsible for the overall direction and operation of the occupational medical program at a particular site.

Supervisor means an individual who has direct oversight and responsibility for a person holding a PSAP position.

Unacceptable damage means an incident that could result in a nuclear explosive detonation, a major environmental release from a nuclear material production reactor, or an interruption of nuclear weapons production with a significant impact on national security.

#### PROCEDURES

# § 710.55 Designation of PSAP positions.

PSAP positions shall be designated by the cognizant Operations Office Manager in accordance with the following criteria:

- (a) Positions that afford direct access to Category I quantities of SNM or have direct responsibility for transportation or protection of Category I quantities of SNM.
- (b) Positions that afford direct access to the control areas of a nuclear material production reactor.
- (c) Positions with the potential for causing unacceptable damage to national security which are not included in paragraph (a) or (b) of this section, and are designated by the Director, Office of Safeguards and Security, DOE.

### §710.56 Program process.

- (a) Individuals selected for assignment to PSAP positions must be granted a PSAP access authorization in accordance with the procedures and requirements set forth in this subpart.
- (b) The PSAP involves four components: Supervisory review: Medical assessment; management evaluation; and security determination. A DOE determination to grant initially and to continue annually an individual's PSAP access authorization is based upon a DOE security assessment of any information of security concern developed in the course of the supervisory review,

medical assessment, management evaluation, and security review.

(c) DOE shall make its decision as to a PSAP access authorization in accordance with the criteria in subpart A, §710.8 of this part.

#### §710.57 Supervisory review.

- (a) The supervisory review shall be performed on all applicants tentatively selected for PSAP positions, transferees to PSAP positions, individuals occupying PSAP positions but not yet holding a PSAP access authorization, and PSAP-cleared employees.
- (b) The initial SF-86, OMB Control No. 3206.007, "Questionnaire for Sensitive Positions" of an applicant tentatively selected for a PSAP position and an annual update of the "Questionnaire for Sensitive Positions," Part II, of each incumbent in a PSAP position shall be completed and forwarded to the appropriate PSAP Approving Official.
- (c) Before being selected for a PSAP position, any tentatively selected applicant must undergo a pre-employment suitability determination as defined by 48 CFR 970.2201. For DOE employees, this pre-employment check must comply with the requirements established by the Office of Personnel Management in part 731 of title 5, Code of Federal Regulations. For contractor employees, this pre-employment check must comply with the requirements established by the DOE in section 970.2201(b)(1)(ii) of title 48.
- (d) Each applicant tentatively selected for a PSAP position and each individual occupying a PSAP position but not a yet holding a PSAP access authorization shall execute the appropriate PSAP releases, acknowledgements, and waivers. The request for a PSAP access authorization shall not be further processed until these documents are completed. Failure of an individual, occupying a PSAP position but not yet holding a PSAP access authorization, to complete these documents may prevent DOE from reaching an affirmative finding required for granting or continuing PSAP access authorization. An effort shall be made to reassign that individual to a position not requiring a PSAP access authorization. For purposes of this sec-

tion and all sections of this rule that relate to reassignment from PSAP duties, any Federal employee will be immediately removed from PSAP duties. The affected employee's supervisor may reassign the employee or realign the employee's current duties. If these actions are not feasible, the supervisor must contact the appropriate servicing personnel office for guidance.

- (e) Applicants tentatively selected for PSAP positions and each individual occupying a PSAP position, but not yet holding a PSAP access authorization, shall undergo testing for the use of illegal drugs in accordance with the provisions of the DOE policies implementing Executive Order 12564, or part 707 of this chapter, which establish workplace substance abuse programs for DOE and contractor employees respectively. A determination of the use of illegal drugs, based on a drug test, shall result in termination of consideration for the PSAP access authorization. An employee who has been determined to have used illegal drugs, based on a drug test, shall be immediately reassigned from the PSAP duties and processed under the provisions of subpart A of this part.
- (f) Applicants tentatively selected for PSAP positions and each individual occupying a PSAP position, but not yet holding a PSAP access authorization, must submit to a polygraph examination under 10 CFR part 709.
- (g) The supervisor (or selecting official) shall report any security concerns, resulting from his or her review, to the appropriate management official.
- (h) Annual review. Each PSAP-cleared employee shall have an annual PSAP review conducted by the supervisor during which the supervisor shall evaluate information relevant to security. The supervisor shall report any security concerns, resulting from his or her review, to the appropriate management official.
- (i) Recognition of security concerns and unusual Conduct. In order to facilitate early recognition of an individual who represents a possible security concern, individuals who, in the judgment of the responsible supervisor, exhibit unusual conduct shall be referred to the site Occupational Medical Director,

who may arrange for the PSAP-cleared employee to be examined by the appropriate medical staff. Information indicating a possible security concern shall be reported immediately to the appropriate management official and PSAP Approving Official.

(j) Temporary reassignment to non-PSAP duties. Where an individual has demonstrated a possible security concern or a condition which may temporarily affect his or her reliability, the individual, with the recommendation of the site Occupational Medical Director or the PSAP Approving Official, may be temporarily reassigned to non-PSAP duties. In the event that a PSAP-cleared employee is temporarily reassigned to non-PSAP duties, the supervisor, jointly with the site Occupational Medical Director and/or the PSAP Approving Official, as appropriate, may determine the temporary restrictions to be placed on the employee. The PSAP Approving Official shall be notified immediately upon the decision to temporarily reassign the employee to non-PSAP duties and the reason for such action, and upon the decision to reinstate such employee. If the reason for the temporary reassignment was based upon a security concern, the PSAP Approving Official must approve the request for reinstatement.

[60 FR 20368, Apr. 25, 1995, as amended at 64 FR 70980, Dec. 17, 1999]

#### § 710.58 Medical assessment.

(a) The medical examination. The purpose of the PSAP medical examination is to ensure that an applicant tentatively selected for, or incumbent in, a PSAP position does not represent a security concern or have a condition which may prevent the individual from performing PSAP duties in a reliable and safe manner. The examination shall include an evaluation to determine the presence of any physical or mental condition that causes or may cause a significant defect in the judgment or reliability of the individual, including that which may result from the use of illegal drugs or the use of alcohol habitually to excess.

(b) When performed. The medical assessment is performed initially upon applicants tentatively selected for

PSAP positions and employees occupying PSAP positions who have not yet received a PSAP access authorization. The medical assessment shall be performed annually, or more often as may be required by the site Occupational Medical Director, for PSAP-cleared employees.

- (c) Contents of medical assessment. The medical assessment shall include: A comprehensive medical examination; an examination for use of alcohol habitually to excess; a psychological assessment and/or psychiatric evaluation as provided for in any applicable DOE medical standards, and as permitted by Federal regulations; and an examination for the cause of any reported unusual conduct.
- (d) Examination for use of alcohol habitually to excess. The use of alcohol habitually to excess represents a potential threat to national security and is inconsistent with access to a PSAP position. Accordingly, the medical assessment shall include:
- (1) Diagnosis. Employees in, or applicants tentatively selected for, a PSAP position shall be evaluated for the use of alcohol habitually to excess. Those employees diagnosed currently to use alcohol habitually to excess shall be temporarily reassigned to non-PSAP duties and the PSAP Approving Official shall be notified immediately.
- (2) Rehabilitation. Individuals reinstated to PSAP duties following treatment leading to rehabilitation from the use of alcohol habitually to excess shall be required to undergo evaluation as prescribed by the site Occupational Medical Director to ensure continued rehabilitation. Such evaluation shall be consistent with appropriate Departmental substance abuse programs.
- (e) Examination for the cause of reported unusual conduct. Upon referral of a PSAP-cleared employee by a supervisor for observed unusual conduct, the site Occupational Medical Director may arrange for the employee to be examined by appropriate specialists.
- (f) Report of occupational Medical Director. Upon completion of the medical assessment, the site Occupational Medical Director shall report any security concerns resulting from the medical assessment to the appropriate management official.

(g) Temporary restrictions on a PSAP position. In the event that a condition or circumstance develops that may affect the judgment or reliability of a PSAP-cleared employee, the site Occupational Medical Director may recommend restrictions. The site Occupational Medical Director shall report these restrictions immediately, in writing, to the appropriate management official who shall immediately notify the appropriate PSAP Approving Official. Removal of restrictions requires notification in writing to both the management official and the PSAP Approving Official by the site Occupational Medical Director.

(h) Sick leave from a PSAP position. PSAP-cleared employees who have been on sick leave for five or more consecutive work days are required to report in person to the site Occupational Medical Director before being allowed to return to normal duties. The site Occupational Medical Director shall provide a recommendation to the appropriate management official regarding the employee's return to work. A PSAP-cleared employee may in certain circumstances also be required to report to the site Occupational Medical Director for written recommendation to return to normal duties after any period of sick leave.

### §710.59 Management evaluation.

(a) Evaluation components. A management evaluation based upon a careful review of the results of the supervisory review, medical assessment, and drug testing of an individual in, or an applicant tentatively selected for, a PSAP position is required before that individual can be considered for an initial granting or the continuance of a PSAP access authorization. The appropriate manager of an organization having PSAP positions (management official) shall evaluate the information in these reports and forward his or her recommendation, including any security concern, to the PSAP Approving Offi-

(b) Drug testing component. Drug testing for the use of illegal drugs, as required by the PSAP, shall be established to test all individuals in, or applicants tentatively selected for, PSAP positions. Testing shall be conducted in

accordance with the DOE policies implementing Executive Order 12564, or part 707 of this chapter, which establish workplace substance abuse programs for DOE and contractor employees respectively. The program shall include unannounced annual drug testing and testing for occurrence or reasonable suspicion for all PSAP-cleared individuals. A PSAP-cleared individual who has been determined to have used illegal drugs based on a drug test shall be reassigned immediately to non-PSAP duties, and the PSAP Approving Official shall be notified immediately.

(c) Occurrence or reasonable suspicion testing component. When a PSAPcleared employee is involved in or associated with an occurrence requiring notification to the DOE or whose behavior creates the basis for a reasonable suspicion of substance abuse, the employee shall be tested for the use of illegal drugs. Drug testing shall be conducted in accordance with the provisions of the DOE policies implementing Executive Order 12564, or part 707 of this chapter, which establish workplace substance abuse programs for DOE and contractor employees respectively.

(d) Rehabilitation. Individuals reinstated to PSAP duties following treatment leading to rehabilitation from the use of illegal drugs shall be required to undergo evaluation and testing as prescribed in DOE drug-free workplace and substance abuse policies and by the site Occupational Medical Director or other designated official, as appropriate, in order to ensure continued rehabilitation.

(e) Corporate policy. Nothing in this subpart is intended to interfere with or prohibit a contractor of the Department from conducting medical and other evaluations, including testing for the use of illegal drugs as a matter of corporate policy, so long as such policy is at least as effective as the requirements and procedures of this subpart.

# § 710.60 DOE security review and clearance determination.

(a) When performed. The final component of the PSAP process is a security review and clearance determination

performed by the PSAP Approving Official upon receipt of the management evaluation and recommendation.

- (b) The criteria. The PSAP access authorization and adjudication shall be conducted in accordance with the criteria and procedures contained in relevant sections of this part.
- (c) Review for initial PSAP access authorization. An initial PSAP access authorization requires the applicant or employee to have a DOE Q access authorization, based upon a background investigation. The adjudication and determination for a PSAP access authorization shall be based upon a review of security information, including the results of the background investigation and the information provided by management and medical sources.
- (d) Annual PSAP access authorization continuance. Once an employee has received the PSAP access authorization, he or she shall thereafter undergo an annual security evaluation by the PSAP Approving Official. The evaluation shall include a review of the individual's DOE personnel security file, and an updated SF-86, OMB Control No. 3206-007, "Questionnaire for Sensitive Positions," Part II. The determination to continue the PSAP access authorization shall be based upon a review and any necessary adjudication of the information resulting from the annual security evaluation, and the information provided by management and medical sources, in accordance with the criteria and procedures contained in relevant sections of this part.
- (e) Periodic reinvestigation. The PSAP-cleared employee shall undergo periodic reinvestigation as required to maintain a Q access authorization. The determination to continue the PSAP access authorization shall be based upon a review of security information, including the results of the limited background investigation and the information provided by management and medical sources.
- (f) Processing under 10 CFR part 710, subpart A. Any matters of security concern raised to the attention of the PSAP Approving Official, such as confirmed use of illegal drugs or use of alcohol habitually to excess, shall be evaluated in accordance with the criteria under subpart A, §710.8 of this

part. Any administrative review under the PSAP shall be conducted in accordance with the provisions and procedures in subpart A of this part.

# PART 711—PERSONNEL ASSURANCE PROGRAM (PAP)

#### Subpart A—PAP Certification/Recertification, Temporary Removal/Reinstatement, and Revocation of PAP Certification

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- 711.45 Maintenance of medical records.

AUTHORITY: 42 U.S.C. 2201(p), 7191.

SOURCE: 63 FR 48066, Sept. 8, 1998, unless otherwise noted.

Subpart A—PAP Certification/Recertification, Temporary Removal/Reinstatement, and Revocation of PAP Certification

#### §711.1 Purpose.

The purpose of this part is to establish a Personnel Assurance Program (PAP) in DOE. The PAP is a human reliability program designed to ensure that individuals assigned to nuclear explosive duties do not have emotional, mental, or physical incapacities that could result in a threat to nuclear explosive safety. The PAP establishes the requirements and responsibilities for screening, selecting, and continuously evaluating employees assigned to or being considered for assignment to nuclear explosive duties.

### § 711.2 Applicability.

(a) This part applies to DOE Headquarters and field elements and DOE contractors that manage, oversee, or conduct nuclear explosive operations and associated activities, and to DOE and DOE contractor employees assigned to nuclear explosive duties.

(b) This part does not apply to responses to unplanned events (e.g., Accident Response Group activities), which are addressed in DOE 5530-Series Orders and DOE Order 151.1, "Comprehensive Emergency Management System."

### § 711.3 Definitions.

The following definitions are used in this part:

Access means proximity to a nuclear explosive that affords a person the opportunity to tamper with it or to cause it to detonate.

Alcohol use disorder means a maladaptive pattern in which a person's intake of alcohol is great enough to damage or adversely affect physical or mental health or personal, social, or occupational function; or when alcohol has become a prerequisite to normal function.

Certification means the formal action the PAP certifying official takes which permits an individual to be placed in the PAP and perform PAP duties. This action is taken once it has been determined an individual meets the requirements for certification under this part.

Contractor means the contractor and subcontractors at all tiers.

Designated physician means a licensed doctor of medicine or osteopathy who has been nominated by the SOMD and, with the concurrence of the Director, Office of Occupational Medicine and Medical Surveillance, approved by the operations office manager, to provide professional expertise in the area of occupational medicine as it relates to the PAP.

Designated psychologist means a licensed Ph.D. or Psy.D. clinical psychologist who has been nominated by the SOMD and, with the concurrence of the Director, Office of Occupational Medicine and Medical Surveillance, approved by the operations office manager, to provide professional expertise in the area of psychological assessment as it relates to the PAP.

Diagnostic and Statistical Manual for Mental Disorders means the current version of the American Psychiatric Association's manual containing definitions of psychiatric terms and diagnostic criteria of mental disorders.

Director, Office of Occupational Medicine and Medical Surveillance, means the chief occupational medical officer of the DOE with responsibility for policy and quality assurance for DOE occupational medical programs.

Drug abuse means use of an illegal drug or misuse of legal drugs.

Flashback means a transient, spontaneous, and often unpredictable recurrence of aspects of a person's use of a hallucinogen that involves dramatic alteration of emotional state, perception, sensation, and behavior.

Hallucinogen means any hallucinogenic drug or substance that has the potential to cause flashbacks.

Illegal drug means a controlled substance, as specified in Schedules I through V of the Controlled Substances Act, 21 U.S.C. 811, 812. The term "illegal drug" does not apply to the use of a controlled substance in accordance with the terms of a valid prescription, or other uses authorized by Federal law.

Impaired or impairment means a decrease in functional capacity of a worker caused by a physical, mental, emotional, substance abuse, or behavioral disorder.

Job task analysis means a statement outlining the essential functions of a job and the potential exposures and hazards of an individual's specific job.

Medical assessment means an evaluation of a PAP individual's present health status and health risk factors by means of: (1) a medical history review; (2) the job task analysis; (3) a physical examination; (4) appropriate laboratory tests and measurements; and (5) appropriate psychological and psychiatric evaluations.

Medical Review Officer (MRO) means a licensed doctor of medicine or osteopathy who has knowledge of illegal drug use and other substance abuse disorders and has appropriate medical training to interpret drug test results. The MRO may also be the designated physician and/or SOMD.

Nuclear explosive means an assembly containing fissionable and/or fusionable materials and main charge high explosive parts or propellants capable of producing a nuclear detonation (e.g., a nuclear weapon or test device).

Nuclear explosive area means any area that contains a nuclear explosive or collocated pit and main charge high explosive parts.

Nuclear explosive duties means work assignments that allow custody of a nuclear explosive or access to a nuclear explosive device or area.

Occupational medical program means a DOE program that: (1) assists in the maintenance, monitoring, protection, and promotion of employee health through the skills of occupational medicine, psychology, and nursing; and (2) maintains a close interface with allied health disciplines, including industrial hygiene, health physics, and safety.

Operations office manager means the manager of a DOE operations office.

PAP certifying official or certifying official means the operations office manager or the manager's designee who certifies, recertifies, or reviews the circumstances of an individual's removal from nuclear explosive duties.

PAP individual means an individual being considered for assignment or assigned to perform nuclear explosive duties.

PAP official means any DOE employee who is involved in the PAP as a manager or supervisor or involved in the certification/recertification process

Recertification means the formal action the PAP certifying official takes annually, not to exceed 12 months, which permits an individual to remain in the PAP and perform PAP duties. This action is taken once it has been determined an individual still meets the requirements of this part.

Reinstatement means the action the PAP certifying official takes once it has been determined an individual who has been temporarily removed from the PAP meets the certification requirements of this part and can be returned to the PAP and PAP duties.

Semi-structured interview means an interview by a designated psychologist who has the latitude to vary the focus and content of the questions depending upon the interviewee's responses.

Site Occupational Medical Director/SOMD means the physician responsible for the overall direction and operation of the site occupational medical program.

### §711.4 General.

- (a) PAP certification is required of each individual assigned to nuclear explosive duties in addition to any other job qualification requirements that may apply.
- (b) Nothing in this part shall be construed as prohibiting contractors from establishing stricter employment standards for employees who are nominated to DOE for certification or recertification in the PAP.
- (c) The failure of an individual to be certified or recertified in the PAP shall not, in itself, reflect on the individual's suitability for assignment to other duties or, in itself, be a cause for loss of pay or other benefits or other changes in employment status.
- (d) Personnel management actions based on consideration of technical competence and other job qualification requirements shall be considered only if they are based on behavior that also

affects an individual's suitability for the PAP.

(e) Except for the functions in §711.12 (d), (e) and (h), an operations office manager may delegate PAP functions to a deputy manager, assistant manager, division director, and/or area office manager.

#### §711.5 General requirements.

- (a) Each PAP individual shall be certified in the PAP before being assigned to nuclear explosive duties and shall be recertified annually, not to exceed 12 months between recertifications.
- (b) To be certified or recertified in the PAP, an individual shall:
- (1) Have an active DOE Q access authorization based upon a background investigation;
- (2) Sign an acknowledgment and agreement to participate in the PAP on a form provided by DOE;
- (3) Be interviewed and briefed on the importance of the nuclear explosive duty assignment and PAP objectives and requirements.
- (4) Successfully complete an annual medical assessment for certification and recertification in accordance with Subpart B of this part;
- (5) Not have used any hallucinogen in the preceding 5 years and shall not have experienced a flashback resulting from the use of any hallucinogen more than 5 years before applying for certification or recertification;
- (6) If a DOE employee, be tested for illegal drugs at least once each calendar year in an unannounced and unpredictable manner under DOE Order 3792.3, "Drug-Free Federal Workplace Testing Implementation Program," and be subject to testing for cause or reasonable suspicion or after an accident or an unsafe practice involving the individual:
- (7) If a DOE contractor employee, be tested for illegal drugs at least once each calendar year in an unannounced and unpredictable manner under 10 CFR part 707, "Workplace Substance Abuse Programs at DOE Sites," and be subject to testing for cause or reasonable suspicion or after an accident or an unsafe practice involving the individual; and
- (8) Be eligible for a polygraph examination under 10 CFR part 709.

- (c) If an individual in the PAP refuses to submit a urine sample for illegal drug testing or attempts deception by substitution, adulteration, or other means, DOE immediately shall remove the individual from nuclear explosive duties.
- (d) An individual will be denied PAP certification, or shall have his or her certification revoked, immediately, if use of an illegal drug is confirmed through drug testing, as provided in §711.42 of Subpart B.
- (e) An individual whose PAP certification is revoked for the use of illegal drugs will be considered for reinstatement in the PAP if the individual successfully completes an SOMD approved drug rehabilitation program, as provided in §711.42 of Subpart B and a PAP position is available for which the individual is qualified.
- (f) If an individual chooses not to participate in the PAP, he or she shall sign a refusal of consent form provided by DOE.

[63 FR 48066, Sept. 8, 1998, as amended at 64 FR 70980, Dec. 17, 1999]

#### §711.6 PAP certification process.

- (a) The PAP certifying official shall determine each PAP individual's suitability for certification or recertification in the PAP and review the circumstances concerning an individual's removal from nuclear explosive duties and possible reinstatement.
- (b) Operations office managers who exercise jurisdiction over PAP certification shall issue instructions for implementing the PAP. At a minimum, the instructions shall provide for:
- (1) Conducting a supervisory interview of each PAP individual, during which the supervisor shall determine the individual's willingness to accept the requirements and conditions of the PAP:
- (2) Ensuring that each PAP individual undergoes a medical assessment under subpart B of this part;
- (3) Ensuring that the personnel security file (PSF) of each PAP individual is reviewed by a DOE employee trained to identify PAP concerns before the individual is certified or recertified;
- (4) Ensuring that other available personnel data or information about each

PAP individual is reviewed by an employee trained to identify PAP concerns before the individual is certified or recertified:

- (5) Allowing the exchange of information about a PAP individual among responsible DOE officials during the certification, recertification, or certification review process. Any mental or behavioral issues which could impact an individual's ability to perform PAP duties may be provided to the SOMD, designated physician, and/or designated psychologist who have been previously identified for receipt of this information by the operations office manager or designee. In rare instances when information from an employee's PSF may be relevant, such information may be shared only with prior written approval of the manager or his/her designee. The Director, Office of Security Affairs, must be notified of the manager's decision to share PSF information, as well as the specific information provided and a brief summary of the circumstances. This notice should be provided as soon as practicable. Contractor medical personnel will not be allowed to view the PSF. Contractor medical personnel must not share any information obtained from the PSF with anyone who is not a DOE PAP official:
- (6) Requesting certification or recertification of a contractor employee when the contractor has determined, on the basis of all available information, that the individual is suitable for the PAP. The contractor requesting certification or recertification shall, in writing, assure the PAP certifying official that all PAP certification requirements have been met:
- (7) Addressing any requirement not met during the certification/recertification process, and requiring a contractor to provide any additional personal data or information in its possession that may have a bearing on the certification/recertification of an individual:
- (8) Documenting certification and recertification of each PAP individual on a form provided by DOE;
- (9) Developing a mechanism for coworkers, supervisors, and managers to communicate concerns about a PAP in-

dividual's suitability for nuclear explosive duties:

- (10) Ensuring that PAP concerns are reported to an appropriate official, as specified in §§711.9 and 711.10, for timely resolution:
- (11) Providing that the processing of a request for certification or recertification of an individual is terminated if the individual is no longer being considered for assignment to nuclear explosive duties or is no longer assigned to such duties. If, subsequently, the individual is considered for assignment to nuclear explosive duties, the certification or recertification process must be completely redone; and
- (12) Using recertification to return an individual whose certification has exceeded 12 months, and thus expired, to the PAP, once it has been determined an individual still meets the requirements of this part.

# § 711.7 Maintenance of PAP personnel list.

Operations office managers who exercise jurisdiction over PAP certification and recertification shall establish procedures for developing and maintaining a current list of DOE and contractor personnel certified in the PAP. The list is to be used for program administration and is not an authorization for personnel to perform nuclear explosive duties. The list shall be promptly updated and verified on a quarterly basis under the supervision of the operations office manager.

#### §711.8 PAP training requirements.

- (a) Operations office managers shall ensure that each individual who is assigned to nuclear explosive duties receives special training in PAP objectives, policies, and requirements.
- (b) Operations office managers shall ensure that DOE and contractor supervisory personnel and PAP certifying officials receive training that includes:
- (1) A detailed explanation of nuclear explosive duties and nuclear explosive safety;
- (2) Instruction on PAP objectives, policies, and requirements;
- (3) Instruction on the early identification of behavior that may indicate a degradation in reliability or judgment; and

- (4) Special emphasis on the importance of timely reporting of any PAP concern to appropriate personnel.
- (c) Operations office managers shall ensure that medical personnel who perform medical assessments receive, before performing PAP responsibilities, training that includes:
- (1) A detailed explanation of nuclear explosive duties and nuclear explosive safety;
- (2) Instruction on PAP objectives, policies, and requirements;
- (3) An orientation on nuclear explosive duties and the work environment applicable to that of the PAP employee;
- (4) Annual professional training on current issues and concerns relative to psychological assessment; and
- (5) Special emphasis on the importance of timely reporting of any PAP concern to appropriate personnel.
- (d) Operations office managers shall establish and maintain a system for documenting the training received by PAP-certified individuals, supervisors of PAP personnel, and medical personnel with PAP-related duties.

#### §711.9 Supervisor reporting.

- (a) Supervisors shall document and report to a PAP official and the SOMD, if appropriate, any observed or reported behavior or condition of an individual that causes the supervisor to have a reasonable belief that the individual's ability to perform assigned tasks in a safe and reliable manner may be impaired.
- (b) Behavior and conditions that could indicate unsuitability for the PAP include, but are not limited to, the following:
- (1) Psychological or physical disorders that impair performance of assigned duties:
- (2) Conduct that warrants referral for a criminal investigation or results in arrest or conviction;
- (3) Indications of deceitful or delinquent behavior;
- (4) Attempted or threatened destruction of property or life:
- (5) Suicidal tendencies or attempted suicide:
- (6) Use of illegal drugs or the abuse of legal drugs or other substances;
  - (7) Alcohol use disorder;

- (8) Recurring financial irresponsibility:
- (9) Irresponsibility in performing assigned duties;
- (10) Inability to deal with stress, or the appearance of being under unusual stress:
- (11) Failure to understand work directives, hostility or aggression toward fellow workers or authority, uncontrolled anger, violation of safety or security procedures, or repeated absenteeism; and
- (12) Significant behavioral changes, moodiness, depression, or other evidence of loss of emotional control.

#### §711.10 Individual reporting.

- (a) An individual in the PAP shall report any observed or reported behavior or condition of another PAP individual's unsuitability for nuclear explosive duties, including the behaviors and conditions listed in §711.9, to a supervisor, the SOMD, or other PAP official.
- (b) An individual in the PAP shall report any behavior or condition, including any behavior or condition listed in §711.9, that may affect his or her own suitability for nuclear explosive duties to a supervisor, the SOMD, or other PAP official.

# §711.11 Immediate removal from nuclear explosive duties.

- (a) A supervisor who has a reasonable belief that an individual in the PAP is not suitable for nuclear explosive duties shall immediately remove that individual from those duties pending a determination of the individual's suitability. The supervisor shall, at a minimum:
- (1) Require the individual to stop performing nuclear explosive duties;
- (2) Take action to ensure the individual is denied access to nuclear explosive areas; and
- (3) Notify the individual, in writing, the reason for these actions.
- (b) A supervisor who removes an individual from nuclear explosive duties shall notify the PAP certifying official of the action and the reasons that led to the removal of the individual from nuclear explosive duties as soon as possible, and shall forward this information, in writing, to the PAP certifying

official within 24 hours from the time the individual is removed from duties.

(c) Immediate removal of an individual from nuclear explosive duties is an interim, precautionary action and does not constitute a determination that the individual is not fit for nuclear explosive duties. Removal from nuclear explosive duties shall not, in itself, be cause for loss of pay or other benefits or other changes in employment status.

# § 711.12 Action following removal from duties.

- (a) Temporary removal. If a PAP certifying official receives a supervisor's written notice of the immediate removal of an individual from nuclear explosive duties, the certifying official shall direct the removal of the individual from PAP duties pending an evaluation and determination regarding the individual's suitability for nuclear explosive duties. The applicable DOE personnel security office shall be notified if removal is based on a security concern.
- (b) Evaluation. The PAP certifying official shall conduct an evaluation of the circumstances or information that led the supervisor to remove the individual from nuclear explosive duties. The PAP certifying official shall prepare a written report of the evaluation that includes the certifying official's determination regarding the individual's suitability for continuing PAP certification.
- (c) PAP certifying official's action. (1) If the PAP certifying official determines that an individual who has been removed temporarily from nuclear explosive duties continues to meet the requirements for certification in the PAP, the certifying official shall:
- (i) Notify the operations office manager of the determination; and
- (ii) Notify the individual's supervisor of the determination and direct that the individual be allowed to return to nuclear explosive duties.
- (2) If the PAP certifying official determines that an individual who has been temporarily removed from PAP duties does not meet the requirements for certification, the certifying official shall refer the matter to the operations office manager for action. The certi-

- fying official shall submit the evaluation report to the operations office manager and a recommendation that the individual's PAP certification be revoked.
- (d) Operations office manager's initial decision. After receipt of a PAP certifying official's evaluation report and recommendation for revoking an individual's PAP certification, the operations office manager shall take one of the following actions:
- (1) Direct that the individual be reinstated in the PAP and, in writing, explain the reasons and factual basis for the action:
- (2) Direct the revocation of the individual's PAP certification and, in writing, explain the reasons and factual basis for the decision; or
- (3) Direct continuation of the temporary removal pending completion of specified actions (e.g., medical assessment, security evaluation, treatment) to resolve the concerns about the individual's suitability for the PAP.
- (e) In the event of a revocation, pursuant to §711.12(d)(2), or suspension pursuant to §711.12(d)(3), the operations office manager shall provide the individual a copy of the PAP certifying official's evaluation report. The manager may withhold such report, or portions thereof, to the extent that he/she determines that the report, or portions thereof, may be exempt from access by the individual under the Privacy Act or the Freedom of Information Act.
- (f) Reinstatement after completion of specified actions. An individual directed by the operations office manager to take specified actions to resolve PAP concerns shall be reevaluated by the certifying official after those actions have been completed. After considering the PAP certifying official's evaluation report and recommendation, the operations office manager shall direct either:
- (1) Reinstatement of the individual in the PAP; or
- (2) Revocation of the individual's PAP certification.
- (g) Notification of operations office manager's initial decision. The operations office manager shall send by certified mail, return receipt requested, a written decision, including

rationale, to an individual who is denied certification or recertification. The operations office manager's decision shall be accompanied by notification to the individual, in writing, of the procedures in paragraph (g) of this section and §§711.14—711.16 pertaining to reconsideration or a hearing on the operation office manager's decision.

- (h) Request for reconsideration or certification review hearing. An individual who receives notification of an operation office manager's decision to deny or revoke his or her PAP certification may choose one of the following options:
  - (1) Take no action;
- (2) Submit a written request to the operations office manager for reconsideration of the decision to deny or revoke certification. The request shall include the individual's response to any information that gave rise to a concern about the individual's suitability for nuclear explosive duties. The statement shall be signed under oath or affirmation before a notary public, and must be sent by certified mail to the operations office manager within 20 working days after the individual received notice of the operations office manager's decision; or
- (3) Submit a written request to the operations office manager for a certification review hearing. The request for a hearing must be sent by certified mail to the operations office manager within 20 working days after the individual receives notice of the operations office manager's decision.
- (i) Operations office manager's decision after reconsideration or hearing. (1) If an individual requests reconsideration by the operations office manager but not a certification review hearing, the operations office manager shall, within 20 working days after receipt of the individual's request, send by certified mail, return receipt requested, to the individual a final decision as to suitability based upon the individual's response and other relevant information available to the operations office manager.
- (2) If an individual requests a certification review hearing, the operations office manager shall decide the matter after receipt of the certification review hearing officer's report and recommendation, as provided in §711.15.

The operations office manager shall, within 20 working days after receiving the hearing officer's report and recommendation, send by certified mail, return receipt requested, the operations office manager's final decision to the individual, accompanied by a copy of the hearing officer's report and recommendation, and the transcript of the certification review proceedings.

# § 711.13 Appointment of a certification review hearing officer and legal counsel.

- (a) After receiving an individual's request for a certification review hearing, the operations office manager shall promptly appoint a certification review hearing officer. The hearing officer shall:
- (1) Be a DOE attorney or a hearing official from the DOE Office of Hearings and Appeals and have a DOE Q access authorization; and
- (2) Have no prior involvement in the matter or be directly supervised by any person who is involved in the matter.
- (b) The operations office manager shall also appoint a DOE attorney as counsel for DOE, who shall assist the hearing officer by:
  - (1) Obtaining evidence;
- (2) Arranging for the appearance of witnesses:
- (3) Examining and cross-examining witnesses; and
- (4) Notifying the individual in writing, at least 7 working days in advance of the hearing, of the scheduled place, date, and hour where the hearing will take place.

#### §711.14 Certification review hearing.

- (a) The certification review hearing officer shall conduct the proceedings in an orderly and impartial manner to protect the interests of both the Government and the individual.
- (b) An individual who requests a certification review hearing shall have the right to appear personally before the hearing officer; to present evidence in his or her own behalf, through witnesses or by documents, or by both; and be accompanied and represented at the hearing by counsel of the individual's choosing or any other person and at the individual's own expense.

- (c) In conducting the proceedings, the certification review hearing officer shall:
- (1) Receive all information relating to the individual's fitness for PAP certification through witnesses or documentation:
- (2) Ensure that the individual is permitted to offer information in his or her behalf; to call, examine, and except as provided in paragraph (c)(3) of this section, cross-examine witnesses and other persons who have made written or oral statements, and to present and examine documentary evidence;
- (3) Have the option to receive and consider oral or written statements adverse to the individual without affording the individual the opportunity to cross-examine the person making the statement in either of the following circumstances:
- (i) The substance of the statement was contained in the individual's personnel security file and the head of the Federal agency supplying the statement certifies that the person who furnished the information is a confidential informant who has been engaged in obtaining intelligence information for the Government, and that the disclosure of that person's identity would substantially harm the national security: or
- (ii) The substance of the statement was contained in the individual's personnel security file and the Assistant Secretary for Defense Programs or designee for that particular purpose has determined, after considering information furnished by the investigative agency concerning the reliability of the person and the accuracy of the statement, that —
- (A) The statement appears to be reliable and material;
- (B) Failure of the hearing officer to receive and consider such statement would substantially harm the national security; and
- (C) The person who furnished the information cannot appear to testify due to death or severe illness, or due to some other good cause as determined only by the Assistant Secretary for Defense Programs:
- (4) Ensure that if the procedures in paragraph (c)(3) of this section are used, the individual is given a descrip-

- tion of the information, which shall be as comprehensive and detailed as the national security permits. In addition, if a statement is received under paragraph (c)(3)(ii) of this section, the identity of the person making the statement and the information to be considered shall be made available to the individual. The hearing officer shall give appropriate consideration to the fact that the individual did not have an opportunity to cross-examine such person:
- (5) Require the testimony of the individual and all witnesses be given under oath or affirmation:
- (6) Request that the Assistant Secretary for Defense Programs issue subpoenas for witnesses to attend the hearing or for the production of specific documents or other physical evidence; and
- (7) Ensure that a transcript of the certification review proceedings is made.

# §711.15 Hearing officer's report and recommendation.

Not later than 30 working days after the conclusion of the hearing, the certification review hearing officer shall forward written findings, a supporting statement of reasons, and recommendation regarding the individual's suitability for certification or recertification in the PAP to the operations office manager. The hearing officer's report and recommendation shall be accompanied by a copy of the record of the proceedings.

# § 711.16 Appeal of the operations office manager's final decision.

- (a) An individual who has been denied PAP certification or recertification, or whose certification has been revoked, may appeal the operations office manager's decision to the Assistant Secretary for Defense Programs. The appeal must be sent to the Assistant Secretary for Defense Programs, by certified mail, no later than 20 working days after the individual receives the operations office manager's decision.
- (b) An individual who appeals an operations office manager's decision to the Assistant Secretary for Defense Programs must submit the appeal and a written supporting statement to the

Assistant Secretary for Defense Programs through the operations office manager and the Deputy Assistant Secretary for Military Application and Stockpile Management. The individual must also submit:

- (1) A copy of the operations office manager's final decision and any related documentation; and
- (2) If a certification review hearing was conducted, a copy of the hearing officer's report and recommendation and the record of the proceedings.
- (c) Within 20 working days of the receipt of an individual's appeal and supporting documents, the Assistant Secretary for Defense Programs shall review all of the information and issue a written decision in the matter. The decision of the Assistant Secretary for Defense Programs shall be final for DOE.
- (d) If an individual does not appeal to the Assistant Secretary for Defense Programs within the time specified in paragraph (a) of this section, the operations office manager's decision shall be the final decision.

### Subpart B—Medical Assessments for PAP Certification and Recertification

GENERAL PROVISIONS

#### § 711.20 Applicability.

The purpose of this subpart is to establish standards and procedures for conducting medical assessments of DOE and DOE contractor employees in the PAP.

#### §711.21 Purpose and scope.

The standards and procedures set forth in this part are necessary for DOE to:

- (a) Identify the presence of any mental, emotional, physical, or behavioral characteristics or conditions that present or are likely to present an unacceptable impairment in judgment, reliability, or fitness of an individual to perform nuclear explosive duties safely and reliably;
- (b) Facilitate the early diagnosis and treatment of disease or impairment and to foster accommodation and rehabilitation of a disabled individual with

the intent of returning the individual to assigned nuclear explosive duties:

(c) Determine what functions an employee may be able to perform and to facilitate the proper placement of employees; and (d) Provide for continuing monitoring of the health status of employees in order to facilitate early detection and correction of adverse health effects, trends, or patterns.

RESPONSIBILITIES AND AUTHORITIES

### §711.30 Designated physician.

- (a) The designated physician shall be qualified to provide professional expertise in the area of occupational medicine as it relates to the PAP. The designated physician may serve in other capacities, including Medical Review Officer.
  - (b) The designated physician shall:
- (1) Be a physician who is a graduate of an accredited school of medicine or osteopathy:
- (2) Have a valid, unrestricted state license to practice medicine in the state where PAP medical assessments occur;
- (3) Have met the applicable PAP training requirements; and (4) Be eligible for DOE access authorization.
- (c) The designated physician shall be responsible for the medical assessments of PAP individuals, including determining which components of the medical assessments may be performed by other qualified personnel. Although a portion of the assessment may be performed by another physician, physician's assistant, or nurse practitioner, the designated physician remains responsible for:
- (1) Supervising the evaluation process:
- (2) Interpreting the results of evaluations:
- (3) Documenting medical conditions that may disqualify an individual from the PAP;
- (4) Providing medical assessment information to the designated psychologist to assist in determining psychological fitness:
- (5) Determining, in conjunction with DOE, if appropriate, the location and date of the next required medical assessment, thereby establishing the period of certification; and (6) Signing a

recommendation as to the medical fitness of an individual for certification or recertification.

- (d) The designated physician shall immediately report to the SOMD any of the following about himself or herself:
- (1) Initiation of an adverse action by any state medical licensing board or any other professional licensing board;
- (2) Initiation of an adverse action by any federal regulatory board since the last designation;
- (3) The withdrawal of the privilege to practice by any institution;
- (4) Being named a defendant in any criminal proceedings (felony or misdemeanor) since the last designation;
- (5) Being evaluated or treated for alcohol use disorder or drug dependency or abuse since the last designation; or
- (6) Occurrence of a physical or mental health condition since the last designation that might affect his or her ability to perform professional duties.

### §711.31 Designated psychologist.

- (a) The designated psychologist shall report to the SOMD and shall determine the psychological fitness of an individual to participate in the PAP. The results of this evaluation shall be provided only to the designated physician or the SOMD.
  - (b) The designated psychologist shall:
- (1) Hold a doctoral degree from a clinical psychology program that includes a 1-year clinical internship approved by the American Psychological Association or an equivalent program;
- (2) Have accumulated a minimum of 3 years postdoctoral clinical experience with a major emphasis in psychological assessment;
- (3) Have a valid, unrestricted state license to practice clinical psychology in the state where PAP medical assessments occur;
- (4) Have met the applicable PAP training requirements; and
- (5) Be eligible for DOE access authorization
- (c) The designated psychologist shall be responsible for the performance of all psychological evaluations of PAP individuals, and otherwise as directed by the SOMD. In addition, the designated psychologist shall:

- (1) Designate which components of the psychological evaluation may be performed by other qualified personnel;
- (2) Upon request of management, assess the psychological fitness of personnel for PAP duties in specific work settings and recommend referrals as indicated;
- (3) Conduct and coordinate educational and training seminars, workshops, and meetings to enhance PAP individual and supervisor awareness of mental health issues;
- (4) Establish personal workplace contact with supervisors and workers to help them identify psychologically distressed PAP individuals; and
- (5) Make referrals for psychiatric, psychological, substance abuse, personal or family problems, and monitor the progress of individuals so referred.
- (d) The designated psychologist shall immediately report to the SOMD any of the following about himself or herself:
- (1) Initiation of an adverse action by any state medical licensing board or any other professional licensing board;
- (2) Initiation of an adverse action by any federal regulatory board since the last designation;
- (3) The withdrawal of the privilege to practice by any institution:
- (4) Being named a defendant in any criminal proceeding (felony or misdemeanor) since the last designation;
- (5) Being evaluated or treated for alcohol use disorder or drug dependency or abuse since the last designation; or
- (6) Occurrence of a physical or mental health condition that might affect his or her ability to perform professional duties since the last designation.

# §711.32 Site Occupational Medical Director (SOMD).

(a) The SOMD shall nominate a physician to serve as the designated physician and a clinical psychologist to serve as the designated psychologist. The nominations shall be sent through the operations office to the Director, Office of Occupational Medicine and Medical Surveillance. Each nomination shall describe the nominee's relevant training, experience, and licensure, and shall include a curriculum vitae and a copy of the nominee's current state or district license.

- (b) The SOMD shall submit a renomination report biennially through the operations office manager to the Director, Office of Occupational Medicine and Medical Surveillance. This report shall be submitted at least 60 days before the second anniversary of the initial designation or of the last redesignation, whichever applies. The report shall include:
- (1) A statement evaluating the performance of the designated physician and designated psychologist during the previous designation period;
- (2) A summary of all PAP-relevant training, including postgraduate education, that the designated physician and designated psychologist has completed since the last designation; and
- (3) A copy of the valid, unrestricted state or district license of the designated physician and designated psychologist.
- (c) The SOMD shall submit, annually, to the Director, Office of Occupational Medicine and Medical Surveillance, through the operations office manager, a written report summarizing PAP medical activity during the previous year. The SOMD shall comply with any DOE directives specifying the form or contents of the annual report.
- (d) The SOMD shall investigate any reports of problems regarding a designated physician or designated psychologist, and the SOMD may suspend either official from PAP-related duties. If the SOMD suspends either official, the SOMD shall notify the Director, Office of Occupational Medicine and Medical Surveillance and the operations office manager, and provide supporting documentation and reasons for the action.

#### § 711.33 Director, Office of Occupational Medicine and Medical Surveillance.

The Director, Office of Occupational Medicine and Medical Surveillance, shall:

- (a) Develop policies, standards, and guidance related to the medical aspects of the PAP, including the psychological testing inventory to be used;
- (b) Review the qualifications of designated physicians and designated psychologists, and concur or nonconcur in their designations by sending a state-

ment to the responsible program office and the operations office, with an informational copy to the SOMD;

- (c) Provide technical assistance on medical aspects of the PAP to all DOE elements and DOE contractors; and
- (d) Concur or nonconcur with the medical bases of decisions rendered on appeals of PAP certification decisions.

## § 711.34 Operations office managers; Director, Transportation Safeguards Division.

Operations office managers and the Director, Transportation Safeguards Division, shall approve, upon the nomination of the SOMD and concurrence of the Director, Office of Occupational Medicine and Medical Surveillance, physicians and psychologists to serve as designated physicians and designated psychologists.

MEDICAL ASSESSMENT PROCESS AND STANDARDS

## § 711.40 Medical standards for certification.

To be certified in the PAP, an individual shall be free of any mental, emotional, or physical condition or behavioral characteristics or conditions that present or are likely to present an unacceptable impairment in judgement, reliability, or fitness of an individual to perform nuclear explosive duties safely and reliably. The designated physician, with the assistance of the designated psychologist, shall determine the existence or nature of any of the following:

- (a) Physical or medical disabilities such as visual acuity, defective color vision, impaired hearing, musculoskeletal deformities, and neuromuscular impairment;
- (b) Mental disorders or behavioral problems, including substance use disorders, as defined in the Diagnostic and Statistical Manual of Mental Disorders;
- (c) Use of illegal drugs or the abuse of legal drugs or other substances, as identified by self-reporting, or by medical or psychological evaluation or testing;
- (d) Alcohol use disorder;
- (e) Threat of suicide, homicide, or physical harm; or

(f) Cardiovascular disease, endocrine disease, cerebrovascular or other neurologic disease, or the use of drugs for the treatment of such conditions that may adversely affect the judgment or ability of an individual to perform assigned duties in a safe and reliable manner.

#### §711.41 Medical assessment process.

- (a) The designated physician, under the supervision of the SOMD, shall be responsible for the medical assessment of PAP individuals. In carrying out this responsibility, the designated physician or the SOMD shall integrate the medical evaluations, available drug testing results, psychological evaluations, any psychiatric evaluations, and any other relevant information to determine an individual's overall medical qualification for assigned duties.
- (b) Employers shall provide a job task analysis or detailed statement of duties for each PAP individual to both the designated physician and the designated psychologist before each medical assessment and psychological evaluation. PAP medical assessments and psychological evaluations shall not be performed if a job task analysis or detailed statement of duties has not been provided.
- (c) The designated physician shall consider a PAP individual's fitness for nuclear explosive duties at the time of each medical contact, including:
- (1) Medical assessments for initial certification, annual recertification, and evaluations for reinstatement following temporary removal from the PAP:
- (2) Intermediate evaluations, including job transfer evaluations, evaluations upon self-referral, and referral by management:
- (3) Routine medical contacts, including routine return-to-work evaluations and occupational and nonoccupational health counseling sessions; and
- (4) A review of current, legal drug use.
- (d) Psychological evaluations shall be conducted:
- (1) For initial certification. This psychological evaluation consists of a generally accepted, self-reporting psychological inventory tool approved by the Director, Office of Occupational Medi-

- cine and Medical Surveillance, and a semi-structured interview.
- (2) For recertification. This psychological evaluation consists of a semi-structured interview.
- (3) Every third year. The medical assessment for recertification shall include a generally accepted self-reporting psychological inventory tool approved by the Director, Office of Occupational Medicine and Medical Surveilance
- (4) Additional psychological or psychiatric evaluations may be required by the SOMD when needed to resolve PAP concerns.
- (e) Following absences requiring return-to-work evaluations under applicable DOE directives, the designated physician, with assistance from the designated psychologist, shall determine whether a psychological evaluation is necessary.
- (f)(1) Except as provided in paragraph (f)(2) of this section, the designated physician shall forward the completed medical assessment of a PAP individual to the SOMD, who shall send a recommendation based on the assessment simultaneously to the individual's PAP administrative organization and to the PAP certifying official.
- (2) If the designated physician determines that a currently certified individual no longer meets the PAP standards, the designated physician shall immediately, orally, inform the PAP certifying official and the PAP individual's administrative organization, following up in writing as appropriate.
- (g) Only the designated physician, subject to informing the SOMD, shall make a medical recommendation for return to work and work accommodations for PAP individuals.
- (h) The following documentation is required for routine use in the PAP after treatment of an individual for any disqualifying condition:
- (1) A summary of the diagnosis, treatment, current status, and prognosis to be furnished to the designated physician:
- (2) The medical opinion of the designated physician advising the individual's supervisor on whether the individual is able to return to work in either a PAP or non-PAP capacity; and

(3) Any periodic monitoring plan approved by the designated physician, the designated psychologist, and the SOMD, that is used to evaluate the reliability of the employee.

# §711.42 Medical assessment for drug abuse.

- (a) Except as otherwise provided by this section, a medical assessment for illegal drug use by DOE employees shall be conducted under DOE Order 3792.3, "Drug-Free Federal Workplace Testing Implementation Program," or any successor order issued by DOE.
- (b) Except as otherwise provided by this section, a medical assessment for illegal drug use by DOE contractor employees shall be conducted under 10 CFR part 707, "Workplace Substance Abuse Programs at DOE Sites."
- (c) In each case of drug abuse, the SOMD, in consultation with the designated psychologist, shall evaluate the individual for evidence of psychological impairment and make a recommendation to the PAP certifying official as to the individual's reliability.
- (d) If an individual successfully completes an SOMD-approved drug rehabilitation program, DOE may reinstate the individual in the PAP based on the SOMD's follow-up evaluation and recommendation. The individual reinstated will be subject to SOMD-directed unannounced tests for illegal drugs and relevant counseling for 3 years.

## §711.43 Evaluation for hallucinogen

If DOE determines that a PAP individual has used any hallucinogen, the individual shall not be eligible for certification or recertification unless:

- (a) Five years have passed since the last use of the hallucinogen;
- (b) A medical evaluation, including a psychological test, is performed to determine that the individual is reliable;
- (c) The individual has a record of acceptable job performance and observed behavior.

# § 711.44 Medical assessment for alcohol use disorder.

(a) If alcohol abuse is suspected, an individual shall be examined for evi-

- dence of alcohol use disorder. If the examination produces evidence of alcohol use disorder, additional evaluation shall be conducted, which may include psychological evaluation.
- (b) Alcohol consumption is prohibited within an 8-hour period preceding scheduled work and during the performance of nuclear explosive duties.
- (c) Individuals in the PAP, including individuals who report for unscheduled work, may be tested for cause or reasonable suspicion of alcohol use or after an accident or an unsafe practice involving the individual.
- (d) DOE shall implement or require the contractor to implement procedures that will ensure that persons called in to perform unscheduled work are fit to perform the tasks assigned.
- (e) Tests for alcohol must be administered by a certified Breath Alcohol Technician using an evidential-grade breath analysis device approved for use at the 0.02/0.04 cut-off levels that conforms to the Department of Transportation's (DOT) National Highway Traffic Safety Administration (NHTSA) model specifications (58 FR 48705, September 17, 1993), and the most recent "Conforming Products List" issued by NHTSA which are available from the Office of Traffic Safety Programs, Washington, DC.
- (f) An individual whose confirmatory breath alcohol test result is at or above an alcohol concentration of 0.02 percent shall not be allowed to perform nuclear explosive duties until the individual's alcohol concentration is below 0.02 percent using an evidential-grade breath analysis device described in section 711.44(e).
- (g) Individuals subject to alcohol testing under DOT regulations shall be subject to the sanctions promulgated by the Federal Highway Administration rule. Appropriate disciplinary action will be taken under DOE's authority.
- (h) Individuals refusing to submit to a breath alcohol test shall be immediately removed from nuclear explosive duties.
- (i) The SOMD, in conjunction with the designated psychologist, shall

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evaluate each case of alcohol use disorder for evidence of psychological impairment and provide the PAP certifying official a recommendation as to the individual's reliability.

(j) After successfully completing an SOMD-approved alcohol treatment program, DOE may reinstate an individual in the PAP based on the SOMD's follow-up evaluation and recommendation.

# § 711.45 Maintenance of medical records.

- (a) Medical records produced or used in the PAP certification process shall be collected and maintained on separate forms and in separate medical files, and be treated as a confidential medical record.
- (b) The medical records of PAP individuals shall be maintained in accordance with the Privacy Act, 5 U.S.C. 552a and DOE implementing regulations in 10 CFR Part 1008; the Department of Labor's regulations on access to employee exposure and medical records, 29 CFR 1910.1020; and applicable DOE directives. DOE contractors also may be subject to \$503 of the Rehabilitation Act, 29 U.S.C. 793, and its implementing rules, including confidentiality provisions at 29 CFR 60-741.23(d).
- (c) The psychological record of a PAP individual shall be considered a component of the medical record. The psychological record shall:
- (1) Contain any clinical reports, test protocols and data, notes of employee contacts and correspondence, and other information pertaining to an individual's contact with a psychologist;
- (2) Be stored in a secure location in the custody of the designated psychologist:
- (3) Be kept separate from other medical record documents, with access limited to the SOMD, the designated physician, the designated psychologist, or other persons who are authorized by law or regulation to have access; and
  - (4) Be retained indefinitely.
- (d) The records of alcohol and drug testing shall be maintained in accordance with 42 CFR part 2, "Confidentiality of Alcohol and Drug Abuse Patient Records," and 10 CFR part 707,

"Workplace Substance Abuse Programs at DOE Sites."

# PART 715—DEFINITION OF NON—RECOURSE PROJECT—FINANCED

Sec.

715.1 Purpose and scope.

715.2 Definitions.

715.3 Definition of "Nonrecourse Project-Financed."

AUTHORITY: 42 U.S.C. 7651o(a)(2)(B); 42 U.S.C. 7254.

SOURCE: 56 FR 55064, Oct. 24, 1991, unless otherwise noted.

#### §715.1 Purpose and scope.

This part sets forth the definition of "nonrecourse project-financed" as that term is used to define "new independent power production facility," in section 416(a)(2)(B) of the Clean Air Act Amendments of 1990, 42 U.S.C. 7651o(a)(2)(B). This definition is for purposes of section 416(a)(2)(B) only. It is not intended to alter or impact the tax treatment of any facility or facility owner under the Internal Revenue Code and regulations.

#### § 715.2 Definitions.

As used in this subpart—

Act means the Clean Air Act Amendments of 1990, 104 Stat. 2399.

Facility means a "new independent power production facility" as that term is used in the Act, 42 U.S.C. 7651o(a)(2).

# § 715.3 Definition of "Nonrecourse Project-Financed".

Nonrecourse project-financed means when being financed by any debt, such debt is secured by the assets financed and the revenues received by the facility being financed including, but not limited to, part or all of the revenues received under one or more agreements for the sale of the electric output from the facility, and which neither an electric utility with a retail service territory, nor a public utility as defined by section 201(e) of the Federal Power Act, as amended, 16 U.S.C. 824(e), if any of its facilities are financed with general credit, is obligated to repay in whole or in part. A commitment to contribute equity or the contribution of equity to a facility by an electric utility shall

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not be considered an obligation of such utility to repay the debt of a facility. The existence of limited guarantees, commitments to pay for cost overruns, indemnity provisions, or other similar undertakings or assurances by the facility's owners or other project participants will not disqualify a facility from being "nonrecourse project-financed" as long as, at the time of the financing for the facility, the borrower is obligated to make repayment of the term debt from the revenues generated by the facility, rather than from other sources of funds. Projects that are 100 percent equity financed are also considered "nonrecourse project-financed" for purposes of section 416(a)(2)(B).

# PART 725—PERMITS FOR ACCESS TO RESTRICTED DATA

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AUTHORITY: Sec. 161 of the Atomic Energy Act, as amended, 68 Stat. 943, 42 U.S.C. 2201.

SOURCE: 41 FR 56778, Dec. 30, 1976, unless otherwise noted.

EDITORIAL NOTE: Regulations in this part are affected by a document published at 44 FR 37938, June 29, 1979. See the redesignation table appearing in the Finding Aids section of this volume.

#### GENERAL PROVISIONS

### § 725.1 Purpose.

This part establishes procedures and standards for the issuance of an Access Permit to any person subject to this part who requires access to Restricted Data applicable to civil uses of atomic energy for use in his business, trade or profession; provides for the amendment, renewal, suspension, termination and revocation of an Access Permit; and specifies the terms and conditions under which the Administrator will issue the Permit.

#### § 725.2 Applicability.

The regulations in this part apply to any person within or under the jurisdiction of the United States who desires access to Restricted Data for use in his business, profession or trade.

#### § 725.3 Definitions.

As used in this part:

- (a) Access Permit means a permit, issued by the Administrator authorizing access by the named permittee to Restricted Data applicable to civil uses of atomic energy in accordance with the terms and conditions stated on the permit.
- (b) Act means the Atomic Energy Act of 1954 (68 Stat. 919), including any amendments thereto.
- (c) Category means a category of Restricted Data designated in appendix A to the regulations in this part.
- (d) *Administrator* means the Administrator of the Department of Energy or his duly authorized representatives.
- (e) DOE means the Department of Energy.
- (f) *Permittee* means the holder of a permit issued pursuant to the regulations in this part.
- (g) Person means (1) any individual, corporation, partnership, firm, association, trust, estate, public or private institution, group, Government agency

other than DOE, any state or any political subdivision of, or any political entity within a state, or other entity; and (2) any legal successor, representative, agent, or agency of the foregoing.

- (h) Restricted Data means all data concerning (1) design, manufacture or utilization of atomic weapons; (2) the production of special nuclear material; or (3) the use of special nuclear material in the production of energy, but shall not include data declassified or removed from the Restricted Data category pursuant to section 142 of the Act.
- (i) Government Confidential Commercial Information means sensitive commercial information not including Restricted Data, generated by the government, the release of which could put the government at a competitive disadvantage in providing enrichment services.

 $[41\ FR\ 56778,\ Dec.\ 30,\ 1976,\ as\ amended\ at\ 52\ FR\ 30139,\ Aug.\ 13,\ 1987]$ 

### § 725.4 Interpretations.

Except as specifically authorized by the Administrator in writing no interpretation of the meaning of the regulations in this part by any officer or employee of DOE other than a written interpretation by the General Counsel will be recognized to be binding upon DOE.

### §725.5 Communications.

Communications concerning rulemaking, i.e., petition to change part 725, should be addressed to Administrator of Energy Research and Development, Department of Energy, Washington DC 20545. Except with respect to category C-24, all other communications concerning the regulations in this part and applications filed under them, should be addressed to the DOE Operations Office listed in appendix B of this part responsible for the geographical area in which (a) the applicant's principal place of business is located, or (b) the principal place where the applicant will use the restricted data is located.

# § 725.6 Categories of available information.

For administrative purposes DOE has categorized Restricted Data which will

be made available to permittees in the categories as set forth in appendix A to this part. Top Secret information; information pertaining to the design, manufacture or utilization of atomic weapons; and defense information other than Restricted Data are not included in these categories and will not be made available under this part.

### §725.7 Specific waivers.

The Administrator may, upon application of any interested party, grant such waivers from the requirements of this part as he determines are authorized by law and will not constitute an undue risk to the common defense and security.

#### APPLICATIONS

### § 725.11 Applications.

- (a) Any person desiring access to Restricted Data pursuant to this part should submit an application (Form DOE 378), in triplicate, for an access permit to the DOE Operations Office, listed in appendix B to this part, responsible for the area in which (1) the applicant's principal place of business is located, or (2) the principal place where the applicant will use the Restricted Data is located. Applications for access to Restricted Data in category C-24 isotope separation, should be submitted to the Oak Ridge Operations Office.
- (b) Where an individual desires access to Restricted Data for use in the performance of his duties as an employee, the application for an access permit must be filed in the name of his employer.
- (c) Self-employed private consultants, desiring access to Restricted Data, must file the application in their own name for an individual access permit.
- (d) Each application should contain the following information:
- (1) Name of applicant (unincorporated subsidiaries or divisions of a corporation must apply in the name of the corporation):
  - (2) Address of applicant;
- (3) Description of business or occupation of applicant; and
- (4)(i) If applicant is an individual, state citizenship.

#### § 725.12

- (ii) If applicant is a partnership, state name, citizenship and address of each partner and the principal location where the partnership does business.
- (iii) If applicant is a corporation or an unincorporated association, state:
- (A) The state where it is incorporated or organized and the principal location where it does business;
- (B) The names, addresses and citizenship of its directors and of its principal officers;
- (C) Whether it is owned, controlled or dominated by an alien, a foreign corporation, or foreign government, and if so, give details.
- (iv) If the applicant is acting as agent or representative of another person in filing the application, identify the principal and furnish information required under this subparagraph with respect to such principal;
- (5) Total number of full-time employees:
- (6) Classification of Restricted Data (Confidential or Secret) to which access is requested:
- (7) Potential use of the Restricted Data in the applicant's business, profession or trade. If access to Secret Restricted Data is requested, list the specific categories by number and furnish detailed reasons why such access within the specified categories is needed by the applicant. The need for Secret information should be stated by describing its proposed use in specific research, design, planning, construction, manufacturing, or operating projects; in activities under licenses issued by Nuclear Regulatory Commission; in studies or evaluations planned or under way; or in work or services to be performed for other organizations. In addition, if access to secret restricted data in category C-65, plutonium production, or restricted data in category C-24, isotope separation, is requested, the application should also include sufficient information to satisfy the requirements of §725.15(b) (2) or (3), as the case may be."
- (8) Principal Location(s) at which Restricted Data will be used.
- (e) Applications should be signed by a person authorized to sign for the applicant.
- (f) Each application shall contain complete and accurate disclosure with

respect to the real party or parties in interest and as to all other matters and things required to be disclosed.

#### § 725.12 Noneligibility.

The following persons are not eligible to apply for an access permit:

- (a) Corporations not organized under the laws of the United States or a political subdivision thereof.
- (b) Any individual who is not a citizen of the United States.
- (c) Any partnership not including among the partners one or more citizens of the United States; or any other unincorporated association not including one or more citizens of the United States among its principal officers.
- (d) Any organization which is owned, controlled or dominated by the Government of, a citizen of, or an organization organized under the laws of a country or area listed as a Subgroup A country or destination in §371.3 (15 CFR 371.3) of the Comprehensive Export Schedule of the United States Department of Commerce.
- (e) Persons subject to the jurisdiction of the United States who are not doing business within the United States.

#### § 725.13 Additional information.

The Administrator may, at any time after the filing of the original application and before the termination of the permit, require additional information in order to enable the Administrator to determine whether the permit should be granted or denied or whether it should be modified or revoked.

## § 725.14 Public inspection of applications.

Applications and documents submitted to DOE in connection with applications may be made available for public inspection in accordance with the regulations contained in part 702 of this chapter.

## § 725.15 Requirements for approval of applications.

(a) An application for an access permit authorizing access to confidential restricted data in the categories set forth in appendix A of this part (except C-91 and C-24) will be approved only if the application demonstrates that the

applicant has a potential use or application for such data in his business, trade, or profession and has filed a complete application form.

- (b)(1) An application for an access permit authorizing access to restricted data in category C-24 or secret restricted data in other categories will be approved only if the applicant has a need for such data in his business, trade, or profession and has filed a complete application form.
- (2) An application for an access permit authorizing access to Secret Restricted Data in category C-65 Plutonium Production will be approved only if the application demonstrates also that the applicant:
- (i) Is directly engaged in a substantial effort to develop, design, build or operate a chemical processing plant or other facility related to his participation in the peaceful uses of atomic energy for which such production rate and cost data are needed; or
- (ii) Is furnishing to a permittee having access to C-65 under paragraph (b)(2)(i) of this section, substantial scientific, engineering or other professional services to be used by said permittee in carrying out the activities for which said permittee received access to category C-65.
- (3) An application for an access permit authorizing access to Restricted Data in category C-24, isotope separation—subcategory A or B—will be approved only if the application demonstrates also that the applicant:
- (i) Possesses technical, managerial and financial qualifications onstrating that the applicant is potentially capable of undertaking or participating significantly in the construction and/or operation of production or manufacturing facilities and offers reasonable assurance of adequacy of resources to carry on, alone or with others, uranium enrichment on a production basis or the large-scale manufacture or assembly of precision equipment systems, or is potentially capable of utilizing centrifuge machines in its business for uranium enrichment or for purposes other than uranium enrichment; and is not subject to foreign ownership, control, or influence; and
- (A) For subcategory A, desires to determine its interest in participating

- significantly in a substantial effort to develop, design, build, and operate a uranium enrichment facility or a facility for the manufacture of uranium enrichment equipment.
- (B) For subcategory B, proposes to (1) participate significantly in, or is directly participating significantly in, a substantial effort to evaluate alternative processes, develop, design, build, and operate a uranium enrichment facility or a facility for the manufacture of uranium enrichment equipment, or (2) utilize centrifuge machines and related equipment in its business for uranium enrichment or for purposes other than uranium enrichment, or
- (ii) Is furnishing to a permittee having access to Category C-24 under the paragraph (b)(3)(i) of this section substantial scientific, engineering, or other professional services to be used by said permittee in carrying out the activities for which said permittee received access to Category C-24.
- (4) An application for an access permit authorizing access to Confidential and Secret Restricted Data in C-91, Nuclear Reactors for Rocket Propulsion, will be approved only if the application demonstrates also that the applicant:
- (i) Possesses qualifications demonstrating that he is capable of making a contribution to research and development in the field of nuclear reactors for rocket propulsion and is directly engaged in or proposes to engage in a substantial research and development program in such field of work; or
- (ii) Is engaged in or proposes to engage in a substantial study program in the field of nuclear reactors for rocket propulsion preparatory to the submission of a research and development proposal to DOE; or
- (iii) Is furnishing to a permittee having access under paragraph (b)(4) (i) or (ii) of this section substantial scientific, engineering or other professional services to be used by that permittee in a study or research and development program for which said permittee received access.
- $[41\ {\rm FR}\ 56778,\ {\rm Dec.}\ 30,\ 1976,\ {\rm as}\ {\rm amended}\ {\rm at}\ 52\ {\rm FR}\ 30139,\ {\rm Aug.}\ 13,\ 1987]$

#### § 725.21

#### PERMITS

#### § 725.21 Issuance.

- (a) Upon a determination that an application meets the requirements of this regulation, the Administrator will issue to the applicant an access permit on Form DOE 379.
- (b) An Access Permit is not an access authorization. It does not authorize any individual not having an appropriate DOE access authorization to receive Restricted Data. See §725.24 and part 795 of this chapter.

#### § 725.22 Scope of permit.

- (a) All access permits will as a minimum authorize access, subject to the terms and conditions of the access permit to confidential restricted data in all of the categories set forth in appendix A to this part, except C-91 and C-24.
- (b) In addition, access permits may authorize access, subject to the terms and conditions of the access permit to such Secret Restricted Data as is included within the particular category or categories specified in the permit.
- (c) In addition, access permits may authorize access, subject to the terms and conditions of the access permit, to such government confidential commercial information as is included within the particular category or categories specified in the permit.
- $[41\ FR\ 56778,\ Dec.\ 30,\ 1976,\ as\ amended\ at\ 52\ FR\ 30139,\ Aug.\ 13,\ 1987]$

## § 725.23 Terms and conditions of access.

- (a) Neither the United States, nor DOE, nor any person acting on behalf of DOE makes any warranty or other representation, expressed or implied, (1) with respect to the accuracy, completeness or usefulness of any information made available pursuant to an access permit, or (2) that the use of any such information may not infringe privately owned rights.
- (b) The Administrator, on behalf of DOE, hereby waives such rights with respect to any invention or discovery as it may have pursuant to section 152 of the Act by reason of such invention or discovery having been made or conceived in the course of, in connection with, or resulting from access to Restricted Data received under the terms

of an access permit. (Note provisions of §725.23(d).)

- (c) Each permittee shall:
- (1) Comply with all applicable provisions of the Atomic Energy Act of 1954, as amended, and with parts 795 and 810 of this chapter and with all other applicable rules, regulations, and orders of DOE, including such rules, regulations, and orders as DOE may adopt or issue to effectuate the policies specified in the act directing DOE to strengthen free competition in private enterprise and avoid the creation or maintenance of a situation inconsistent with the antitrust laws.
- (2) Be deemed to have waived all claims for damages under section 183 of title 35 U.S. Code by reason of the imposition of any secrecy order on any patent application and all claims for just compensation under section 173 of the Atomic Energy Act of 1954, with respect to any invention or discovery made or conceived in the course of, in connection with or as a result of access to Restricted Data received under the terms of the access permit;
- (3) Be deemed to have waived any and all claims against the United States, DOE and all persons acting on behalf of DOE that might arise in connection with the use, by the applicant, of any and all information supplied by them pursuant to the access permit:
- (4) Obtain and preserve in his files written agreements from all individuals who will have access to Restricted Data under his access permit. The agreement shall be as follows:

In consideration for receiving access to Restricted Data under the access permit issued by the Administrator of Energy Research and Development, I hereby agree to:

- (a) Waive all claims for damages under section 183 of title 35 U.S. Code by reason of the imposition of any secrecy order on any patent application, and all claims for just compensation under section 173 of the Atomic Energy Act of 1954, with respect to any invention or discovery made or conceived in the course of, in connection with or resulting from access to Restricted Data received under the terms of the access permit issued to (insert the name of the holder of the access permit):
- (b) Waive any and all claims against the United States, DOE, and all persons acting on behalf of DOE that might arise in connection with the use, by me, of any and all information supplied by them pursuant to the

access permit issued to (insert the name of the holder of the access permit).

In case of an access permit authorizing access to restricted data in category C-24, isotope separation, the agreement shall also provide for such requirements as the permittee considers necessary for purposes of fulfilling its obligations under paragraph (d) of this section.

- (5) Pay all established charges for personnel access authorizations, DOE consulting services, publication and reproduction of documents, and such other services as DOE may furnish in connection with the access permit.
- (d) The following terms and conditions are applicable to an access permit authorizing access to restricted data in category C-24, isotope separation irrespective of whether access to DOE's restricted data information is desired:
- (1) The permittee agrees to grant a nonexclusive license at reasonable royalties to the United States and, at the request of DOE, to domestic and foreign persons, to use in the production or enrichment of special nuclear material any U.S. patent or any U.S. patent application (otherwise in condition for allowance except for a secrecy order thereon) on any invention or discovery made or conceived by the permittee, its employees, or others engaged by the permittee in the course of the permittee's work under the access permit, or as a result of access to data or information made available by DOE.
- (2) The permittee agrees to grant to the United States, and, at the request of DOE, to domestic and foreign persons, the right at reasonable royalties to use for research, development, or manufacturing programs for the production or enrichment of special nuclear material, any technical information or data, including economic evaluations thereof, of a proprietary nature developed by the permittee, its employees, or others engaged by the permittee in the course of the permittee's work under the access permit or as a result of access to data or information made available by DOE and not covered by a U.S. patent or U.S. patent application referred to in paragraph (d)(1) of this section. If DOE disseminates any such proprietary technical information

or data in its possession to any of its contractors for use in any DOE research, development, production, or manufacturing programs, it will do so under contractual provisions pursuant to which the contractor would undertake to use this information only for the work under the pertinent DOE contract. Notwithstanding the foregoing provisions of this subparagraph, the permittee waives any claim against DOE for compensation or otherwise, in connection with any use or dissemination of information or data not specifically identified and claimed by the permittee as proprietary in a written notice to DOE at the time of the furnishing of the information or data to DOE. As used in this subparagraph, the term "technical information or data, including economic evaluations thereof, of a proprietary nature" means information or data which:

- (i) Is not the property of the Government by virtue of any agreement;
- (ii) Concerns the details of trade secrets or manufacturing processes which the permittee has protected from us by others; and
- (iii)(A) Is specifically identified as proprietary at the time it is made available to DOE.
- (B) Technical information or data shall not be deemed proprietary in nature whenever substantially the same technical information is available to DOE which has been prepared, developed or furnished as nonproprietary information by another source independently of the proprietary information and data furnished by the permittee.
- (3) If the amount of reasonable royalties provided for in paragraphs (d) (1) and (2) of this section cannot be agreed upon, the permittee agrees that such amount shall be determined by the Administrator under the provisions of section 157c of the Atomic Energy Act of 1954, as amended.
- (4) In the event domestic commercial uranium enriching services are provided by persons other than an agency of the United States, the permittee agrees not to require the United States to pay the royalties provided for in paragraphs (d) (1) and (2) of this section.
- (5) The acceptance, exercise, or use of the licenses or rights provided for in

#### § 725.24

paragraphs (d) (1) and (2) of this section shall not prevent the Government, at any time, from contesting their validity, scope or enforceability.

- (6) The permittee agrees, during the term of the access permit, to make quarterly reports to DOE in writing, in reasonable detail, respecting all technical information or data, including economic evaluations thereof, which the permittee or DOE considers may be of interest to DOE, including reports of patent applications on inventions or discoveries and of technical information and data of a proprietary nature. These reports will cover the results of the permittee's work under the access permit or as a result of data or information made available by DOE. The foregoing provisions of this subparagraph shall be subject to the provisions of paragraphs (d) (1) and (2) of this section.
- (7) The permittee agrees to make available to DOE, at all reasonable times during the term of the access permit, for inspection by DOE personnel, or by mutual agreement, others on behalf of DOE, all experimental equipment and technical information or data developed by the permittee, its employees, or others engaged by the permittee, in the course of the permittee's work under the access permit or as a result of data or information made available by DOE. The foregoing provision of this subparagraph shall be subject to the provisions of paragraphs (d) (1) and (2) of this section.
- (8) The permittee agrees to pay such reasonable compensation as DOE may elect to charge for the commercial use of its inventions and discoveries including related data and technology and, except for an applicant qualifying for a permit pursuant to \$725.15(b)(3)(ii), agrees to pay \$25,000 for an access permit authorizing access to restricted data in subcategory B.
- (9) Except as may be otherwise authorized by DOE, the permittee agrees not to disseminate to persons not granted access by DOE, restricted data or government confidential commercial information made available to the permittee by DOE or restricted data developed by the permittee, its employees, or others engaged by the permittee in the course of the permittee's

work under the access permit or as a result of data or information made available by DOE.

- (10) The granting of an access permit does not constitute any assurance, direct or implied, that the Nuclear Regulatory Commission will grant the permittee a license for a production facility or any other license.
- (11) In the event the permittee is engaged by DOE to perform work for DOE in the field of the separation of isotopes, the permittee agrees to undertake such measures as DOE may require for the separation of its activities under the access permit from its work for DOE.

 $[41\ FR\ 56778,\ Dec.\ 30,\ 1976,\ as\ amended\ at\ 52\ FR\ 30139,\ Aug.\ 13,\ 1987]$ 

#### § 725.24 Administration.

With respect to each permit issued pursuant to the regulations in this part, the cognizant Operations Office will:

- (a) Process all personnel access authorizations requested in connection with the permit;
- (b) Review the procedures submitted by the Applicant, in accordance with part 795 of this chapter, for the safeguarding of Restricted Data; and
- (c) Provide information to the permittee with respect to the sources and locations of Restricted Data available under this permit and to assist the permittee in other matters pertaining to the administration of his permit.

#### §725.25 Term and renewal.

- (a) Each access permit will be issued for a two year term, unless otherwise stated in the permit.
- (b) Applications for renewal shall be filed in accordance with §725.11. Each renewal application must be complete, without reference to previous applications. In any case in which a permittee has filed a properly completed application for renewal more than thirty (30) days prior to the expiration of his existing permit, such existing permit shall not expire until the application for a renewal has been finally acted upon by the Administrator.

#### § 725.26 Assignment.

An access permit is nontransferable and nonassignable.

#### § 725.27 Amendment.

An access permit may be amended from time to time upon application by the permittee. An application for amendment may be filed, in triplicate, in letter form and shall be signed by an individual authorized to sign on behalf of the applicant. The term of an access permit shall not be altered by an amendment thereto.

### § 725.28 Administrator action on application to renew or amend.

In considering an application by a permittee to review or amend his permit, the Administrator will apply the criteria set forth in §725.15. Failure of an applicant to reply to an DOE request for additional information concerning an application for renewal or amendment within 60 days shall result in a rejection of the application without prejudice to resubmit a properly completed application at a later date.

## §725.29 Suspension, revocation and termination of permits.

The Administrator may revoke or suspend any access permit for any material false statement in the application or in any report submitted to DOE pursuant to the regulations in this part or because of conditions or facts which would have warranted a refusal to grant the permit in the first instance, or for violation of any of the terms and conditions of the Atomic Energy Act of 1954 or rules, regulations or orders issued pursuant thereto. A permittee should request termination of his permit when he no longer requires Restricted Data for use in his business, trade or profession.

## § 725.30 Exceptions and additional requirements.

Notwithstanding any other provision in the regulations in this part, the Administrator may deny an application for an access permit or suspend or revoke any access permit, or incorporate additional conditions or requirements in any access permit, upon finding that such denial, revocation or the incorporation of such conditions and limitations is necessary or appropriate in the interest of the common defense and security or is otherwise in the public interest.

#### § 725.31 Violations.

An injunction or other court order may be obtained prohibiting any violation of any provision of the Act or any regulation or order issued thereunder. Any person who willfully violates any provision of the Act or any regulation or order issued thereunder may be guilty of a crime and, upon conviction, may be punished by fine or imprisonment or both, as provided by law.

## APPENDIX A TO PART 725—CATEGORIES OF RESTRICTED DATA AVAILABLE

C-24 Isotope separation.—This category is divided into subcategories A and B.

Subcategory A includes information in summary form concerning the status and potential of the gaseous diffusion and gas centrifuge processes for the separation of uranium isotopes.

Subcategory B includes information on the following:

- a. Any aspect of separating one or more isotopes of uranium from a composition containing a mixture of isotopes of that element by the gas centrifuge or gaseous diffusion processes.
- b. Design, construction, and operation of any plant, facility or device capable of separating by the gas centrifuge or gaseous diffusion processes one or more isotopes of uranium from a composition containing a mixture of isotopes of that element, including means and methods of transporting materials from one to another device.
- C-44 Nuclear Technology. This category includes classified technical information concerning nuclear technology. It may contain information on the following:
- a. Materials, including metals, ceramics, organic and inorganic compounds. Included are such technical areas as the technology and fabrication of fuel elements, corrosion studies, cladding techniques and radiation studies.
- b. Chemistry, chemical engineering and radiochemistry of all the elements and their compounds. Included are techniques and processes of chemical separations, radioactive waste handling and feed material processing.
- c. Reactor physics, engineering and technology including theory, design, criticality studies and operation of reactors, reactor systems and reactor components.
  - d. Reserved.
- e. Lithium isotope separation technology. This subcategory includes classified technical information on the separation of lithium isotopes by using counter-current flows of lithium amalgam and aqueous lithium hydroxide solution in packed columns. Not included is information regarding plant design

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and operating conditions from which total production rates or design capacity of the lithium isotope separation plant (Colex) in Oak Ridge, Tennessee, can be inferred. In addition to the other requirements of this part, access permits for Restricted Data in this subcategory will be approved, provided the permittee:

- 1. Demonstrates that it is not a corporation or entity owned, controlled or dominated by an alien, a foreign corporation, or a foreign government, and
- 2. Agrees to insertion in his access permit of the terms and conditions:
- (i) Set forth in paragraphs (a) and (b) of §725.23 of this part;
- (ii) Set forth in paragraph (c) of §725.23 of this part, amended by deleting the phrase "category C-24, isotope separation," and inserting in lieu thereof the phrase "subcategory C-44e, lithium isotope separation technology";
- (iii) Set forth in paragraph (d) of §725.23 of this part, amended by:
- (A) Deleting the phrases "production or enrichment of special nuclear material" and "separation of isotopes" wherever they appear, and inserting in lieu thereof the phrase "separation of isotopes of lithium";
- (B) Deleting the phrase "domestic commercial uranium enriching services are provided by," and inserting in lieu thereof the phrase "domestic lithium isotope separation capacity becomes available to."

This category does not include information which reveals or from which can be calculated actual or planned (as distinguished from design) capacities, production rates and unit costs for the plutonium production program.

C-65 Plutonium Production. This category includes information on reactor, fuel element and separations technology which reveals or from which can be calculated actual or planned (as distinguished from design) capacities, production rates and unit costs for the Hanford and Savannah River production facilities.

Technology which does not reveal or enable calculation of production rates and unit costs of Hanford or Savannah River production facilities is categorized in C-44 Nuclear Technology.

- C-90 Nuclear Reactors for Ram-Jet Propulsion. This category includes information on:
- a. Programs pertaining to the development of nuclear reactors for application to ram-jet propulsion systems including theory and/or design, test philosophy procedures and/or results
- b. Fabrication technology and evaluation of performance or characteristics of materials or components for such reactors.

- c. Controls, control systems and instrumentation relating to the design or technology of such reactors.
- d. Data pertaining to heat transfer, propellant kinetics or corrosion and erosion of materials under conditions of high temperature, high gas flows or other environmental conditions characteristic of ram-jet propulsion systems.

This category does not include information

- a. Design details of weapons systems or nuclear warheads.
- b. Military operational techniques or characteristics.
- c. General aspects of nuclear ram-jet missiles, such as payload, aerodynamic characteristics, guidance systems, physical size, gross weight, thrust and information of this kind which is associated with utilization of a nuclear ram-jet propulsion system.
- C-91 Nuclear Reactors for Rocket Propulsion. This category includes information on:
- a. Programs pertaining to nuclear reactors for rocket propulsion, i.e., missile propulsion, theory and/design, test philosophy procedures and/or results.
- b. Design, fabrication technology and evaluation of performance or characteristics of material, components, or subsystems or nuclear rocket reactors.
- c. Controls, control systems and instrumentation relating to the design or technology of rocket reactor systems.
- d. Data pertaining to heat transfer, propellant kinetics or corrosion and erosion of rocket reactor system materials under conditions of high temperature, high gas flows, or other environmental conditions characteristic of rocket reactors.

This category does not include information on:

- a. Design details of weapons systems or nuclear warheads.
- b. Military operational techniques or characteristics.
- c. General aspects of payload and aero-dynamic characteristics.
- d. Design details and development, information of components and subsystems of the nuclear rocket engine other than that associated with the reactor system.
- C-92 Systems for Nuclear Auxiliary Power (SNAP). This category includes information on:
- a. Isotopic SNAP Program, including theory, design, research and development, fabrication, test procedures and results for the device, including power conversion device and the fuels used.
- b. Reactor SNAP Program, including theory, design, research and development, fabrication, test procedures and results for the reactor, including the directly associated power conversion device when developed by DOE.

This category does not include that technical and scientific data developed under the SNAP Advanced Concept Program which should be reported in C-93.

C-93 Advanced Concepts for Future Application.

C-93a Reactor Experiments. This category includes classified technical information developed in the pursuit of work on new or advanced concepts of reactors or components which DOE considers essential to future growth or for general application to future generations of reactors. Classified information developed in the pursuit of work on the lithium cooled reactor experiment is an example of the type of information to be reported in this category, i.e., information resulting from an experimental reactor project or component development which may have many future applications but which is not currently being pursued to meet the specific needs of an approved requirement for which other information categories have been provided. For example, classified technical information developed in the pursuit of work on Naval, Ram-Jet or Rocket nuclear reactors would not be reported here but under their respective specific categories. This category will include classified technical information on the following:

a. Theory, design, and performance, either estimated or actual.

b. Design details, composition and performance characteristics of major components (e.g., fuel media, reflectors, moderators, heat exchangers, pressure shells or containment devices, control rods, conversion devices, instrumentation and shielding).

- c. Material (metals, ceramics and compounds) development, alloying, cladding, corrosion, erosion, radiation studies and fabrication techniques.
- d. Chemistry, including chemical engineering, processes and techniques. Reactor physics, engineering and criticality studies.

C-93b Conversion Devices. This category includes classified technical information developed in the pursuit of studies, designs, research and development, fabrication and operation of any energy conversion device to be used with nuclear energy sources which is not being applied to a specific system development project.

C-94 Military Compact Reactor (MCR). This category includes classified technical information on the actual or planned Military Compact Reactor and its components developed in the pursuit of studies, designs, research and development, fabrication, and operation of the reactor system or its components.

Examples of the areas of information included are:

- a. Reactor core physics.
- b. Fuel elements and fuel element components.

- c. Moderator and reflector details.
- d. Data on primary coolant system.
- e Radiation shield.
- f. Controls and instrumentation.

This category does not include information on military operational characteristics or techniques.

[41 FR 56778, Dec. 30, 1976, as amended at 44 FR 37939, June 29, 1979]

APPENDIX B TO PART 725—DOE'S OPERATIONS OFFICES AND GEOGRAPHICAL AREAS OF RESPONSIBILITIES

Albuquerque Operations Office, U.S. Department of Energy, P.O. Box 5400, Albuquerque, New Mexico 87115: Arizona, Kansas, New Mexico, Oklahoma, and Texas.

Chicago Operations Office, U.S. Department of Energy, 9800 South Cass Avenue, Argonne, Illinois 60439: Connecticut, Delaware, District of Columbia, Illinois, Indiana, Iowa, Maine, Maryland, Massachusetts, Michigan, Minnesota, Nebraska, North Dakota, New Hampshire, New Jersey, New York, Ohio, Pennsylvania, Rhode Island, South Dakota, Vermont, and Wisconsin.

Richland Operations Office, U.S. Department of Energy, P.O. Box 550, Richland, Washington 99352: Alaska, Oregon, and Washington.

Oak Ridge Operations Office, U.S. Department of Energy, P.O. Box E, Oak Ridge, Tennessee 37830: Arkansas, Kentucky, Louisiana, Mississippi, Missouri, Panama Canal Zone, Puerto Rico, Tennessee, Virginia, Virgin Islands, and West Virginia.

San Francisco Operations Office, U.S. Department of Energy, 2111 Bancroft Way, Berkeley 4, California 94612: California, Colorado, Hawaii, Idaho, Montana, Nevada, Utah, Wyoming, and U.S. Pacific Territories.

Savannah River Operations Office, U.S. Department of Energy, P.O. Box A, Aiken, South Carolina 29810: Alabama, Florida, Georgia, North Carolina, and South Carolina.

[41 FR 56778, Dec. 30, 1976, as amended at 44 FR 37939, June 29, 1979]

## PART 745—PROTECTION OF HUMAN SUBJECTS

Sec.

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AUTHORITY: 5 U.S.C. 301; 42 U.S.C. 7254; 42 U.S.C. 300v-1(b).

SOURCE: 56 FR 28012, 28018, June 18, 1991, unless otherwise noted.

## §745.101 To what does this policy apply?

- (a) Except as provided in paragraph (b) of this section, this policy applies to all research involving human subjects conducted, supported or otherwise subject to regulation by any federal department or agency which takes appropriate administrative action to make the policy applicable to such research. This includes research conducted by federal civilian employees or military personnel, except that each department or agency head may adopt such procedural modifications as may be appropriate from an administrative standpoint. It also includes research conducted, supported, or otherwise subject to regulation by the federal government outside the United States.
- (1) Research that is conducted or supported by a federal department or agency, whether or not it is regulated as defined in §745.102(e), must comply with all sections of this policy.
- (2) Research that is neither conducted nor supported by a federal department or agency but is subject to

regulation as defined in §745.102(e) must be reviewed and approved, in compliance with §745.101, §745.102 and §745.107 through §745.101 of this policy, by an institutional review board (IRB) that operates in accordance with the pertinent requirements of this policy.

- (b) Unless otherwise required by department or agency heads, research activities in which the only involvement of human subjects will be in one or more of the following categories are exempt from this policy:
- (1) Research conducted in established or commonly accepted educational settings, involving normal educational practices, such as (i) research on regular and special education instructional strategies, or (ii) research on the effectiveness of or the comparison among instructional techniques, curricula, or classroom management methods.
- (2) Research involving the use of educational tests (cognitive, diagnostic, aptitude, achievement), survey procedures, interview procedures or observation of public behavior, unless:
- (i) Information obtained is recorded in such a manner that human subjects can be identified, directly or through identifiers linked to the subjects; and (ii) any disclosure of the human subjects' responses outside the research could reasonably place the subjects at risk of criminal or civil liability or be damaging to the subjects' financial standing, employability, or reputation.
- (3) Research involving the use of educational tests (cognitive, diagnostic, aptitude, achievement), survey procedures, interview procedures, or observation of public behavior that is not exempt under paragraph (b)(2) of this section, if:
- (i) The human subjects are elected or appointed public officials or candidates for public office; or (ii) federal statute(s) require(s) without exception that the confidentiality of the personally identifiable information will be maintained throughout the research and thereafter.
- (4) Research, involving the collection or study of existing data, documents, records, pathological specimens, or diagnostic specimens, if these sources are publicly available or if the information is recorded by the investigator in such

a manner that subjects cannot be identified, directly or through identifiers linked to the subjects.

- (5) Research and demonstration projects which are conducted by or subject to the approval of department or agency heads, and which are designed to study, evaluate, or otherwise examine:
- (i) Public benefit or service programs:
- (ii) Procedures for obtaining benefits or services under those programs;
- (iii) Possible changes in or alternatives to those programs or procedures; or
- (iv) Possible changes in methods or levels of payment for benefits or services under those programs.
- (6) Taste and food quality evaluation and consumer acceptance studies, (i) if wholesome foods without additives are consumed or (ii) if a food is consumed that contains a food ingredient at or below the level and for a use found to be safe, or agricultural chemical or environmental contaminant at or below the level found to be safe, by the Food and Drug Administration or approved by the Environmental Protection Agency or the Food Safety and Inspection Service of the U.S. Department of Agriculture.
- (c) Department or agency heads retain final judgment as to whether a particular activity is covered by this policy.
- (d) Department or agency heads may require that specific research activities or classes of research activities conducted, supported, or otherwise subject to regulation by the department or agency but not otherwise covered by this policy, comply with some or all of the requirements of this policy.
- (e) Compliance with this policy requires compliance with pertinent federal laws or regulations which provide additional protections for human subjects.
- (f) This policy does not affect any state or local laws or regulations which may otherwise be applicable and which provide additional protections for human subjects.
- (g) This policy does not affect any foreign laws or regulations which may otherwise be applicable and which pro-

vide additional protections to human subjects of research.

- (h) When research covered by this policy takes place in foreign countries, procedures normally followed in the foreign countries to protect human subjects may differ from those set forth in this policy. [An example is a foreign institution which complies with guidelines consistent with the World Medical Assembly Declaration (Declaration of Helsinki amended 1989) issued either by sovereign states or by an organization whose function for the protection of human research subjects is internationally recognized.] In these circumstances, if a department or agency head determines that the procedures prescribed by the institution afford protections that are at least equivalent to those provided in this policy, the department or agency head may approve the substitution of the foreign procedures in lieu of the procedural requirements provided in this policy. Except when otherwise required by statute, Executive Order, or the department or agency head, notices of these actions as they occur will be published in the FEDERAL REGISTER or will be otherwise published as provided in department or agency procedures.
- (i) Unless otherwise required by law, department or agency heads may waive the applicability of some or all of the provisions of this policy to specific research activities or classes of research activities otherwise covered by this policy. Except when otherwise required by statute or Executive Order, the department or agency head shall forward advance notices of these actions to the Office for Protection from Research Risks, Department of Health and Human Services (HHS), and shall also publish them in the FEDERAL REGISTER or in such other manner as provided in department or agency procedures.1

[56 FR 28012, 28018, June 18, 1991; 56 FR 29756, June 28, 1991]

<sup>&</sup>lt;sup>1</sup>Institutions with HHS-approved assurances on file will abide by provisions of title 45 CFR part 46 subparts A–D. Some of the other Departments and Agencies have incorporated all provisions of title 45 CFR part 46 into their policies and procedures as well. However, the exemptions at 45 CFR 46.101(b) do not apply to research involving prisoners,

#### § 745.102

#### §745.102 Definitions.

- (a) Department or agency head means the head of any federal department or agency and any other officer or employee of any department or agency to whom authority has been delegated.
- (b) Institution means any public or private entity or agency (including federal, state, and other agencies).
- (c) Legally authorized representative means an individual or judicial or other body authorized under applicable law to consent on behalf of a prospective subject to the subject's participation in the procedure(s) involved in the research
- (d) Research means a systematic investigation, including research development, testing and evaluation, designed to develop or contribute to generalizable knowledge. Activities which meet this definition constitute research for purposes of this policy, whether or not they are conducted or supported under a program which is considered research for other purposes. For example, some demonstration and service programs may include research
- (e) Research subject to regulation, and similar terms are intended to encompass those research activities for which a federal department or agency has specific responsibility for regulating as a research activity, (for example, Investigational New Drug requirements administered by the Food and Drug Administration). It does not include research activities which are incidentally regulated by a federal department or agency solely as part of the department's or agency's broader responsibility to regulate certain types of activities whether research or non-research in nature (for example, Wage and Hour requirements administered by the Department of Labor).
- (f) Human subject means a living indi-

vidual about whom an investigator fetuses, pregnant women, or human in vitro fertilization, subparts B and C. The exemption at 45 CFR 46.101(b)(2), for research involving survey or interview procedures or observation of public behavior, does not apply to research with children, subpart D, except for research involving observations of public behavior when the investigator(s) do not par-

ticipate in the activities being observed.

- (whether professional or student) conducting research obtains
- (1) Data through intervention or interaction with the individual, or (2) Identifiable private information.
- Intervention includes both physical procedures by which data are gathered (for example, venipuncture) and manipulations of the subject or the subject's environment that are performed for research purposes. Interaction includes communication or interpersonal contact between investigator and subject. "Private information" includes information about behavior that occurs in a context in which an individual can reasonably expect that no observation or recording is taking place, and information which has been provided for specific purposes by an individual and which the individual can reasonably expect will not be made public (for example, a medical record). Private infor-
- (g) IRB means an institutional review board established in accord with and for the purposes expressed in this policv.

mation must be individually identifi-

able (i.e., the identity of the subject is

or may readily be ascertained by the

investigator or associated with the in-

formation) in order for obtaining the information to constitute research in-

volving human subjects.

- (h) IRB approval means the determination of the IRB that the research has been reviewed and may be conducted at an institution within the constraints set forth by the IRB and by other institutional and federal require-
- (i) Minimal risk means that the probability and magnitude of harm or discomfort anticipated in the research are not greater in and of themselves than those ordinarily encountered in daily life or during the performance of routine physical or psychological examinations or tests.
- (j) Certification means the official notification by the institution to the supporting department or agency, in accordance with the requirements of this policy, that a research project or activity involving human subjects has been reviewed and approved by an IRB in accordance with an approved assurance.

- §745.103 Assuring compliance with this policy—research conducted or supported by any Federal department or agency.
- (a) Each institution engaged in research which is covered by this policy and which is conducted or supported by a federal department or agency shall provide written assurance satisfactory to the department or agency head that it will comply with the requirements set forth in this policy. In lieu of requiring submission of an assurance, individual department or agency heads shall accept the existence of a current assurance, appropriate for the research in question, on file with the Office for Protection from Research Risks, HHS, and approved for Federal wide use by that office. When the existence of an HHS-approved assurance is accepted in lieu of requiring submission of an assurance, reports (except certification) required by this policy to be made to department and agency heads shall also be made to the Office for Protection from Research Risks, HHS.
- (b) Departments and agencies will conduct or support research covered by this policy only if the institution has an assurance approved as provided in this section, and only if the institution has certified to the department or agency head that the research has been reviewed and approved by an IRB provided for in the assurance, and will be subject to continuing review by the IRB. Assurances applicable to federally supported or conducted research shall at a minimum include:
- (1) A statement of principles governing the institution in the discharge of its responsibilities for protecting the rights and welfare of human subjects of research conducted at or sponsored by the institution, regardless of whether the research is subject to federal regulation. This may include an appropriate existing code, declaration, or statement of ethical principles, or a statement formulated by the institution itself. This requirement does not preempt provisions of this policy applicable to department- or agency-supported or regulated research and need not be applicable to any research exempted or waived under §745.101 (b) or (i).

- (2) Designation of one or more IRBs established in accordance with the requirements of this policy, and for which provisions are made for meeting space and sufficient staff to support the IRB's review and recordkeeping duties.
- (3) A list of IRB members identified by name: earned degrees: representative capacity; indications of experience such as board certifications, licenses, etc., sufficient to describe each member's chief anticipated contributions to IRB deliberations; and any employment or other relationship between each member and the institution: for example: full-time employee, part-time employee, member of governing panel or board, stockholder, paid or unpaid consultant. Changes in IRB membership shall be reported to the department or agency head, unless in accord with §745.103(a) of this policy, the existence of an HHS-approved assurance is accepted. In this case, change in IRB membership shall be reported to the Office for Protection from Research Risks, HHS.
- (4) Written procedures which the IRB will follow (i) for conducting its initial and continuing review of research and for reporting its findings and actions to the investigator and the institution; (ii) for determining which projects require review more often than annually and which projects need verification from sources other than the investigators that no material changes have occurred since previous IRB review; and (iii) for ensuring prompt reporting to the IRB of proposed changes in a research activity, and for ensuring that such changes in approved research, during the period for which IRB approval has already been given, may not be initiated without IRB review and approval except when necessary to eliminate apparent immediate hazards to the subject.
- (5) Written procedures for ensuring prompt reporting to the IRB, appropriate institutional officials, and the department or agency head of (i) any unanticipated problems involving risks to subjects or others or any serious or continuing noncompliance with this

#### §§ 745.104-745.106

policy or the requirements or determinations of the IRB and (ii) any suspension or termination of IRB approval.

- (c) The assurance shall be executed by an individual authorized to act for the institution and to assume on behalf of the institution the obligations imposed by this policy and shall be filed in such form and manner as the department or agency head prescribes.
- (d) The department or agency head will evaluate all assurances submitted in accordance with this policy through such officers and employees of the department or agency and such experts or consultants engaged for this purpose as the department or agency head determines to be appropriate. The department or agency head's evaluation will take into consideration the adequacy of the proposed IRB in light of the anticipated scope of the institution's research activities and the types of subject populations likely to be involved, the appropriateness of the proposed initial and continuing review procedures in light of the probable risks, and the size and complexity of the institution.
- (e) On the basis of this evaluation, the department or agency head may approve or disapprove the assurance, or enter into negotiations to develop an approvable one. The department or agency head may limit the period during which any particular approved assurance or class of approved assurance shall remain effective or otherwise condition or restrict approval.
- (f) Certification is required when the research is supported by a federal department or agency and not otherwise exempted or waived under §745.101 (b) or (i). An institution with an approved assurance shall certify that each application or proposal for research covered by the assurance and by §745.103 of this Policy has been reviewed and approved by the IRB. Such certification must be submitted with the application or proposal or by such later date as may be prescribed by the department or agency to which the application or proposal is submitted. Under no condition shall research covered by §745.103 of the Policy be supported prior to receipt of the certification that the research has been reviewed and approved by the IRB. Institutions without an approved assur-

ance covering the research shall certify within 30 days after receipt of a request for such a certification from the department or agency, that the application or proposal has been approved by the IRB. If the certification is not submitted within these time limits, the application or proposal may be returned to the institution.

(Approved by the Office of Management and Budget under control number 9999–0020)

[56 FR 28012, 28018, June 18, 1991; 56 FR 29756, June 28, 1991]

#### §§ 745.104-745.106 [Reserved]

#### §745.107 IRB membership.

- (a) Each IRB shall have at least five members, with varying backgrounds to promote complete and adequate review of research activities commonly conducted by the institution. The IRB shall be sufficiently qualified through the experience and expertise of its members, and the diversity of the members, including consideration of race, gender, and cultural backgrounds and sensitivity to such issues as community attitudes, to promote respect for its advice and counsel in safeguarding the rights and welfare of human subjects. In addition to possessing the professional competence necessary to review specific research activities, the IRB shall be able to ascertain the acceptability of proposed research in terms of institutional commitments and regulations, applicable law, and standards of professional conduct and practice. The IRB shall therefore include persons knowledgeable in these areas. If an IRB regularly reviews research that involves a vulnerable category of subjects, such as children, prisoners, pregnant women, or handicapped or mentally disabled persons, consideration shall be given to the inclusion of one or more individuals who are knowledgeable about and experienced in working with these subjects.
- (b) Every nondiscriminatory effort will be made to ensure that no IRB consists entirely of men or entirely of women, including the institution's consideration of qualified persons of both sexes, so long as no selection is made to the IRB on the basis of gender. No IRB may consist entirely of members of one profession.

- (c) Each IRB shall include at least one member whose primary concerns are in scientific areas and at least one member whose primary concerns are in nonscientific areas.
- (d) Each IRB shall include at least one member who is not otherwise affiliated with the institution and who is not part of the immediate family of a person who is affiliated with the institution.
- (e) No IRB may have a member participate in the IRB's initial or continuing review of any project in which the member has a conflicting interest, except to provide information requested by the IRB.
- (f) An IRB may, in its discretion, invite individuals with competence in special areas to assist in the review of issues which require expertise beyond or in addition to that available on the IRB. These individuals may not vote with the IRB.

## §745.108 IRB functions and operations.

In order to fulfill the requirements of this policy each IRB shall:

- (a) Follow written procedures in the same detail as described in §745.103(b)(4) and, to the extent required by, §745.103(b)(5).
- (b) Except when an expedited review procedure is used (see §745.110), review proposed research at convened meetings at which a majority of the members of the IRB are present, including at least one member whose primary concerns are in nonscientific areas. In order for the research to be approved, it shall receive the approval of a majority of those members present at the meeting.

#### §745.109 IRB review of research.

- (a) An IRB shall review and have authority to approve, require modifications in (to secure approval), or disapprove all research activities covered by this policy.
- (b) An IRB shall require that information given to subjects as part of informed consent is in accordance with §745.116. The IRB may require that information, in addition to that specifically mentioned in §745.116, be given to the subjects when in the IRB's judgment the information would meaning-

fully add to the protection of the rights and welfare of subjects.

- (c) An IRB shall require documentation of informed consent or may waive documentation in accordance with §745.117.
- (d) An IRB shall notify investigators and the institution in writing of its decision to approve or disapprove the proposed research activity, or of modifications required to secure IRB approval of the research activity. If the IRB decides to disapprove a research activity, it shall include in its written notification a statement of the reasons for its decision and give the investigator an opportunity to respond in person or in writing.
- (e) An IRB shall conduct continuing review of research covered by this policy at intervals appropriate to the degree of risk, but not less than once per year, and shall have authority to observe or have a third party observe the consent process and the research.

(Approved by the Office of Management and Budget under control number 9999–0020)

#### § 745.110 Expedited review procedures for certain kinds of research involving no more than minimal risk, and for minor changes in approved research.

- (a) The Secretary, HHS, has established, and published as a Notice in the FEDERAL REGISTER, a list of categories of research that may be reviewed by the IRB through an expedited review procedure. The list will be amended, as appropriate after consultation with other departments and agencies, through periodic republication by the Secretary, HHS, in the FEDERAL REGISTER. A copy of the list is available from the Office for Protection from Research Risks, National Institutes of Health, HHS, Bethesda, Maryland 20892.
- (b) An IRB may use the expedited review procedure to review either or both of the following:
- (1) Some or all of the research appearing on the list and found by the reviewer(s) to involve no more than minimal risk.
- (2) Minor changes in previously approved research during the period (of one year or less) for which approval is authorized.

#### §745.111

Under an expedited review procedure, the review may be carried out by the IRB chairperson or by one or more experienced reviewers designated by the chairperson from among members of the IRB. In reviewing the research, the reviewers may exercise all of the authorities of the IRB except that the reviewers may not disapprove the research. A research activity may be disapproved only after review in accordance with the non-expedited procedure set forth in §745.108(b).

- (c) Each IRB which uses an expedited review procedure shall adopt a method for keeping all members advised of research proposals which have been approved under the procedure.
- (d) The department or agency head may restrict, suspend, terminate, or choose not to authorize an institution's or IRB's use of the expedited review procedure.

## §745.111 Criteria for IRB approval of research.

- (a) In order to approve research covered by this policy the IRB shall determine that all of the following requirements are satisfied:
- (1) Risks to subjects are minimized: (i) By using procedures which are consistent with sound research design and which do not unnecessarily expose subjects to risk, and (ii) whenever appropriate, by using procedures already being performed on the subjects for diagnostic or treatment purposes.
- (2) Risks to subjects are reasonable in relation to anticipated benefits, if any, to subjects, and the importance of the knowledge that may reasonably be expected to result. In evaluating risks and benefits, the IRB should consider only those risks and benefits that may result from the research (as distinguished from risks and benefits of therapies subjects would receive even if not participating in the research). The IRB should not consider possible longrange effects of applying knowledge gained in the research (for example, the possible effects of the research on public policy) as among those research risks that fall within the purview of its responsibility.
- (3) Selection of subjects is equitable. In making this assessment the IRB should take into account the purposes

of the research and the setting in which the research will be conducted and should be particularly cognizant of the special problems of research involving vulnerable populations, such as children, prisoners, pregnant women, mentally disabled persons, or economically or educationally disadvantaged persons.

- (4) Informed consent will be sought from each prospective subject or the subject's legally authorized representative, in accordance with, and to the extent required by §745.116.
- (5) Informed consent will be appropriately documented, in accordance with, and to the extent required by §745.117.
- (6) When appropriate, the research plan makes adequate provision for monitoring the data collected to ensure the safety of subjects.
- (7) When appropriate, there are adequate provisions to protect the privacy of subjects and to maintain the confidentiality of data.
- (b) When some or all of the subjects are likely to be vulnerable to coercion or undue influence, such as children, prisoners, pregnant women, mentally disabled persons, or economically or educationally disadvantaged persons, additional safeguards have been included in the study to protect the rights and welfare of these subjects.

#### §745.112 Review by institution.

Research covered by this policy that has been approved by an IRB may be subject to further appropriate review and approval or disapproval by officials of the institution. However, those officials may not approve the research if it has not been approved by an IRB.

## §745.113 Suspension or termination of IRB approval of research.

An IRB shall have authority to suspend or terminate approval of research that is not being conducted in accordance with the IRB's requirements or that has been associated with unexpected serious harm to subjects. Any suspension or termination of approval shall include a statement of the reasons for the IRB's action and shall be reported promptly to the investigator,

appropriate institutional officials, and the department or agency head.

(Approved by the Office of Management and Budget under control number 9999–0020)

#### §745.114 Cooperative research.

Cooperative research projects are those projects covered by this policy which involve more than one institution. In the conduct of cooperative research projects, each institution is responsible for safeguarding the rights and welfare of human subjects and for complying with this policy. With the approval of the department or agency head, an institution participating in a cooperative project may enter into a joint review arrangement, rely upon the review of another qualified IRB, or make similar arrangements for avoiding duplication of effort.

#### § 745.115 IRB records.

- (a) An institution, or when appropriate an IRB, shall prepare and maintain adequate documentation of IRB activities, including the following:
- (1) Copies of all research proposals reviewed, scientific evaluations, if any, that accompany the proposals, approved sample consent documents, progress reports submitted by investigators, and reports of injuries to subjects.
- (2) Minutes of IRB meetings which shall be in sufficient detail to show attendance at the meetings; actions taken by the IRB; the vote on these actions including the number of members voting for, against, and abstaining; the basis for requiring changes in or disapproving research; and a written summary of the discussion of controverted issues and their resolution.
- (3) Records of continuing review activities
- (4) Copies of all correspondence between the IRB and the investigators.
- (5) A list of IRB members in the same detail as described is §745.103(b)(3).
- (6) Written procedures for the IRB in the same detail as described in §745.103(b)(4) and §745.103(b)(5).
- (7) Statements of significant new findings provided to subjects, as required by §745.116(b)(5).
- (b) The records required by this policy shall be retained for at least 3 years, and records relating to research

which is conducted shall be retained for at least 3 years after completion of the research. All records shall be accessible for inspection and copying by authorized representatives of the department or agency at reasonable times and in a reasonable manner.

(Approved by the Office of Management and Budget under control number 9999–0020)

## § 745.116 General requirements for informed consent.

Except as provided elsewhere in this policy, no investigator may involve a human being as a subject in research covered by this policy unless the investigator has obtained the legally effective informed consent of the subject or the subject's legally authorized representative. An investigator shall seek such consent only under circumstances that provide the prospective subject or the representative sufficient opportunity to consider whether or not to participate and that minimize the possibility of coercion or undue influence. The information that is given to the subject or the representative shall be in language understandable to the subject or the representative. No informed consent, whether oral or written, may include any exculpatory language through which the subject or the representative is made to waive or appear to waive any of the subject's legal rights, or releases or appears to release the investigator, the sponsor, the institution or its agents from liability for negligence.

- (a) Basic elements of informed consent. Except as provided in paragraph (c) or (d) of this section, in seeking informed consent the following information shall be provided to each subject:
- (1) A statement that the study involves research, an explanation of the purposes of the research and the expected duration of the subject's participation, a description of the procedures to be followed, and identification of any procedures which are experimental:
- (2) A description of any reasonably foreseeable risks or discomforts to the subject:
- (3) A description of any benefits to the subject or to others which may reasonably be expected from the research;

#### §745.116

- (4) A disclosure of appropriate alternative procedures or courses of treatment, if any, that might be advantageous to the subject;
- (5) A statement describing the extent, if any, to which confidentiality of records identifying the subject will be maintained:
- (6) For research involving more than minimal risk, an explanation as to whether any compensation and an explanation as to whether any medical treatments are available if injury occurs and, if so, what they consist of, or where further information may be obtained:
- (7) An explanation of whom to contact for answers to pertinent questions about the research and research subjects' rights, and whom to contact in the event of a research-related injury to the subject; and
- (8) A statement that participation is voluntary, refusal to participate will involve no penalty or loss of benefits to which the subject is otherwise entitled, and the subject may discontinue participation at any time without penalty or loss of benefits to which the subject is otherwise entitled.
- (b) Additional elements of informed consent. When appropriate, one or more of the following elements of information shall also be provided to each subject:
- (1) A statement that the particular treatment or procedure may involve risks to the subject (or to the embryo or fetus, if the subject is or may become pregnant) which are currently unforeseeable:
- (2) Anticipated circumstances under which the subject's participation may be terminated by the investigator without regard to the subject's consent;
- (3) Any additional costs to the subject that may result from participation in the research:
- (4) The consequences of a subject's decision to withdraw from the research and procedures for orderly termination of participation by the subject;
- (5) A statement that significant new findings developed during the course of the research which may relate to the subject's willingness to continue participation will be provided to the subject; and

- (6) The approximate number of subjects involved in the study.
- (c) An IRB may approve a consent procedure which does not include, or which alters, some or all of the elements of informed consent set forth above, or waive the requirement to obtain informed consent provided the IRB finds and documents that:
- (1) The research or demonstration project is to be conducted by or subject to the approval of state or local government officials and is designed to study, evaluate, or otherwise examine: (i) Public benefit of service programs; (ii) procedures for obtaining benefits or services under those programs; (iii) possible changes in or alternatives to those programs or procedures; or (iv) possible changes in methods or levels of payment for benefits or services under those programs; and
- (2) The research could not practicably be carried out without the waiver or alteration.
- (d) An IRB may approve a consent procedure which does not include, or which alters, some or all of the elements of informed consent set forth in this section, or waive the requirements to obtain informed consent provided the IRB finds and documents that:
- (1) The research involves no more than minimal risk to the subjects;
- (2) The waiver or alteration will not adversely affect the rights and welfare of the subjects;
- (3) The research could not practicably be carried out without the waiver or alteration; and
- (4) Whenever appropriate, the subjects will be provided with additional pertinent information after participation.
- (e) The informed consent requirements in this policy are not intended to preempt any applicable federal, state, or local laws which require additional information to be disclosed in order for informed consent to be legally effective.
- (f) Nothing in this policy is intended to limit the authority of a physician to provide emergency medical care, to the extent the physician is permitted to do so under applicable federal, state, or local law.

(Approved by the Office of Management and Budget under control number 9999–0020)

### § 745.117 Documentation of informed consent.

- (a) Except as provided in paragraph (c) of this section, informed consent shall be documented by the use of a written consent form approved by the IRB and signed by the subject or the subject's legally authorized representative. A copy shall be given to the person signing the form.
- (b) Except as provided in paragraph (c) of this section, the consent form may be either of the following:
- (1) A written consent document that embodies the elements of informed consent required by §745.116. This form may be read to the subject or the subject's legally authorized representative, but in any event, the investigator shall give either the subject or the representative adequate opportunity to read it before it is signed; or
- (2) A short form written consent document stating that the elements of informed consent required by §745.116 have been presented orally to the subject or the subject's legally authorized representative. When this method is used, there shall be a witness to the oral presentation. Also, the IRB shall approve a written summary of what is to be said to the subject or the representative. Only the short form itself is to be signed by the subject or the representative. However, the witness shall sign both the short form and a copy of the summary, and the person actually obtaining consent shall sign a copy of the summary. A copy of the summary shall be given to the subject or the representative, in addition to a copy of the short form.
- (c) An IRB may waive the requirement for the investigator to obtain a signed consent form for some or all subjects if it finds either:
- (1) That the only record linking the subject and the research would be the consent document and the principal risk would be potential harm resulting from a breach of confidentiality. Each subject will be asked whether the subject wants documentation linking the subject with the research, and the subject's wishes will govern; or
- (2) That the research presents no more than minimal risk of harm to subjects and involves no procedures for

which written consent is normally required outside of the research context.

In cases in which the documentation requirement is waived, the IRB may require the investigator to provide subjects with a written statement regarding the research.

(Approved by the Office of Management and Budget under control number 9999–0020)

## § 745.118 Applications and proposals lacking definite plans for involvement of human subjects.

Certain types of applications for grants, cooperative agreements, or contracts are submitted to departments or agencies with the knowledge that subjects may be involved within the period of support, but definite plans would not normally be set forth in the application or proposal. These include activities such as institutional type grants when selection of specific projects is the institution's responsibility; research training grants in which the activities involving subjects remain to be selected; and projects in which human subjects' involvement will depend upon completion of instruments, prior animal studies, or purification of compounds. These applications need not be reviewed by an IRB before an award may be made. However, except for research exempted or waived under §745.101 (b) or (i), no human subjects may be involved in any project supported by these awards until the project has been reviewed and approved by the IRB, as provided in this policy. and certification submitted, by the institution, to the department or agency.

#### § 745.119 Research undertaken without the intention of involving human subjects.

In the event research is undertaken without the intention of involving human subjects, but it is later proposed to involve human subjects in the research, the research shall first be reviewed and approved by an IRB, as provided in this policy, a certification submitted, by the institution, to the department or agency, and final approval given to the proposed change by the department or agency.

#### §745.120

## § 745.120 Evaluation and disposition of applications and proposals for research to be conducted or supported by a Federal department or agency.

The department or agency head will evaluate all applications and proposals involving human subjects submitted to the department or agency through such officers and employees of the department or agency and such experts and consultants as the department or agency head determines to be appropriate. This evaluation will take into consideration the risks to the subjects, the adequacy of protection against these risks, the potential benefits of the research to the subjects and others, and the importance of the knowledge gained or to be gained.

(b) On the basis of this evaluation, the department or agency head may approve or disapprove the application or proposal, or enter into negotiations to develop an approvable one.

#### § 745.121 [Reserved]

#### § 745.122 Use of Federal funds.

Federal funds administered by a department or agency may not be expended for research involving human subjects unless the requirements of this policy have been satisfied.

#### § 745.123 Early termination of research support: Evaluation of applications and proposals.

(a) The department or agency head may require that department or agency support for any project be terminated or suspended in the manner prescribed in applicable program requirements, when the department or agency head finds an institution has materially failed to comply with the terms of this policy.

(b) In making decisions about supporting or approving applications or proposals covered by this policy the department or agency head may take into account, in addition to all other eligibility requirements and program criteria, factors such as whether the applicant has been subject to a termination or suspension under paragraph (a) of this section and whether the applicant or the person or persons who would direct or has have directed the

scientific and technical aspects of an activity has have, in the judgment of the department or agency head, materially failed to discharge responsibility for the protection of the rights and welfare of human subjects (whether or not the research was subject to Federal regulation).

#### §745.124 Conditions.

With respect to any research project or any class of research projects the department or agency head may impose additional conditions prior to or at the time of approval when in the judgment of the department or agency head additional conditions are necessary for the protection of human subjects.

## PART 760—DOMESTIC URANIUM PROGRAM

# § 760.1 Uranium leases on lands controlled by DOE. (Domestic Uranium Program Circular No. 760.1, formerly (AEC) Domestic Uranium Program Circular 8, 10 CFR 60.8).

- (a) What this section does. This section sets forth regulations governing the issuance of leases to permit the exploration for and mining of deposits containing uranium in public lands withdrawn from entry and location under the general mining laws for use of DOE, and in certain other lands under DOE control.
- (b) Statutory authority. The Atomic Energy Act of 1954, as amended (68 Stat. 919, 42 U.S.C. 2011 *et seq.*) is the authority for this section.
- (c) Who may hold leases. Only parties who are (1) citizens of the United States; (2) associations of such citizens; or (3) corporations organized under the laws of the United States or territories thereof, are eligible lessees under this section. Persons under 21 years of age or employees of DOE are not eligible.
- (d) Issuance of leases through competitive bidding. Except under special circumstances as provided in paragraph (u) of this section, each lease will be offered through competitive bidding and, except as otherwise provided in this paragraph (d), will be issued to the acceptable bidder offering the highest bid. The bid may be on a cash bonus,

royalty bonus, or other basis as specified in the invitation to bid. Invitations to bid on some of the lands may be limited to small business concerns as defined by the Small Business Administration, and such invitations may limit the number of leases to be awarded to each bidder. In such cases DOE will accept those bids which, in relation to other bids received pursuant to the invitation, are most advantageous to the Government. Before any lease is awarded, DOE may require high bidders to submit a detailed statement of the facts as to such matters as their experience, organization, and financial resources. DOE reserves the right to reject any and all bids.

(e) Solicitation of bids. Announcements of the availability of invitations to bid for a lease will be publicly posted and published. Copies of such announcements will also be mailed to parties who submit to DOE's Grand Junction, Colorado, Office subsequent to publication in the FEDERAL REG-ISTER of this (DOE) Domestic Uranium Program Circular 760.1, written requests that their names be placed on a mailing list for receipt of such announcements. The invitations containing information for preparation and submission of bids will be available at the Grand Junction Office, and will be mailed only on specific written request, following announcement of their availability. Invitations will specify the land to be leased, the basis on which bids are to be submitted, the amount of the monetary deposit which must be transmitted with the bid, the place and time the bids will be publicly opened, the term, royalty and other payments, performance requirements, and other payments, performance requirements, and other conditions which will become a part of the lease. In addition, data which have been assembled pertaining to the lands to be leased will be available for public inspection at the Grand Junction Office; copies will also be available for purchase.

(f) Bidding requirements; deposits. All bids must be filed at the place and prior to the time set forth in the invitation. Each bid must be sealed and accompanied by a deposit, in the form of a certified check, cashier's check, or

bank draft, in an amount as specified in the invitation to bid. Deposits of unsuccessful bidders will be returned. If the bidder is an individual, he must submit with his bid a statement of his citizenship and age. If the bidder is an association (including a partnership), the bid shall be accompanied by a certified copy of the articles of association together with a statement as to the citizenship and age of its members. If the bidder is a corporation, evidence that the officer signing the bid had authority to do so and a statement as to the State of incorporation shall also be submitted.

(g) Awarding of lease. Following public opening of the bids, DOE, subject to the right to reject any and all bids, will determine the successful bidder. In the event the highest acceptable bids are tie bids, a public drawing will be held by DOE to determine the successful bidder. After notice of award and within the time period prescribed in the invitation, the successful bidder shall execute and return to DOE three (3) copies of the lease and shall remit payments due as prescribed in the invitation. Should the successful bidder fail to execute the lease, or make payments as required, in accordance with the terms of the invitation, or fail to otherwise comply with applicable regulations, he may be required to forfeit any payments previously made, and lose any further right or interest in the lease. In such event, DOE may offer the lease to the next highest acceptable bidder, reoffer the lease for bidding, or take such other action as appropriate. If the awarded lease is executed by the bidder through an agent, evidence of authorization must be submitted.

- (h) Dating of lease. A lease issued under this section will ordinarily be effective as of the date it is signed on behalf of DOE.
- (i) Term of lease. A lease shall be for the period specified in the invitation to bid. When deemed desirable by DOE, the lease will provide that the lease term may be extended at the option of the lessee for a specified period and upon stipulated conditions.
- (j) Payments to DOE under lease. Royalty payments shall be specified in the invitation to bid; base royalty, minimum royalty, advance royalty, and

#### § 760.1

rental payments, or a combination thereof may be required.

- (k) Title to unshipped ore. DOE, unless it approves otherwise, reserves all right and title to property in and to all ores and other uranium- or vanadiumbearing material not removed from the leased premises within 60 days after expiration or other termination of the lease. Unless DOE approves otherwise, all material mined from the leased premises and not marketed by the lessee shall remain on the leased premises.
- (1) Environmental controls. Each lease will contain such provisions as may be deemed necessary by DOE with respect to the lessee's use of the leased lands. DOE may require periodic submission of plans for exploration and mining activities including provisions for control of environmental impact. The lessee will be required to conduct operations so as to minimize adverse environmental effects, to comply with all applicable State and Federal statutes and regulations and to the extent stipulated in the lease agreement, will be held responsible for maintenance or rehabilitation of affected areas in accordance with plans submitted to and approved by DOE
- (m) Performance requirements. A lease shall require that exploration, development, and mining activities, as appropriate, be conducted on the leased premises with reasonable diligence, skill, and care as required to achieve and maintain production of uranium ore at rates consistent with good and safe mining practice and with market conditions.
- (n) Health and safety requirements. A lease (1) shall require that exploration, development, and mining activities, as appropriate, be conducted on the leased premises with due regard for the health and safety of those involved, and (2) shall include appropriate measures for the control of radiation exposure in the mines.
- (0) Lessee's records. Leases shall provide that the lessee keep and make available to DOE such records as DOE deems necessary for the administration of the lease and its leasing program.
- (p) Rights of DOE. DOE reserves the right to enter upon the leased property and into all parts of the mine for in-

- spection and other purposes. DOE also reserves the right to grant to other persons easements or rights of way upon, through, or in the leased premises. DOE and the Comptroller General of the United States or any of his duly authorized representatives shall, until the expiration of 3 years after termination or expiration of lease, have access to and the right to examine any directly pertinent books, papers, and records of the lessee involving transactions related to the lease.
- (q) Relinquishment of leases. A lease may be surrendered by the lessee upon filing with and approval by DOE of a written application for relinquishment. Approval of the application shall be contingent upon the delivery of the leased premises to DOE in a condition determined to be satisfactory to DOE. The lessee shall continue to be liable for the payment of all royalty and other debts due DOE.
- (r) Assignment of leases. Any transfer of a lease or any interest therein or claim thereunder, will not be recognized unless and until approved by DOE in writing. Ordinarily, DOE will not approve any transfer of a lease which involves overriding royalties or deferred payments of any kind to the transferor.
- (s) Cancellation. Any lease may be cancelled by DOE whenever the lessee fails to comply with the provisions of the lease. Failure of DOE to exercise its right to cancel shall not be deemed a waiver thereof.
- (t) Form of lease. Leases will be issued on forms prescribed by DOE.
- (u) Noncompetitive leases. Under special circumstances, where DOE believes it to be in the best interest of the Government, DOE at its discretion may award or extend leases on the basis of negotiation.
- (v) DOE decisions. All matters connected with the issuance and administration of leases will be determined by DOE whose decisions shall be final and conclusive.
- (w) *Definitions*. DOE as used in this section means the United States Department of Energy or its duly authorized representative or representatives.
- (x) Multiple use of land. Leases issued under this section shall provide that

operations under them will be conducted so as not to interfere with the lawful operations of any third party having a lease, permit, easement, or other right or interest in the premises.

(y) Compliance with State and Federal regulations. Every lease shall provide that the lessee is required to comply with all applicable State and Federal statutes and regulations.

(Secs. 66, 161, 68 Stat. 933, 948, as amended; 42 U.S.C. 2096, 2201)

[41 FR 56783, Dec. 30, 1976]

# PART 765—REIMBURSEMENT FOR COSTS OF REMEDIAL ACTION AT ACTIVE URANIUM AND THORIUM PROCESSING SITES

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765.32 Reimbursement of excess funds.

AUTHORITY: Sections 1001–1004 of Pub. L. No. 102–486, 106 Stat. 2776 (42 U.S.C. 2296a et seg.).

SOURCE: 59 FR 26726, May 23, 1994, unless otherwise noted.

#### Subpart A—General

#### § 765.1 Purpose.

The provisions of this part establish regulatory requirements governing reimbursement for certain costs of remedial action at active uranium or thorium processing sites as specified by Subtitle A of Title X of the Energy Policy Act of 1992. These regulations are authorized by section 1002 of the Act (42 U.S.C. 2296a-1), which requires the Secretary to issue regulations governing the reimbursements.

#### § 765.2 Scope and applicability.

(a) This part establishes policies, criteria, and procedures governing reimbursement of certain costs of remedial action incurred by licensees at active uranium or thorium processing sites as a result of byproduct material generated as an incident of sales to the United States.

(b) Costs of remedial action at active uranium or thorium processing sites are borne by persons licensed under section 62 or 81 of the Atomic Energy Act (42 U.S.C. 2092, 2111), either by NRC or an Agreement State pursuant to a counterpart to section 62 or 81 of the Atomic Energy Act, under State law, subject to the exceptions and limitations specified in this part.

(c) The Department shall, subject to the provisions specified in this part, reimburse a licensee, of an active uranium or thorium processing site for the portion of the costs of remedial action as are determined by the Department to be attributable to byproduct material generated as an incident of sales to the United States and either incurred by the licensee not later than December 31, 2002, or incurred by the licensee in accordance with a plan for subsequent remedial action approved by the Department.

(d) Costs of remedial action are reimbursable under Title X for decontamination, decommissioning, reclamation, and other remedial action, provided that claims for reimbursement are supported by reasonable documentation as specified in subpart C of this part.

(e) Except as authorized by §765.32, the total amount of reimbursement

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paid to any licensee of an active uranium processing site shall not exceed \$5.50 multiplied by the number of Federal-related dry short tons of byproduct material. This total amount shall be adjusted for inflation pursuant to section 765.12.

- (f) The total amount of reimbursement paid to all active uranium processing site licensees shall not exceed \$270 million. This total amount shall be adjusted for inflation by applying the CPI-U, as provided by §765.12.
- (g) The total amount of reimbursement paid to the licensee of the active thorium processing site shall not exceed \$40 million, as adjusted for inflation by applying the CPI-U as provided by §765.12.
- (h) Reimbursement of licensees for costs of remedial action will only be made for costs that are supported by reasonable documentation as required by §765.20 and claimed for reimbursement by a licensee in accordance with the procedures established by subpart C of this part.
- (i) The \$310 million aggregate amount authorized to be appropriated under section 1003(a) of the Act (42 U.S.C. 2296a-2(a)) shall be adjusted for inflation by applying the CPI-U as provided by \$765.12, and shall be provided from the Fund.

#### § 765.3 Definitions.

For the purposes of this part, the following terms are defined as follows:

Active uranium or thorium processing site or active processing site means:

- (1) any uranium or thorium processing site, including the mill, containing byproduct material for which a license, issued either by NRC or by an Agreement State, for the production at a site of any uranium or thorium derived from ore—
  - (i) Was in effect on January 1, 1978;
- (ii) Was issued or renewed after January 1, 1978; or
- (iii) For which an application for renewal or issuance was pending on, or after January 1, 1978; and
- (2) Any other real property or improvement on such real property that is determined by the Secretary or by an Agreement State to be:
  - (i) In the vicinity of such site; and

(ii) Contaminated with residual byproduct material.

Agreement State means a State that is or has been a party to a discontinuance agreement with NRC under section 274 of the Atomic Energy Act (42 U.S.C. 2021) and thereafter issues licenses and establishes remedial action requirements pursuant to a counterpart to section 62 or 81 of the Atomic Energy Act under state law.

Atomic Energy Act means the Atomic Energy Act of 1954, as amended, (42 U.S.C. 2011 et seq.).

Byproduct material means the tailings or wastes produced by the extraction or concentration of uranium or thorium from any ore processed primarily for its source material content.

Claim for reimbursement means the submission of an application for reimbursement in accordance with the requirements established in subpart C of this part.

Costs of remedial action means costs incurred by a licensee prior to or after enactment of UMTRCA to perform decontamination, decommissioning, reclamation, and other remedial action. These costs may include but are not necessarily limited to expenditures for work necessary to comply with applicable requirements to conduct groundwater remediation, treatment or containment of contaminated soil, disposal of process wastes, removal actions, air pollution abatement measures, mill and equipment decommissioning, site monitoring, administrative activities, expenditures required to meet necessary regulatory standards, or other requirements established by NRC, or an Agreement State. Costs of remedial action must be supported by reasonable documentation in accordance with the requirements of subpart C of this part.

Decontamination, decommissioning, reclamation, and other remedial action means work performed which is necessary to comply with all applicable requirements of UMTRCA or, where appropriate, with applicable requirements established by an Agreement State.

Department means the United States Department of Energy or its authorized agents.

Dry short tons of byproduct material means the quantity of tailings generated from the extraction and processing of 2,000 pounds of uranium or thorium ore-bearing rock.

Federal reimbursement ratio means the ratio of Federal-related dry short tons of byproduct material to total dry short tons of byproduct material present at an active uranium or thorium processing site on October 24, 1992. The ratio shall be established by comparing Federal-related dry short tons of byproduct material to total dry short tons of byproduct material present at the site on October 24, 1992, or by another means of attributing costs of remedial action to byproduct material generated as an incident of sales to the United States which the Department determines is more accurate than a ratio established using dry short tons of byproduct material.

Federal-related dry short tons of byproduct material means dry short tons of byproduct material that was present at an active uranium or thorium processing site on October 24, 1992, and was generated as an incident of uranium or thorium sales to the United States.

Generally accepted accounting principles means those principles established by the Financial Accounting Standards Board which encompass the conventions, rules, and procedures necessary to define accepted accounting practice at a particular time.

Inflation index means the consumer price index for all urban consumers (CPI-U) as published by the Department of Commerce's Bureau of Labor Statistics.

Licensee means a site owner licensed under section 62 or 81 of the Atomic Energy Act (42 U.S.C. 2092, 2111) by NRC, or an Agreement State, for any activity at an active uranium or thorium processing site which results, or has resulted, in the production of byproduct material.

Maximum reimbursement amount or maximum reimbursement ceiling means the smaller of the following two quantities:

(1) The amount obtained by multiplying the total cost of remedial action at the site, as determined in the approved plan for subsequent remedial

action, by the Federal reimbursement ratio established for the site; or

(2) \$5.50, as adjusted for inflation, multiplied by the number of Federal-related dry short tons of byproduct material.

*NRC* means the United States Nuclear Regulatory Commission or its predecessor agency.

Offsite disposal means the disposal, and activities that contribute to the disposal, of byproduct material in a location that is not contiguous to the West Chicago Thorium Mill Site located in West Chicago, Illinois, in accordance with a plan approved by, or other written authorization from, the State of Illinois or NRC provided the activities are consistent with the ultimate removal of byproduct material from the West Chicago Thorium Mill Site.

Plan for subsequent remedial action means a plan approved by the Department which includes an estimated total cost and schedule for remedial action, and all applicable requirements of remedial action established by NRC or an Agreement State to be performed after December 31, 2002 at an active uranium or thorium processing site.

Reclamation plan or site reclamation plan means a plan, which has been approved by NRC or an Agreement State, for remedial action at an active processing site that establishes the work necessary to comply with applicable requirements of UMTRCA, or where appropriate with requirements established by an Agreement State.

Remedial action means decontamination, decommissioning, reclamation, and other remedial action at an active uranium or thorium processing site.

Secretary means the Secretary of Energy or her designees.

Site owner means a person that presently holds, or held in the past, any interest in land, including but not limited to a fee simple absolute, surface or subsurface ownership of mining claims, easements, and a right of access for the purposes of cleanup, or any other legal or equitable interest.

Tailings means the remaining portion of a metal-bearing ore after some or all of the metal, such as uranium, has been extracted.

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The Fund means the Uranium Enrichment Decontamination and Decommissioning Fund established at the United States Department of Treasury pursuant to section 1801 of the Atomic Energy Act (42 U.S.C. 2297g).

Title X or "the Act" means Subtitle A of Title X of the Energy Policy Act of 1992, Public Law 102-486, 106 Stat. 2776 (42 U.S.C. 2296a-1 et seq.).

UMTRCA means the Uranium Mill Tailings Radiation Control Act of 1978, as amended (42 U.S.C. 7901 et seq.).

United States means any executive department, commission, or agency, or other establishment in the executive branch of the Federal Government.

Written Authorization means a written statement from either the NRC or an Agreement State that a licensee has performed in the past, or is authorized to perform in the future, a remedial action that is necessary to comply with the requirements of UMTRCA or, where appropriate, the requirements of an Agreement State.

#### Subpart B—Reimbursement Criteria

#### § 765.10 Eligibility for reimbursement.

(a) Any licensee of an active uranium or thorium processing site that has incurred costs of remedial action for the site that are attributable to byproduct material generated as an incident of sales to the United States shall be eligible for reimbursement of these costs, subject to the procedures and limitations specified in this part.

(b) Prior to reimbursement of costs of remedial action incurred by a licensee, the Department shall make a determination regarding the total quantity of dry short tons of byproduct material, and the quantity of Federalrelated dry short tons of byproduct material present on October 24, 1992 at the licensee's active processing site. A claim for reimbursement from a site for which a determination is made will be evaluated individually. If a licensee does not concur with the Department's determination regarding the quantity of dry short tons of byproduct material present at the site, the licensee may appeal the Department's determination in accordance with §765.22 of this part. The Department's determination shall

be used to determine that portion of an approved claim for reimbursement submitted by the licensee which shall be reimbursed, unless or until the determination is overturned on appeal. If the outcome of an appeal requires a change in the Department's initial determination, the Department will adjust any payment previously made to the licensee to reflect the change.

#### § 765.11 Reimbursable costs.

- (a) Costs for which a licensee may be reimbursed must be for remedial action that a licensee demonstrates is attributable to byproduct material generated as an incident of sales to the United States, as determined by the Department. These costs are equal to the total costs of remedial action at a site multiplied by the Federal reimbursement ratio established for the site. These costs must be incurred in the performance of activities, prior to or after enactment of UMTRCA, and required by a plan, portion thereof, or other written authorization, approved by NRC or by an Agreement State. Costs of remedial action shall be reimbursable only if approved by the Department in accordance with the provisions of this part.
- (b) In addition, costs of remedial action incurred by a licensee after December 31, 2002 must be in accordance with a plan for subsequent remedial action approved by the Department as specified in §765.30.
- (c) Total reimbursement of costs of remedial action incurred at an active processing site that are otherwise reimbursable pursuant to the provisions of this part shall be limited as follows:
- (1) Reimbursement of costs of remedial action to active uranium processing site licensees shall not exceed \$5.50, as adjusted for inflation, multiplied by the number of Federal-related dry short tons of byproduct material.
- (2) Aggregate reimbursement of costs of remedial action incurred at all active uranium processing sites shall not exceed \$270 million. This aggregate amount shall be adjusted for inflation pursuant to \$765.12; and
- (3) Reimbursement of costs of remedial action at the active thorium processing site shall be limited to costs incurred for offsite disposal and shall not

exceed \$40 million. This amount shall be adjusted for inflation pursuant to §765.12.

(d) Notwithstanding the Title X requirement that byproduct material must be located at an active processing site on October 24, 1992, byproduct material moved from the Edgemont Mill in Edgemont, South Dakota, to a disposal site as a result of remedial action, shall be eligible for reimbursement in accordance with all applicable requirements of this part.

## § 765.12 Inflation index adjustment procedures.

(a) The amounts of \$5.50 (as specified in \$765.2(e) of this rule) \$270 million (as specified in \$765.2(f) of this rule), \$40 million (as specified in \$765.2(g) of this rule) and \$310 million (as specified in \$765.2(i) of this rule) shall be adjusted for inflation as provided by this section.

(b) To make adjustments for inflation to the amounts specified in paragraph (a) of this section, the Department shall apply the CPI-U to these amounts annually, beginning in 1994, using the CPI-U as published by the Bureau of Labor Statistics within the Department of Commerce for the preceding calendar year.

(c) The Department shall adjust annually, using the CPI-U as defined in this part, amounts paid to an active uranium processing site licensee for purposes of comparison with the \$5.50 per dry short ton limit on reimbursement as adjusted for inflation.

#### Subpart C—Procedures for Submitting and Processing Reimbursement Claims

### § 765.20 Procedures for submitting reimbursement claims.

(a) All costs of remedial action for which reimbursement is claimed must be supported by reasonable documentation as specified in this subpart. The Department reserves the right to deny any claim for reimbursement, in whole or in part, that is not submitted in accordance with the requirements of this subpart.

(b) The licensee shall provide a copy of the approved site reclamation plan or other written authorization from NRC or an Agreement State upon which claims for reimbursement are based, with the initial claim submitted. Any revision or modification made to the plan or other written authorization, which is approved by NRC or an Agreement State, shall be included by the licensee in the next claim submitted to the Department following that revision or modification. This reclamation plan or other written authorization, as modified or revised, shall serve as the basis for the Department's evaluation of all claims for reimbursement submitted by a licensee

(c) Each submitted claim shall provide a summary of all costs of remedial action for which reimbursement is claimed. This summary shall identify the costs of remedial action associated with each major activity or requirement established by the site's reclamation plan or other written authorization. In addition, each claim shall provide a summary of the documentation relied upon by the licensee in support of each cost category for which reimbursement is claimed.

(d) Documentation used to support a reimbursement claim must demonstrate that the costs of remedial action for which reimbursement is claimed were incurred specifically for activities specified in the site's reclamation plan, or otherwise authorized by NRC or an Agreement State. Summary documentation used in support of a claim must be cross-referenced to the relevant page and activity of the licensee's reclamation plan, or other written authorization approved by NRC or an Agreement State.

(1) Documentation prepared contemporaneous to the time the cost was incurred should be used when available. The documentation should identify the date or time period for which the cost was incurred, the activity for which the cost was incurred, and the reclamation plan provision or other written authorization to which the cost relates. Where available, each claim should be supported by receipts, invoices, pay records, or other documents that substantiate that each specific cost for which reimbursement is claimed was incurred for work that was necessary

#### § 765.21

to comply with UMTRCA or applicable Agreement State requirements.

- (2) Documentation not prepared contemporaneous to the time the cost was incurred, or not directly related to activities specified in the reclamation plan or other written authorization, may be used in support of a claim for reimbursement provided that the licensee determines the documentation is the only means available to document costs for which reimbursement is sought.
- (e) The Department may audit, or require the licensee to audit, any documentation used to support a claim on a case-by-case basis and may approve, approve in part, or deny reimbursement of any claim in accordance with the requirements of this part. Documentation relied upon by a licensee in support of a claim for reimbursement shall be made available to the Department and retained by the licensee until 4 years after final payment of a claim is made by the Department.
- (f) Each licensee should utilize generally accepted accounting principles consistently throughout the claim. These accounting principles, underlying assumptions, and any other information necessary for the Department to evaluate the claim shall be set forth in each claim.
- (g) Following each annual appropriation by Congress, the Department will issue a Federal Register Notice announcing:
- (1) A claim submission deadline for that fiscal year:
- (2) Availability of funds for reimbursement of costs of remedial action;
- (3) Whether the Department anticipates that approved claims for that fiscal year may be subject to prorated payment;
- (4) Any changes in the Federal reimbursement ratio or maximum reimbursement ceiling for any active uranium or thorium processing site;
- (5) Any revision in the per dry short ton limit on reimbursement for all active uranium processing sites; and(6) Any other relevant information.
- (h) A licensee shall certify, with respect to any claim submitted by it for reimbursement, that the work was completed as described in an approved reclamation plan or other authoriza-

tion. In addition, the licensee shall certify that all costs for which reimbursement is claimed, all documentation relied upon in support of its costs, and all statements or representations made in the claim are complete, accurate, and true. The certification shall be signed by an officer or other official of the licensee with knowledge of the contents of the claim and authority to represent the licensee in making the certification. Any knowingly false or frivolous statements or representations may subject the individual to penalties under the False Claims Act, sections 3729 through 3731 of title 31 United States Code, or any other applicable statutory authority; and criminal penalties under sections 286, 287, 1001 and 1002 of title 18, United States Code, or any other applicable statutory authority.

(i) All claims for reimbursement submitted to the Department shall be sent by registered or certified mail, return receipt requested. The Department reserves all rights under applicable law to recover any funds paid to licensees which an audit finds to not meet the requirements of this part.

## § 765.21 Procedures for processing reimbursement claims.

- (a) The Department will conduct a preliminary review of each claim within 60 days after the claim submission deadline announced in the FEDERAL REGISTER Notice specified in §765.20(g) to determine the completeness of each claim. Payments from the Fund to active uranium or thorium processing site licensees for approved costs of remedial action will be made simultaneously by the Department within 1 year of the claim submission deadline.
- (b) After completing the preliminary review specified in paragraph (a) of this section, the Department may audit, or require the licensee to audit, any documentation used in support of such claim, request the licensee to provide additional information, or request the licensee to provide other clarification determined by the Department to be necessary to complete its evaluation of the claim. In addition, the Department reserves the right to conduct an inspection of the site to verify any information provided by the licensee in a claim

for reimbursement, or in support thereof. Any information requested by the Department, if provided, must be submitted by the claimant within 60 days of receipt of the request unless the Department specifies in writing that additional time is provided.

- (c) At any time during the review of a claim, the Department may request an informal conference with a licensee to obtain further information or clarification on any unresolved issue pertaining to the claim. While the licensee is not required to provide additional clarification requested by the Department, a failure to do so may result in the denial of that portion of the claim for which information is requested.
- (d) Based upon the claim submitted and any additional information received by the Department, including any audit or site inspection if conducted, the Department shall complete a final review of all relevant information prior to making a reimbursement decision. When the Department determines it is not clear that an activity for which reimbursement is claimed was necessary to comply with UMTRCA or where appropriate, with applicable Agreement State requirements, the Department may consult with the appropriate regulatory authorities.
- (e) A written decision regarding the Department's determination to approve, approve in part, or deny a claim will be provided to the licensee within 10 days of completion of the final review.
- (f) If the Department determines that insufficient funds are available at any time to provide for complete payment of all outstanding approved claims, reimbursements of approved claims will be made on a prorated basis. A prorated payment of all outstanding approved claims for reimbursement, or any unpaid portion thereof, shall be made on the basis of the total amount of all outstanding approved claims, regardless of when the claims were submitted or approved.
- (g) Notwithstanding the provisions of paragraph (f) of this section, or any other provisions of this part, any requirement for the payment or obligation of funds by the Department established by this part shall be subject to

the availability of appropriated funds, and no provision herein shall be interpreted to require obligation or payment of funds in violation of the Anti-Deficiency Act (31 U.S.C. 1341).

#### § 765.22 Appeals procedures.

- (a) Any appeal by a licensee of any Department determination subject to the requirements of this part, shall invoke the appeals process specified in paragraph (b) of this section.
- (b) A licensee shall file an appeal of any Department determination subject to the requirements of this part with the Office of Hearings and Appeals, U.S. Department of Energy, 1000 Independence Avenue, SW., Washington, DC 20585. Any appeal must be filed within 45 days from the date the licensee received notice, actual or constructive (i.e., publication in the FEDERAL REG-ISTER), of the Department's determination. Appeals must comply with the procedures set forth in 10 CFR part 1003, subpart C. The decision of the Office of Hearings and Appeals shall be the final decision of the Department. A licensee must file an appeal in order to exhaust its administrative remedies, and the receipt of an appellate decision is a prerequisite to seeking judicial review of any determination made under this part.

[59 FR 26726, May 23, 1994, as amended at 60 FR 15017, Mar. 21, 1995]

#### § 765.23 Annual report.

The Department shall prepare annually a report summarizing pertinent information concerning claims submitted in the previous calendar year, the status of the Department's review of the claims, determinations made regarding the claims, amounts paid for claims approved, and other relevant information concerning this reimbursement program. The report will be available to all interested parties upon written request to the Department's Uranium Mill Tailings Remedial Action Project Office, 2155 Louisiana NE., suite 10000, Albuquerque, NM 87110 and will also be available in the Department's Freedom of Information Reading room, 1000 Independence Avenue SW., Washington, DC

#### § 765.30

## Subpart D—Additional Reimbursement Procedures

#### § 765.30 Reimbursement of costs incurred in accordance with a plan for subsequent remedial action.

- (a) This section establishes procedures governing reimbursements of costs of remedial action incurred in accordance with a plan for subsequent remedial action approved by the Department as provided in this section. Costs otherwise eligible for reimbursement in accordance with the terms of this part and incurred in accordance with the plan shall be reimbursed in accordance with the provisions of subpart D and subpart C. In the event there is an inconsistency between the requirements of subpart D and subpart C, the provisions of subpart D shall govern reimbursement of such costs of remedial action.
- (b) A licensee who anticipates incurring costs of remedial action after December 31, 2002 may submit a plan for subsequent remedial action. This plan may be submitted at any time after January 1, 2000, but no later than December 31, 2001. Reimbursement of costs of remedial action incurred after December 31, 2002 shall be subject to the approval of this plan by the Department. This plan shall describe:
- (1) All applicable requirements established by NRC pursuant to UMTRCA, or where appropriate, by the requirements of an Agreement State, included in a reclamation plan approved by NRC or an Agreement State which have not yet been satisfied in full by the licensee, and
- (2) The total cost of remedial action required at the site, together with all necessary supporting documentation, segregated into actual costs incurred to date, costs incurred or expected to be incurred prior to December 31, 2002 but not yet approved for reimbursement, and anticipated future costs.
- (c) The Department shall review the plan for subsequent remedial action to verify conformance with the NRC- or Agreement State-approved reclamation plan or other written authorization, and to determine the reasonableness of anticipated future costs, and shall approve, approve with suggested modifications, or reject the plan. During its

review, the Department may request additional information from the licensee to clarify or provide support for any provision or estimate contained in the plan. The Department may also consult with NRC or an Agreement State concerning any provision or estimate contained in the plan. Upon approval, approval with modifications, or rejection of a plan, the Department shall inform and explain to the licensee its decision.

- (d) If the Department rejects a plan for subsequent remedial action submitted by a licensee, the licensee may appeal the Department's rejection or prepare and submit a revised plan. The licensee may continue to submit revised plans for subsequent remedial action until the Department approves a plan, or September 30, 2002, whichever occurs first. A failure by a licensee to receive approval from the Department of a plan prior to December 31, 2002 will preclude that licensee from receiving any reimbursement for costs of remedial action incurred after that date.
- (e) The Department shall determine, in approving a plan for subsequent remedial action, the maximum reimbursement amount for which the licensee may be eligible. This maximum reimbursement amount shall be the smaller of the following two quantities:
- (1) The amount obtained by multiplying the total cost of remedial action at the site, as determined in the approved plan for subsequent remedial action, by the Federal reimbursement ratio established for such site; or
- (2) \$5.50, as adjusted for inflation, multiplied by the number of Federal-related dry short tons of byproduct material. The Department shall subtract from the maximum reimbursement amount any reimbursement already approved to be paid to the licensee. The resulting sum shall be the potential additional reimbursement to which the licensee may be entitled.

## § 765.31 Designation of funds available for subsequent remedial action.

(a) Upon the Department's approval of each plan for subsequent remedial action submitted by a licensee, the Department will designate specific

amounts on deposit in the Fund for reimbursement, subject to the availability of appropriated funds as specified in §765.21(g). If insufficient funds are available at the time of approval of a plan for subsequent remedial action to provide for reimbursement of the total estimated costs, the designation of specific amounts on deposit in the Fund for reimbursement will be made on a prorated basis. Any remaining balance will be designated for reimbursement at the time additional funds become available.

- (b) The Department shall authorize reimbursement of costs of remedial action, incurred in accordance with an approved plan for subsequent remedial action and approved by the Department as specified in subpart C to this part, to be made from the Fund. These costs are reimbursable until:
- This remedial action has been completed, or
- (2) The licensee has been reimbursed its maximum reimbursement amount as determined by the Department pursuant to paragraph (e) of §765.30.
- (c) A licensee shall submit any claim for reimbursement of costs of remedial action incurred pursuant to an approved plan for subsequent remedial action in accordance with the requirements of subpart C of this part. The Department shall approve, approve in part, or deny any claims in accordance with the procedures specified in subpart C of this part. The Department shall authorize the disbursement of funds upon approval of a claim for reimbursement.
- (d) After all remedial actions have been completed by affected Agreement State or NRC licensees, the Department will issue a Federal Register notice announcing a termination date beyond which claims for reimbursement will no longer be accepted.

### § 765.32 Reimbursement of excess funds.

(a) No later than July 31, 2005, the Department shall determine if the aggregate amount authorized for appropriation pursuant to section 1003 of the Act (42 U.S.C. 2296a-2), as adjusted for

inflation pursuant to §765.12, exceed as of that date the combined total of all reimbursements which have been paid to licensees under this part, any amounts approved for reimbursement and owed to any licensee, and any anticipated additional reimbursements to be made in accordance with approved plans for subsequent remedial action.

- (b) If the Department determines that the amount authorized pursuant to section 1003 of the Act (42 U.S.C. 2296a-2), as adjusted for inflation, exceed the combined total of all reimbursements (as indicated in paragraph (a) of this section), the Department may establish procedures for providing additional reimbursement to uranium licensees for costs of remedial action, subject to the availability of appropriated funds. If the amount of available excess funds is insufficient to provide reimbursement of all eligible costs of remedial action, then reimbursement shall be paid on a prorated basis.
- (c) Each eligible uranium licensee's prorated share will be determined by dividing the total excess funds available by the total number of Federal-related dry short tons of byproduct material present at the site where costs of remedial action exceed \$5.50 per dry short ton, as adjusted for inflation pursuant to §765.12. The resulting number will be the maximum cost per dry short ton, over \$5.50, that may be reimbursed. Total reimbursement for each licensee that has incurred approved costs of remedial action in excess of \$5.50 per dry short ton will be the product of the excess cost per dry short ton multiplied by the number of Federalrelated dry short tons of byproduct material at the site or the actual costs incurred and approved by the Department, whichever is less.
- (d) Any costs of remedial action for which reimbursement is sought from excess funds determined by the Department to be available is subject to all requirements of this part except the per dry short ton limit on reimbursement established by paragraph (d) of \$765.11.

#### Pt. 766

# PART 766—URANIUM ENRICHMENT DECONTAMINATION AND DE-COMMISSIONING FUND; PROCEDURES FOR SPECIAL ASSESSMENT OF DOMESTIC UTILITIES

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Source: 59 FR 41963, Aug. 15, 1994, unless otherwise noted.

#### Subpart A—General

#### § 766.1 Purpose.

The provisions of this part establish procedures for the Special Assessment of domestic utilities for the Uranium Enrichment Decontamination and Decommissioning Fund pursuant to sections 1801, 1802 and 1803 of the Atomic Energy Act of 1954, as amended (42 U.S.C. § 2011 et seq.).

#### § 766.2 Applicability.

This part applies to all domestic utilities in the United States that purchased separative work units from the DOE between 1945 and October 23, 1992.

#### § 766.3 Definitions.

For the purposes of this part, the following terms shall be defined as follows:

 $CPI\!-\!U$  means the Consumer Price Index for all-urban consumers published by the Department of Labor.

Commercial electricity generation means the production of electricity for sale to consumers.

DOE means the United States Department of Energy and its predecessor agencies.

Domestic utility means any utility in the United States that has purchased SWUs produced by DOE for the purpose of commercial electrical generation during the period beginning in 1945 to October 23, 1992.

Fund means an account in the U.S. Treasury referred to as the Uranium Enrichment Decontamination and Decommissioning Fund, established by section 1801 of the Atomic Energy Act of 1954, as amended.

Oak Ridge Operations Office means the Oak Ridge Operations Office of the Department of Energy in Oak Ridge, Tennessee

Special Assessment means the Special Assessment levied on domestic utilities for payments into the Fund.

SWU means a separative work unit, the common measure by which uranium enrichment services are sold.

TESS means the Toll Enrichment Services System, which is the database that tracks uranium enrichment services transactions of the DOE Oak Ridge Operations Office for the purpose of planning, toll transaction processing, customer invoicing and historical tracking of SWU deliveries.

Use and burnup charges mean lease charges for the consumption of SWUs and natural uranium.

#### Subpart B—Procedures for Special Assessment

#### §766.100 Scope.

This subpart sets forth the procedures for the Special Assessment of domestic utilities for funds to be deposited in the Fund.

#### § 766.101 Data utilization.

DOE shall use the records from the Toll Enrichment Services System (TESS) and other records maintained by the Oak Ridge Operations Office in order to determine the total SWUs purchased from DOE for all purposes. DOE shall use records from TESS, relevant records of domestic utilities, and such other information as DOE deems to be reliable and probative in determining the number of SWUs that were purchased by each domestic utility prior

to October 24, 1992. A domestic utility shall be considered to have purchased a SWU from DOE if the SWU was produced by DOE but purchased by the domestic utility from another source. DOE shall consider a purchase to have occurred upon the delivery of a SWU to the domestic utility purchasing the SWU. A domestic utility shall not be considered to have purchased a SWU from DOE if the SWU was purchased by the domestic utility but subsequently sold to another source.

#### § 766.102 Calculation methodology.

(a) Calculation of Domestic Utilities' Annual Assessment Ratio to the Fund. Domestic utilities shall be assessed annually for their share of the Fund. The amount of the assessment shall be determined by the ratio of SWUs produced by DOE and purchased by domestic utilities prior to October 24, 1992, to the total number of SWUs produced by DOE for all purposes (including SWUs produced for defense purposes). All calculations will be carried out to the fifth significant digit. This ratio is expressed by the following hypothetical example:

SWUs pur- chased by all domestic utili- ties		Total SWUs pro- duced—all pur- poses		Special as- sessment ratio
12345	÷	45678	=	.27026

(b) Calculation of the Baseline Total Annual Special Assessment for Domestic Utilities. The Annual Special Assessment ratio calculated in paragraph (a) of this section shall be multiplied by \$480 million, yielding the total amount of the Baseline Total Annual Special Assessment as of October 1992. In the event that this amount is in excess of \$150 million, the Baseline Total Annual Special Assessment shall be capped at \$150 million. All calculations will be carried out to the fifth significant digit. The Baseline Total Annual Special Assessment is determined as shown in the following hypothetical example:

Total fund		Annual assess- ment ratio		Baseline total annual special as- sessment		
\$480,000,000	×	0.27026	=	\$129,724,800		

(c) Calculation of Baseline Total Annual Special Assessment per Utility. The ratio of the total number of SWUs purchased by an individual domestic utility for commercial electricity generation, to the total number of SWUs purchased by all domestic utilities for generation. commercial electricity multiplied by the Baseline Total Annual Special Assessment calculated in paragraph (b) of this section, determines an individual utility's share of the Baseline Total Annual Special Assessment. All calculations will be carried out to the fifth significant digit. A hypothetical example of such a calculation follows:

Single utility SWUs			Utility ratio		Baseline total annual special assessment	Individual utility special Assessment	
300	÷	12345	=	.02430	×	\$129,724,800	\$3,152,312.64

(d) Calculation of Inflation Adjustment. The Baseline Total Annual Special Assessment billed to domestic utilities shall be adjusted for inflation using the most recently published monthly CPI–U and the CPI–U for October 1992. All calculations will be carried out to the fifth significant digit. A hypothetical example of such a calculation follows:

CPI-U (Mar 93)		CPI-U (Oct 92)		Adjustment multiplier
150	÷	141.8	=	1.05783

Utility special Assessment Adjustment Multiplier Adjusted utility assessment

\$3,152,312.64 \times 1.05783 = \$3,334,610.88

#### § 766.103 Special Assessment invoices.

(a) DOE shall issue annually a Special Assessment invoice to each domestic utility. This invoice will specify itemized quantities of enrichment services by reactor. In each Special Assessment invoice, DOE shall require payment, on or before 30 days from the date of each invoice, of that utility's prorated share of the Baseline Total

#### § 766.104

Annual Special Assessment, as adjusted for inflation using the most recently published monthly CPI-U data.

- (b) DOE shall enclose with the Fiscal Year 1993 Special Assessment invoice a sealed, business confidential, summary SWU transaction statement including:
- (1) TESS information which documents, by reactor, the basis of the utility's assessment:
- (2) A list of domestic utilities subject to the Special Assessment:
- (3) The total number of SWUs purchased from DOE by all domestic utilities for all purposes prior to October 24, 1992.
- (4) The total number of SWUs purchased from DOE for all purposes prior to October 24, 1992, including SWUs purchased or produced for defense purposes; and
- (5) Such other information as may be appropriate.
- (c) With regard to any fiscal year after Fiscal Year 1993, DOE shall enclose a summary SWU transaction statement with Special Assessment invoices that will include updated information regarding adjustments to Special Assessments resulting from the reconciliation and appeals process under Section 766.104.
- (d) The date of each Annual Special Assessment invoicing will be set on or about October 1 with payment due 30 calendar days from the date of invoice starting with the Fiscal Year 1995 Special Assessment.

## § 766.104 Reconciliation, adjustments and appeals.

(a) A domestic utility requesting an adjustment shall, within 30 days from the date of a Special Assessment invoice, file a notice requesting an adjustment. Such notice shall include an explanation of the basis for the adjustment and any supporting documents, and may include a request for a meeting with DOE to discuss its invoice. If more time is needed to gather probative information, DOE will consider utility requests for up to 90 days additional time, providing that the initial notice requesting an adjustment was timely filed. The notice shall be filed at the address set forth in the Special Assessment invoice, and filing of this notice is complete only upon receipt by

DOE. Domestic utilities are considered to have met the filing requirements upon DOE's receipt of the notice requesting an adjustment without regard to DOE's acceptance of supporting documentation. The filing of a notice for an adjustment shall not stay the obligation to pay.

- (b) DOE may request additional information from domestic utilities and may acquire data from other sources.
- (c) After reviewing a notice submitted under paragraph (a) of this section and other relevant information, and after making any necessary adjustment to its records in light of reliable and adequately probative records submitted in connection with the request for adjustment or otherwise obtained by DOE, DOE shall make a written determination granting or denying the requested adjustment. As appropriate, DOE shall modify the application of TESS data for any discrepancies or further transactions raised during the reconciliation process.
- (d) Any domestic utility that wishes to dispute a written determination under paragraph (c) of this section shall have the right to file an appeal with the Office of Hearings and Appeals, U.S. Department of Energy, 1000 Independence Avenue S.W., Washington, DC 20585. Except for the Fiscal Year 1993 Special Assessment, any appeal must be filed on or before 30 days from the date of the written determination and should contain information of the type described in 10 CFR part 1003, subpart C. With regard to a written determination under paragraph (c) of this section concerning a Fiscal Year 1993 Special Assessment, a domestic utility must file an appeal on or before 30 days from the effective date of this paragraph or from the date of such written determination, whichever is later. The decision of the Office of Hearings and Appeals shall be the final decision of DOE. Upon completion of the reconciliation process, all records of SWU transactions shall be finalized and shall become the basis of subsequent Special Assessment invoices. These records shall be revised to reflect any decisions from the Office of Hearings and Appeals and any applicable court rulings.

(e) Refunds of Special Assessments shall be provided in cases where DOE has determined, as a result of reconciliation, that an overpayment has been made by a domestic utility, and that the domestic utility has no further current obligation to DOE.

[59 FR 41963, Aug. 15, 1994, as amended at 60 FR 15017, Mar. 21, 1995]

#### § 766.105 Payment procedures.

DOE shall specify payment details and instructions in all Special Assessment invoices. Each domestic utility shall make payments to the Fund by wire transfer to the Department of Treasury.

#### § 766.106 Late payment fees.

In the case of a late payment by a domestic utility of its Special Assessment, the domestic utility shall pay interest at the per annum rate (365-day basis) established by DOE for general application to monies due DOE and not received by DOE on or before a designated due date. Interest shall accrue beginning the date of the designated payment except that, whenever the due date falls on a Saturday. Sunday, or a United States legal holiday, interest shall commence on the next day immediately following which is not a Saturday, Sunday, or United States legal holiday. Late payment provisions for the Special Assessment to the Fund shall be based on the Treasury Current Value of Funds Rate (which is published annually by the Treasury and used in assessing interest charges for outstanding debts on claims owed to the United States Government), plus six (6) percent pro rata on a daily basis. The additional six (6) percent charge shall not go into effect until five (5) business days after payment was originally due. Late payment fees shall be invoiced within two days of receipt of utility payment of the special assessment when delinquency is less than 30 days. For longer periods of delinquency, DOE will submit additional invoices, as appropriate. Late payment fees will be due 30 days from the date of invoice.

### § 766.107 Prepayment of future Special Assessments

DOE shall accept prepayment of future Special Assessments upon request by a domestic utility. A domestic utility's liability for the future assessments shall be satisfied to the extent of the prepayments. DOE shall use the pro rata share of prepayments attributable to a given fiscal year plus the Special Assessments collected from utilities who did not prepay for that fiscal year, in order to determine that the total amount of Special Assessments collected from domestic utilities in a given fiscal year does not exceed \$150 million, annually adjusted for inflation.

# PART 770—TRANSFER OF REAL PROPERTY AT DEFENSE NUCLEAR FACILITIES FOR ECONOMIC DEVELOPMENT

Sec

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AUTHORITY: 42 U.S.C. 7274q.

Source: 65 FR 10689, Feb. 29, 2000, unless otherwise noted.

#### § 770.1

## § 770.1 What is the purpose of this part?

(a) This part establishes how DOE will transfer by sale or lease real property at defense nuclear facilities for economic development.

(b) This part also contains the procedures for a person or entity to request indemnification for any claim that results from the release or threatened release of a hazardous substance or pollutant or contaminant as a result of DOE activities at the defense nuclear facility.

## § 770.2 What real property does this part cover?

(a) DOE may transfer DOE-owned real property by sale or lease at defense nuclear facilities, for the purpose of permitting economic development.

(b) DOE may transfer, by lease only, improvements at defense nuclear facilities on land withdrawn from the public domain, that are excess, temporarily underutilized, or underutilized, for the purpose of permitting economic development.

## § 770.3 What general limitations apply to this part?

(a) Nothing in this part affects or modifies in any way section 120(h) of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (42 U.S.C. 9620(h)).

(b) Individual proposals for transfers of property are subject to NEPA review as implemented by 10 CFR Part 1021.

(c) Any indemnification agreed to by the DOE is subject to the availability of funds.

## § 770.4 What definitions are used in this part?

Community Reuse Organization or CRO means a governmental or non-governmental organization that represents a community adversely affected by DOE work force restructuring at a defense nuclear facility and that has the authority to enter into and fulfill the obligations of a DOE financial assistance agreement.

Claim means a request for reimbursement of monetary damages.

Defense Nuclear Facility means "Department of Energy defense nuclear facility" within the meaning of section

318 of the Atomic Energy Act of 1954 (42 U.S.C. 2286g).

DOE means the United States Department of Energy.

DOE Field Office means any of DOE's officially established organizations and components located outside the Washington, D.C., metropolitan area. (See Field Office Manager.)

Economic Development means the use of transferred DOE real property in a way that enhances the production, distribution, or consumption of goods and services in the surrounding region(s) and furthers the public policy objectives of the laws governing the downsizing of DOE's defense nuclear facilities.

Excess Real Property means any property under DOE control that the Field Office, cognizant program, or the Secretary of Energy have determined, according to applicable procedures, to be no longer needed.

Field Office Manager means the head of the DOE Operations Offices or Field Offices associated with the management and control of defense nuclear facilities.

Hazardous Substance means a substance within the definition of "hazardous substances" in subchapter I of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) (42 U.S.C. 9601(14)).

Indemnification means the responsibility for reimbursement of payment for any suit, claim, demand or action, liability, judgment, cost, or other fee arising out of any claim for personal injury or property damage, including business losses consistent with generally accepted accounting practices, which involve the covered real property transfers. Indemnification payments are subject to the availability of appropriated funds.

Person or Entity means any state, any political subdivision of a state or any individual person that acquires ownership or control of real property at a defense nuclear facility.

Pollutant or Contaminant means a substance identified within the definition of "pollutant or contaminant" in section 101(33) of CERCLA (42 U.S.C. 9601(33)).

Real Property means all interest in land, together with the improvements,

structures, and fixtures located on the land (usually including prefabricated or movable structures), and associated appurtenances under the control of any federal agency.

Release means a "release" as defined in subchapter I of CERCLA (42 U.S.C. 9601(22)).

Underutilized Real Property or Temporarily Underutilized Real Property means the entire property or a portion of the real property (with or without improvements) that is used only at irregular intervals, or which is used by current DOE missions that can be satisfied with only a portion of the real property.

#### § 770.5 How does DOE notify persons and entities that defense nuclear facility real property is available for transfer for economic development?

(a) Field Office Managers annually make available to Community Reuse Organizations and other persons and entities a list of real property at defense nuclear facilities that DOE has identified as appropriate for transfer for economic development. Field Office Managers may use any effective means of publicity to notify potentially-interested persons or entities of the availability of the list.

(b) Upon request, Field Office Managers provide to interested persons and entities relevant information about listed real property, including information about a property's physical condition, environmental, safety and health matters, and any restrictions or terms of transfer.

## § 770.6 May interested persons and entities request that real property at defense nuclear facilities be transferred for economic development?

Any person or entity may request that specific real property be made available for transfer for economic development pursuant to procedures in §770.7. A person or entity must submit such a request in writing to the Field Office Manager who is responsible for the real property.

## § 770.7 What procedures are to be used to transfer real property at defense nuclear facilities for economic development?

- (a) *Proposal*. The transfer process starts when a potential purchaser or lessee submits to the Field Office Manager a proposal for the transfer of real property that DOE has included on a list of available real property, as provided in \$770.5 of this part.
- (1) A proposal must include (but is not limited to):
- (i) A description of the real property proposed to be transferred;
- (ii) The intended use and duration of use of the real property;
- (iii) A description of the economic development that would be furthered by the transfer (e.g., jobs to be created or retained improvements to be made):
- (iv) Information supporting the economic viability of the proposed development; and
- (v) The consideration offered and any financial requirements.
- (2) The person or entity should state in the proposal whether it is or is not requesting indemnification against claims based on the release or threatened release of a hazardous substance or pollutant or contaminant resulting from DOE activities.
- (3) If a proposal for transfer does not contain a statement regarding indemnification, the Field Office Manager will notify the person or entity by letter of the potential availability of indemnification under this part, and will request that the person or entity either modify the proposal to include a request for indemnification or submit a statement that it is not seeking indemnification.
- (b) Decision to transfer real property. Within 90 days after receipt of a proposal, DOE will notify, by letter, the person or entity that submitted the proposal of DOE's decision whether or not a transfer of the real property by sale or lease is in the best interest of the Government. If DOE determines the transfer is in the Government's best interest, then the Field Office Manger will begin development of a transfer agreement.

#### §770.8

- (c) Congressional committee notification. DOE may not transfer real property under this part until 30 days have elapsed after the date DOE notifies congressional defense committees of the proposed transfer. The Field Office Manager will notify congressional defense committees through the Secretary of Energy.
- (d) *Transfer*. After the congressional committee notification period has elapsed, the Field Office Manager:
- (1) Finalizes negotiations of a transfer agreement, which must include a provision stating whether indemnification is or is not provided:
- (2) Ensures that any required environmental reviews have been completed; and
- (3) Executes the documents required for the transfer of property to the buver or lessee.

#### § 770.8 May DOE transfer real property at defense nuclear facilities for economic development at less than fair market value?

DOE generally attempts to obtain fair market value for real property transferred for economic development, but DOE may agree to sell or lease such property for less than fair market value if the statutory transfer authority used imposes no market value restriction, and:

- (a) The real property requires considerable infrastructure improvements to make it economically viable, or
- (b) A conveyance at less than market value would, in the DOE's judgment, further the public policy objectives of the laws governing the downsizing of defense nuclear facilities.

# § 770.9 What conditions apply to DOE indemnification of claims against a person or entity based on the release or threatened release of a hazardous substance or pollutant or contaminant attributable to DOE?

- (a) If an agreement for the transfer of real property for economic development contains an indemnification provision, the person or entity requesting indemnification for a particular claim must:
- (1) Notify the Field Office Manager in writing within two years after such claim accrues under §770.11 of this part;

- (2) Furnish the Field Office Manager, or such other DOE official as the Field Office Manager designates, with evidence or proof of the claim;
- (3) Furnish the Field Office Manager, or such other DOE official as the Field Office Manager designates, with copies of pertinent papers (e.g., legal documents) received by the person or entity;
- (4) If requested by DOE, provide access to records and personnel of the person or entity for purposes of defending or settling the claim; and
- (5) Provide certification that the person or entity making the claim did not contribute to any such release or threatened release.
- (b) DOE will enter into an indemnification agreement if DOE determines that indemnification is essential for the purpose of facilitating reuse or redevelopment.
- (c) DOE may not indemnify any person or entity for a claim if the person or entity contributed to the release or threatened release of a hazardous substance or pollutant or contaminant that is the basis of the claim.
- (d) DOE may not indemnify a person or entity for a claim made under an indemnification agreement if the person or entity refuses to allow DOE to settle or defend the claim.

## § 770.10 When must a person or entity, who wishes to contest a DOE denial of request for indemnification of a claim, begin legal action?

If DOE denies the claim, DOE must provide the person or entity with a notice of final denial of the claim by DOE by certified or registered mail. The person or entity must begin legal action within six months after the date of mailing.

#### § 770.11 When does a claim "accrue" for purposes of notifying the Field Office Manager under § 770.9(a) of this part?

For purposes of §770.9(a) of this part, a claim "accrues" on the date on which the person asserting the claim knew, or reasonably should have known, that the injury to person or property was caused or contributed to by the release or threatened release of a hazardous substance, pollutant, or contaminant

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as a result of DOE activities at the defense nuclear facility on which the real property is located.

#### PART 780—PATENT COMPENSA-TION BOARD REGULATIONS

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AUTHORITY: 42 U.S.C. 7151, 7254; 42 U.S.C. 5814, 5815; 42 U.S.C. 2183, 2187, 2223; 35 U.S.C. 183; North American Free Trade Agreement, Article 1709(10), as implemented by the North American Free Trade Agreement Implementing Act, Pub. L. 103–182.

SOURCE: 46 FR 39581, Aug. 4, 1981, unless otherwise noted.

#### Subpart A—General Provisions

#### § 780.1 Scope.

The regulations in this part establish the procedures, terms, and conditions for Patent Compensation Board:

- (a) Proceedings to declare a patent affected with the public interest pursuant to section 153a of the Atomic Energy Act of 1954 (Pub. L. 83–703; 42 U.S.C. 2183);
- (b) Proceedings to determine a reasonable royalty fee pursuant to section 157 of the Atomic Energy Act of 1954;
- (c) Proceedings for the grant of an award pursuant to section 157 of the Atomic Energy Act of 1954:
- (d) Proceedings to obtain compensation pursuant to section 173 of the Atomic Energy Act of 1954 and the Invention Secrecy Act (35 U.S.C. 183);

And for applications to the Department of Energy (DOE) for a patent license pursuant to sections 153b(2) and 153c of the Atomic Energy Act of 1954.

#### § 780.2 Definitions.

- (a) Act means the Atomic Energy Act of 1954 (Pub. L. 83–703; 42 U.S.C. 2011).
- (b) Application means the application filed by an applicant for a patent license, for the determination of a reasonable royalty fee, for an award, or for compensation under this part.
- (c) Board means the Patent Compensation Board.
- (d) Chairman means the Chairman of the Patent Compensation Board.

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- (e) Department, or DOE, or Department of Energy means the Department of Energy, established by the Department of Energy Organization Act (Pub. L. 95–91; 42 U.S.C. 7101).
- (f) Party means the applicant, patent owner, Department representative, and any person admitted as a party by the Board for any proceeding under this part.
- (g) Patent Owner means the owner of record in the United States Patent and Trademark Office.
- (h) Secretary means the Secretary of the Department of Energy or the delegate of the Secretary of Energy.

### § 780.3 Jurisdiction of the Patent Compensation Board.

The Patent Compensation Board was established by section 157 of the Atomic Energy Act of 1954. It was transferred to the Energy Research and Development Administration pursuant to section 104(d) of the Energy Reorganization Act of 1974 (42 U.S.C. 5814) and subsequently to the Department of Energy by section 301 of the Department of Energy Organization Act (42 U.S.C. 7151). Under section 157, the Board is given authority to determine reasonable royalty fees or resolve issues involving the grant of awards. In addition, the Board has authority:

- (a) To hear and make decisions as to compensation under section 173 of the Act (42 U.S.C. 2223) and the Invention Secrecy Act (35 U.S.C. 183);
- (b) To hear and make decisions as to whether a specific patent is affected with the public interest pursuant to section 153a of the Act;
- (c) To hear and make decisions as to whether a specific patent license should be granted under sections 153b(2) and 153e of the Act;
- (d) To give notices, hold hearings and take such other actions as may be necessary under section 153; and
- (e) To exercise all powers available under the Act and necessary for the performance of these duties, including the issuance of such rules of procedure as may be necessary.

### § 780.4 Filing and service of documents.

(a) All communications regarding proceedings subject to this part should

be addressed to: Chairman, Patent Compensation Board, U.S. Department of Energy, Webb Building, Room 1006, 4040 N. Fairfax Drive, Arlington, Virginia 22203. All documents offered for filing shall be accompanied by proof of service upon all parties to the proceeding or their attorneys of record as required by law, rule, or order of the Department. Service on the Department shall be by mail, telegram, or derivery to: Office of the Assistant General Counsel for Patents, U.S. Department of Energy, Washington, DC 20585.

(b) Filing by mail or telegram will be deemed to be complete as of the time of deposit in the United States mail or with a telegraph company.

### § 780.5 Applications—General form, content, and filing.

- (a) Each application shall be signed by the applicant and shall state the applicant's name and address. If the applicant is a corporation, the application shall be signed by an authorized officer of the corporation, and the application shall indicate the state of incorporation. Where the applicant elects to be represented by counsel, a signed notice to that effect shall be filed with the Board.
- (b) Each application must contain a concise statement of all of the essential facts upon which it is based. No particular form of statement is required. Each application shall be verified by the applicant or by the person having the best knowledge of such facts. In the case of facts stated on information and belief, the source of such information and grounds of belief shall be given.
- (c) Each application must identify any person whose interest the applicant believes may be affected by the proceeding before the Board.
- (d) Three copies of each application shall be filed with the Board. However, only one copy of the accompanying exhibits need be filed.
- (e) The Board will acknowledge the receipt of the application in writing and advise the applicant of the docket number assigned to the application.

#### § 780.6 Department participation.

The Department shall be a party to all proceedings under this part, and the

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Office of the General Counsel will represent the Department's interests before the Board.

### § 780.7 Designation of interested persons as parties.

In any proceeding under this part, the Board shall admit as a party any person, upon application of such person or on the Board's own initiative, whose interest may be affected by the proceeding.

#### § 780.8 Security.

In any proceeding under this part, the Board shall take such steps as necessary pursuant to chapter 12 of the Act and section 181 of the Act to assure compliance with Department security regulations and the common defense.

### $\S 780.9$ Rules of procedure before the Board.

Except as set forth in this part, all Board proceedings, including the hearing and decision, shall be conducted pursuant to the rules of practice of the Department of Energy Board of Contract Appeals, 10 CFR part 1023, modified as the Board may determine to be necessary and appropriate.

#### § 780.10 Decision of the Board.

The decision of the Board in any proceeding under this part shall constitute the final action of the Department on the matter.

#### § 780.11 Records of the Board.

The records of the Board in cases filed before it, including the pleadings, the transcript, and the final decision, shall be open to public inspection, except to the extent that such records or portions thereof are withheld from disclosure by the Board pursuant to 10 CFR part 1004.

#### Subpart B—Declaring Patents Affected With the Public Interest Under Section 153a of the Atomic Energy Act of 1954

#### § 780.20 Initiation of proceeding.

When any person in the Department believes that the Department should declare a patent affected with the public interest pursuant to section 153a of the Act, that person shall make such a recommendation to the Under Secretary. If, after consultation with the General Counsel, the Under Secretary agrees with the recommendation, the Under Secretary shall initiate in writing a proceeding under section 153a before the Board. The communication of the Under Secretary to the Board shall identify the patent and state the basis for the proposed declaration.

#### § 780.21 Notice.

The Board will serve upon the patent owner and all other parties a written notice of the Department's proposed action to declare the patent affected with the public interest, and the notice shall identify the patent and state the basis for the proposed declaration.

### § 780.22 Opposition, support and request for hearing.

(a) Any party may, within thirty (30) days after service of the notice or such other time as may be provided by the terms of the notice, file with the Board a written statement in opposition to or in support of the Department's proposed action. Such statement may also include a request for hearing. The statement shall contain a concise description of the facts, law, or any other relevant matter which the party believes should be reviewed by the Board during its consideration of the proposed declaration. If the request for a hearing is timely received, the Board shall call a hearing and provide notice of the time and place to all parties.

(b) Failure of all parties to oppose the proposed action or to request a hearing within the time specified in the notice shall be deemed an acquiescence to that action and may result in a declaration by the Board that the patent is affected with the public interest.

#### § 780.23 Hearing and decision.

If a timely request for a hearing is made by any party, the Board will proceed with a hearing and decision. If a hearing is not requested, the Board shall prepare and issue its decision on the record.

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### § 780.24 Criteria for declaring a patent affected with the public interest.

A patent shall be declared to be affected with the public interest pursuant to section 153a of the Act upon the Board's final decision that:

- (a) The invention or discovery covered by the patent is of primary importance in the production or utilization of special nuclear material or atomic energy; and
- (b) The licensing of such invention or discovery under section 153 of the Act is of primary importance to effectuate the policies and purposes of the Act.

#### Subpart C—Application for a License Pursuant to Section 153b(2) of the Atomic Energy Act of 1954

#### § 780.30 Filing of application.

An applicant for a license pursuant to section 153b(2) of the Act, under a patent which the Department has declared to be affected with the public interest, shall file an application with the Board in accordance with §780.5. The Board will docket the application and serve notice of the docketing upon all parties.

#### § 780.31 Contents of application.

Each application shall contain, in addition to the requirements specified in §780.5, the following information:

- (a) The activities in the production or utilization of special nuclear material or atomic energy to which applicant proposes to apply the patent license:
- (b) The nature and purpose of the applicant's intended use of the patent license;
- (c) The relationship of the invention or discovery to the authorized activities to which it is to be applied, including an estimate of the effect on such activities stemming from the grant or denial of the license;
- (d) Efforts made by the applicant to obtain a patent license from the owner of the patent;
- (e) Terms, if any, on which the owner of the patent proposes to grant the applicant a patent license;
- (f) The terms the applicant proposes for the patent license; and

(g) A request for either a hearing or a decision on the record.

### § 780.32 Response and request for hearing.

Any party within thirty (30) days after service of the notice of docketing of the application:

- (a) May file with the Board a response containing a concise statement of the facts or law or any other relevant information which that party believes should be considered by the Board in opposition to or in support of the proposed application; and
- (b) May file a request for a hearing or for a decision on the record.

#### § 780.33 Hearing and decision.

If any party requests a hearing, the Board will proceed with a hearing and decision. If a hearing is not requested, the Board shall on the basis of the record prepare and issue its decision.

### § 780.34 Criteria for decision to issue a license.

A license shall issue to the applicant to use the invention covered by the patent declared to be affected with the public interest pursuant to subsection 153b(2) of the Act upon a final decision that:

- (a) The activities to which the patent license is proposed to be applied are of primary importance to the applicant's conduct of an activity authorized under the Act; and
- (b) The applicant has made efforts to obtain reasonable commercial terms and conditions and such efforts have not been successful within a reasonable period of time. The requirement to make such efforts may be waived by the Board in the case of a national emergency or other circumstances of extreme urgency or in cases of public non-commercial use. Where this requirement is waived due to national emergency or other circumstances of extreme urgency, the owner of the patent shall be notified as soon as reasonably practicable. Where this requirement is waived for a public non-commercial use, the owner of the patent shall be notified promptly.

[46 FR 39581, Aug. 4, 1981, as amended at 58 FR 68734, Dec. 29, 1993]

### § 780.35 Communication of decision to General Counsel.

Following a determination to issue a patent license under section 153b(2) of the Act, the Board shall send the decision to the General Counsel and instruct the General Counsel to issue the license on terms deemed equitable by the Department and generally not less fair than those granted by the patentee or by the Department to similar licensees for comparable use.

### § 780.36 Conditions and issuance of license.

- (a) Upon receipt of the Board's decision and instruction to issue a patent license, the General Counsel shall issue a license which complies with the following:
- (1) The scope and durations of such use shall be limited to the purpose for which it was authorized;
  - (2) Such use shall be non-exclusive:
- (3) Such use shall be non-assignable, except with that part of the enterprise or goodwill that enjoys such use;
- (4) Any such use shall be authorized predominantly for the supply of the U.S. market; and,
- (5) Authorization for such use shall be liable, subject to adequate protection of the legitimate interests of the persons so authorized, to be terminated if and when the circumstances that led to it cease to exist and are unlikely to recur.
- (b) The Board shall have the authority to review, on motivated request, the continued existence of these circumstances. The parties will propose and agree on a reasonable royalty fee within a reasonable time as determined by the General Counsel. A reasonable royalty shall provide adequate remuneration for the circumstances of each case, taking into account the economic value of the authorization. If a party does not agree with the terms and conditions of the license as determined by the General Counsel or if a royalty fee cannot be agreed upon within the reasonable time period established by the General Counsel, any party may, within 30 days after the expiration of such time period, initiate a proceeding before the Board, in accordance with subpart E of this part, for a reconsideration of the General Counsel's deter-

mination. After the proceeding under subpart E of this part is completed, the General Counsel shall modify the patent license in accordance with the Board's determination.

[58 FR 68734, Dec. 29, 1993]

#### Subpart D—Application for a License Pursuant to Section 153c of the Atomic Energy Act of 1954

#### § 780.40 Filing of application.

An application to the Department, pursuant to section 153c of the Act, for the issuance of a license to use the invention or discovery covered by a patent useful in the production or utilization of special nuclear material or atomic energy shall be filed with the Board in accordance with requirements of §780.5.

#### § 780.41 Contents of application.

In addition to the information specified in §780.5, each application shall contain the following:

- (a) The applicant's contention, with supporting data, that the invention or discovery covered by the patent is of primary importance in the production or utilization of special nuclear material or atomic energy:
- (b) The applicant's contention, with supporting data, that the licensing of such invention or discovery is of primary importance to the conduct of the activities of the applicant, including information concerning:
- (1) The activities in the production or utilization of special nuclear material or atomic energy to which applicant proposes to apply the license;
- (2) The nature and purpose of the applicant's intended use of the patent license; and
- (3) The relationship of the invention or discovery to the activities to which it is to be applied, including an estimate of the effect of such activities stemming from the grant or denial of the license.
- (c) The applicant's contention, with supporting data, that the activities to which the patent license are proposed to be applied are of primary importance to the furtherance of policies and purposes of the Act;

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- (d) The applicant's contention, with supporting data, that such applicant cannot otherwise obtain a patent license from the owner of the patent on terms which are reasonable for the applicant's intended use of the patent, including information concerning:
- (1) Efforts made by applicant to obtain a patent license from the owner of the patent; and
- (2) Terms, if any, on which the owner of the patent proposed to grant applicant a patent license.
- (e) The terms the applicant proposes as reasonable for the patent license; and
- (f) A copy of any license, permit, or lease obtained by the applicant under the procedures outlined in section 153(c) of the Act.

#### § 780.42 Notice of hearing.

Within thirty (30) days after the filing of the application, the Board will serve on all parties a notice of hearing to be held not later than sixty (60) days after the filing of the application.

#### § 780.43 Response.

Any party may file a response with the Board containing a concise statement of the facts or law or any other relevant information in opposition to or in support of the application which that party believes should be considered by the Board. Such response must be filed by a party within twenty (20) days after being served a copy of the application.

#### § 780.44 Hearing and decision.

In accordance with section 153d of the Act, the Board shall hold a hearing and issue a final decision on the application.

### § 780.45 Criteria for decision to issue a license.

A license shall issue to the applicant to use the invention covered by the patent for the purposes stated in the application upon a final decision that:

- (a) The invention or discovery covered by the patent is of primary importance in the production or utilization of special nuclear material or atomic energy;
- (b) The licensing of such invention or discovery is of primary importance to

the conduct of the activities of the applicant;

- (c) The activities to which the patent license is proposed to be applied by such applicant are of primary importance to the furtherance of policies and purposes of the Act; and
- (d) The applicant has made efforts to obtain reasonable commercial terms and conditions and such efforts have not been successful within a reasonable period of time. The requirement to make such efforts may be waived by the Board in the case of a national emergency or other circumstances of extreme urgency or in cases of public non-commercial use. Where this requirement is waived due to national emergency or other circumstances of extreme urgency, the owner of the patent shall be notified as soon as reasonably practicable. Where this requirement is waived for a public non-commercial use, the owner of the patent shall be notified promptly.

[46 FR 39581, Aug. 4, 1981, as amended at 58 FR 68734, Dec. 29, 1993]

### § 780.46 Communication of decision to General Counsel.

When the Board decides to issue a patent license under section 153c of the Act, the Board shall send the decision to the General Counsel and instruct the General Counsel to issue the license on terms deemed equitable by the Department and generally not less fair than those granted by the patentee or by the Department to similar licensees for comparable use.

### § 780.47 Conditions and issuance of license.

- (a) Upon receipt of the Board's decision and instruction to issue a patent license, the General Counsel shall issue a license which complies with the following:
- (1) The scope and durations of such use shall be limited to the purpose for which it was authorized;
  - (2) Such use shall be non-exclusive;
- (3) Such use shall be non-assignable, except with that part of the enterprise or goodwill that enjoys such use;
- (4) Any such use shall be authorized predominantly for the supply of the U.S. market; and,

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- (5) Authorization for such use shall be liable, subject to adequate protection of the legitimate interests of the persons so authorized, to be terminated if and when the circumstances that led to it cease to exist and are unlikely to recur.
- (b) The Board shall have the authority to review, on motivated request, the continued existence of these circumstances. The parties will propose and agree on a reasonable royalty fee within a reasonable time as determined by the General Counsel. A reasonable royalty shall provide adequate remuneration for the circumstances of each case, taking into account the economic value of the authorization. If a party does not agree with the terms and conditions of the license as determined by the General Counsel or if a royalty fee cannot be agreed upon within the reasonable time period established by the General Counsel, any party may, within 30 days after the expiration of such time period, initiate a proceeding before the Board, in accordance with subpart E of this part, for a reconsideration of the General Counsel's determination. After the proceeding under subpart E of this part is completed, the General Counsel shall modify the patent license in accordance with the Board's determination.

[46 FR 39581, Aug. 4, 1981, as amended at 58 FR 68734, Dec. 29, 1993]

Subpart E—Application for Royalties and Awards Under Section 157 of the Atomic Energy Act of 1954 and Compensation Under Section 173 of the Atomic Energy Act of 1954 and the Invention Secrecy Act (35 U.S.C. 183)

#### § 780.50 Applicants.

- (a) Any owner or licensee of a patent licensed under section 158 or subsections b or e of section 153 of the Act may file an application with the Board for the determination of a reasonable royalty fee.
- (b) Any owner or licensee of a patent licensed under subsections b or e of section 153 of the Act may file an application with the Board for the modifica-

tion of any terms and conditions of the license.

- (c) Any person who has made an invention or discovery useful in the production or utilization of special nuclear material or atomic energy, has complied with the provisions of section 151c, but, under the Act, is not entitled to a royalty for such invention or discovery, may file an application for an award
- (d) Any owner of a patent application that contains restricted data not belonging to the United States which the Department has communicated to any foreign nation may make application for just compensation pursuant to section 173 of the Act.
- (e) Any patent applicant, whose patent is withheld because of a secrecy order issued at the request of the Department may, beginning at the date the patent applicant is notified that, except for such order, the application is otherwise in condition for allowance, apply for compensation for the damage caused by the secrecy order and/or for the use of the invention by the Government, resulting from any disclosure to the Department required by the Invention Secrecy Act.

#### § 780.51 Form and content.

- (a) Each application shall contain a statement of the applicant's interest in the patent, patent application, invention or discovery and identify any other claimants of whom the applicant has knowledge.
- (b) Each application must contain a concise statement of all of the essential facts upon which it is based. No particular form of statement is required, but it will facilitate consideration of the application if the following specific data accompany the application:
- (1) In the case of an issued patent, a copy of the patent.
- (2) In the case of a patent application, a copy of the application and of all Patent and Trademark Office actions and responses thereto.
- (3) In the case of an invention or discovery as to which a report has been filed with the Department pursuant to subsection c of section 151 of the Act, a copy of such report.

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- (4) In the case of an award, the date relied upon as the date of invention.
- (5) In all cases, a statement of the extent to which the invention or discovery was developed through federally financed research or with other Federal support.
- (6) In all cases, the degree of the utility, novelty, and importance of the invention or discovery.
- (7) In all cases, a statement of the actual use by the Federal Government or others of such invention or discovery, to the extent known to the applicant.
- (8) In all cases, the cost of developing the invention or discovery and acquiring the patent or patent application.
- (9) The royalty fee proposed, the proposed terms and conditions of a license agreement, or the amount sought as compensation or award, as well as the basis used in calculating such fee, compensation or award and whether a lump sum or periodic payments are sought.
- (10) In an application for just compensation pursuant to section 173 of the Act, the ownership of the invention that is the subject matter of the patent application at the time the Department communicated the restricted data shall be set forth, and any restricted data contained in the application shall be specifically identified.
- (11) In an application for compensation under the authority provided in the Invention Secrecy Act (35 U.S.C. 183), for the damage caused by imposition of a secrecy order on a patent application and/or for the use of the invention by the Government, the date of the secrecy order, the date of the notice that the patent application is in condition for allowance, and, if known to the applicant, the date of the first use of the invention by the Government.

#### § 780.52 Notice and hearing.

The Board shall, in its discretion, afford the applicable party an opportunity for a hearing for the presentation of relevant evidence. Thirty (30) days notice shall be given of the time and place of such hearing. After expiration of the notice period, the Board shall proceed with a hearing and render its decision.

### § 780.53 Criteria for decisions for royalties, awards and compensation.

- (a) In deciding a reasonable royalty fee for a patent licensed under section 158 or sections 153b or 153e of the Act, the Board shall consider:
- (1) The economic value of the compulsory license and the Board shall strive to provide adequate remuneration for the circumstances of each case.
- (2) Any defense, general or special, that a defendant could plead in an action for infringement;
- (3) The extent to which such patent was developed through federally financed research or with other Federal support:
- (4) The degree of utility, novelty, and importance of the invention or discovery; and
- (5) The cost to the owner of the patent of developing such invention or discovery or of acquiring such patent.
- (b) In deciding whether or not to grant an award, under section 157 of the Act, for the making of an invention or discovery useful in the production or utilization of special nuclear material or atomic energy, the Board shall take into account the considerations set forth in §780.53(a) of this part and the actual use of such invention or discovery.
- (c) In deciding whether or not to provide compensation, pursuant to section 173 of the Act, to a person who owns a patent application that contains restricted data not belonging to the United States which the Department has communicated to a foreign nation, the Board shall take into account the considerations set forth in §780.53(b) of this part and the damage to the applicant resulting from such communication.
- (d) In the course of its review of an application to provide compensation, pursuant to 35 U.S.C. 183, to an applicant whose patent was withheld because of a secrecy order issued at the request of the Department, the Board shall take into account the considerations set forth in §780.53(b) of this part and:
- (1) The damage sustained by the applicant as a result of the secrecy order; and

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(2) The use of the invention by the Government resulting from the disclosure of such invention to the Department.

[46 FR 39581, Aug. 4, 1981, as amended at 58 FR 68735, Dec. 29, 1993]

### PART 781—DOE PATENT LICENSING REGULATIONS

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AUTHORITY: Dept. of Energy Organization Act, sec. 301, Pub. L. 95-91 (42 U.S.C. 7301); Federal Nonnuclear Energy Research and Development Act of 1974, sec. 9(g), Pub. L. 93-577 (42 U.S.C. 5908(g)); Atomic Energy Act of 1954, as amended, secs. 156, 161g, Pub. L. 83-703 (42 U.S.C. 2186, 2201g); Presidential Statement, 36 FR 16887, Aug. 26, 1971.

Source: 45 FR 73447, Nov. 4, 1980, unless otherwise noted.

#### GENERAL PROVISIONS

#### §781.1 Scope.

The regulations of this part establish the procedures, terms, and conditions upon which licenses may be granted in inventions covered by patents or patent applications, both domestic and foreign, vested in the United States of America, as represented by or in the custody of the Department of Energy.

#### § 781.2 Policy.

(a) The inventions covered by the patents and patent applications, both foreign and domestic, vested in the Government of the United States of America, as represented by or in the custody of the Department, normally will best serve the public interest when they are developed to the point of practical or commercial application and made available to the public in the shortest possible time. This may be accomplished by the granting of express nonexclusive, exclusive, or partially exclusive licenses for the practice of these inventions. However, it is recognized that there may be inventions as to which the Department deems dedication to the public by publication the preferable method of accomplishing these objectives.

(b) Although DOE encourages the nonexclusive licensing of its inventions to promote competition and to achieve their widest possible utilization, the commercial development of certain inventions may require a substantial capital investment that private manufacturers may be unwilling to risk under a nonexclusive license. Thus, DOE may grant exclusive or partially exclusive licenses where the granting of such exclusive or partially exclusive licenses is consistent with §781.52.

(c) Decisions as to grants or denials of any license application will, in the discretion of the Secretary, be based on the Department's view of what is in the best interests of the United States and the general public under the provisions of these regulations. Decisions of the Department under these regulations may be made on the Secretary's behalf by the General Counsel or the General Counsel's delegate, except where otherwise delegated to the Invention Licensing Appeal Board. When the Department determines that it is appropriate to grant a license, the license will be negotiated on terms and conditions most favorable to the interests of the United States and the general public.

(d) No license shall be granted or implied under a DOE invention except as provided for in these regulations, in patent rights articles under Department procurement regulations (41 CFR part 9-9), in agreements between DOE and other Government bodies, or in

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any existing or future treaty or agreement between the United States and any foreign government or intergovernmental organization.

(e) No grant of a license under this part shall be construed to confer upon any licensee any immunity from the antitrust laws or from liability for patent misuse, and the acquisition and use of rights pursuant to this part shall not be immunized from the operation of State or Federal law by reason of the source of the grant.

#### § 781.3 Definitions.

- (a) Board means the Invention Licensing Appeal Board.
- (b) Department of Energy, Department, or DOE mean the Department of Energy, established by the Department of Energy Organization Act (Pub. L. 95-91; 42 U.S.C. 7101).
- (c) DOE invention means an invention covered by a U.S. or foreign patent or patent application that is vested in the Government of the United States, as represented by or in the custody of the Department or any of its predecessors, and which is designated by the Department as appropriate for the grant of an express nonexclusive, exclusive, or partially exclusive license.
- (d) Exclusive license means a license in which the licensee has the exclusive right under the patent for a part or the full term of the patent, subject only to the retention by the U.S. Government of a license and rights in the invention, as specified herein.
- (e) Partially exclusive license means (1) an exclusive license where the exclusive right granted is limited to making or using or selling the invention, or is limited to specified fields of use or use in specified geographic locations; or (2) a license where the number of licenses under the particular invention is limited
- (f) *Person* means any individual, partnership, corporation, association, or institution, or other entity.
- (g) Predecessor means the Energy Research and Development Administration, the Atomic Energy Commission, and any of the Government entities or parts thereof whose functions were transferred to the Department of Energy pursuant to title III of the Department of Energy Organization Act.

- (h) Responsible applicant means an applicant who, in the discretion of the Department, has the intention, plans, and ability expeditiously to bring the invention to the point of practical or commercial application.
- (i) Secretary means the Secretary of Energy or the delegate of the Secretary of Energy.
- (j) To the point of practical or commercial application means to manufacture in the case of composition or product, to practice in the case of a process, or to operate in the case of a machine, under such conditions as to establish that the invention is being worked and that its benefits are reasonably accessible to the public.
- (k) United States and the general public means the United States Government, United States citizens, and United States organizations.
- (1) United States Organization means any partnership, corporation, association, or institution where 75 percent or more of the voting interest is owned by United States citizens.

#### § 781.4 Communications.

All communications concerning the regulations in this part, including applications for licenses, should be addressed or delivered to the General Counsel, Attention: Assistant General Counsel for Patents, U.S. Department of Energy, Washington, DC 20545.

TYPES OF LICENSES AND CONDITIONS FOR LICENSING

#### § 781.51 Nonexclusive licenses.

- (a) Availability of licenses. Except as provided in §781.52, DOE inventions will be made available for the grant of nonexclusive, revocable licenses to responsible applicants. However, when in the best interests of the United States and the general public, licenses may be restricted to manufacture in the United States. Factors which the Department will consider in so restricting a license include, but are not limited to, the following:
  - (1) The nature of the invention;
- (2) The effect of the license upon the policies of the United States Government:

- (3) The effect of the license upon domestic and international commerce and competition;
- (4) The effect of the license upon the balance of payments of the United States: and
- (5) The effect of the license upon the overall posture of the United States in world markets.
- (b) Terms of grant. Nonexclusive licenses shall contain such terms and conditions as the Department may determine appropriate for the protection of the interests of the United States and the general public, including but not limited to the following:
- (1) The duration of the license will be negotiated and may be extended upon application therefor, provided the licensee complies with all the terms of the license and shows that substantial utilization has been, or within a reasonable time will be, achieved.
- (2) The license shall require the licensee to bring the invention to the point of practical or commercial application in the geographic area of the license, within a period of time specified in the license or such period as may be extended by the Department, upon request in writing to the General Counsel, for good cause shown. The license shall further require the licensee to continue to make the benefits of the invention reasonable accessible in the geographic area of the license.
- (3) The license may be granted for all or less than all fields of use of the invention and in any one or all of the countries, or any lesser geographic area thereof, in which the invention is covered by a patent or a patent application.
- (4) Reasonable royalties may be charged for nonexclusive licenses on DOE inventions. Factors to be considered in determining whether to charge royalties, or the amount thereof, include but are not limited to, the following:
  - (i) The nature of the invention;
- (ii) Applicant's status as a small business, minority business, or business in an economically depressed, lowincome or labor surplus area;
- (iii) The extent of U.S. Government contribution to the development of the invention:

- (iv) The degree of development of the invention:
- (v) The extent of effort necessary for the licensee to bring the invention to the point of practical or commercial application;
- (vi) The extent of effort necessary to create or penetrate the market for the invention:
- (vii) Whether the licensee is a U.S. citizen or U.S. organization; and
- (viii) Whether the invention is to be licensed in the U.S. or in a foreign country.
- (5) In the jurisdiction of the license, the license may extend to the licensee's subsidiaries and to affiliates within the corporate structure of which licensee is a part, if any. However, the license shall not be assignable or include the right to grant sublicenses without the approval of the Department in writing.
- (6) The licensee shall be required to submit written reports annually, and when specifically requested by the Department, on its efforts to bring the invention to a point of practical or commercial application and the extent to which the licensee continues to make the benefits of the invention reasonably accessible to the public. The reports shall contain information within the licensee's knowledge, or which the licensee may acquire under normal business practices, pertaining to the commercial use being made of the invention.
- (7) The Department may restrict the license to the fields of use or geographic areas in which the licensee has brought the invention to the point of practical or commercial application and continues to make the benefits of the invention reasonably accessible to the public.

(The information collection requirements contained in paragraph (b)(6) were approved by the Office of Management and Budget under control number 1902–0232)

[45 FR 73447, Nov. 4, 1980, as amended at 46 FR 63209, Dec. 31, 1981]

### § 781.52 Exclusive and partially exclusive licenses.

(a) Availability of licenses. The Department may grant exclusive or partially exclusive licenses in any invention only if:

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- (1) The invention has been published as available for licensing pursuant to §781.61 for a period of at least six (6) months;
- (2) It does not appear that the desired practical or commercial application has been or will be achieved on a non-exclusive basis, and that exclusive or partially exclusive licensing is a reasonable and necessary incentive to call forth the risk capital and expenses necessary to bring the invention to the point of practical or commercial application:
- (3) A sixty (60) day notice of a proposed exclusive or partially exclusive licensee has been provided, pursuant to §781.63(a), advising of an opportunity for a hearing; and
- (4) After termination of the sixty (60) day notice period, the Secretary has determined that:
- (i) The interests of the United States and the general public will best be served by the proposed license, in view of the license applicant's intention, plans, and ability to bring the invention to the point of practical or commercial application:
- (ii) The desired practical or commercial application has not been achieved, or is not likely expeditiously to be achieved, under any nonexclusive license which has been granted, or which may be granted, on the invention;
- (iii) Exclusive or partially exclusive licensing is a reasonable and necessary incentive to call forth the risk capital and expenses necessary to bring the invention to the point of practical or commercial application; and
- (iv) The proposed terms and scope of exclusivity are not substantially greater than necessary to provide the incentive for bringing the invention to the point of practical or commercial application and to permit the licensee to recoup its costs and a reasonable profit thereon;
- (5) Any determination pursuant to paragraph (a)(4) of this section regarding the practical or commercial application of an invention may be limited to the making, using or selling of an invention, a specific field of use, or a geographic location, provided that the grant of such license will not tend substantially to lessen competition or result in undue concentration in any sec-

tion of the United States in any line of commerce to which the technology to be licensed relates.

- (b) Limited number of partially exclulicenses. In appropriate circumstances, and only after compliance with the requirements of paragraph (a) of this section, the Department may offer a limited number of partially exclusive licenses under a particular invention, when limitation of the number of licenses is found to be in the public interest and consistent with the purpose of these regulations. Factors to be considered in a determination to offer a limited number of licenses under a particular invention include, but are not limited to, the following: (1) The nature of the invention; (2) the projected market size; (3) the need for limitation of licenses to attract risk capital; and (4) the need for limitation of licenses to achieve expeditious commercialization of the invention. When such a determination is made, a Notice of Intent to limit the number of licenses shall be published in the FED-ERAL REGISTER, identifying the invention and advising that the Department will entertain no further applications for license under the subject invention unless, within 60 days of the publication of the notice, the General Counsel receives, in writing, responses in accordance with §781.63.
- (c) Selection of exclusive licensee or partially exclusive licensee among multiple applicants. When a determination is made by the Department that grant of an exclusive license or partially exclusive license under a particular invention is a reasonable and necessary incentive, in accordance with paragraphs (a) and (b) of this section, to call forth the risk capital and expenses required to bring the invention to the point of practical or commercial application, and there is more than one applicant in a particular jurisdiction seeking an exclusive license, and no applicant will accept either a nonexclusive or a partially exclusive license, the Department shall make a written determination selecting an exclusive licensee. Similarly, when a determination is made to grant a limited number of partially exclusive licenses under a particular invention and there are more

applicants for such licenses than acceptable, the Department shall make a written determination selecting a limited number of partially exclusive licenses. Factors to be considered in making these determinations include, but are not limited to, the following:

- (1) The relative intentions, plans, and abilities of the applicants to further the technical and market development of the invention and to bring the invention to the point of practical or commercial application;
- (2) The projected impact on competition in the U.S.;
  - (3) Projected market size;
- (4) The benefit to the U.S. Government, U.S. organizations, and the U.S. public:
- (5) Assistance to small business and minority business enterprises and economically depressed, low-income, and labor-surplus areas; and
- (6) Whether the applicant is a U.S. citizen or U.S. organization.
- (d) Terms of grant. Exclusive or partially exclusive licenses shall contain such terms and conditions as the Secretary may determine to be appropriate for the protection of the interests of the United States and the general public, including but not limited to the following:
- (1) The duration of the license will be negotiated, and the terms and scope of exclusivity shall not be substantially greater than necessary to provide the incentive for bringing the invention to the point of practical or commercial application and to permit the licensee to recoup its costs and a reasonable profit thereon. Extensions are permissible only through reapplication for an exclusive or partially exclusive license under procedures established in these regulations. The license shall be subject to any compulsory license provision required by law in a particular jurisdiction.
- (2) The license shall require the licensee to bring the invention to the point of practical or commercial application in the geographic area of the license, within a period of time specified in the license or such period as may be extended by the Department, upon request in writing to the General Counsel, for good cause shown. The license shall further require the licensee to

continue to make the benefits of the invention reasonably accessible in the geographic area of the license. In specifying the period for bringing the invention to the point of practical or commercial application, the license shall specify the minimum sum to be expended by the licensee and/or other specific actions to be taken by it within the time periods indicated in the license.

- (3) The license may be granted for all or less than all fields of use of the invention and in any one or all of the countries, or any lesser geographic area thereof, in which the invention is covered by a patent or a patent application.
- (4) Reasonable royalties shall be charged by the Department unless the Department determines that charging of royalties would not be in the best interests of the United States and the general public.
- (5) In the jurisdiction of the license, the license may extend to the licensee's subsidiaries and to affiliates within the corporate structure of which the licensee is a part, if any. However, the license shall not be assignable or include the right to grant sublicenses without the approval of the Department in writing.
- (6) The licensee shall be required to submit written reports annually, and when specifically requested by the Department, on its efforts to bring the invention to the point of practical or commercial application and the extent to which the licensee continues to make the benefits of the invention reasonably accessible to the public. The reports shall contain information within the licensee's knowledge, or which the licensee may acquire under normal business practices, pertaining to the commercial use being made of the invention.
- (7) The license shall reserve at least an irrevocable, nonexclusive, paid-up license to make, use and sell the invention throughout the world by or on behalf of the United States (including any Government agency), the States, and domestic municipal governments, unless the Secretary determines that it would not be in the public interest to reserve such a license for the States and domestic municipal governments.

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- (8) The license shall reserve in the United States the right to sublicense the licensed invention to any foreign government pursuant to any existing or future treaty or agreement, if the Secretary determines it would be in the national interest to acquire this right.
- (9) The license shall reserve in the Secretary the right to require the granting of a nonexclusive or partially exclusive sublicense to a responsible applicant or applicants, upon terms reasonable under the circumstances, (i) to the extent that the invention is required for public use by governmental regulations, (ii) as may be necessary to fulfill health, safety, or energy needs, or (iii) for such other purposes as may be stipulated in the license.
- (10) The license shall reserve in the Secretary the right to terminate such license, in whole or in part, subject to the notice and appeal provisions of §§ 781.64 and 781.65, unless the licensee demonstrates to the satisfaction of the Secretary that he has taken effective steps, or within a reasonable time thereafter is expected to take such steps, necessary to accomplish substantial utilization of the invention.
- (11) The license shall reserve in the Secretary the right, commencing three years after the grant of the license, to terminate the license, in whole or in part, subject to the provisions of \$781.66 and following a publicly-noticed hearing, initiated pursuant to a petition by an interested person justifying such hearing—
- (i) If the Secretary determines, upon review of such material as he deems relevant and after the licensee or other interested person has had the opportunity to provide such relevant and material information as the Secretary may require, that such license has tended substantially to lessen competition or to result in undue concentration in any section of the United States in any line of commerce to which the technology relates; or
- (ii) If the licensee fails to demonstrate to the satisfaction of the Secretary at such hearing that he has taken effective steps, or within a reasonable time thereafter is expected to take such steps, necessary to accom-

plish substantial utilization of the invention

#### § 781.53 Additional licenses.

Subject to any outstanding licenses, nothing in this part shall preclude the Department from granting additional nonexclusive, or exclusive, or partially exclusive licenses for inventions covered by this part when the Department determines that to do so would provide for an equitable exchange of patent rights. The following circumstances are examples in which such licenses may be granted:

- (a) In consideration of the settlement of interferences;
- (b) In consideration of a release of any claims;
- (c) In exchange for or as a part of the consideration for a license under adversely held patents; or
- (d) In consideration for the settlement or resolution of any proceeding under the Department of Energy Organization Act or other law.

#### PROCEDURES

### § 781.61 Publication of DOE inventions available for license.

- (a) The Department will publish periodically in the FEDERAL REGISTER a list of the DOE inventions available for licensing under this part. In addition, a list of those DOE inventions that are protected in the United States will be published in the U.S. Patent and Trademark Office Official Gazette and in the National Technical Information Service (NTIS) publication "Government Inventions for Licensing."
- (b) Interested persons may obtain copies of such lists by contacting the General Counsel, Attention: Assistant General Counsel for Patents, U.S. Department of Energy, Washington, DC 20545. Copies of U.S. patents may be obtained from the U.S. Patent and Trademark Office, Washington, DC 20231. Copies of U.S. patent applications, specifications, or microfiche reproductions thereof may be secured at reasonable cost from the National Technical Information Service (NTIS), Springfield, Virginia 22151.

#### § 781.62 Contents of a license application.

An application for a license under a DOE invention must be accompanied by a processing fee of \$25 for each patent or patent application under which a license is desired, which shall be credited towards royalty if royalties are charged, and must include the following information:

- (a) Identification of the invention for which the license is desired, including the title of the invention and the patent application serial number or the patent number of the invention;
- (b) Name and address of the person applying for a license and whether the applicant is a U.S. citizen or U.S. organization;
- (c) Name and address of a representative of the applicant to whom correspondence should be sent and any notices served:
- (d) Nature and type of the applicant's business:
- (e) Applicant's status, if any, as a small business firm, minority business firm, or business firm located in a labor surplus area, low-income area, or economically depressed area.
- (f) Identification of the source of the applicant's information concerning the availability of a license on the invention:
- (g) A statement of the field or fields of use in which the applicant intends to practice the invention;
- (h) A statement of the geographic area or areas in which the applicant proposes to practice the invention, including a statement of any foreign countries in which the applicant proposes to practice the invention;
- (i) A description of the applicant's technical and financial capability and plan for bringing the invention to a point of practical or commercial application, and the applicant's offer to implement that plan, if the license is granted.
- (j) The amount of royalty fees or other consideration, if any, that the applicant would be willing to pay the Government for the license;
- (k) Applicant's knowledge of the extent to which the invention is being practiced by private industry and the Government; and

(1) In the case of an exclusive or partially exclusive license application, any facts which the applicant believes will show that it is in the public interest for the Department to grant such a license rather than a nonexclusive license and that such exclusive or partially exclusive license should be granted to the applicant.

(Approved by the Office of Management and Budget under control number 1901–0232)\*

[45 FR 73447, Nov. 4, 1980, as amended at 46 FR 63209, Dec. 31, 1981]

#### § 781.63 Published notices.

- (a) A notice of a proposed exclusive license or partially exclusive licenses shall be published in the FEDERAL REGISTER, and a copy of the notice shall be sent to the Attorney General. The notice shall include:
  - (1) Identification of the invention;
- (2) Identification of the proposed exclusive licensee or partially exclusive licensees;
- (3) Duration and scope of the proposed license;
- (4) A statement that the license will be granted unless:
- (i) An application for a nonexclusive license, submitted by a responsible applicant pursuant to §781.62, is received by the Department within sixty (60) days from the publication of the notice in the FEDERAL REGISTER, and the Department determines that the applicant has established that it has already achieved, or is likely expeditiously to achieve, practical or commercial application under a nonexclusive license; or
- (ii) The Department determines, based upon evidence and argument submitted in writing by a third party, that it would not be in the interest of the United States and the general public to grant the exclusive or partially exclusive licenses; and
- (5) A statement advising that applicants or third parties participating in response to the FEDERAL REGISTER notice shall have the right to appeal any adverse decision, including the right to request an oral hearing, in accordance with §781.65.
- (b) In situations where the Department intends to limit the number of

<sup>\*</sup>Editorial Note: The section amended at 46 FR 63209, Dec. 31, 1981, appears as  $\S781.52$ .

#### § 781.64

partially exclusive licenses under a particular invention pursuant to §781.52(b), the notice in paragraph (a) of this section will be modified to reflect that intent and to invite applicants to apply for such partially exclusive licenses by a date specified in the notice.

- (c) If an exclusive or partially exclusive license has been granted or, in whole or in part, terminated pursuant to this regulation, notice thereof shall be published in the FEDERAL REGISTER. Such notice shall include:
  - (1) Identification of the invention:
  - (2) Identification of the licensee; and
- (3) If a license grant, the duration and scope of the license; or
- (4) If a termination in whole or in part, the effective date of the termination and whether it is in whole or in part.

#### §781.64 Termination.

- (a) The Department may terminate, in whole or in part, a license:
- (1) For failure, within the time specified in the license, to take steps necessary to accomplish substantial utilization of the invention;
- (2) For failure of the licensee, upon bringing the invention to the point of practical or commercial application, to continue to make the benefits of the invention reasonably accessible to the public;
- (3) If an exclusive or partially exclusive license, for failure of the licensee to expend the minimum sum or to take any other action specified in the license agreement:
- (4) For failure of the licensee to make any payments or periodic reports required by the license;
- (5) For a false statement or omission of a material fact in the license application submitted pursuant to §781.62 or in any required report;
- (6) For failure to grant a nonexclusive or partially exclusive license when required by the Secretary in accordance with this regulation; or
- (7) For breach of any other term or condition on which the license was issued
- (b) Before terminating, in whole or in part, any license granted pursuant to this part, the Department shall mail to the licensee and any sublicensee of

record, at the last address filed with the Department, a written notice of the Department's intention to terminate, in whole or in part, the license, with reasons therefor, and the licensee and any sublicensee shall be allowed thirty (30) days from the date of the mailing of such notice, or within such further period as may be granted by the Department for good cause shown in writing, to remedy any breach of any term or condition referred to in the notice or to show cause why the license should not be terminated in whole or in part.

(c) Termination shall be effective upon final written notice thereof to the licensee, after consideration of the response, if any, to the notice of intent to terminate, unless an appeal is taken in accordance with §781.65, in which case the effective date of the termination is stayed, pending a final administrative decision on the appeal.

#### § 781.65 Appeals.

- (a) The following parties have the right to appeal under this part:
- (1) A person whose application for a license has been denied;
- (2) A licensee or sublicensee whose license has been terminated, in whole or in part, pursuant to §781.64; and
- (3) A third party who has participated under §781.63 of this regulation.
- (b) Appeal under paragraph (a) of this section shall be initiated by filing a Notice of Appeal with the Secretary, ATTN: Invention Licensing Appeal Board, with a copy to the General Counsel ATTN: Assistant General Counsel for Patents, within thirty (30) days from the date of receipt of a written notice by the Department. The Notice of Appeal shall specify the portion of the decision from which the appeal is taken. A statement of fact and argument in the form of a brief in support of the appeal shall be submitted with the notice of appeal or within thirty (30) days thereafter. Upon receipt of a Notice of Appeal, the General Counsel shall have thirty (30) days to transmit a copy of the administrative record of the decision to the Board with a copy to appellant. The General Counsel shall respond to appellant within 30 days from receipt of appellant's brief.

- (c) The appellant shall have the burden of proving by a preponderance of evidence, based upon the administrative record as supplemented by evidence and argument submitted by the parties to the appeal, that the decision appealed from should be reversed or modified.
- (d) The Board shall offer to the applicant, or to any other party who has participated under §781.63, an opportunity to join as a party to the appeal.
- (e) A hearing may be requested by any party to the appeal within a time period set by the Board.
- (f) Except as set forth in this part, all Board proceedings shall be conducted pursuant to the Rules of Practice of the Department of Energy Board of Contract Appeals, 10 CFR part 1023, modified as the Board may determine to be necessary or appropriate.
- (g) The decision of the Board shall constitute the final action of the Department on the matter.

### § 781.66 Third-party termination proceedings.

(a) Any interested person may petition the Secretary to terminate, in whole or in part, an exclusive or partially exclusive license three years after such license was granted.

The petition shall be sent to the Secretary, ATTN: Invention Licensing Appeal Board, and shall be verified and accompanied by any supporting documents or affidavits that the petitioner believes demonstrates that either:

- (1) The license has tended substantially to lessen competition or to result in undue concentration; or
- (2) The licensee has not taken effective steps, or within a reasonable time thereafter is not expected to take such steps, necessary to accomplish substantial utilization of the invention.
- (b) Upon receipt of such a petition, the Board shall forward a copy of the petition and supporting documents to the General Counsel, ATTN: Assistant General Counsel for Patents. The General Counsel shall then forward a copy of the petition and supporting documents to the licensee, who shall have thirty (30) days from receipt of the petition to submit a response thereto together with any supporting documents and affidavits. The General Counsel

- shall then make a preliminary review of the petition, response, and any supporting documents or affidavits to determine whether a hearing on the matter is justified. If the General Counsel finds that a hearing on the matter has been justified, he shall so advise the Board in writing.
- (c) If the General Counsel finds that a hearing has not been justified by petitioner, he shall so find in writing. The General Counsel shall promptly notify the Board and the petitioner of the finding. The petitioner may appeal this finding by filing a Notice of Appeal with the Board within thirty (30) days of the date of the mailing of the finding by the General Counsel. The Board shall review the finding concerning petitioner's justification for a hearing, and shall uphold the finding of the General Counsel unless petitioner can demonstrate that the finding was arbitrary, capricious, or an abuse of discretion. If the Board reverses the finding as to the justification for a hearing, the petition shall be heard by the Board in accordance with the procedures outlined in paragraph (d) of this section.
- (d) When it has been determined, in accordance with paragraph (b) of this section, that a hearing is justified, the Board shall so notify the petitioner and the licensee, and the Board shall publish a Notice in the FEDERAL REGISTER advising the public that a hearing is to be scheduled. The Notice shall describe the subject matter of the hearing and shall advise of the right of any interested person to file a petition with the Board, within thirty (30) days of the Notice, showing cause why he should be added as a party to the hearing. The Board shall, in its discretion, determine who should be added as a party.
- (e) Any party shall have the right to request a full evidentiary hearing on the matter. In lieu thereof, if the parties agree, the matter may be decided at an "informal" hearing in which no party has the right to call and cross-examine witnesses, but in which the parties have the right to present oral argument to the Board to supplement briefs, affidavits, and other documentary evidence that may have been submitted. Any hearing and related procedures shall be conducted pursuant to

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the Rules of Practice of the Department of Energy Board of Contract Appeals, 10 CFR part 1023, modified as the Board may determine to be necessary or appropriate.

- (f) If petitioner alleges that the exclusive or partially exclusive license has tended substantially to lessen competition or to result in undue concentration in any section of the country in any line of commerce to which the technology relates, the petitioner shall have the burden to prove the allegation by a preponderance of evidence.
- (g) If petitioner alleges that licensee has failed to accomplish substantial utilization of the invention and has presented sufficent proof, in accordance with paragraph (b) of this section, to justify a hearing on the matter, the licensee shall have the burden to prove, by a preponderance of evidence, that he has taken effective steps, or within a reasonable time thereafter is expected to take such steps, necessary to accomplish substantial utilization of the invention.
- (h) The Board shall make findings of fact and render a conclusion of law with respect to the challenged license. The conclusion of the Board shall constitute the final action of the Department on the matter.

#### SPECIAL PROVISIONS

#### §781.71 Litigation.

- (a) An exclusive or partially exclusive licensee may be granted the right to sue at his own expense any party who infringes the rights set forth in his license and covered by the licensed patent. Upon a determination that the Government is a necessary party, the licensee may join the Government of the United States, upon consent of the Attorney General, as a party complainant in such suit. The licensee shall pay costs and any final judgment or decree that may be rendered against the Government in such suit. The Government shall have the absolute right to intervene in any such suit at its own expense.
- (b) The licensee shall be obligated to furnish promptly to the Government, upon request, copies of all pleadings and other papers filed in any such suit and of evidence adduced in proceedings

relating to the licensed patent, including but not limited to, negotiations, agreements settling claims by a licensee based on a licensed patent, and all other books, documents, papers and records pertaining to such suit. If, as a result of any such litigation, the patent shall be declared invalid, the licensee shall have the right to surrender his license and be relieved from any further obligation thereunder.

#### § 781.81 Transfer of custody.

The Department may enter into an agreement to transfer custody of any patent to another Government agency for purposes of administration, including the granting of licenses pursuant to this part.

### PART 782—CLAIMS FOR PATENT AND COPYRIGHT INFRINGEMENT

#### Subpart A—General

Sec.

782.1 Purpose.

782.2 Objectives.

#### 782.3 Authority.

Subpart B—Requirements and Procedures
782.5 Contents of communication initiating claim.

782.6 Processing of administrative claims.

782.7 Incomplete notice of infringement.

782.8 Indirect notice of infringement.

AUTHORITY: Dept. of Energy Organization Act; sec. 651, 91 Stat. 601, 42 U.S.C. 7261; Atomic Energy Act of 1954; sec. 107(d), 88 Stat. 1241, 42 U.S.C. 5817(d); sec. 161(g), 80 Stat. 443, 42 U.S.C. 2201(g); sec. 172, 62 Stat. 933, 42 U.S.C. 2223; Foreign Assistance Act of 1961, sec. 2356, 75 Stat. 440, 22 U.S.C. 2356; Patents, Invention Secrecy Act; sec. 183, 66 Stat. 4, 35 U.S.C. 183; Judiciary and Judical Procedure Act, sec. 1498, 62 Stat. 601, 28 U.S.C. 1498.

Source: 45 FR 26950, Apr. 22, 1980, unless otherwise noted.

#### Subpart A—General

#### § 782.1 Purpose.

The purpose of this regulation is to set forth policies and procedures for the filing and disposition of claims asserted against the Department of Energy of infringement of privately owned rights in patented inventions or copyrighted works.

#### § 782.2 Objectives.

Whenever a claim of infringement of privately owned rights in patented inventions or copyrighted works is asserted against the Department of Energy, all necessary steps shall be taken to investigate and to settle administratively, to deny, or otherwise to dispose of such claim prior to suit against the United States.

#### § 782.3 Authority.

The General Counsel or the General Counsel's delegate is authorized to investigate, settle, deny, or otherwise dispose of all claims of patent and copyright infringement pursuant to 42 U.S.C. 2201(g), 2223, 5817(d) and 7261; the Foreign Assistance Act of 1961, 22 U.S.C. 2356 (formerly the Mutual Security Acts of 1951 and 1954); the Invention Secrecy Act, 35 U.S.C. 183; and 28 U.S.C. 1498.

### Subpart B—Requirements and Procedures

### § 782.5 Contents of communication initiating claim.

- (a) Requirements for claim. A patent or copyright infringement claim for compensation, asserted against the United States as represented by the Department of Energy under any of the applicable statutes cited in §782.3, must be actually communicated to and received by an agency, organization, office, or field establishment within the Department of Energy. Claims must be in writing and must include the following:
  - (1) An allegation of infringement;
- (2) A request, either expressed or implied, for compensation;
- (3) A citation of the patents or copyrighted items alleged to be infringed;
- (4) In the case of a patent infringement claim, a sufficiently specific designation to permit identification of the items or processes alleged to infringe the patents, giving the commercial designation if known to the claimant, or, in the case of a copyright infringement claim, the acts alleged to infringe the copyright:
- (5) In the case of a patent infringement claim, a designation of at least one claim of each patent alleged to be infringed or, in the case of a copyright

infringement claim, a copy of each work alleged to be infringed;

- (6) As an alternative to paragraphs (a) (4) and (5) of this section, certification that the claimant has made a bona fide attempt to determine the items or processes which are alleged to infringe the patents, or the acts alleged to infringe the copyrights, but was unable to do so, giving reasons, and stating a reasonable basis for the claimant's belief that the patents or copyrighted items are being infringed.
- (b) Additional information for patent infringement claims. In addition to the information listed in paragraph (a) of this section the following material and information generally is necessary in the course of processing a claim of patent infringement. Claimants are encouraged to furnish this information at the time of filing a claim to permit rapid processing and resolution of the claim.
- (1) A copy of the asserted patents and identification of all claims of the patents alleged to be infringed.
- (2) Identification of all procurements known to claimant that involve the accused items or processes, including the identity of the vendors or contractors and the Government acquisition activity or activities.
- (3) A detailed identification and description of the accused articles or processes, particularly where the articles or processes relate to components or subcomponents of the item acquired, and an element-by-element comparison of representative claims with the accused articles or processes. If available, the identification and description should include documentation and drawings to illustrate the accused articles or processes in sufficient detail to enable verification that the claims of the asserted patents read on the accused articles or processes.
- (4) Names and addresses of all past and present licensees under the patents and copies of all license agreements and releases involving the patents.
- (5) A brief description of all litigation in which the patents have been or are now involved, and their present status.
- (6) A list of all persons to whom notices of infringement have been sent, including all departments and agencies

#### § 782.6

of the Government, and a statement of the status or ultimate disposition of each

- (7) A description of Government employment or military service, if any, by the inventors or patent owner.
- (8) A list of all contracts between the Government and inventors, patent owner, or anyone in privity with them that were in effect at the time of conception or actual reduction to practice of the inventions covered by the patents.

(9) Evidence of title to the asserted patents or other right to make the claim

- (10) If it is available to claimant, a copy of the Patent Office file of each patent.
- (11) Pertinent prior art of which the claimant has become aware after issuance of the asserted patents.

In addition to the foregoing, if claimant can provide a statement that the investigation may be limited to the specifically identified accused articles or processes, or to a specific acquisition (e.g. identified contracts), it may speed disposition of the claim.

(c) Denial for refusal to provide information. In the course of investigating a claim, it may become necessary for the Department of Energy to request information in the control and custody of claimant that is relevant to the disposition of the claim. Failure of the claimant to respond to a request for such information may be sufficient reason alone for denying a claim.

### § 782.6 Processing of administrative claims.

(a) Filing and forwarding of claims. All communications regarding claims should be addressed to:

General Counsel, ATTN: Assistant General Counsel for Patents, Office of the General Counsel, U.S. Department of Energy, Washington, DC 20545.

If any communication relating to a claim or possible claim of patent or copyright infringement is received by an agency, organization, office, or field establishment within the Department of Energy, it should be forwarded to the Assistant General Counsel for Patents.

(b) Disposition and notification. The General Counsel shall investigate and administratively settle, deny, or otherwise dispose of each claim by denial or settlement. When a claim is denied, the Department shall so notify the claimant or his authorized representative and provide the claimant with the reasons for denying the claim. Disclosure of information shall be subject to applicable statutes, regulations, and directives pertaining to security, access to official records, and the rights of others.

### § 782.7 Incomplete notice of infringement.

- (a) If a communication alleging patent or copyright infringement is received that does not meet the requirements set forth above in §782.5, the sender shall be advised in writing by the General Counsel:
- (1) That the claim for infringement has not been satisfactorily presented;
- (2) Of the elements considered necessary to establish a claim.
- (b) A communication, such as a mere offer of a license, in which an infringement is not alleged in accordance with §782.5(a) of this part shall not be considered a claim for infringement.

#### § 782.8 Indirect notice of infringement.

If a patent or copyright owner communicates an allegation of infringement in the performance of a Government contract, grant, or other arrangement to addressees other than those specified in §782.5(a), such as Department of Energy contractors including contractors operating government-owned facilities, the communication shall not be considered a claim within the meaning of §782.5 until it meets the requirements of that section.

### PART 783—WAIVER OF PATENT RIGHTS

Sec. 783.1

783.1 Waiver. 783.2 Limitations.

AUTHORITY: Secs. 152, 161, 68 Stat. 944, 948, as amended; (42 U.S.C. 2182, 2201).

SOURCE: 41 FR 56784, Dec. 30, 1976, unless otherwise noted.

#### § 783.1 Waiver.

The Department of Energy, hereinafter "DOE", waives its rights under section 152 of the Atomic Energy Act of 1954 (66 Stat. 944) with respect to inventions and discoveries resulting from the use of the following materials and services:

- (a) Source materials, special nuclear materials, and heavy water distributed by DOE in accordance with the "Schedules of Base Charges for Materials Sold of Leased by DOE for Use in Private Atomic Energy Development and Base Prices Which DOE Will Pay for Certain Products From Private Reactors."
- (b) Radioactive and stable isotopes, irradiation services (this waiver does not include inventions or discoveries made by DOE or DOE contractor personnel in the course of or in connection with the performance of an irradiation service), and radioactive material resulting from the performance of an irradiation service sold or distributed by DOE in accordance with the prices and charges established by:
- (1) Oak Ridge National Laboratory Inventory and Price List of electromagnetically enriched and other stable isotopes.
- (2) Oak Ridge National Laboratory Catalog and Price List of radioisotopes, special materials, and services.
- (3) Idaho National Engineering Laboratory Catalog of Price and charges on irradiation services at the materials testing reactor. The waiver does include inventions or discoveries made by sponsor personnel in the course of their use of the Gamma Irradiation Facility at the Idaho National Engineering Laboratory.
- (4) Argonne National Laboratory schedule of charges for irradiation services at its irradiation facilities.
- (5) Brookhaven National Laboratory schedule of prices and charges for irradiation services and radioisotopes.

#### § 783.2 Limitations.

(a) Except with regard to the use of the Gamma facility at the Idaho National Engineering Laboratory, nothing contained in this part shall be deemed to waive any rights in inventions or discoveries where a person or a group of persons acting on behalf of the person requesting the irradiation service works at the DOE facility in connection with the irradiation service. In such event, special arrangements are made.

(b) Nothing contained in this part shall be construed to affect the provisions of any written agreement to which DOE has or may become a party.

### PART 784—PATENT WAIVER REGULATION

784.1 Scope and applicability.

784.2 Definitions.

784.3 Policy.

784.4 Advance waiver.

784.5 Waiver of identified inventions.784.6 National security considerations for

waiver of certain sensitive inventions.

784.7 Class waiver. 784.8 Procedures.

784.9 Content of waiver requests.

784.10 Record of waiver determinations.

784.11 Bases for granting waivers.

784.12 Terms and conditions of waivers.

784.13 Effective dates.

AUTHORITY: 42 U.S.C. 7151; 42 U.S.C. 5908; 42 U.S.C. 2182; 35 U.S.C. 202 and 210; 42 U.S.C. 7261a.

SOURCE: 61 FR 36614, July 12, 1996, unless otherwise noted.

#### § 784.1 Scope and applicability.

- (a) This part states the policy and establishes the procedures, terms and conditions governing waiver of the Government's rights in inventions made under contracts, grants, agreements, understandings or other arrangements with the Department of Energy (DOE).
- (b) This part applies to all inventions conceived or first actually reduced to practice in the course of or under any contract, grant, agreement, understanding, or other arrangement with or for the benefit of DOE (including any subcontract, subgrant, or subagreement), the patent rights disposition of which is governed by section 152 of the Atomic Energy Act of 1954, 42 U.S.C. 2182, or section 9 of the Federal Nonnuclear Energy Research and Development Act of 1974, 42 U.S.C. 5908. In funding agreements with nonprofit organizations or small business firms, when title or other rights are reserved to the Government under the authority of 35 U.S.C. 202(a), this part will apply

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to any waiver of such rights. The patent waiver provisions in this part supersede the patent waiver regulations previously included with patent regulations at 41 CFR part 9–9.100.

#### § 784.2 Definitions.

As used in this part:

Contract means procurement contracts, grants, agreements, understandings and other arrangements (including Cooperative Research and Development Agreements [CRADAs], Work for Others and User Facility agreements, which includes research, development, or demonstration work, and includes any assignment or substitution of the parties, entered into, with, or for the benefit of DOE.

Contractor means entities performing under contracts as defined above.

Patent Counsel means the DOE Patent Counsel assisting the contracting activity.

#### § 784.3 Policy.

- (a) Section 6 of Public Law 96-517 (the Bayh-Dole patent and trademark amendments of 1980), as amended, as codified at 35 U.S.C. 200-212, provides that title to inventions conceived or first actually reduced to practice in the course of or under any contract, grant, agreement, understanding, or other arrangement entered into with or for the benefit of the Department of Energy (DOE) vests in the United States, except where 35 U.S.C. 202 provides otherwise for nonprofit organizations or small business firms. However, where title to such inventions vests in the United States, the Secretary of Energy (hereinafter Secretary) or designee may waive all or any part of the rights of the United States, subject to required terms and conditions, with respect to any invention or class of inventions made or which may be made by any person or class of persons in the course of or under any contract of DOE if it is determined that the interests of the United States and the general public will best be served by such waiver. In making such determinations, the Secretary or designee shall have the following objectives:
- (1) Making the benefits of the energy research, development, and demonstra-

tion program widely available to the public in the shortest practicable time;

- (2) Promoting the commercial utilization of such inventions;
- (3) Encouraging participation by private persons in DOE's energy research, development, and demonstration programs; and
- (4) Fostering competition and preventing undue market concentration or the creation or maintenance of other situations inconsistent with the antitrust laws.
- (b) If it is not possible to attain the objectives in paragraphs (a)(1) through (4) immediately and simultaneously for any specific waiver determination, the Secretary or designee will seek to reconcile these objectives in light of the overall purposes of the DOE patent waiver policy, as set forth in section 152 of the Atomic Energy Act of 1954, 42 U.S.C. 2182, section 9 of the Federal Nonnuclear Energy Research and Development Act of 1974, 42 U.S.C. 5908, Public Law 99-661, 42 U.S.C. 7261a, and, where not inconsistent therewith, the Presidential Memorandum to Heads of Executive Departments and Agencies on Government Patent Policy issued February 18, 1983 and Executive Order No. 12591 issued April 10, 1987.
- (c) The policy set forth in this section is applicable to all types of contracts as defined in §784.2 of this part.

#### § 784.4 Advance waiver.

This section covers inventions that may be conceived or first actually reduced to practice in the course of or under a particular contract. In determining whether an advance waiver will best serve the interests of the United States and the general public, the Secretary or designee (currently the Assistant General Counsel for Technology Transfer and Intellectual Property) shall, at a minimum, specifically include as considerations the following:

- (a) The extent to which the participation of the contractor will expedite the attainment of the purposes of the program:
- (b) The extent to which a waiver of all or any part of such rights in any or all fields of technology is needed to secure the participation of the particular contractor:

- (c) The extent to which the work to be performed under the contract is useful in the production or utilization of special nuclear material or atomic energy:
- (d) The extent to which the contractor's commercial position may expedite utilization of the research, development, and demonstration results;
- (e) The extent to which the Government has contributed to the field of technology to be funded under the contract:
- (f) The purpose and nature of the contract, including the intended use of the results developed thereunder;
- (g) The extent to which the contractor has made or will make substantial investment of financial resources or technology developed at the contractor's private expense which will directly benefit the work to be performed under the contract:
- (h) The extent to which the field of technology to be funded under the contract has been developed at the contractor's private expense:
- (i) The extent to which the Government intends to further develop to the point of commercial utilization the results of the contract effort;
- (j) The extent to which the contract objectives are concerned with the public health, public safety, or public welfare:
- (k) The likely effect of the waiver on competition and market concentration;
- (1) In the case of a domestic nonprofit educational institution under an agreement not governed by Chapter 18 of Title 35, United States Code, the extent to which such institution has a technology transfer capability and program approved by the Secretary or designee as being consistent with the applicable policies of this section;
- (m) The small business status of the contractor under an agreement not governed by Chapter 18 of Title 35, United States Code, and
- (n) Such other considerations, such as benefit to the U.S. economy, that the Secretary or designee may deem appropriate.

#### § 784.5 Waiver of identified inventions.

This section covers the relinquishing by the Government to the contractor

- or inventor of title rights in a particular identified subject invention. In determining whether such a waiver of an identified invention will best serve the interests of the United States and the general public, the Secretary or designee shall, at a minimum, specifically include as considerations the following:
- (a) The extent to which such waiver is a reasonable and necessary incentive to call forth private risk capital for the development and commercialization of the invention;
- (b) The extent to which the plans, intentions, and ability of the contractor or inventor will obtain expeditious commercialization of such invention;
- (c) The extent to which the invention is useful in the production or utilization of special nuclear material or atomic energy;
- (d) The extent to which the Government has contributed to the field of technology of the invention;
- (e) The purpose and nature of the invention, including the anticipated use thereof;
- (f) The extent to which the contractor has made or will make substantial investment of financial resources or technology developed at the contractor's private expense which will directly benefit the commercialization of the invention;
- (g) The extent to which the field of technology of the invention has been developed at the contractor's expense;
- (h) The extent to which the Government intends to further develop the invention to the point of commercial utilization;
- (i) The extent to which the invention is concerned with the public health, public safety, or public welfare;
- (j) The likely effect of the waiver on competition and market concentration;
- (k) In the case of a domestic nonprofit educational institution under an agreement not governed by Chapter 18, Title 35, United States Code, the extent to which such institution has a technology transfer capability and program approved by the Secretary or designee as being consistent with the applicable policies of this section;
- (1) The small business status of the contractor, under an agreement not

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governed by Chapter 18 of Title 35, United States Code; and,

(m) Such other considerations, such as benefit to the U.S. economy that the Secretary or designee may deem appropriate.

#### § 784.6 National security considerations for waiver of certain sensitive inventions.

- (a) Whenever, in the course of or under any Government contract or subcontract of the Naval Nuclear Propulsion Program or the nuclear weapons programs or other atomic energy defense activities of the Department of Energy, a contractor makes an invention or discovery to which title vests in the Department of Energy pursuant to statute, the contractor may request waiver of any or all of the Government's property rights. The Secretary of Energy or designee may decide to waive the Government's rights.
- (b) In making a decision under this section, the Secretary or designee shall consider, in addition to the objectives of DOE waiver policy as specified in §784.3(a)(1) through (4), and the considerations specified in §784.4 for advance waivers, and §784.5 for waiver of identified inventions, the following:
- (1) Whether national security will be compromised;
- (2) Whether sensitive technical information (whether classified or unclassified) under the Naval Nuclear Propulsion Program or the nuclear weapons programs or other atomic energy defense activities of the Department of Energy for which dissemination is controlled under Federal statutes and regulations will be released to unauthorized persons;
- (3) Whether an organizational conflict of interest contemplated by Federal statutes and regulations will result, and
- (4) Whether waiving such rights will adversely affect the operation of the Naval Nuclear Propulsion Program or the nuclear weapons programs or other atomic energy defense activities of the Department of Energy.
- (c) A decision under this §784.6 shall be made within 150 days after the date on which a complete request for waiver, as described by paragraph (d) of this

section, has been submitted to the Patent Counsel by the contractor.

- (d) In addition to the requirements for content which apply generally to all waiver requests under paragraph (a) of this section, a requestor must include a full and detailed statement of facts, to the extent known by or available to the requestor, directed to the considerations set forth in paragraphs (b)(1) through (4) of this section, as applicable. To be considered complete, a waiver request must contain sufficient information, in addition to the content requirements under paragraphs (a) and (b) of this section, to allow the Secretary or designee to make a decision under this section. For advance waiver requests, such information shall include, at a minimum:
- (1) An identification of all of the requestor's contractual arrangements involving the Government (including contracts, subcontracts, grants, or other arrangements) in which the technology involved in the contract was developed or used and any other funding of the technology by the Government, whether direct or indirect, involving any other party, of which the requestor is aware:
- (2) A description of the requestor's past, current, and future private investment in and development of the technology which is the subject of the contract. This includes expenditures not reimbursed by the Government on research and development which will directly benefit the work to be performed under the instant contract, the amount and percentage of contract costs to be shared by the requestor, the out-of-pocket costs of facilities or equipment to be made available by the requestor for performance of the contract work which are not charged directly or indirectly to the Government under contract, and the contractor's plans and intentions to further develop and commercialize the technology at private expense:
- (3) A description of competitive technologies or other factors which would ameliorate any anticompetitive effect of granting the waiver.
- (4) Identification of whether the contract pertains to work that is classified, or sensitive, i.e., unclassified but controlled pursuant to section 148 of

the Atomic Energy Action of 1954, as amended (42 U.S.C. 2168), or subject to export control under Chapter 17 of the Military Critical Technology List (MCTL) contained in Department of Defense Directive 5230.25 including identification of all principal uses of the subject matter of the contract, whether inside or outside the contractor program, and an indication of whether any such uses involve classified or sensitive technologies.

- (5) Identification of all DOE and DOD programs and projects in the same general technology as the contract for which the requestor intends to be providing program planning advice or has provided program planning advice within the last three years.
- (e) For identified invention requests under this section, such requests shall include at a minimum:
- (1) A brief description of the intentions of the requestor (or its present or intended licensee) to commercialize the invention. This description should include:
  - (i) Estimated expenditures.
  - (ii) Anticipated steps,
- (iii) The associated time periods to bring the invention to commercialization, and
- (iv) A statement that requestor (or its present or intended licensee) has the capability to carry out its stated intentions.
- (2) A description of any continuing Government funding of the development of the invention (including investigation of materials or processes for use therewith), from whatever Government source, whether direct or indirect, and, to the extent known by the requestor, any anticipated future Government funding to further develop the invention.
- (3) A description of competitive technologies or other factors which would ameliorate any anticompetitive effects of granting the waiver.
- (4) A statement as to whether or not the requestor would be willing to reimburse the Department of Energy for any and all costs and fees incurred by the Department in the preparation and prosecution of the patent applications covering the invention that is the subject of the waiver request.

- (5) Where applicable, a statement of reasons why the request was not timely filed in accordance with the applicable patent rights clause of the contract, or why a request for an extension of time to file the request was not filed in a timely manner.
- (6) Identification of whether the invention pertains to work that is classified, or sensitive, i.e., unclassified but controlled pursuant to section 148 of the Atomic Energy Act of 1954, as amended (42 U.S.C. 2168), or subject to export control under Chapter 17 of the Military Critical Technology List (MCTL) contained in Department of Defense Directive 5230.25, including identification of all principal uses of the invention inside or outside the contractor program, and an indication of whether any such uses involve classified or sensitive technologies.
- (7) Identification of all DOE and DOD programs and projects in the same general technology as the invention for which the requestor intends to be providing program planning advice or has provided program planning advice within the last three years.
- (8) A statement of whether a classification review of the invention disclosure, any resulting patent application(s), and/or any reports and other documents disclosing a substantial portion of the invention, has been made, together with any determinations on the existence of classified or sensitive information in either the invention disclosure, the patent application(s), or reports or other documents disclosing a substantial portion of the invention; and
- (9) Identification of any and all proposals, work for other activities, or other arrangements submitted by the requestor, DOE, or a third party, of which requestor is aware, which may involve further funding of the work on the invention at either the contractor facility where the invention arose or another facility owned by the Government.
- (f) Patent Counsel will notify the requestor promptly if the waiver request is found not to be a complete request and, in that event, will provide the requestor with a reasonable period, not to exceed 60 days, to correct any such incompleteness. If requestor does not

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respond within the allotted time period, the waiver request will be considered to be withdrawn. If requestor responds within the allotted time period, but the submittal is still deemed incomplete or insufficient, the waiver request may be denied.

(g) As set forth in paragraph (c) of this section, waiver decisions shall be made within 150 days after the date on which a complete request for waiver of such rights, as specified in this section, has been submitted by the requestor to the DOE Patent Counsel. If the original waiver request does not result in a communication from DOE Patent Counsel indicating that the request is incomplete, the 150-day period for decision commences on the date of receipt of the waiver request. If the original waiver request results in a communication from DOE Patent Counsel indicating that the request is incomplete, the 150-day period for decision commences on the date on which supplementary information is received by Patent Counsel sufficient to make the waiver request complete. For advance waiver requests, if requestor is not notified that the request is incomplete. the 150-day period for decision commences on the date of receipt of the request, or on the date on which negotiation of contract terms is completed, whichever is later.

(h) Failure of DOE to make a patent waiver decision within the prescribed 150-day period shall in no way be construed as a grant of the waiver.

#### § 784.7 Class waiver.

This section covers relinquishing of patent title rights by the Government to a class of persons or to a class of inventions. The authorization for class waivers is to be found at 42 U.S.C. 5908(c). Class waivers may be appropriate in situations where all members of a particular class would likely qualify for an advance or identified invention waiver. Normally, class waivers are originated by the Department. However, any person with a direct and substantial interest in a DOE program may request a class waiver by forwarding a written request therefor to the Patent Counsel. While no particular format for requesting a class waiver is prescribed, any request for a

class waiver and any resulting determination by the Secretary or designee must address the pertinent objectives and considerations set forth in §§ 784.3(a), 784.4, 784.5, and 784.6.

#### §784.8 Procedures.

(a) All requests for waivers shall be in writing. Each request for a waiver other than a class waiver shall include the information set forth in §784.9. Such requests may be submitted by existing or prospective contractors in the case of requests for an advance waiver and by contractors, including successor contractors at a facility, or employee-inventors in the case of requests for waiver of identified inventions.

(b) A request for an advance waiver should be submitted to the Contracting Officer (subcontractors may submit through their prime contractors) at any time prior to execution of the contract or subcontract, or within thirty days thereafter, or within such longer period as may be authorized by Patent Counsel for good cause shown in writing. If the purpose, scope, or cost of the contract is substantially altered by modification or extension after the waiver is granted, a new waiver request will be required. When advance waivers are granted, the provisions of the "Patent Rights-Waiver" clause set forth in §784.12 shall be used in contracts which are the subject of the waivers, unless modified with the approval of the Patent Counsel to conform to the scope of the waiver granted. (See §784.12.) Advance waivers may be requested for all inventions which may be conceived or first actually reduced to practice under a DOE contract. An advance waiver may also be requested for an identified invention conceived by the contractor before the contract but which may be first actually reduced to practice under the contract. Such waiver request must include a copy of any patent or patent application covering the identified invention, or if no patent application has been filed, a complete description of the invention.

(c) A request for waiver (other than an advance or class waiver) for an identified invention must be submitted to the Patent Counsel at the time the invention is to be reported to DOE or not later than eight months after conception and/or first actual reduction to practice, whichever occurs first in the course of or under the contract, or such longer period as may be authorized by Patent Counsel for good cause shown in writing by the requestor. The time for submitting a waiver request will not normally be extended past the time the invention has been advertised for licensing by DOE. If the Government has already filed a patent application on the invention, the requestor should indicate whether or not it is willing to reimburse the Government for the costs of searching, prosecution, filing and maintenance fees, in the event the waiver is granted.

(d) If the request for waiver contains insufficient information, the Patent Counsel may seek additional information from the requestor and from other sources. The Patent Counsel will thoroughly analyze the request in view of each of the objectives and considerations and shall also consider the overall rights obtained by the Government in the patent, copyright, and data clauses of the contract. Where it appears that a waiver of a lesser part of the rights of the United States than requested would be more appropriate in view of the policies set forth, the Patent Counsel should attempt to negotiate a compromise acceptable to both the requestor and DOE. If approval of a waiver is recommended, Patent Counsel shall obtain an indication of agreement by the requestor to the proposed waiver scope, terms and conditions.

(e) The Patent Counsel will prepare a Statement of Considerations setting forth the rationale for either approving or denying the waiver request and will forward the Statement to the General Counsel or designee for review thereof. While the Statement need not provide specific findings as to each and every consideration of §784.4 or §784.5 of this part, it will cover those that are decisive, and it will explain the basis for recommended determination. There may be occasions when the application of the various individual considerations of §784.4 or §784.5 of this part to a particular case could conflict. and in those instances the conflict will be reconciled giving due regard to the

overall policies set forth in 784.3(a) (1) through (4).

(f) The Patent Counsel will also obtain comments from the appropriate DOE program organization to assist the Patent Counsel in the waiver determination. Additionally, if any other Federal Government entity has provided funding or will be providing funding, or if a subject invention has been made in whole or in part by an employee of that entity, Patent Counsel shall obtain permission to waive title to the undivided interest in the invention from the cognizant official of that entity. In situations where time does not permit a delay in contract negotiations for the preparation and mailing of a full written statement, field Patent Counsel may submit a recommendation on the waiver orally to the Assistant General Counsel for Technology Transfer and Intellectual Property, who upon verbal consultation with the appropriate DOE program organization, shall provide a verbal decision to field Patent Counsel. All oral actions shall be promptly confirmed in writing. In approving waiver determinations, the Secretary or designee shall objectively review all requests for waiver in view of the objectives and considerations set forth in §§ 784.3 through 784.6. If the determination and the rationale therefor is not accurately reflected in the Statement of Considerations which has been submitted for approval, a new Statement of Considerations shall be prepared.

(g) In the event that a request for advance waiver is approved after the effective date of the contract, the Patent Counsel shall promptly notify the requestor by letter of the determination and the basis therefor. The letter shall state the scope, terms and conditions of such waiver. If the terms and conditions of an approved advance waiver were not incorporated in the contract when executed, the letter shall inform the requestor that the advance waiver shall be effective as of the effective date of the contract for an advance waiver of inventions identified, i.e., conceived prior to the effective date of the contract, or as of the date the invention is reported with an election by the contractor to retain rights therein, i.e., for an invention conceived or first

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actually reduced to practice after the effective date of the contract; provided a copy of the letter is signed and returned to the Contracting Officer by the requestor acknowledging the acceptance of the scope, terms and conditions of the advance waiver. After acceptance by the contractor of an advance waiver, the Contracting Officer shall cause a unilateral no-cost modification to be made to the contract incorporating the terms and conditions of the waiver in lieu of previous patent rights provisions.

(h) In the event that a waiver request is denied, the requestor may, within thirty days after notification of the denial, request reconsideration. Such a request shall include any additional facts and rationale not previously submitted which support the request. Request for reconsideration shall be submitted and processed in accordance with the procedures for submitting waiver requests set forth in this section.

#### §784.9 Content of waiver requests.

- (a) Forms (OMB No. 1901-0800) for submitting requests for advance and identified invention waivers, indicating the necessary information, may be obtained from the Contracting Officer or Patent Counsel. All requests for advance and identified invention waivers shall include the following information:
- (1) The requestor's identification, business address, and, if represented by Counsel, the Counsel's name and address:
- (2) An identification of the pertinent contract or proposed contract and a copy of the contract Statement of Work or a nonproprietary statement which fully describes the proposed work to be performed;
- (3) The nature and extent of waiver requested;
- (4) A full and detailed statement of facts, to the extent known by or available to the requestor, directed to each of the considerations set forth in §§ 784.4 or 784.5 of this part, as applicable, and a statement applying such facts and considerations to the policies set forth in § 784.3 of this part. It is important that this submission be tailored to the unique aspects of each re-

quest for waiver, and be as complete as feasible; and

- (5) The signature of the requestor or authorized representative with the following statement: "The facts set forth in this request for waiver are within the knowledge of the requestor and are submitted with the intention that the Secretary or designee rely on them in reaching the waiver determination."
- (b) In addition to the requirements of paragraph (a) of this section, requests for waiver of identified inventions shall include:
  - (1) The full names of all inventors;
- (2) A statement of whether a patent application has been filed on the invention, together with a copy of such application if filed or, if not filed, a complete description of the invention;
- (3) If a patent application has not been filed, any information which may indicate a potential statutory bar to the patenting of the invention under 35 U.S.C. 102 or a statement that no such bar is known to exist; and
- (4) Where the requestor is the inventor, written authorization from the applicable contractor or subcontractor permitting the inventor to request a waiver.
- (c) Subject to statutes, DOE regulations, requirements, and restrictions on the treatment of proprietary and classified information; all material submitted in requests for waiver or in support thereof will be made available to the public after a determination on the waiver request has been made, regardless of whether a waiver is granted. Accordingly, requests for waiver should not normally contain information or data that the requestor is not willing to have made public. If proprietary or classified information is needed to make the waiver determination, such information shall be submitted only at the request of Patent Counsel.

### § 784.10 Record of waiver determinations.

The Assistant General Counsel for Technology Transfer and Intellectual Property shall maintain and periodically update a publicly available record of waiver determinations.

#### § 784.11 Bases for granting waivers.

- (a) The various factual situations which are appropriate for waivers cannot be categorized precisely because the appropriateness of a waiver will depend upon the manner in which the considerations set forth in §§784.4 or 784.5, and 784.6 if applicable, of this part relate to the facts and circumstances surrounding the particular contracting situation or the particular invention, in order to best achieve the objectives set forth in §784.3 of this part. However, some examples where advance waivers might be appropriate are:
  - (1) Cost-shared contracts;
- (2) Situations in which DOE is providing increased funding to a specific ongoing privately-sponsored research, development, or demonstration project:
- (3) Situations such as Work for Others Agreements, User Facility Agreements or CRADAs, involving DOE-approved private use of Government facilities where the waiver requestor is funding a substantial part of the costs;
- (4) Situations in which the equities of the contractor are so substantial in relation to that of the Government that the waiver is necessary to obtain the participation of the contractor.
- (b) Waivers may be granted as to all or any part of the rights of the United States to an invention subject to certain rights retained by the United States as set forth in §784.12 of this part. The scope of the waiver will depend upon the relationship of the contractual situation or identified invention to considerations set forth in §§ 784.4 or 784.5, and 784.6, if applicable, in order to best achieve the objectives set forth in §784.3. For example, waivers may be restricted to a particular field of use in which the contractor has substantial equities or a commercial position, or restricted to those uses that are not the primary object of the contract effort. Waivers may also be made effective for a specified duration of time, may be limited to particular geographic locations, may require the contractor to license others at reduced royalties in consideration of the Government's contribution to the research, development, or demonstration effort,

or may require return of a portion of the royalties or revenue to the Government.

- (c) Contractors shall not use their ability to award subcontracts as economic leverage to acquire rights for themselves in the subcontractor inventions, where the subcontractor(s) would prefer to petition for title. A waiver granted to a prime contractor is not normally applicable to inventions of subcontractors. However, in appropriate circumstances, the waiver given to the prime contractor may be made applicable to the waivable inventions of any or all subcontractors, such as where there are pre-existing special research and development arrangements between the prime contractor and subcontractor, or where the prime contractor and subcontractor are partners in a cooperative effort. In addition, in such circumstances, the prime contractor may be permitted to acquire nonexclusive licenses in the subcontractors' inventions when a waiver of the subcontractor inventions is not covered by the prime contractor's waiver.
- (d) In advance waivers of identified inventions, the invention will be deemed to be a subject invention and the waiver will be considered as being effective as of the effective date of the contract (see §784.13(a)). This will be true regardless of whether the identified invention had been first actually reduced to practice prior to the time of contracting or would be reduced to practice under the contract or after expiration of the contract. One purpose of advance waivers of identified inventions is to establish the rights of the parties to such inventions when the facts surrounding the first actual reduction to practice prior to or during the contract are or will be difficult to establish.

### \$784.12 Terms and conditions of waivers.

The terms and conditions for waivers are set forth in the "Patent Rights—Waiver" clause in this section. A waiver of all foreign and domestic patent rights under a contract authorizes the use of this clause with any additions prescribed by the DOE Acquisition Regulations (48 CFR Chapter 9) or the

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terms of the waiver. This clause shall not be used in contracts with small business firms or nonprofit organizations subject to 35 U.S.C. 200 et seq. If a waiver of different scope is granted, the clause shall be modified to conform to the scope of the waiver granted. Advance waivers for arrangements other than contracts, grants, and cooperative agreements may use other clause provisions approved by the Assistant General Counsel for Technology Transfer and Intellectual Property, except that all waivers for funding agreements shall be subject to the license of clause paragraph (b) and the provisions of clause paragraphs (i) and (j). The terms and conditions of the clause shall also constitute the basis for confirmatory licenses regarding waivers of identified inventions. For inventions under advance waivers, a duly executed and approved instrument fully confirmatory of all rights to which the Government is entitled is required to be submitted promptly after filing a patent application thereon. If, however, a waiver request is pending, delivery of the confirmatory instrument may be delayed until a determination on the waiver request is made. In the case of a waiver of an identified invention pursuant to a request for greater rights, the confirmatory instrument shall be agreed to or submitted to Patent Counsel before or at the time the waiver is granted.

#### PATENT RIGHTS—WAIVER

Use the clause at 48 CFR 52.227–12 with the following changes:

(1) In paragraph (a) "Definitions" add the following definitions:

Background patent means a domestic patent covering an invention or discovery which is not a Subject Invention and which is owned or controlled by the Contractor at any time through the completion of this contract:

- (i) Which the Contractor, but not the Government, has the right to license to others without obligation to pay royalties thereon, and
- (ii) Infringement of which cannot reasonably be avoided upon the practice of any specific process, method, machine, manufacture or composition of matter (including relatively minor modifications thereof) which is a subject of the research, development, or demonstration work performed under this contract.

Contract means any contract, grant, agreement, understanding, or other arrangement,

which includes research, development, or demonstration work, and includes any assignment or substitution of parties.

DOE patent waiver regulations means the Department of Energy patent waiver regulations at 10 CFR part 784.

Patent Counsel means the Department of Energy Patent Counsel assisting the procuring activity.

Secretary means the Secretary of Energy.
(2) In paragraph (a) in the definition of "Subject invention" substitute: "course of

or" for: "performance of work".

(3) In paragraph (b) "Allocation of principal rights," add at the beginning of first sentence:

"Whereas DOE has granted a waiver of rights to subject inventions to the Contractor."

(4) In paragraph (c)(1), substitute:

"Patent Counsel within six months after conception or first actual reduction to practice, whichever occurs first in the course of or under this contract, but in any event, prior to any sale, public use, or public disclosure of such invention known to the Contractor." for.

"Contractor officer within 2 months after the inventor discloses it in writing to Contractor Personnel responsible for Patent matters \* \* \* earlier."

- (5) In paragraph (c)(2) add at the end: "The Contractor shall notify the Patent Counsel as to those countries (including the United States) in which the Contractor will retain title not later than 60 days prior to the end of the statutory period."
- (6) In paragraph (c)(3) substitute: "but not later than at least 60 days" for "or, if earlier."
  - (7) In paragraph (d) add (d)(5):
- "(5) If the waiver authorizing the use of this clause is terminated as provided in paragraph (p) of this clause."
- (8) In paragraph (e)(1) add: "under paragraph (d) of this clause" after "Government obtains title."
- (9) In paragraph (e)(2) substitute "37 CFR part 404 and DOE licensing regulations." for "the Federal Property Management regulations and agency licensing regulations (if any)"
- (10) In paragraph (f)(5) substitute "the course of or" for "performance of work".
- (11) In paragraph (g) substitute paragraphs (1), (2) and (3) as follows:
- (1) Unless otherwise directed by the Contracting Officer, the Contractor shall include the clause at 48 CFR 952.227-11, suitably modified to identify the parties, in all subcontracts, regardless of tier, for experimental, developmental, or research work to be performed by a small business firm or nonprofit organization, except where the work of the subcontract is subject to an Exceptional Circumstances Determination by DOE. In all other subcontracts, regardless of

tier, for experimental, developmental, demonstration, or research work, the Contractor shall include the patent rights clause at 48 CFR 952.227-13 (suitably modified to identify the parties).

- (2) The Contractor shall not, as part of the consideration for awarding the subcontract, obtain rights in the subcontractor's subject inventions
- (3) In the case of subcontractors at any tier, Department, the subcontractor, and Contractor agree that the mutual obligations of the parties created by this clause constitute a contract between the subcontractor and the Department with respect to those matters covered by this clause.
- (12) Substitute the following for paragraph (k):
  - (k) Background Patents
  - (1) The Contractor agrees:
- (i) to grant to the Government a royalty-free, nonexclusive license under any Background Patent for purposes of practicing a subject of this contract by or for the Government in research, development, and demonstration work only.
- (ii) that, upon written application by DOE, it will grant to responsible parties for purposes of practicing a subject of this contract, nonexclusive licenses under any Background Patent on terms that are reasonable under the circumstances. If, however, the Contractor believes that exclusive or partially exclusive rights are necessary to achieve expeditious commercial development or utilization, then a request may be made to DOE for DOE approval of such licensing by the Contractor.
- (2) Notwithstanding paragraph (k)(1)(ii), the Contractor shall not be obligated to license any Background Patent if the Contractor demonstrates to the satisfaction of the Secretary or his designee that:
- (i) a competitive alternative to the subject matter covered by said Background Patent is commercially available from one or more other sources; or
- (ii) the Contractor or its licensees are supplying the subject matter covered by said Background Patent in sufficient quantity and at reasonable prices to satisfy market needs, or have taken effective steps or within a reasonable time are expected to take effective steps to so supply the subject matter.
- (13) Add new paragraph (1) Communications as follows:
- All reports and notifications required by this clause shall be submitted to the Patent Counsel unless otherwise instructed.
- (14) In paragraph (m) add to end of sentence: ", except with respect to Background Patents, above."
- (15) In paragraph (n)(4) substitute "conducted in such a manner as" for "subject to appropriate conditions."

- (16) In paragraph (o) add at the end of the parenthetical phrase in the heading to the paragraph: "or grants".
- (17) In paragraph (o) add paragraph (o)(1)(v) as follows:
- (v) Convey to the Government, using a DOE-approved form, the title and/or rights of the Government in each subject invention as required by this clause.
- (18) In paragraph (o), substitute the following for (o)(3):
- (3) Final payment under this contract shall not be made before the Contractor delivers to the Patent Counsel all disclosures of subject inventions required by paragraph (c)(1) of this clause, an acceptable final report pursuant to paragraph (f)(7)(ii) of this clause, and all past due confirmatory instruments, and the Patent Counsel has issued a patent clearance certification to the Contracting Officer.
- (19) Add paragraphs (p), (q), (r), and (s) as follows:
- (p) Waiver Terminations.
- Any waiver granted to the Contractor authorizing the use of this clause (including any retention of rights pursuant thereto by the Contractor under paragraph (b) of this clause) may be terminated at the discretion of the Secretary or his designee in whole or in part, if the request for waiver by the Contractor is found to contain false material statements or nondisclosure of material facts, and such were specifically relied upon by DOE in reaching the waiver determination. Prior to any such termination, the Contractor will be given written notice stating the extent of such proposed termination and the reasons therefor, and a period of 30 days. or such longer period as the Secretary or his designee shall determine for good cause shown in writing, to show cause why the waiver of rights should not be so terminated. Any waiver termination shall be subject to the Contractor's minimum license as provided in paragraph (e) of this clause.
  - (q) Atomic Energy.

No claim for pecuniary award or compensation under the provisions of the Atomic Energy Act of 1954, as amended, shall be asserted by the Contractor or its employees with respect to any invention or discovery made or conceived in the course of or under this contract.

(r) Publication.

It is recognized that during the course of work under this contract, the Contractor or its employees may from time to time desire to release or publish information regarding scientific or technical developments conceived or first actually reduced to practice in the course of or under this contract. In order that public disclosure of such information will not adversely affect the patent interests of DOE or the Contractor, approval for release of publication shall be secured

#### § 784.13

from Patent Counsel prior to any such release or publication. In appropriate circumstances, and after consultation with the Contractor, Patent Counsel may waive the right of prepublication review.

- (s) Forfeiture of rights in unreported subject inventions.
- (1) The Contractor shall forfeit and assign to the Government, at the request of the Secretary of Energy or designee, all rights in any subject invention which the Contractor fails to report to Patent Counsel within six months after the time the Contractor:
- (i) Files or causes to be filed a United States or foreign patent application thereon; or
- (ii) Submits the final report required by paragraph (e)(2)(ii) of this clause, whichever is later.
- (2) However, the Contractor shall not forfeit rights in a subject invention if, within the time specified in paragraph (m)(1) of this clause, the Contractor:
- (i) Prepares a written decision based upon a review of the record that the invention was neither conceived nor first actually reduced to practice in the course of or under the contract and delivers the decision to Patent Counsel, with a copy to the Contracting Officer: or
- (ii) Contending that the subject invention is not a subject invention, the Contractor nevertheless discloses the subject invention and all facts pertinent to this contention to the Patent Counsel, with a copy to the Contracting Officer, or
- (iii) Establishes that the failure to disclose did not result from the Contractor's fault or negligence.
- (3) Pending written assignment of the patent application and patents on a subject invention determined by the Contracting Officer to be forfeited (such determination to be a Final Decision under the Disputes clause of this contract), the Contractor shall be deemed to hold the invention and the patent applications and patents pertaining thereto in trust for the Government. The forfeiture provision of this paragraph shall be in addition to and shall not supersede any other rights and remedies which the Government may have with respect to subject inventions.

#### § 784.13 Effective dates.

Waivers shall be effective on the following dates:

- (a) For advance waivers of identified inventions, i.e., inventions conceived prior to the effective date of the contract, on the effective date of the contract, even though the advance waiver may have been requested after that date;
- (b) For identified inventions under advance waivers, i.e., inventions con-

ceived or first actually reduced to practice after the effective date of the contract, on the date the invention is reported with the election to retain rights as to that invention; and

(c) For waivers of identified inventions (other than under an advance waiver), on the date of the letter from Patent Counsel notifying the requestor that the waiver has been granted.

# PART 800—LOANS FOR BID OR PROPOSAL PREPARATION BY MINORITY BUSINESS ENTERPRISES SEEKING DOE CONTRACTS AND ASSISTANCE

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Sec.

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800.200 Maximum loan; allowable costs.

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800.306 Noninterference with other laws.

800.307 Appeals.

AUTHORITY: Sec. 211(e) of the Department of Energy (DOE) Organization Act, Pub. L. 95-91, Title II, as amended by Pub. L. 95-619, Title VI, sec. 641, Nov. 9, 1978, 92 Stat. 3284 (42 U.S.C. 7141).

SOURCE: 46 FR 44689, Sept. 4, 1981, unless otherwise noted.

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#### Subpart A—General

#### §800.001 Purpose.

The purpose of this regulation is to set forth policies and procedures for the award and administration of loans to minority business enterprises. The loans are to assist such enterprises in participating fully in research, development, demonstration and contract activities of the Department of Energy. The loans are to defray a percentage of the cost of obtaining DOE contracts and other agreements, including procurements, cooperative agreements, grants, loans and loan guarantees; of obtaining subcontracts with DOE operating contractors; and of obtaining contracts with first-tier subcontractors of DOE operating contractors in furtherance of the research, development, demonstration or other contract activities of DOE. Issuance of loans under this regulation is limited to the extent funds are provided in advance in appropriation acts. This regulation implements the authority for such loans in section 211(e) of the Department of Energy (DOE) Organization Act, Public Law 95-619, title VI, section 641, November 9, 1978, 92 Stat. 3284 (42 U.S.C.A. 7141).

[48 FR 17574, Apr. 25, 1983]

#### §800.002 Program management.

Program management responsibility for financial assistance awarded under this regulation has been assigned to the Office of Minority Economic Impact.

#### § 800.003 Definitions.

For the purpose of this regulation:

Act means the DOE Organization Act, Public Law 95–91, title II, as amended by the National Energy Conservation Policy Act, Public Law 95–619, title VI, section 641.

Applicant means a minority business enterprise which is seeking a loan under this regulation.

Application Approving Official means the Director of the Office of Minority Economic Impact.

Application Evaluation Panel (also referred to as the Panel) means a team of Federal employees appointed by the Application Approving Official to

evaluate loan applications and make approval or disapproval recommendations regarding such applications.

Borrower means an applicant who enters into a loan agreement with DOE.

Contracting Officer means the DOE official warranted and authorized to contractually bind the Department of Energy and execute written agreements that are binding on the Department.

Costs of a bid or proposal means the cost of preparing, submitting and supporting a bid or proposal, whether solicited or not, for a DOE contract or other agreement such as a procurement contract, grant, cooperative agreement, loan or loan guarantee; or a subcontract with a DOE operating contractor; or a contract with a first-tier subcontractor of a DOE operating contractor in furtherance of the research, development, demonstration or other contract activities of DOE.

Default means the actual failure by the borrower to make payment of principal or interest in accordance with the terms and conditions of a loan issued under this regulation, or the failure of the borrower to meet any other requirement specified as a default condition in the loan agreement.

Director means the Director of the Office of Minority Economic Impact (OMEI).

Loan, in reference to a loan made pursuant to the regulation, means a transaction in which a contractual instrument ("loan agreement") is executed between the United States, as lender, acting through the Secretary of Energy, and a borrower. The instrument must obligate the United States to provide the borrower with a specified amount(s) of United States funds for a specified period of time and must obligate the borrower to use the moneys to bid for and attempt to obtain contracts and other agreements relating to DOE research, development, demonstration and contract activities, and to repay the moneys at a specified time at an agreed rate of interest. The words 'loan', 'loan agreement' and 'transaction' include (where the context does not require otherwise) the terms and conditions of related documents, such as the borrower's note or bond or other evidence of, or security for, the borrower's indebtedness.

#### §800.004

Minority Business Enterprise means a firm including a sole proprietorship, corporation, association, or partnership which is at least 50 percent owned or controlled by a member of a minority or group of members of a minority. For the purpose of this definition, 'control' means direct or indirect possession of the power to direct, or cause the direction of, management and policies, whether through the ownership of voting securities, by contract or otherwise. An individual who is a citizen of the United States and who is a Negro, Puerto Rican, American Indian, Eskimo, Oriental, or Aleut, or is a Spanish speaking individual of Spanish descent, is a member of a "minority" as used in this regulation.

Operating Contractors means contractors under contracts having one of the following purposes, in accordance with the provisions of §9.50.001(a)(1) of the DOE procurement regulations (title 41 CFR part 9-50):

- (a) DOE prime contracts for the management of Federal Government-owned laboratories, production plants, and research facilities located on Federal Government-owned or Federal Government-leased sites, where the programs being conducted are considered of a long-term, continuing nature; or
- (b) DOE prime contracts for the operation of Federal Government-owned facilities located on contractor-owned or leased sites where the programs being conducted are of a long-term, continuing nature. An example of this category would be those contracts with universities for the operation of Federal Government-owned facilities, for the purpose of conducting long-term basic research programs.
- (c) Other contracts performed on sites owned by the Federal Government when so designated by the appropriate procurement official.

Secretary means the Secretary of the Department of Energy or his delegate.

[46 FR 44689, Sept. 4, 1981, as amended at 48 FR 17574, Apr. 25, 1983]

#### §800.004 Eligibility.

In order to be eligible for a loan, an applicant must be a minority business enterprise as defined in §800.003.

#### Subpart B—Loan Solicitation, Application and Review

#### § 800.100 Solicitation of applications.

The Secretary will periodically issue an announcement soliciting applications under this regulation. The announcement will be published in the FEDERAL REGISTER, synopsized in the Commerce Business Daily, and circulated to minority trade associations and organizations and to the Minority Business Development Agency and Small Business Administration. The announcement will indicate funds availability, eligibility requirements, application instructions, interest rates, maturities and other key loan terms and any applicable restrictions. In such solicitations, DOE shall further indicate that, in the case of applications for loans relating to bids or proposals for contracts with first-tier subcontractors of DOE operating contractors, information necessary to substantiate such applications may be unavailable to DOE from such subcontractors. If the substantiating information is not made available to DOE in a timely manner, the application may be rejected.

[46 FR 44689, Sept. 4, 1981, as amended at 48 FR 17574, Apr. 25, 1983]

#### §800.101 Application requirements.

- (a) Applications for loans shall be filed, one original and three copies with: Department of Energy, Washington, DC 20585, Attention: Announcement No. DE-PS60-MI.
- (b) An application for a loan under this regulation must include the following information. Items described in paragraphs (b)(1) through (7) of this section may be submitted for preliminary review in advance of a specific loan request but must be updated at time of loan request to reflect substantial changes.
- (1) Applicant's name and address, with a description of the kind and size of its business, its business experience and its history as a minority business enterprise.
- (2) Financial statements of applicant and its principals, including source of revenue and balance sheets for the current year and, as to applicant, for the

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two preceding years of applicant's existence as a business entity. The Secretary may require applicant to provide certification by a public accountant, or other certification acceptable to the Secretary.

- (3) A description of any other Federal financial backing (direct loans, guaranteed loans, grants, etc.) applied for or obtained by the applicant within the previous five years, or expected to be applied for.
- (4) A description of applicant's management structure, with list of applicant's key persons with their responsibilities and qualifications.
- (i) In the case of a specific loan request this list should include any contractor or consultant whose services are proposed in connection with the bid or proposal for which the loan is sought.
- (5) Affidavit(s) of eligibility (see §800.004).
- (6) Documentation as to applicant's authority to undertake the activities contemplated by the application. Such documentation shall take substantially the following form:
- (i) If the applicant is a corporation, a copy of the charter or certificate and articles of incorporation, with any amendments, duly certified by the Secretary of State of the State where organized, and a copy of the by-laws. There shall also be included a copy of all minutes, resolutions of stockholders or directors or other representatives of the applicant, properly attested, authorizing the filing of the application.
- (ii) If the applicant is an association, a verified copy of its articles of association, if any, with an attested copy of the resolution of its governing board, if any, authorizing the filing of the application.
- (iii) If the applicant is a business trust, a verified copy of the trust instrument and an attested copy of the resolution or other authority under which the application is made.
- (iv) If the applicant is a joint stock company, a verified copy of the articles of association and of the authorizing resolution.
- (v) If the application is made on behalf of a partnership, a copy of the partnership agreement, if any; if on be-

half of a limited partnership, a duly certified copy, also, of the certificate of limited partnership, if such certificate is required to be obtained under state law governing such limited partnership.

- (7) Credit references.
- (8) Information on the award to be sought through the bid or proposal, as follows:
- (i) Title, and whether in response to a solicitation or unsolicited.
- (ii) Brief description of work to be performed.
- (iii) Sponsoring DOE office, including solicitation number, if any.
- (iv) If an unsolicited proposal is planned, the loan application shall indicate the appropriate DOE program personnel to be consulted as to whether there is potential for the proposal to be supported.
- (v) Schedule for preparation and submission of the bid or proposal.
- (9) Itemized cost estimates (and whether yet incurred).
- (10) The required loan amount, not to exceed 75 percent of total bid or proposal costs, in accordance with §800.200 on allowable costs.
- (11) Requested loan maturity, in accordance with §800.202(a)(3).
- (12) How applicant will finance performance of work under a successful bid or proposal.
- (13) Such other information as the Application Approving Official may deem necessary for evaluation in accordance with §800.103 and for compliance with the provisions of this regulation.
- (14) The application shall be signed by the applicant or on behalf of the applicant by an authorized representative. Verification may be by affidavit of an authorized representative of an applicant; attestation shall be by the authorized officer of an applicant.

NOTE: Title 18 United States Code, section 1001 provides criminal penalties for fraud and intentional false statements in information submitted in such an application.

### §800.102 Review by Application Evaluation Panel.

(a) Applications for loans under this regulation shall be reviewed by an Application Evaluation Panel, which shall

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be appointed by the Application Approving Official. The Panel shall include, at a minimum, a representative of the Office of Minority Economic Impact, the contracting officer and a representative of the Office of the Controller.

- (b) Panel review shall be conducted pursuant to paragraph (c) or (d) of this section, as applicable, to evaluate, to clarify and to develop information contained in the application and such other information as the Application Approving Official or the Panel may request.
- (1) The Panel shall give priority to applications relating to a competitive solicitation, because of time limits on such solicitations. The Panel may defer action a maximum of five days after a solicitation has been announced in the *Commerce Business Daily* to provide all interested applicants an opportunity to apply.
- (2) Initial screening will be in the order applications are received, but time required to process an application may vary from case to case.
- (c) Panel review of specific loan requests.
- (1) If an application contains a specific loan request, and complies with \$800.101, the Panel shall arrange for risk analysis, independent of any such analysis submitted by or on behalf of the applicant. Risk analysis shall be directed both to the loan request and to applicant's prospective performance of work pursuant to the bid or proposal.
- (2) The Panel shall evaluate the loan request in light of the risk analysis, and shall give its conclusions in writing to the Application Approving Official, with respect to the following and to such other considerations as that official may direct:
- (i) Applicant's eligibility as a minority business enterprise.
- (ii) Compliance with the application requirements of §800.101.
- (iii) Compliance with §800.200 on allowable costs.
- (iv) Applicant's financial ability to make the bid or proposal without the
- (v) Applicant's contribution of, or ability to contribute, the 25% minimum share of allowable costs, or more.

- (vi) Applicant's ability to prepare an adequate bid or proposal, if the loan is made.
- (vii) Possibility of award to applicant pursuant to its bid or proposal.

NOTE: Normally, not more than three loans will be approved for the same competitive award.

- (viii) Applicant's ability to perform pursuant to the bid or proposal.
- (ix) Likelihood that applicant will repay the requested loan, regardless of success of applicant's bid or proposal.
- (x) Optimal use of available program
- (xi) The Panel's recommendation.
- (d) Panel review of other applications. If the application was submitted without a specific loan request, the Panel shall review the application in accordance with paragraph (b) of this section with the limited purpose of determining whether the applicant has complied with §800.101, except as to matters determinable only with respect to a future specific loan request, and shall inform the Application Approving Official in writing as to its determinations.

# §800.103 Review by Application Approving Official.

- (a) The Application Approving Official shall consider the results of the Panel's review under section 102 (c) or (d), and such other information as the Application Approving Official determines to be relevant pursuant to the provisions of this regulation, and shall either approve or disapprove the application, giving it priority in accordance with the provisions of §800.102(b).
- (b) The Application Approving Official shall authorize a contracting officer to notify the applicant of approval or disapproval.
- (c) An applicant whose application has been rejected will be informed, on request, of the reason for rejection. Rejection is not a bar to submission of an appropriately revised application.

## Subpart C—Loans

# § 800.200 Maximum loan; allowable costs.

(a) A loan under this regulation shall not exceed 75 percent of allowable costs

of a bid or proposal to obtain a DOE contract or other agreement (such as a procurement contract, cooperative agreement, grant, loan or loan guarantee), or a subcontract with a DOE operating contractor, or a contract with a first-tier subcontractor of a DOE operating contractor in furtherance of the research, development, demonstration or other contract activities of DOE.

- (b) To be allowable, costs must, in DOE's judgment:
- (1) Be consistent with the bidding cost principles of the Federal Procurement Regulation (41 CFR Ch. 1, 1–15.205–3) and DOE Procurement Regulation (41 CFR Ch. 9, 9–15.205–3); and;
- (2) Be necessary, reasonable and customary for the bid or proposal contemplated by the application; and
- (3) Be incurred, or expected to be incurred, by the applicant.
- (c) Costs which are, in general, allowable, if consistent with paragraph (b) of this section include, but are not limited to:
  - (1) Bid bond premiums.
- (2) Financial, accounting, legal, engineering and other professional, consulting or similar fees and service charges.
  - (3) Printing and reproduction costs.
  - (4) Travel and transportation costs.
- (5) Costs of the loan application under this rule.
- (d) Costs that are not considered as allowable costs include the following:
- (1) Fees and commissions charged to the applicant, including finder's fees, for obtaining Federal funds.
- (2) Expenses, which, in DOE's judgment, have primarily an application broader than the specific loan request.
- (3) Costs which, in DOE's judgment, fail to conform to paragraph (b) of this section.

[46 FR 44689, Sept. 4, 1981, as amended at 48 FR 17574, Apr. 25, 1983]

## §800.201 Findings.

A loan shall issue under this regulation only if the Secretary, having reviewed the action of the Application Approving Official, and having considered such other information as the Secretary may deem pertinent, has made all the findings that follow:

- (a) That the applicant is a minority business enterprise.
- (b) That the loan will assist the enterprise to participate in the research, development, demonstration or contract activities of the Department of Energy by providing funds needed by applicant for bid or proposal purposes.
- (c) That, by terms of the loan, applicant's use of the funds will be limited to bidding for and obtaining a contract or other agreement with the Department of Energy, a subcontract with a DOE operating contractor, or a contract with a first-tier subcontractor of a DOE operating contractor in furtherance of the research, development, demonstration or other contract activities of DOE.
- (d) That the funds to be loaned will not exceed 75% of applicant's costs in bidding for and obtaining the contract or agreement.
- (e) That the rate of interest on the loan has been determined in consultation with the Secretary of the Treasury.
- (f) That there is a reasonable prospect that the applicant will make the bid or proposal which is the purpose of the loan, will perform according to its bid or proposal, and will repay the loan according to the terms thereof, regardless of the success of its bid or proposal.
- (g) That the terms and conditions of the loan are acceptable to the Secretary and comply with this regulation and with section 211(e) of the Department of Energy Organization Act.

[46 FR 44689, Sept. 4, 1981, as amended at 48 FR 17574, Apr. 25, 1983]

### § 800.202 Loan terms and conditions.

(a) The loan shall be based upon a loan agreement and the borrower's separate promissory note for the proceeds of the loan, including interest. The agreement and note shall be executed in writing between the borrower and the Secretary. The contracting officer shall execute the loan agreement on behalf of the Secretary. The loan agreement and the promissory note shall provide as follows, either at full length or by incorporation by reference to terms of the other of the two documents.

## § 800.202

- (1) The borrower agrees to repay the loan of funds provided by the Secretary.
- (2) The interest rate on the loan is as established in consultation with the Secretary of the Treasury, taking into consideration the current average market yields of outstanding marketable obligations of the United States having maturities comparable to the loan.
- (3) The loan shall be repaid over a maximum period as follows, in equal monthly installments of principal and interest, unless a different frequency of installments is specified by the Secretary:

Loan value	Maximum repayment 1
\$0—\$5,000 \$5,000—\$25,000	5 years 3 months.
Excess of \$25,000	8 years 3 months.

<sup>1</sup>Maximum repayment period from date of initial

Repayment of principal and interest shall begin within 90 days following the initial loan disbursement or such longer period as may be acceptable to the Secretary. Installments shall be applied to accrued interest first and then to repayment of principal. Past due installments shall accrue interest at the quarterly current-value-offunds-rate specified by the Treasury for overdue accounts. Prepayments may be made at any time without penalty.

- (4) The borrower shall have appropriate opportunities, as specified in the loan agreement, to cure any default, failure, or breach of any of the covenants, conditions and obligations undertaken by the borrower pursuant to the provisions of the loan agreement.
- (5) Loans of \$10,000 or less will be disbursed in a single disbursement. Disbursement of loans larger than \$10,000 shall be per schedule and documentation specified by the Secretary.
- (6) The loan may be used by the borrower to defray as much as, but no more than, 75 percent of the cost of the bid or proposal within the limitations specified in §800.200, on allowable costs. Costs incurred by the borrower prior to the effective date of the loan agreement, and allowable under §800.200, may be credited toward the borrower's share of costs if, in DOE's judgment, they were primarily related to the bid

or proposal, but shall not be reimbursed from the loan.

- (7) The borrower shall make periodic reports regarding the bid or proposal.
- (8) The borrower shall maintain good standing under Federal, State and local laws and regulations applicable to the conduct of its business, including current payment of all taxes, fees and other charges and all requisite licenses and other governmental authorization necessary for the continued operation of the business throughout the term of the loan.
- (9) The borrower shall remain a minority business enterprise throughout the term of the loan.
- (10) The borrower shall return funds disbursed, but not required together with accrued interest thereon, to DOE, or to the servicing agent, if applicable, when its bid or proposal is ready for submission. The return of unrequired funds shall be by check separate from any payment of interest or principal, shall be identified by the borrower as a return of unrequired funds, and shall be accompanied by the borrower's certification that so much of the loan as has been disbursed to the borrower and not returned has been, or will be, expended by the borrower for costs allowable under § 800.200.
- (11) Such other provisions as the Secretary deems appropriate.
- (b) The loan agreement shall also provide for loan servicing and monitoring in accordance with \$800.300 and \$800.301, loan limitation in accordance with \$800.302, assignment and transfer in accordance with \$800.303, default in accordance with \$800.304 and appeals in accordance with \$800.307.
- (c) The Secretary may require, as preconditions to disbursement, that the borrower have specified amounts of working capital (including amounts derived from Federal financial assistance) and maintain specified financial ratios, where in the Secretary's judgment satisfaction of such preconditions is necessary to assure the borrower's ability to make and perform the contract, agreement or subcontract according to the bid or proposal, or is otherwise necessary to protect the interests of the United States.
- (d) The Secretary may require pledges, personal guarantees and other

collateral security, and the maintenance of insurance on the borrower's assets and principals, in amounts and on terms appropriate in the Secretary's judgment, to protect the interests of the United States.

### §800.203 Loan limits.

The Secretary shall not make a loan in excess of \$50,000, or make aggregate loans to the same minority business enterprise, including its affiliates, in any Federal fiscal year in excess of \$100,000. In addition, the Secretary shall not increase a loan to an amount which would cause the limits set forth in the previous sentence to be exceeded. Nothing in this regulation shall be interpreted to restrict the Secretary, in making the various determinations provided for in this regulation, from taking into account considerations relating to the Office of Minority Economic Impact loan program as a whole.

### §800.204 Deviations.

- (a) To the extent consistent with the Act, relevant appropriations acts, and other applicable statutes, DOE may deviate on an individual application basis from the requirements of this regulation upon a finding by the Secretary that such deviation is necessary or appropriate in the individual case for the accomplishment of program objectives.
- (b) The contracting officer may, subject to written agreement by other necessary parties, modify or amend the terms and conditions of a loan provided that such modification or amendment shall be consistent with this regulation

## Subpart D—Loan Administration

## §800.300 Loan servicing.

(a) Servicing of a loan under this regulation may be performed by DOE, by another Federal agency, or by a servicing agent (commercial bank, broker, or other financial institution or entity) having the capability, and legally qualified, to service the loan consistently with the requirements of this regulation, which contracts with DOE to act as servicing agent. In determining the capability of a prospective servicing agent, DOE shall give due consideration to the experience of the

agent in providing financial services to minority business enterprises.

- (b) If the servicing of the loan is by contract or other agreement, such contract or other agreement shall provide that the loan shall be serviced in accordance with this regulation and with the terms and conditions of the loan, under a standard of performance that a reasonable and prudent lender would require as to its own similar loan. Servicing responsibilities shall include, but not necessarily be limited to, the following:
- (1) Loan disbursements as set forth in the loan agreement.
- (2) Collection of principal and interest payments on a monthly basis.
- (3) Maintenance of records on loan accounts.
- (4) Notification of the Secretary, without delay, as to the following:
- (i) That the initial disbursement or loan drawdown is ready to be made, together with evidence from the borrower that the bid or proposal preparation has begun or is about to begin.
- (ii) The date and amount of each subsequent disbursement under the loan.
- (iii) Any nonreceipt of payment within 10 days after the date specified for payment, together with evidence of appropriate notification to the borrower.
- (iv) Any known failure by the borrower to comply with the terms and conditions of the loan agreement.
- (v) Evidence, if any, that the borrower is likely to default on any condition set forth in the loan agreement or may be unable to make the next scheduled payment of principal or interest.
- (5) Submittal to DOE of periodic (semi-annual or annual) reports on the status and conditions of the loan and of the borrower.

## § 800.301 Monitoring.

The Secretary shall have the right to audit any and all costs of the bid or proposal for which the loan is sought or made and to exclude or reduce the includible amount of any cost in accordance with §800.200. Auditors who are employees of the United States Government, who are designated by the Secretary of Energy or by the Comptroller General of the United States, shall have access to, and the right to

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examine, any directly pertinent documents and records of an applicant or borrower at reasonable times under reasonable circumstances. The servicing agent, if any, shall make information regarding the loan available to the Secretary of Energy and Comptroller General to the extent lawful and within its ability. The Secretary may direct the applicant or borrower to submit to an audit by public accountant or equivalent acceptable to the Secretary.

#### §800.302 Loan limitation.

The Secretary may limit the loan by written notice to the borrower to those amounts, if any, already disbursed under the loan, if the Secretary has determined that the borower has failed to comply with a material term or condition set forth in the loan agreement.

# §800.303 Assignment or transfer of loan.

Assignment or transfer of the loan and obligations thereunder may be made only with the prior written consent of the Secretary.

### §800.304 Default.

- (a) In the event that the borrower fails to perform the terms and conditions of the loan, the borrower shall be in default and the Secretary shall have the right, at the Secretary's option, to accelerate the indebtedness and demand full payment of all principal and interest amounts outstanding under the loan.
- (b) No failure on the part of the Secretary to make demand at any time shall constitute a waiver of the rights held by the Secretary.
- (c) Upon demand by the Secretary, the borrower shall have a period of not more than 30 days from the date of receipt of the Secretary's demand to make payment in full.
- (d) In the event that the failure on the part of the borrower to perform the terms and conditions of the loan does not constitute an intentional act, but is brought about as a result of circumstances largely beyond the control of the borrower, or is deemed by, the Secretary to be insubstantial, the Secretary may elect, at the Secretary's option, to defer such performance and/

or restructure the repayment required by the loan agreement in any mutually acceptable manner.

(e) Should the borrower fail to pay after demand as provided in paragraph (c) of this section, and no deferral or restructuring is agreed to by the Secretary as provided in paragraph (d) of this section, the Secretary shall undertake collection in accordance with the terms of the loan agreement and the applicable law.

## §800.305 Disclosure.

Information received from an applicant by DOE may be available to the public subject to the provision of 5 U.S.C. 552, 18 U.S.C. 1905 and 10 CFR part 1004; provided that:

- (a) Subject to the requirements of law, information such as trade secrets, commercial and financial information, and other information concerning the minority business enterprise that the enterprise submits to DOE in writing, in an application, or at other times throughout the duration of the loan on a privileged or confidential basis, will not be disclosed without prior notice to submitter in accordance with DOE regulations concerning public disclosure of information. Any submitter asserting that the information is privileged or confidential should appropriately identify and mark such information.
- (b) Upon a showing satisfactory to the Secretary that any information or portion thereof obtained under this regulation would, if made public, divulge trade secrets or other proprietary information of the minority business enterprise, the Secretary may not disclose such information.
- (c) This section shall not be construed as authority to withhold information from Congress or from any committee of Congress upon request of the Chairman.

# § 800.306 Noninterference with other laws.

Nothing in this regulation shall be construed to modify requirements imposed on the borrower by Federal, State and local government agencies in connection with permits, licenses, or other authorizations to conduct or finance its business.

## §800.307 Appeals.

Any dispute concerning questions of fact arising under the loan agreement shall be decided in writing by the contracting officer. The borrower may request the contracting officer to reconsider any such decision, which reconsideration shall be promptly undertaken. If not satisfied with the contracting officer's final decision, the borrower, upon receipt of such written decision, may appeal the decision within 60 days in writing to the Chairman, Financial Assistance Appeals Board (FAAB), Department of Energy, Washington, DC 20585. The Board shall proceed in accordance with the Department of Energy's rules and regulations for such purpose. The decision of the Board with respect to such appeals shall be the final decision of the Secretary.

## PART 810—ASSISTANCE TO FOR-EIGN ATOMIC ENERGY ACTIVI-TIES

Sec.

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810.16 Effective date and savings clause.

AUTHORITY: Secs. 57, 127, 128, 129, 161, and 223, Atomic Energy Act of 1954, as amended by the Nuclear Non-Proliferation Act of 1978, Pub. L. 95–242, 68 Stat. 932, 948, 950, 958, 92 Stat. 126, 136, 137, 138 (42 U.S.C. 2077, 2156, 2157, 2158, 2201, 2273); Sec. 104 of the Energy Reorganization Act of 1974, Pub. L. 93–438; Sec. 301, Department of Energy Organization Act, Pub. L. 95–91.

Source: 51 FR 44574, Dec. 10, 1986, unless otherwise noted.

## §810.1 Purpose.

These regulations implement section 57b of the Atomic Energy Act which empowers the Secretary of Energy to authorize U.S. persons to engage directly or indirectly in the production of special nuclear material outside the United States. Their purpose is to:

- (a) Indicate activities which have been generally authorized by the Secretary of Energy and thus require no further authorization;
- (b) Indicate activities which require specific authorization by the Secretary and explain how to request authorization; and
- (c) Explain reporting requirements for various activities.

### §810.2 Scope.

10 CFR part 810:

- (a) Applies to all persons subject to the jurisdiction of the United States who engage directly or indirectly in the production of special nuclear material outside the United States.
- (b) Applies to activities conducted either in the United States or abroad by such persons or by licensees, contractors or subsidiaries under their direction, supervision, responsibility or control.
- (c) Applies, but is not limited to, activities involving nuclear reactors and other nuclear fuel cycle facilities for the following: fluoride or nitrate conversion; isotope separation (enrichment); the chemical, physical or metallurgical processing, fabricating, or alloying of special nuclear material; production of heavy water, zirconium (hafnium-free or low-hafnium), nuclear-grade graphite, or reactor-grade beryllium; production of reactor-grade uranium dioxide from yellowcake; and certain uranium milling activities.
- (d) Does not apply to exports licensed by the Nuclear Regulatory Commission.

## §810.3 Definitions.

As used in part 810:

Accelerator-driven subcritical assembly system is a system comprising a "subcritical assembly" and a "production accelerator" and which is designed or used for the purpose of producing or processing special nuclear material

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(SNM) or which a U.S. provider of assistance knows or has reason to know will be used for the production or processing of SNM. In such a system, the "production accelerator" provides a source of neutrons used to effect SNM production in the "subcritical assembly."

Agreement for cooperation means an agreement with another nation or group of nations concluded under sections 123 or 124 of the Atomic Energy Act.

Atomic Energy Act means the Atomic Energy Act of 1954, as amended.

Classified information means National Security Information classified under Executive Order 12356 or any superseding order, or Restricted Data classified under the Atomic Energy Act.

General authorization means an authorization granted by the Secretary of Energy under section 57b(2) of the Atomic Energy Act to provide certain assistance to foreign atomic energy activities and which is effective without a specific request to the Secretary or the issuance of an authorization to a particular person.

IAEA means the International Atomic Energy Agency.

Non-nuclear-weapon state is a country not recognized as a nuclear-weapon state by the NPT (i.e., states other than the United States, Russia, the United Kingdom, France, and China).

NNPA means the Nuclear Non-Proliferation Act of 1978.

NPT means the Treaty on the Non-Proliferation of Nuclear Weapons.

Nuclear reactor means an apparatus, other than a nuclear explosive device, designed or used to sustain nuclear fission in a self-supporting chain reaction.

Open meeting means a conference, seminar, trade show or other gathering that all technically qualified members of the public may attend and at which they may make written or other personal record of the proceedings, notwithstanding that (1) a reasonable registration fee may be charged, or (2) a reasonable numerical limit exists on actual attendance.

Operational safety means the capability of a reactor to be operated in a manner that prevents uncontrolled or inadvertent criticality, prevents or

mitigates uncontrolled release of radioactivity to the environment, monitors and limits staff exposure to radiation and radioactivity, and protects off-site population from exposure to radiation or radioactivity. Operational safety may be enhanced by providing expert advice, equipment, instrumentation, technology, software, services, analyses, procedures, training, or other assistance that improves the capability of the reactor to be operated in such a manner.

Person means (1) any individual, corporation, partnership, firm, association, trust, estate, public or private institution, group, Government agency other than the Department of Energy, any State or political entity within a State; and (2) any legal successor, representative, agent or agency of the foregoing. Persons under U.S. jurisdiction are responsible for their foreign licensees, contractors or subsidiaries to the extent that the former have control over the activities of the latter.

Production accelerator is a particle accelerator designed and/or intended to be used, with a subcritical assembly, for the production or processing of SNM or which a U.S. provider of assistance knows or has reason to know will be used for the production or processing of SNM.

Production reactor means a nuclear reactor specially designed or used primarily for the production of plutonium or uranium-233.

Public information means: (1) Information available in periodicals, books or other print or electronic media for distribution to any member of the public, or to a community of persons such as those in a scientific, engineering, or educational discipline or in a particular commercial activity who are interested in a subject matter; (2) Information available in public libraries, public reading rooms, public document rooms, public archives, or public data banks, or in university courses; (3) Information that has been presented at an open meeting (see definition of "open meeting"; (4) Information that has been made available internationally without restriction on its further dissemination; or (5) Information contained in an application which has been

filed with the U.S. Patent Office and eligible for foreign filing under 35 U.S.C. 184 or which has been made available under 5 U.S.C. 552, the Freedom of Information Act. Public information must be available to the public prior to or at the same time as it is transmitted to a foreign recipient. It does not include any technical embellishment, enhancement, explanation or interpretation which in itself is not public information, or information subject to sections 147 and 148 of the Atomic Energy Act.

Restricted Data means all data concerning (1) design, manufacture or utilization of atomic weapons; (2) the production of special nuclear material; or (3) the use of special nuclear material in the production of energy, but shall not include data declassified or removed from the Restricted Data category pursuant to section 142 of the Atomic Energy Act.

Sensitive nuclear technology means any information (including information incorporated in a production or utilization facility or important component part thereof) which is not available to the public [see definition of "public information"] which is important to the design, construction, fabrication, operation, or maintenance of a uranium enrichment or nuclear fuel reprocessing facility or a facility for the production of heavy water, but shall not include Restricted Data controlled pursuant to Chapter 12 of the Atomic Energy Act. The information may take a tangible form such as a model, prototype, blueprint, or operation manual or an intangible form such as technical services.

Source Material means: (1) Uranium or thorium, other than special nuclear material or (2) ores which contain by weight 0.05 percent or more of uranium or thorium, or any combination of these.

Special nuclear material means (1) plutonium, (2) uranium-233, or (3) uranium enriched above 0.711 percent by weight in the isotope uranium-235.

Specific authorization means an authorization granted by the Secretary of Energy under section 57b(2) of the Atomic Energy Act to a person to provide specified assistance to a foreign atomic energy activity in response to

an application filed under  $10~\mathrm{CFR}$  part 810.

Subcritical assembly is an apparatus containing source material or SNM designed or used to produce a nuclear fission chain reaction that is not self-sustaining.

United States, when used in a geographical sense, includes all territories and possessions of the United States.

[51 FR 44574, Dec. 10, 1986, as amended at 58 FR 39638, July 26, 1993; 65 FR 16126, Mar. 27, 20001

#### §810.4 Communications.

- (a) All communications concerning the regulations in this part should be addressed to: U.S. Department of Energy, Washington, DC 20585. Attention: Director, Nuclear Transfer and Supplier Policy Division, NN-43, Office of Arms Control and Nonproliferation. Telephone: (202) 586-2331.
- (b) Communications also may be delivered to the Department's head-quarters at 1000 Independence Avenue, SW., Washington, DC. All clearly marked proprietary information will be given the maximum protection allowed by law.

[51 FR 44574, Dec. 10, 1986, as amended at 58 FR 39638, July 26, 1993; 65 FR 16127, Mar. 27, 20001

## $\S 810.5$ Interpretations.

A person may request the advice of the Director, Nuclear Transfer and Supplier Policy Division (NN-43), on whether a proposed activity falls outside the scope of this part, is generally authorized under §810.7, or requires specific authorization under §810.8: however, unless authorized by the Secretary of Energy, in writing, no interpretation of the regulations in this part other than a written interpretation by the General Counsel is binding upon the Department. When advice is requested from the Director, Nuclear Transfer and Supplier Policy Division, or a binding, written determination is requested from the General Counsel, a response normally will be made within 30 days and, if this is not feasible, an interim response will explain the delay.

[65 FR 16127, Mar. 27, 2000]

## §810.6

#### §810.6 Authorization requirement.

Section 57b of the Atomic Energy Act in pertinent part provides that:

It shall be unlawful for any person to directly or indirectly engage in the production of any special nuclear material outside of the United States except (1) as specifically authorized under an agreement for cooperation made pursuant to section 123, including a specific authorization in a subsequent arrangement under section 131 of this Act, or (2) upon authorization by the Secretary of Energy after a determination that such activity will not be inimical to the interest of the United States: Provided, That any such determination by the Secretary of Energy shall be made only with the concurrence of the Department of State and after consultation with the Arms Control and Disarmament Agency, the Nuclear Regulatory Commission, the Department of Commerce, and the Department of Defense.

## §810.7 Generally authorized activities.

In accordance with section 57b(2) of the Atomic Energy Act, the Secretary of Energy has determined that the following activities are generally authorized, provided no sensitive nuclear technology is transferred:

- (a) Furnishing public information as defined in §810.3;
- (b) Furnishing information or assistance to prevent or correct a current or imminent radiological emergency posing a significant danger to the health and safety of the off-site population, provided the Department of Energy is notified in advance and does not object;
- (c) Furnishing information or assistance, including through continuing programs, to enhance the operational safety of an existing civilian nuclear power plant in a country listed in §810.8(a) or to prevent, reduce, or correct a danger to the health and safety of the off-site population posed by a civilian nuclear power plant in such a country; provided the Department of Energy is notified in advance by certified mail, return receipt requested, and approves the use of the authorization in writing; the Department will notify the applicant of the status of the request within 30 days from the date of receipt of the notification.
- (d) Implementing the Agreement between the United States of America and the International Atomic Energy

Agency for the Application of Safeguards in the United States;

- (e) Participation in exchange programs approved by the Department of State in consultation with the Department of Energy;
- (f) Participation approved by a U.S. Government agency in IAEA programs, and activities of IAEA employees whose employment was approved by the U.S. Government;
- (g) Participation in open meetings as defined in §810.3 that are sponsored by educational, scientific, or technical organizations or institutions;
- (h) Otherwise engaging directly or indirectly in the production of SNM outside the United States in ways that:
- (1) Do not involve any of the countries listed in \$810.8(a); and
- (2) Do not involve production reactors, accelerator-driven subcritical assembly systems, enrichment, reprocessing, fabrication of nuclear fuel containing plutonium, production of heavy water, or research reactors, or test reactors, as described in §810.8 (c)(1) through (6).

[51 FR 44574, Dec. 10, 1986, as amended at 58 FR 39639, July 26, 1993; 65 FR 16127, Mar. 27, 20001

# §810.8 Activities requiring specific authorization.

Unless generally authorized by \$810.7, a person requires specific authorization by the Secretary of Energy before:

(a) Engaging directly or indirectly in the production of special nuclear material in any of the following countries. Countries marked with an asterisk (\*) are non-nuclear-weapon states that do not have full-scope IAEA safeguards agreements in force.

Albania Algeria Andorra\* Angola\* Armenia Azerbaijan\* Bahrain<sup>,</sup> Belarus Benin\* Botswana\* Burkina Faso\* Burma (Myanmar) Burundi\* Cambodia\* Cameroon\* Cape Verde\*

Afghanistan

Central African Republic\* Chad\* China, People's Republic of

Comoros\* Congo\* (Zaire)

Cuba\*

Djibouti\*

Equatorial Guinea\*

Eritrea\* Gabon\* Georgia\* Guinea\*

Guinea-Bissau\*

Haiti\*
India\*
Iran
Iraq\*
Israel\*
Kazakhstan

Kenya\*

Korea, People's Democratic Republic of\*

Kuwait\*
Kyrgyzstan\*
Laos\*
Liberia\*
Libya
Macedonia
Mali\*

Marshall Islands\*

Mauritania\*
Micronesia\*
Moldova\*
Mongolia
Mozambique\*
Niger\*
Oman\*
Pakistan\*

Palau\* Qatar\* Russia Rwanda\*

Sao Tome and Principe\*

Saudi Arabia\*
Seychelles\*
Sierra Leone\*
Somalia\*
Sudan
Syria
Tajikistan\*
Tanzania\*
Togo\*
Turkmenistan\*
Uganda\*
Ukraine
United Arab Emirates\*

United Arab Emirates\*
Uzbekistan
Vanuatu\*

Vanuatu\* Vietnam Yemen\* Yugoslavia

- (b) Providing sensitive nuclear technology for an activity in any foreign country.
- (c) Engaging in or providing assistance or training in any of the following

activities with respect to any foreign country.

- (1) Designing production reactors, accelerator-driven subcritical assembly systems, or facilities for the separation of isotopes of source or SNM (enrichment), chemical processing of irradiated SNM (reprocessing), fabrication of nuclear fuel containing plutonium, or the production of heavy water;
- (2) Constructing, fabricating, operating, or maintaining such reactors, accelerator-driven subcritical assembly systems, or facilities:
- (3) Designing, constructing, fabricating, operating or maintaining components especially designed, modified or adapted for use in such reactors, accelerator-driven subcritical assembly systems, or facilities;
- (4) Designing, constructing, fabricating, operating or maintaining major critical components for use in such reactors, accelerator-driven subcritical assembly systems, or production-scale facilities; or
- (5) Designing, constructing, fabricating, operating, or maintaining research reactors, test reactors or subcritical assemblies capable of continuous operation above five megawatts thermal.
- (6) Training in the activities of paragraphs (c)(1) through (5) of this section.

[65 FR 16127, Mar. 27, 2000; 65 FR 26278, May 5, 2000]

# §810.9 Restrictions on general and specific authorization.

A general or specific authorization granted by the Secretary of Energy under these regulations:

- (a) Is limited to activities involving only unclassified information and does not permit furnishing Restricted Data or other classified information.
- (b) Does not relieve a person from complying with relevant laws or the regulations of other Government agencies applicable to exports;
- (c) Does not authorize a person to engage in any activity when the person knows or has reason to know that the activity is intended to provide assistance in designing, developing, fabricating or testing a nuclear explosive device.

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# §810.10 Grant of specific authorization.

- (a) Any person proposing to provide assistance for which §810.8 indicates specific authorization is required may apply for the authorization to the U.S. Department of Energy, National Nuclear Security Administration, Washington, DC 20585, Attention: Director, Nuclear Transfer and Supplier Policy Division, NN-43, Office of Arms Control and Nonproliferation.
- (b) The Secretary of Energy will approve an application for specific authorization if he determines, with the concurrence of the Department of State and after consultation with the Arms Control and Disarmament Agency, the Nuclear Regulatory Commission, the Department of Commerce, and the Department of Defense, that the activity will not be inimical to the interest of the United States. In making this determination, the Secretary will take into account:
- (1) Whether the United States has an agreement for nuclear cooperation with the nation or group of nations involved:
- (2) Whether the country involved is a party to the NPT, or a country for which the Treaty for the Prohibition of Nuclear Weapons in Latin America (Treaty of Tlatelolco) is in force;
- (3) Whether the country involved has entered into an agreement with the IAEA for the application of safeguards on all its peaceful nuclear activities:
- (4) Whether the country involved, if it has not entered into such an agreement, has agreed to accept IAEA safeguards when applicable to the proposed activity:
- (5) Other nonproliferation controls or conditions applicable to the proposed activity:
- (6) The relative significance of the proposed activity;
- (7) The availability of comparable assistance from other sources;
- (8) Any other factors that may bear upon the political, economic, or security interests of the United States, including U.S. obligations under international agreements or treaties.
- (c) If the proposed assistance involves the export of "sensitive nuclear technology" as defined in §810.3, the requirements of sections 127 and 128 of

the Atomic Energy Act and of any applicable U.S. international commitments must also be met.

(d) Approximately 30 days after the Secretary's grant of a specific authorization, a copy of the Secretary's determination may be provided to any person requesting it at the Department's Public Reading Room, unless the applicant submits information showing that public disclosure will cause substantial harm to its competitive position. This provision does not affect any other authority provided by law for the Department not to disclose information.

[51 FR 44574, Dec. 10, 1986, as amended at 58 FR 39639, July 26, 1993; 65 FR 16128, Mar. 27, 2000]

# §810.11 Revocation, suspension, or modification of authorization.

The Secretary may revoke, suspend, or modify a general or specific authorization:

- (a) For any material false statement in an application for specific authorization or in any additional information submitted in its support;
- (b) For failing to provide a report or for any material false statement in a report submitted pursuant to §810.13;
- (c) If any authorized assistance is subsequently determined to be inimical to the interest of the United States or otherwise no longer meets the legal criteria for approval; or
- (d) Pursuant to section 129 of the Atomic Energy Act.

# §810.12 Information required in an application for specific authorization.

Each application shall contain:

- (a) The name, address, and citizenship of the applicant, and complete disclosure of all real parties in interest; if the applicant is a corporation or other legal entity, where it is incorporated or organized, the location of its principal office, and the degree of any control or ownership by any foreign person or entity;
- (b) A complete description of the proposed activity, including its approximate monetary value, the name and location of any facility or project involved, the name and address of the

person or legal entity for which the activity is to be performed, and a detailed description of any specific project to which the activity relates;

- (c) Any information the applicant may wish to provide concerning the factors listed in §810.10(b); and
- (d) Designation of any information considered proprietary whose public disclosure would cause substantial harm to the competitive position of the applicant.

## §810.13 Reports.

- (a) Any person who has received a specific authorization shall within 30 days after beginning the authorized activity provide to the Department of Energy a report containing the following information:
- (1) The name, address, and citizenship of the person submitting the report:
- (2) The name, address, and citizenship of the person or entity for which the activity is being performed;
- (3) A description of the activity, the date it began, its location, status, and anticipated date of completion; and
- (4) A copy of the Department of Energy's letter authorizing the activity.
- (b) Any person carrying out a specifically authorized activity shall inform DOE when the activity is completed or if it is terminated before completion.
- (c) Any person granted a specific authorization shall inform DOE when it is known that the proposed activity will not be undertaken and the granted authorization will not be used.
- (d) Any person, within 30 days after beginning any generally authorized activity under §810.7(b), (c), or (h), shall provide to the Department of Energy:
- (1) The name, address, and citizenship of the person submitting the report:
- (2) The name, address, and citizenship of the person or entity for which the activity is being performed; and
- (3) A description of the activity, the date it began, its location, status, and anticipated date of completion.
- (4) An assurance that the U.S. vendor has an agreement with the recipient ensuring that any subsequent transfer of materials, equipment, or technology transferred under general authorization to a country listed in §810.8(a) will

only take place if the vendor obtains DOE approval.

- (e) Persons engaging in generally authorized activities as employees of persons required to report are not themselves required to report.
- (f) Persons engaging in activities generally authorized under §810.7(a), (d), (e), (f), and (g) are not subject to reporting requirements under this section.
- (g) All reports should be sent to: U.S. Department of Energy, National Nuclear Security Administration, Washington, DC 20585, Attention: Director, Nuclear Transfer and Supplier Policy Division, NN-43, Office of Arms Control and Nonproliferation.
- [51 FR 44574, Dec. 10, 1986, as amended at 58 FR 39639, July 16, 1993; 65 FR 16128, Mar. 27, 2000]

## §810.14 Additional information.

The Department of Energy may at any time require a person engaging in any generally or specifically authorized activity to submit additional information.

## §810.15 Violations.

- (a) The Atomic Energy Act provides that:
- (1) Permanent or temporary injunctions or restraining orders may be granted to prevent any person from violating any provision of the Atomic Energy Act or its implementing regulations.
- (2) Any person convicted of violating or conspiring or attempting to violate any provision of section 57 of the Atomic Energy Act may be fined up to \$10,000 or imprisoned up to 10 years, or both. If the offense is committed with intent to injure the United States or to aid any foreign nation, the penalty could be up to life imprisonment and a \$20,000 fine.
- (b) Title 18 of the United States Code, section 1001, provides that persons convicted of willfully falsifying, concealing, or covering up a material fact or making false, fictitious or fraudulent statements or representations may be fined up to \$10,000 or imprisoned up to five years, or both.

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# §810.16 Effective date and savings

Except for actions that may be taken by DOE pursuant to §810.11, the regulations in this part do not affect the validity or terms of any specific authorizations granted under regulations in effect before April 26, 2000 (and contained in the 10 CFR, part 500 to end, edition revised as of January 1, 2000) or generally authorized activities under those regulations for which the contracts, purchase orders, or licensing arrangements were already in effect. Persons engaging in activities that were generally authorized under regulations in effect before April 26, 2000, but that require specific authorization under the regulations in this part, must request specific authorization by July 25, 2000 but may continue their activities until DOE acts on the request.

[65 FR 16128, Mar. 27, 2000]

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# PART 820—PROCEDURAL RULES FOR DOE NUCLEAR ACTIVITIES

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SOURCE: 58 FR 43692, Aug. 17, 1993, unless	

# Subpart A—General

## §820.1 Purpose and scope.

- (a) Scope. This part sets forth the procedures to govern the conduct of persons involved in DOE nuclear activities and, in particular, to achieve compliance with the DOE Nuclear Safety Requirements by all persons subject to those requirements.
- (b) Questions not addressed by these rules. Questions that are not addressed in this part shall be resolved at the discretion of the DOE Official.
- (c) Exclusion. Activities and facilities covered under E.O. 12344, 42 U.S.C. 7158

note, pertaining to Naval nuclear propulsion are excluded from the requirements of subparts D and E of this part regarding interpretations and exemptions related to this part. The Deputy Assistance Secretary for Naval Reactors or his designee will be responsible for formulating, issuing, and maintaining appropriate records of interpretations and exemptions for these facilities and activities.

#### §820.2 Definitions.

(a) The following definitions apply to this part:

Act or AEA means the Atomic Energy Act of 1954, as amended.

Administrative Law Judge means an Administrative Law Judge appointed under 5 U.S.C. 3105.

Consent Agreement means any written document, signed by the Director and a person, containing stipulations or conclusions of fact or law and a remedy acceptable to both the Director and the person.

Contractor means any person under contract (or its subcontractors or suppliers) with the Department of Energy with the responsibility to perform activities or to supply services or products that are subject to DOE Nuclear Safety Requirements.

Department means the United States Department of Energy or any predecessor agency.

Director means the DOE Official to whom the Secretary has assigned the authority to issue Notices of Violation under subpart B of this part, including the Director of Enforcement, or his designee. With regard to activities and facilities covered under E.O. 12344, 42 U.S.C. 7158 note, pertaining to Naval nuclear propulsion, the Director shall mean the Deputy Assistant Secretary for Naval Reactors or his designee.

Docketing Clerk means the Office in DOE with which documents for an enforcement action must be filed and which is responsible for maintaining a record and a public docket for enforcement actions commencing with the filing of a Preliminary Notice of Violation. It is also the Office with which interpretations, exemptions, and any other documents designated by the Secretary shall be filed.

*DOE* means the United States Department of Energy or any predecessor agency.

DOE Nuclear Safety Requirements means the set of enforceable rules, regulations, or orders relating to nuclear safety adopted by DOE (or by another Agency if DOE specifically identifies the rule, regulation, or order) to govern the conduct of persons in connection with any DOE nuclear activity and includes any programs, plans, or other provisions intended to implement these rules, regulations, orders, a Nuclear Statute or the Act, including technical specifications and operational safety requirements for DOE nuclear facilities. For purposes of the assessment of civil penalties, the definition of DOE Nuclear Safety Requirements is limited to those identified in 10 CFR 820.20(b).

DOE Official means the person, or his designee, in charge of making a decision under this part.

Enforcement adjudication means the portion of the enforcement process that commences when a respondent requests an on-the-record adjudication of the assessment of a civil penalty and terminates when a Presiding Officer files an initial decision.

Exemption means the final order that sets forth the relief, waiver, or release, either temporary or permanent, from a DOE Nuclear Safety Requirement, as granted by the appropriate Secretarial Officer pursuant to the provisions of subpart E of this part.

Filing means, except as otherwise specifically indicated, the completion of providing a document to the Office of the Docketing Clerk and serving the document on the person to whom the document is addressed.

Final Notice of Violation means a document issued by the Director in which the Director determines that the respondent has violated or is continuing to violate a DOE Nuclear Safety Requirement and includes:

- (i) A statement specifying the DOE Nuclear Safety Requirement to which the violation relates;
- (ii) A concise statement of the basis for the determination;
- (iii) Any remedy, including the amount of any civil penalty;

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- (iv) A statement explaining the reasoning behind any remedy; and
- (v) If the Notice assesses a civil penalty, notice of respondent's right:
- (A) To waive further proceedings and pay the civil penalty:
- (B) To request an on-the-record adjudication of the assessment of the civil penalty; or
- (C) To seek judicial review of the assessment of the civil penalty.

Final Order means an order of the Secretary that represents final agency action and, where appropriate, imposes a remedy with which the recipient of the order must comply.

General Counsel means the General Counsel of DOE or his designee.

Hearing means an on-the-record enforcement adjudication open to the public and conducted under the procedures set forth in subpart B of this part.

Initial Decision means the decision filed by the Presiding Officer based upon the record of the enforcement adjudication out of which it arises.

Interpretation means a statement by the General Counsel concerning the meaning or effect of the Act, a Nuclear Statute, or a DOE Nuclear Safety Requirement which relates to a specific factual situation but may also be a ruling of general applicability where the General Counsel determines such action to be appropriate.

Nuclear Statute means any statute or provision of a statute that relates to a DOE nuclear activity and for which DOE is responsible.

Party means the Director and the respondent in an enforcement adjudication under this part.

Person means any individual, corporation, partnership, firm, association, trust, estate, public or private institution, group, Government agency, any State or political subdivision of, or any political entity within a State, any foreign government or nation or any political subdivision of any such government or nation, or other entity and any legal successor, representative, agent or agency of the foregoing; provided that person does not include the Department or the United States Nuclear Regulatory Commission. For purposes of civil penalty assessment, the

term also includes affiliated entities, such as a parent corporation.

Preliminary Notice of Violation means a document issued by the Director in which the Director sets forth the preliminary conclusions that the respondent has violated or is continuing to violate a DOE Nuclear Safety Requirement and includes:

- (i) A statement specifying the DOE Nuclear Safety Requirement to which the violation relates;
- (ii) A concise statement of the basis for alleging the violation;
- (iii) Any proposed remedy, including the amount of any proposed civil penalty: and
- (iv) A statement explaining the reasoning behind any proposed remedy.

Presiding Officer means the Administrative Law Judge designated to be in charge of an enforcement adjudication who shall conduct a fair and impartial hearing, assure that the facts are fully elicited, adjudicate all issues, avoid delay, and shall have authority to:

- (i) Conduct an adjudicatory hearing under this part;
- (ii) Rule upon motions, requests, and offers of proof, dispose of procedural requests, and issue all necessary orders;
- (iii) Exercise the authority set forth in §820.8:
  - (iv) Admit or exclude evidence;
- (v) Hear and decide questions of fact, law, or discretion, except for the validity of regulations and interpretations issued by DOE;
- (vi) Require parties to attend conferences for the settlement or simplification of the issues, or the expedition of the proceedings;
- (vii) Draw adverse inferences against a party that fails to comply with his orders;
- (viii) Do all other acts and take all measures necessary for the maintenance of order and for the efficient, fair and impartial adjudication of issues arising in proceedings governed by these rules.

Remedy means any action necessary or appropriate to rectify, prevent, or penalize a violation of the Act, a Nuclear Statute, or a DOE Nuclear Safety Requirements, including the assessment of civil penalties, the requirement of specific actions, or the modification, suspension or recision of a contract.

Respondent means any person to whom the Director addresses a Notice of Violation.

Secretarial Officer means the Assistant Secretary or Office Director who is primarily responsible for the conduct of an activity under the Act. With regard to activities and facilities covered under E.O. 12344, 42 U.S.C. 7158 note, pertaining to Naval nuclear propulsion, Secretarial Officer shall mean the Deputy Assistant Secretary for Naval Reactors.

Secretary means the Secretary of Energy or his designee.

- (b) Terms defined in the Act and not defined in these rules are used consistent with the meanings given in the Act.
- (c) As used in this part, words in the singular also include the plural and words in the masculine gender also include the feminine and vice versa, as the case may require.

## §820.3 Separation of functions.

- (a) Separation of functions. After a respondent requests an on-the-record adjudication of an assessment of a civil penalty contained in a Final Notice of Violation, no person shall participate in a decision-making function in an enforcement proceeding if he has been, is or will be responsible for an investigative or prosecutorial function related to that proceeding or if he reports to the person responsible for the investigative or prosecutorial function.
- (b) Director. The Director shall be responsible for the investigation and prosecution of violations of the DOE Nuclear Safety Requirements. After the request for an enforcement adjudication, the Director shall not discuss ex parte the merits of the proceeding with a DOE Official or any person likely to advise the DOE Official in the decision of the proceeding.
- (c) Presiding Officer. A Presiding Officer shall perform no duties inconsistent with his responsibilities as a Presiding Officer, and will not be responsible to or subject to the supervision or direction of any officer or em-

ployee engaged in the performance of an investigative or prosecutorial function. The Presiding Officer may not consult any person other than a member of his staff or a special assistant on any fact at issue unless on notice and opportunity for all parties to participate, except as required for the disposition of *ex parte* matters as authorized by law.

#### § 820.4 Conflict of interest.

A DOE Official may not perform functions provided for in this part regarding any matter in which he has a financial interest or has any relationship that would make it inappropriate for him to act. A DOE Official shall withdraw at any time from any action in which he deems himself disqualified or unable to act for any reason. Any interested person may at any time request the General Counsel to disqualify a DOE Official or request that the General Counsel disqualify himself. In the case of an enforcement adjudication, a motion to disqualify shall be made to the Presiding Officer. The request shall be supported by affidavits setting forth the grounds for disqualification of the DOE Official. A decision shall be made as soon as practicable and information may be requested from any person concerning the matter. If a DOE Official is disqualified or withdraws from the proceeding, a qualified individual who has none of the infirmities listed in this section shall replace him.

### §820.5 Service.

- (a) General rule. Any document filed with the Docketing Clerk must be served on the addressee of the document and shall not be considered filed until service is complete and unless accompanied by proof of service; provided that the filing with the Docketing Clerk of any document addressed to the DOE Official shall be considered service on the DOE Official.
- (b) Service in an Enforcement Adjudication. Any document filed in an enforcement adjudication must be served on all other participants in the adjudication.
- (c) Who may be served. Any paper required to be served upon a person shall be served upon him or upon the representative designated by him or by

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law to receive service of papers. When an attorney has entered an appearance on behalf of a person, service must be made upon the attorney of record.

- (d) How service may be made. Service may be made by personal delivery, by first class, certified or registered mail or as otherwise authorized or required by the DOE Official. The DOE Official may require service by express mail.
- (e) When service is complete. Service upon a person is complete:
- (1) By personal delivery, on handing the paper to the individual, or leaving it at his office with his clerk or other person in charge or, if there is no one in charge, leaving it in a conspicuous place therein or, if the office is closed or the person to be served has no office, leaving it at his usual place of residence with some person of suitable age and discretion then residing there;
- (2) By mail, on deposit in the United States mail, properly stamped and addressed: or
- (3) By any other means authorized or required by the DOE Official.
- (f) Proof of service. Proof of service, stating the name and address of the person on whom served and the manner and date of service, shall be shown for each document filed, and may be made by:
- (1) Written acknowledgement of the person served or his counsel;
- (2) The certificate of counsel if he has made the service;
  (3) The affidavit of the person make
- (3) The affidavit of the person making the service; or
- (4) Any other means authorized or required by the DOE Official.
- (g) Deemed service. If a document is deemed filed under this part, then the service requirements shall be deemed satisfied when the document is deemed filed.

# §820.6 Computation and extension of time.

(a) Computation. In computing any period of time set forth in this part, except as otherwise provided, the day of the event from which the designated period begins to run shall not be included. Saturdays, Sundays, and Federal legal holidays shall be included. When a stated time expires on a Saturday, Sunday or Federal legal holiday, the stated time period shall be ex-

tended to include the next business day.

- (b) Extensions of time. A DOE Official may grant an extension of any time period set forth in this part.
- (c) Service by mail. Where a pleading or document is served by mail, five (5) days shall be added to the time allowed by these rules for the filing of a responsive pleading or document. Where a pleading or document is served by express mail, only two (2) days shall be added.

#### §820.7 Questions of policy or law.

- (a) Certification. There shall be no interlocutory appeal from any ruling order, or action decision of a DOE Official except as permitted by this section. A Presiding Officer in an enforcement adjudication may certify, in his discretion, a question to the Secretary, when the order or ruling involves an important question of law or policy concerning which there is substantial grounds for difference of opinion, and either an immediate decision will materially advance the ultimate termination of the proceeding, or subsequent review will be inadequate or ineffective.
- (b) Decision. The certified question shall be decided as soon as practicable. If the Secretary determines that the question was improvidently certified, or if he takes no action within thirty days of the certification, the certification is dismissed. The Secretary may decide the question on the basis of the submission made by the Presiding Officer or may request further information from any person.

## $\S 820.8$ Evidentiary matters.

(a) General. A DOE Official may obtain information or evidence for the full and complete investigation of any matter related to a DOE nuclear activity or for any decision required by this part. A DOE Official may sign, issue and serve subpoenas; administer oaths and affirmations; take sworn testimony; compel attendance of and sequester witnesses; control dissemination of any record of testimony taken pursuant to this section; subpoena and reproduce books, papers, correspondence, memoranda, contracts, agreements, or other relevant records or

tangible evidence including, but not limited to, information retained in computerized or other automated systems in possession of the subpoenaed person.

- (b) Special Report Orders. A DOE Official may issue a Special Report Order (SRO) requiring any person involved in a DOE nuclear activity or otherwise subject to the jurisdiction of DOE to file a special report providing information relating to a DOE Nuclear Safety Requirement, the Act, or a Nuclear Statute, including but not limited to written answers to specific questions. The SRO may be in addition to any other reports required by this part.
- (c) Extension of Time. The DOE Official who issues a subpoena or SRO pursuant to this section, for good cause shown, may extend the time prescribed for compliance with the subpoena or SRO and negotiate and approve the terms of satisfactory compliance.
- (d) Reconsideration. Prior to the time specified for compliance, but in no event more than 10 days after the date of service of the subpoena or SRO, the person upon whom the document was served may request reconsideration of the subpoena or SRO with the DOE Official who issued the document. If the subpoena or SRO is not modified or rescinded within 10 days of the date of the filing of the request, the subpoena or SRO shall be effective as issued and the person upon whom the document was served shall comply with the subpoena or SRO within 20 days of the date of the filing. There is no administrative appeal of a subpoena or SRO.
- (e) Service. A subpoena or SRO shall be served in the manner set forth in §820.5, except that service by mail must be made by registered or certified mail.
- (f) Fees. (1) A witness subpoenaed by a DOE Official shall be paid the same fees and mileage as paid to a witness in the district courts of the United States.
- (2) If a subpoena is issued at the request of a person other than an officer or agency of the United States, the witness fees and mileage shall be paid by the person who requested the subpoena. However, at the request of the person, the witness fees and mileage

shall be paid by the DOE if the person shows:

- (i) The presence of the subpoenaed witness will materially advance the proceeding; and
- (ii) The person who requested that the subpoena be issued would suffer a serious hardship if required to pay the witness fees and mileage. The DOE Official issuing the subpoena shall make the determination required by this subsection.
- (g) Enforcement. If any person upon whom a subpoena or SRO is served pursuant to this section, refuses or fails to comply with any provision of the subpoena or SRO, an action may be commenced in the United States District Court to enforce the subpoena or SRO.
- (h) Certification. (1) Documents produced in response to a subpoena shall be accompanied by the sworn certification, under penalty of perjury, of the person to whom the subpoena was directed or his authorized agent that a diligent search has been made for each document responsive to the subpoena, and to the best of his knowledge, information, and belief all such documents responsive to the subpoena are being produced unless withheld on the grounds of privilege pursuant to paragraph (i) of this section.
- (2) Any information furnished in response to an SRO shall be accompanied by the sworn certification under penalty of perjury of the person to whom it was directed or his authorized agent who actually provides the information that to the best of his knowledge, information and belief a diligent effort has been made to provide all information required by the SRO, and all information furnished is true, complete, and correct unless withheld on grounds of privilege pursuant to paragraph (i) of this section.
- (3) If any document responsive to a subpoena is not produced or any information required by an SRO is not furnished, the certification shall include a statement setting forth every reason for failing to comply with the subpoena or SRO.
- (i) Withheld information. If a person to whom a subpoena or SRO is directed

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withholds any document or information because of a claim of attorney-client or other privilege, the person submitting the certification required by paragraph (h) of this section also shall submit a written list of the documents or the information withheld indicating a description of each document or information, the date of the document, each person shown on the document as having received a copy of the document, each person shown on the document as having prepared or been sent the document, the privilege relied upon as the basis for withholding the document or information, a memorandum of law supporting the claim of privilege, and an identification of the person whose privilege is being asserted.

- (j) Statements/testimony.
- (1) If a person's statement/testimony is taken pursuant to a subpoena, the DOE Official shall determine whether the statement/testimony shall be recorded and the means by which it is recorded.
- (2) A person whose statement/testimony is recorded may procure a copy of the transcript by making a written request for a copy and paying the appropriate fees. Upon proper identification, any potential witness or his attorney has the right to inspect the official transcript of the witness' own statement or testimony.
- (k) Sequestration. The DOE Official may sequester any person who furnishes documents or gives testimony. Unless permitted by the DOE Official, neither a witness nor his attorney shall be present during the examination of any other witnesses.
- (1) Attorney. (1) Any person whose statement or testimony is taken may be accompanied, represented and advised by his attorney; provided that, if the witness claims a privilege to refuse to answer a question on the grounds of self-incrimination, the witness must assert the privilege personally.
- (2) The DOE Official shall take all necessary action to regulate the course of testimony and to avoid delay and prevent or restrain contemptuous or obstructionist conduct or contemptuous language. The DOE Official may take actions as the circumstances may warrant in regard to any instances where any attorney refuses to comply

with directions or provisions of this section.

#### §820.9 Special assistant.

A DOE Official may appoint a person to serve as a special assistant to assist the DOE Official in the conduct of any proceeding under this part. Such appointment may occur at any appropriate time. A special assistant shall be subject to the disqualification provisions in §820.5. A special assistant may perform those duties assigned by the DOE Official, including but not limited to, serving as technical interrogators, technical advisors and special master.

#### §820.10 Office of the docketing clerk.

- (a) Docket. The Docketing Clerk shall maintain a docket for enforcement actions commencing with the issuance of a Preliminary Notice of Violation, interpretations issued pursuant to subpart D of this part, exemptions issued pursuant to subpart E of this part, and any other matters designated by the Secretary. A docket for an enforcement action shall contain all documents required to be filed in the proceeding.
- (b) Public inspection. Subject to the provisions of law restricting the public disclosure of certain information, any person may, during Department business hours, inspect and copy any document filed with the Docketing Clerk. The cost of duplicating documents shall be borne by the person seeking copies of such documents. The DOE Official may waive this cost in appropriate cases
- (c) Transcript. Except as otherwise provided in this part, after the filing of a Preliminary Notice of Violation, all hearings, conferences, and other meetings in the enforcement process shall be transcribed verbatim. A copy of the transcript shall be filed with the Docketing Clerk promptly. The Docketing Clerk shall serve all participants with notice of the availability of the transcript and shall furnish the participants with a copy of the transcript upon payment of the cost of reproduction, unless a participant can show that the cost is unduly burdensome.

## §820.11 Information requirements.

(a) Any information pertaining to a nuclear activity provided to DOE by

any person or maintained by any person for inspection by DOE shall be complete and accurate in all material respects.

(b) No person involved in a DOE nuclear activity shall conceal or destroy any information concerning a violation of a DOE Nuclear Safety Requirement, a Nuclear Statute, or the Act.

# §820.12 Classified, confidential, and controlled information

- (a) General rule. The DOE Official in charge of a proceeding under this part may utilize any procedures deemed appropriate to safeguard and prevent disclosure of classified, confidential, and controlled information, including Restricted Data and National Security Information, to unauthorized persons, with minimum impairment of rights and obligations under this part.
- (b) Obligation to protect restricted information. Nothing in this part shall relieve any person from safeguarding classified, confidential, and controlled information, including Restricted Data or National Security Information, in accordance with the applicable provisions of federal statutes and the rules, regulations, and orders of any federal agency.

## **Subpart B—Enforcement Process**

## §820.20 Purpose and scope.

- (a) Purpose. This subpart establishes the procedures for investigating the nature and extent of violations of the DOE Nuclear Safety Requirements, for determining, whether a violation has occurred, for imposing an appropriate remedy, and for adjudicating the assessment of a civil penalty.
- (b) Basis for civil penalties. DOE may assess civil penalties against any person subject to the provisions of this part who has entered into an agreement of indemnification under 42 U.S.C. 2210(d) (or any subcontractor or supplier thereto), unless exempted from civil penalties as provided in paragraph (c) of this section, on the basis of a violation of:
- (1) Any DOE Nuclear Safety Requirement set forth in the Code of Federal Regulations;
- (2) Any Compliance Order issued pursuant to subpart C of this part; or

- (3) Any program, plan or other provision required to implement any requirement or order identified in paragraphs (b)(1) or (b)(2) of this section.
- (c) Exemptions. The following contractors, and subcontractors and suppliers thereto, are exempt from the assessment of civil penalties under this subpart with respect to the activities specified below:
- (1) The University of Chicago for activities associated with Argonne National Laboratory;
- (2) The University of California for activities associated with Los Alamos National Laboratory, Lawrence Livermore National Laboratory, and Lawrence Berkeley National Laboratory;
- (3) American Telephone and Telegraph Company and its subsidiaries for activities associated with Sandia National Laboratory;
- (4) University Research Association, Inc. for activities associated with FERMI National Laboratory;
- (5) Princeton University for activities associated with Princeton Plasma Physics Laboratory;
- (6) The Associated Universities, Inc. for activities associated with the Brookhaven National Laboratory; and
- (7) Battelle Memorial Institute for activities associated with Pacific Northwest Laboratory.
- (d) Nonprofit educational institutions. Any educational institution that is considered nonprofit under the United States Internal Revenue Code shall receive automatic remission of any civil penalty assessed under this part.

## §820.21 Investigations.

- (a) The Director may initiate and conduct investigations and inspections relating to the scope, nature and extent of compliance by a person with the Act and the DOE Nuclear Safety Requirements and take such action as he deems necessary and appropriate to the conduct of the investigation or inspection, including any action pursuant to §820.8.
- (b) Any person may request the Director to initiate an investigation or inspection pursuant to paragraph (a) of this section. A request for an investigation or inspection shall set forth the subject matter or activity to be investigated or inspected as fully as possible

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and include supporting documentation and information. No particular forms or procedures are required.

- (c) Any person who is requested to furnish documentary evidence, information or testimony in an investigation or during an inspection shall be informed, upon written request, of the general purpose of the investigation or inspection.
- (d) Information or documents that are obtained during any investigation or inspection shall not be disclosed unless the Director directs or authorizes the public disclosure of the investigation. Upon such authorization, the information or documents are a matter of public record and disclosure is not precluded by the Freedom of Information Act, 5 U.S.C. 552 and 10 CFR part 1004. A request for confidential treatment of information for purposes of the Freedom of Information Act shall not prevent disclosure by the Director if disclosure is determined to be in the public interest and otherwise permitted or required by law.
- (e) During the course of an investigation or inspection any person may submit at any time any document, statement of facts or memorandum of law for the purpose of explaining the person's position or furnish information which the person considers relevant to a matter or activity under investigation or inspection.
- (f) If facts disclosed by an investigation or inspection indicate that further action is unnecessary or unwarranted, the investigation may be closed without prejudice to further investigation or inspection by the Director at any time that circumstances so warrant.

## §820.22 Informal conference.

The Director may convene an informal conference to discuss any situation that might be a violation of the Act or a DOE Nuclear Safety Requirement, its significance and cause, any correction taken or not taken by the person, any mitigating or aggravating circumstances, and any other useful information. The Director may compel a person to attend the conference. This conference will not normally be open to the public and there shall be no transcript.

### §820.23 Consent order.

- (a) Settlement policy. DOE encourages settlement of an enforcement proceeding at any time if the settlement is consistent with the objectives of the Act and the DOE Nuclear Safety Requirements. The Director and a person may confer at any time concerning settlement. These settlement conferences shall not be open to the public and there shall be no transcript.
- (b) Consent order. Notwithstanding any other provision of this part, DOE may at any time resolve any or all issues in an outstanding enforcement proceeding with a Consent Order. A Consent Order must be signed by the Director and the person who is its subject, or a duly authorized representative, must indicate agreement to the terms contained therein and must be filed. A Consent Order need not constitute an admission by any person that the Act or a DOE Nuclear Safety Requirement has been violated, nor need it constitute a finding by the DOE that such person has violated the Act or a DOE Nuclear Safety Requirement. A Consent Order shall, however, set forth the relevant facts which form the basis for the Order and what remedy, if any, is imposed.
- (c) Effect on enforcement adjudication. If a Consent Order is signed after the commencement of an enforcement adjudication, the adjudication of the issues subject to the Consent Order shall be stayed until the completion of the Secretarial Review Process. If the Consent Order becomes a Final Order, the adjudication shall be terminated or modified as specified in the Order.
- (d) Secretarial review. A Consent Order shall become a Final Order 30 days after it is filed unless the Secretary files a rejection of the Consent Order or a Modified Consent Order. A Modified Consent Order shall become a Final Order if the Director and the person who is its subject sign it within 15 days of its filing.

# § 820.24 Preliminary notice of violation.

(a) If the Director has reason to believe a person has violated or is continuing to violate a provision of the Act or a DOE Nuclear Safety Requirement, he may file a Preliminary Notice

of Violation. The Notice and any transmittal documents shall contain sufficient information to fairly apprise the respondent of the facts and circumstances of the alleged violations and the basis of any proposed remedy, and to properly indicate what further actions are necessary by or available to respondent.

- (b) Within 30 days after the filing of a Preliminary Notice of Violation, the respondent shall file a reply.
- (c) The reply shall be in writing and signed by the person filing it. The reply shall contain a statement of all relevant facts pertaining to the situation that is the subject of the Notice. The reply shall state any facts, explanations and arguments which support a denial that a violation has occurred as alleged; demonstrate any extenuating circumstances or other reason why the proposed remedy should not be imposed or should be mitigated; and furnish full and complete answers to the questions set forth in the Notice. Copies of all relevant documents shall be submitted with the reply. The reply shall include a discussion of the relevant authorities which support the position asserted, including rulings, regulations, interpretations, and previous decisions issued by DOE.
- (d) The respondent may terminate an enforcement action if the reply agrees to comply with the proposed remedy and waives any right to contest the Notice or the remedy. If a respondent elects this option, the Preliminary Notice of Violation shall be deemed a Final Order upon the filing of the reply.

## $\S 820.25$ Final notice of violation.

- (a) General rule. If, after reviewing the reply submitted by the respondent, the Director determines that a person violated or is continuing to violate a provision of the Act or a DOE Nuclear Safety Requirement, he may file a Final Notice of Violation. The Final Notice shall concisely state the determined violation, any designated penalty, and further actions necessary by or available to respondent.
- (b) Effect of final notice. (1) If a Final Notice of Violation does not contain a civil penalty, it shall be deemed filed as a Final Order 15 days after the Final

- Notice is filed unless the Secretary files a Final Order which modifies the Final Notice.
- (2) If a Final Notice of Violation contains a civil penalty, the respondent must file within 30 days after the filing of the Final Notice:
- (i) A waiver of further proceedings;
- (ii) A request for an on-the-record adjudication; or
- (iii) A notice of intent to seek judicial review.
- (c) Effect of waiver. If a respondent waives further proceedings, the Final Notice of Violation shall be deemed a Final Order enforceable against the respondent. The respondent must pay any civil penalty set forth in the Notice of Violation within 60 days of the filing of waiver unless the Director grants additional time.
- (d) Effect of request. If a respondent files a request for an on-the-record adjudication, then an enforcement adjudication commences.
- (e) Effect of notice of intent. If a respondent files a Notice of Intent, the Final Notice of Violation shall be deemed a Final Order enforceable against the respondent.
- (f) Amendment. The Director may amend the Final Notice of Violation at any time before an action takes place pursuant to paragraph (b) of this section. An amendment shall add fifteen days to the time periods under paragraph (b) of this section.
- (g) Withdrawal. The Director may withdraw the Final Notice of Violation, or any part thereof, at any time before an action under paragraph (b) of this section.

## §820.26 Enforcement adjudication.

If a respondent files a request for an on-the-record adjudication, an enforcement adjudication is initiated and the Docketing Clerk shall notify the Secretary who shall appoint an Administrative Law Judge to be the Presiding Officer.

## §820.27 Answer.

(a) General. If a respondent files a request for an on-the-record adjudication pursuant to §820.25, a written answer to the Final Notice of Violation shall be filed at the same time the request is filed.

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- (b) Contents of the answer. The answer shall clearly and directly admit, deny or explain each of the factual allegations contained in the Final Notice of Violation with regard to which respondent has any knowledge, information or belief. Where respondent has no knowledge, information or belief of a particular factual allegation and so states, the allegation is deemed denied. The answer shall also state the circumstance or argument that is alleged to constitute the grounds of defense and the facts that respondent intends to place at issue.
- (c) Failure to admit, deny, or explain. Failure of respondent to admit, deny, or explain any material factual allegation contained in the Final Notice of Violation constitutes an admission of the allegation.
- (d) Amendment of the answer. The respondent may amend the answer to the Final Notice of Violation upon motion granted by the Presiding Officer.

## §820.28 Prehearing actions.

- (a) General. The Presiding Officer shall establish a schedule for the adjudication and take such other actions as he determines appropriate to conduct the adjudication in a fair and expeditious manner.
- (b) Prehearing conference. The Presiding Officer, at any time before a hearing begins, may direct the parties and their counsel, or other representatives, to appear at a conference before him to consider, as appropriate:
  - (1) The settlement of the case;
- (2) The simplification of issues and stipulation of facts not in dispute;
- (3) The necessity or desirability of amendments to pleadings:
  - (4) The exchange of exhibits;
- (5) The limitation of the number of expert or other witnesses;
- (6) Setting a time and place for the hearing; and
- (7) Any other matters that may expedite the disposition of the proceeding.
- (c) Exchange of witness lists and documents. Unless otherwise ordered by the Presiding Officer, at least five (5) days before any prehearing conference, each party shall make available to all other parties, as appropriate, the names of the expert and other witnesses it intends to call, together with a brief nar-

- rative summary of their expected testimony, and copies of all documents and exhibits that each party intends to introduce into evidence. Documents and exhibits shall be marked for identification as ordered by the Presiding Officer. Documents that have not been exchanged and witnesses whose names have not been exchanged shall not be introduced into evidence or allowed to testify without permission of the Presiding Officer. The Presiding Officer shall allow the parties reasonable opportunity to review new evidence.
- (d) Prehearing conference order. The Presiding Officer shall prepare an order incorporating any action taken at the conference. The summary shall incorporate any written stipulations or agreements of the parties and all rulings and appropriate orders containing directions to the parties.
- (e) Alternative to prehearing conference. If a prehearing conference is unnecessary or impracticable, the Presiding Officer, on motion or sua sponte, may direct the parties to make appropriate filings with him to accomplish any of the objectives set forth in this section.
- (f) Other discovery. (1) Except as provided by paragraph (c) of this section, further discovery under this section shall be permitted only upon determination by the Presiding Officer:
- (i) That such discovery will not in any way unreasonably delay the proceeding;
- (ii) That the information to be obtained is not otherwise obtainable; and
- (iii) That such information has significant probative value.
- (2) The Presiding Officer shall order depositions upon oral questions only upon a showing of good cause and upon a finding that:
- (i) The information sought cannot be obtained by alternative methods; or
- (ii) There is substantial reason to believe that relevant and probative evidence may otherwise not be preserved for presentation by a witness at the hearing.
- (3) Any party to the proceeding desiring an order to take further discovery shall make a motion therefor. Such a motion shall set forth:
- (i) The circumstances warranting the taking of the discovery;

- (ii) The nature of the information expected to be discovered; and
- (iii) The proposed time and place where it will be taken. If the Presiding Officer determines that the motion should be granted, he shall issue an order for the taking of such discovery together with the conditions and terms thereof.
- (4) When the information sought to be obtained is within the control of one of the parties, failure to comply with an order issued pursuant to this paragraph may lead to the inference that the information to be discovered would be adverse to the party from whom the information was sought, or the issuance of a default order under 820.38.

### § 820.29 Hearing.

(a) General. Except as otherwise provided by this part or the Presiding Officer, a hearing shall be conducted in accordance with the Federal Rules of Evidence. The Presiding Officer shall have the discretion to admit all evidence that is not irrelevant, immaterial, unduly repetitious, or otherwise unreliable or of little probative value, if he believes the evidence might facilitate the fair and expeditious resolution of the proceeding. But such evidence may be reasonably limited by the Presiding Officer in scope and length in order to permit prompt resolution of the proceeding. In the presentation, admission, disposition, and use of evidence, the Presiding Officer shall preserve the confidentiality of trade secrets and other commercial and financial information, and shall protect classified and unclassified controlled nuclear information, as well as any other information protected from public disclosure pursuant to law or regulation. The confidential, trade secret, or classified or otherwise protected status of any information shall not, however, preclude its being introduced into evidence. The Presiding Officer may make such orders as may be necessary to consider such evidence in camera, including the preparation of a supplemental initial decision to address questions of law, fact, or discretion that arise out of that portion of the evidence that is confidential, includes trade secrets, is classified, or is otherwise protected.

- (b) Subpoenas. The attendance of witnesses or the production of documentary evidence may be required by subpoena.
- (c) Examination of witnesses. There shall be no direct oral testimony by witnesses, except as permitted by the Presiding Officer. In lieu of oral testimony, the Presiding Officer shall admit into the record as evidence verified written statements of fact or opinion prepared by a witness. The admissibility of the evidence contained in the statement shall be subject to the same rules as if the testimony were produced under oral examination. Before any such statement is read or admitted into evidence, the witness shall have delivered a copy of the statement to the Presiding Officer and the opposing counsel not less than 10 days prior to the date the witness is scheduled to testify. The witness presenting the statement shall swear or affirm that the statement is true and accurate to the best of his knowledge, information, and belief and shall be subject to appropriate oral cross-examination upon the contents thereof provided such cross-examination is not unduly repetitious.
- (d) Burden of presentation; burden of persuasion. The Director has the burden of going forward with and of proving that the violation occurred as set forth in the Notice of Violation and that the proposed civil penalty is appropriate. Following the establishment of a prima facie case, respondent shall have the burden of presenting and of going forward with any defense to the allegations set forth in the Notice of Violation. Each matter of controversy shall be determined by the Presiding Officer upon a preponderance of the evidence.

## §820.30 Post-hearing filings.

Within fifteen days after the filing of the transcript of the hearing, or within such longer time as may be fixed by the Presiding Officer, any party may file for the consideration of the Presiding Officer, proposed findings of fact, conclusions of law, and a proposed order, together with briefs in support thereof. Reply briefs may be filed within ten days of the filing of briefs. All filings shall be in writing, shall be

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served upon all parties, and shall contain adequate references to the record and authorities relied on.

#### §820.31 Initial decision.

(a) Initial Decision. The Presiding Officer shall file an Initial Decision as soon as practicable after the period for filing reply briefs under 820.30 has expired. The Initial Decision shall contain findings of fact, conclusions regarding all material issues of law or discretion, as well as reasons therefor, any remedy and a proposed Final Order. A party may file comments on an Initial Decision within fifteen days of its filing.

(b) Amount of civil penalty. If the Presiding Officer determines that a violation has occurred and that a civil penalty is appropriate, the Initial Decision shall set forth the dollar amount of the civil penalty. If the Presiding Officer decides to assess a penalty different in amount from the penalty assessed in the Final Notice of Violation, the Initial Decision shall set forth the specific reasons for the increase or decrease.

### §820.32 Final order.

(a) Effect of Initial Decision. The Initial Decision shall be deemed filed as a Final Order thirty days after the filing of the Initial Decision unless the Secretary files a Final Order that modifies the Initial Decision or the Secretary files a Notice of Review.

(b) Notice of review. If the Secretary files a Notice of Review, he shall file a Final Order as soon as practicable after completing his review. The Secretary may, at his discretion, order additional procedures, remand the matter or modify the remedy, including an increase or decrease in the amount of the civil penalty from the amount recommended to be assessed in the Initial Decision.

(c) Payment of a civil penalty. The respondent shall pay the full amount of any civil penalty assessed in the Final Order within thirty (30) days after the Final Order is filed unless otherwise agreed by the parties.

# §820.33 Default order.

(a) Default. The Presiding Officer, upon motion by a party or the filing of a Notice of Intent to issue a Default Order sua sponte, may find a party to

be in default if the party fails to comply with the provisions of this part or an order of the Presiding Officer. The alleged defaulting party shall have ten days to answer the motion or the Notice of Intent. No finding of default shall be made against the respondent unless the Director presents sufficient evidence to the Presiding Officer to establish a prima facie case against the respondent. Default by respondent constitutes, for purposes of the pending action only, an admission of all facts alleged in the Final Notice of Violation and a waiver of respondent's rights to an on-the-record adjudication of such factual allegations. Default by the Director shall result in an order to dismiss the Final Notice of Violation with prejudice.

(b) Effect of default order. When the Presiding Officer finds a default has occurred, he shall file a Default Order against the defaulting party. This order shall constitute an Initial Decision

(c) Contents of a default order. A Default Order shall include findings of fact showing the grounds for the order, conclusions regarding all material issues of fact, law or discretion, and the remedy.

## §820.34 Accelerated decision.

(a) General. The Presiding Officer, upon motion of any party or sua sponte, may at any time render an Accelerated Decision in favor of the Director or the respondent as to all or any part of the adjudication, without further hearing or upon such limited additional evidence, such as affidavits, as he may require, if no genuine issue of material fact exists and a party is entitled to judgment as a matter of law, as to all or any part of the adjudication. In addition, the Presiding Officer, upon motion of the respondent, may render at any time an Accelerated Decision to dismiss an action without further hearing or upon such limited additional evidence as he requires, on the basis of failure to establish a prima facie case or other grounds that show no right to relief on the part of the Director.

(b) Effect of Accelerated Decision. (1) If an Accelerated Decision is rendered as to all the issues and claims in the adjudication, the decision constitutes an

Initial Decision of the Presiding Officer, and shall be filed with the Docketing Clerk.

(2) If an Accelerated Decision is rendered on less than all issues or claims in the adjudication, the Presiding Officer shall determine what material facts exist without substantial controversy and what material facts remain controverted in good faith. He shall thereupon file an interlocutory order specifying the facts that appear substantially uncontroverted, and the issues and claims upon which the adjudication will proceed.

## § 820.35 Ex parte discussions.

At no time after a respondent has requested an on-the-record adjudication of the assessment of a civil penalty shall a DOE Official, or any person who is likely to advise a DOE Official in the decision on the case, discuss ex parte the merits of the proceeding with any interested person outside DOE, with any DOE staff member who performs a prosecutorial or investigative function in such proceeding or a factually related proceeding, or with any representative of such person. Any ex parte memorandum or other communication addressed to a DOE Official during the pendency of the proceeding and relating to the merits thereof, by or on behalf of any party shall be regarded as argument made in the proceeding and shall be served upon all other parties. Any oral communication shall be set forth in a written memorandum and served on all other parties. The other parties shall be given an opportunity to reply to such memorandum or communication.

# §820.36 Filing, form, and service of documents.

- (a) Filing in an enforcement proceeding. The original and three copies of any document in an enforcement proceeding shall be filed with the Docketing Clerk commencing with the filing of a Preliminary Notice of Violation.
- (b) Form of documents in an enforcement proceeding. (1) Except as provided herein, or by order of the DOE Official, there are no specific requirements as to the form of documents filed in an enforcement proceeding.

- (2) The first page of every document shall contain a caption identifying the respondent and the docket number.
- (3) The original of any document (other than exhibits) shall be signed by the person filing it or by his counsel or other representative. The signature constitutes a representation by the signer that he has read the pleading, letter or other document, that to the best of his knowledge, information and belief, the statements made therein are true, and that it is not interposed for delay.
- (4) The initial document filed by any person shall contain his name, address and telephone number. Any changes in this information shall be communicated promptly to the Docketing Clerk and all participants to the proceeding. A person who fails to furnish such information and any changes thereto shall be deemed to have waived his right to notice and service under this part.
- (5) The Docketing Clerk may refuse to file any document that does not comply with this section. Written notice of such refusal, stating the reasons therefor, shall be promptly given to the person submitting the document. Such person may amend and resubmit any document refused for filing.

#### §820.37 Participation in an adjudication.

- (a) Parties. In an enforcement adjudication, the Director and the respondent shall be the only parties; provided that the Presiding Officer may permit a person to intervene as a party if the person demonstrates it could be liable in the event a civil penalty is assessed.
- (b) Appearances. Any party to an enforcement adjudication may appear in person or by counsel or other representative. A partner may appear on behalf of a partnership and an officer may appear on behalf of a corporation. Persons who appear as counsel or other representative must conform to the standards of conduct and ethics required of practitioners before the courts of the United States.
- (c) Amicus Curiae. Persons not parties to an enforcement adjudication who wish to file briefs may so move. The motion shall identify the interest of the person and shall state the reasons

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why the proposed amicus brief is desirable. If the motion is granted, the Presiding Officer shall issue an order setting the time for filing such brief. An amicus curiae is eligible to participate in any briefing after his motion is granted, and shall be served with all briefs, reply briefs, motions, and orders relating to issues to be briefed.

#### §820.38 Consolidation and severance.

(a) Consolidation. The Presiding Officer may, by motion or sua sponte, consolidate any or all matters at issue in two or more enforcement adjudications under this part where there exists common parties or common questions of fact or law, consolidation would expedite and simplify consideration of the issues, and consolidation would not adversely affect the rights of parties engaged in otherwise separate adjudications.

(b) Severance. The Presiding Officer may, by motion or sua sponte, for good cause shown order any enforcement adjudication severed with respect to any or all parties or issues.

## § 820.39 Motions.

(a) General. All motions in an enforcement adjudication except those made orally, shall be in writing, state the grounds therefor with particularity, set forth the relief or order sought, and be accompanied by any affidavit, certificate, other evidence, or legal memorandum relied upon.

(b) Answer to motions. Except as otherwise specified by a particular provision of this part or by the Presiding Officer, a party shall have the right to file a written answer to the motion of another party within 10 days after the filing of such motion. The answer shall be accompanied by any affidavit, certificate, other evidence, or legal memorandum relied upon. If no answer is filed within the designated period, the party may be deemed to have waived any objection to the granting of the motion. The Presiding Officer may set a shorter or longer time for an answer, or make such other orders concerning the disposition of motions as he deems appropriate.

(c) Decision. The Presiding Officer shall rule on a motion as soon as practicable after the filing of the answer.

The decision of the Presiding Officer on any motion shall not be subject to administrative appeal.

## **Subpart C—Compliance Orders**

## §820.40 Purpose and scope.

This subpart provides for the issuance of Compliance Orders to prevent, rectify or penalize violations of the Act, a Nuclear Statute, or a DOE Nuclear Safety Requirement and to require action consistent with the Act, a Nuclear Statute, or a DOE Nuclear Safety Requirement.

### §820.41 Compliance order.

The Secretary may issue to any person involved in a DOE nuclear activity a Compliance Order that:

- (a) Identifies a situation that violates, potentially violates, or otherwise is inconsistent with the Act, a Nuclear Statute, or a DOE Nuclear Safety Requirement:
- (b) Mandates a remedy or other action; and,
- (c) States the reasons for the remedy or other action.

### §820.42 Final order.

A Compliance Order is a Final Order that constitutes a DOE Nuclear Safety Requirement that is effective immediately unless the Order specifies a different effective date.

## §820.43 Appeal.

Within fifteen days of the issuance of a Compliance Order, the recipient of the Order may request the Secretary to rescind or modify the Order. A request shall not stay the effectiveness of a Compliance Order unless the Secretary issues an order to that effect.

## **Subpart D—Interpretations**

## §820.50 Purpose and scope.

This subpart provides for interpretations of the Act, Nuclear Statutes, and DOE Nuclear Safety Requirements. Any written or oral response to any written or oral question which is not provided pursuant to this subpart does not constitute an interpretation and does not provide any basis for action inconsistent with the Act, a Nuclear

Statute, or a DOE Nuclear Safety Requirement.

#### §820.51 General Counsel.

The General Counsel shall be the DOE Official responsible for formulating and issuing any interpretation concerning the Act, a Nuclear Statute or a DOE Nuclear Safety Requirement.

## §820.52 Procedures.

The General Counsel may utilize any procedure which he deems appropriate to comply with his responsibilities under this subpart. All interpretations issued under this subpart must be filed with the Office of the Docketing Clerk which shall maintain a docket for interpretations.

## **Subpart E—Exemption Relief**

#### §820.60 Purpose and scope.

This subpart provides for exemption relief from provisions of DOE Nuclear Safety Requirements at nuclear facili-

## §820.61 Secretarial officer.

The Secretarial Officer who is primarily responsible for the activity to which a DOE Nuclear Safety Requirement relates may grant a temporary or permanent exemption from that requirement as requested by any person subject to its provisions; provided that, the Secretarial Officer responsible for environment, safety and health matters shall exercise this authority with respect to provisions relating to radiological protection of workers, the public and the environment. This authority may not be further delegated.

## §820.62 Criteria.

The criteria for granting an exemption to a DOE Nuclear Safety Requirement are determinations that the exemption:

- (a) Would be authorized by law;
- (b) Would not present an undue risk to public health and safety, the environment, or facility workers;
- (c) Would be consistent with the safe operation of a DOE nuclear facility; and
- (d) Involves special circumstances, including the following:

- (1) Application of the requirement in the particular circumstances conflicts with other requirements; or
- (2) Application of the requirement in the particular circumstances would not serve or is not necessary to achieve its underlying purpose, or would result in resource impacts which are not justified by the safety improvements; or
- (3) Application of the requirement would result in a situation significantly different than that contemplated when the requirement was adopted, or that is significantly different from that encountered by others similarly situated; or
- (4) The exemption would result in benefit to human health and safety that compensates for any detriment that may result from the grant of the exemption; or
- (5) Circumstances exist which would justify temporary relief from application of the requirement while taking good faith action to achieve compliance; or
- (6) There is present any other material circumstance not considered when the requirement was adopted for which it would be in the public interest to grant an exemption.

### §820.63 Procedures.

The Secretarial Officer shall utilize any procedures deemed necessary and appropriate to comply with his responsibilities under this subpart. All exemption decisions must set forth in writing the reasons for granting or denying the exemption, and if granted, the basis for the determination that the criteria in §820.62 have been met and the terms of the exemption. All exemption decisions must be filed with the Office of the Docketing Clerk which shall maintain a docket for exemption decisions issued pursuant to this subpart.

### §820.64 Terms and conditions.

An exemption may contain appropriate terms and conditions including, but not limited to, provisions that:

- (a) Limit its duration;
- (b) Require alternative action;
- (c) Require partial compliance; or
- (d) Establish a schedule for full or partial compliance.

### § 820.65

## §820.65 Implementation plan.

With respect to a DOE Nuclear Safety Requirement for which there is no regulatory provision for an implementation plan or schedule, an exemption may be granted to establish an implementation plan which reasonably demonstrates that full compliance with the requirement will be achieved within two years of the effective date of the requirement without a determination of special circumstances under §820.62(d).

## §820.66 Appeal.

Within fifteen (15) days of the filing of an exemption decision by a Secretarial Officer, the person requesting the exemption may file a Request to Review with the Secretary, or the Secretary may file, sua sponte, a Notice of Review. The Request to Review shall state specifically the respects in which the exemption determination is claimed to be erroneous, the grounds of the request, and the relief requested.

## §820.67 Final order.

If no filing is made under §820.66, an exemption decision becomes a Final Order fifteen (15) days after it is filed by a Secretarial Officer. If filing is made under §820.66, an exemption decision becomes a Final Order 45 days after it is filed by a Secretarial Officer, unless the Secretary stays the effective date or issues a Final Order that modifies the decision.

## **Subpart F—Criminal Penalties**

## §820.70 Purpose and scope.

This subpart provides for the identification of criminal violations of the Act or DOE Nuclear Safety Requirements and the referral of such violations to the Department of Justice.

### §820.71 Standard.

If a person subject to the Act or the DOE Nuclear Safety Requirements has, by act or omission, knowingly and willfully violated, caused to be violated, attempted to violate, or conspired to violate any section of the Act or any applicable DOE Nuclear Safety Requirement, the person shall be subject to criminal sanctions under the Act.

# § 820.72 Referral to the Attorney General.

If there is reason to believe a criminal violation of the Act or the DOE Nuclear Safety Requirements has occurred, DOE may refer the matter to the Attorney General of the United States for investigation or prosecution.

## **Subpart G—Civil Penalties**

SOURCE: 62 FR 46184, Sept. 2, 1997, unless otherwise noted.

### §820.80 Basis and purpose.

This subpart implements the Federal Civil Penalties Inflation Adjustment Act of 1990 (the Act) (Pub. L. 101–410), as amended by the Debt Collection Improvement Act of 1996 (Pub. L. 104–134, section 31001). 28 U.S.C. 2461 note. As amended, the Act requires each agency head to adjust by regulation each civil monetary penalty provided by law within the jurisdiction of the Federal agency by the inflation adjustment specified in 28 U.S.C. 2461 note. This subpart increases the civil penalty amount specified in 42 U.S.C. 2282a.

## §820.81 Amount of penalty.

Any person subject to a penalty under 42 U.S.C. 2282a shall be subject to a civil penalty in an amount not to exceed \$110,000 for each such violation. If any violation under 42 U.S.C. 2282a is a continuing one, each day of such violation shall constitute a separate violation for the purpose of computing the applicable civil penalty.

APPENDIX A TO PART 820—GENERAL STATEMENT OF ENFORCEMENT POLICY

### I. Introduction

(a) This policy statement sets forth the general framework through which the U.S. Department of Energy (DOE) will seek to ensure compliance with its enforceable nuclear safety regulations and orders (hereafter collectively referred to as DOE Nuclear Safety Requirements) and, in particular, exercise the civil penalty authority provided to DOE in the Price Anderson Amendments Act of 1988, 42 U.S.C. 2282a (PAAA). The policy set forth herein is applicable to violations of DOE Nuclear Safety Requirements by DOE contractors who are indemnified under the Price Anderson Act, 42 U.S.C. 2210(d), and their subcontractors and suppliers (hereafter

collectively referred to as DOE contractors) This policy statement is not a regulation and is intended only to provide general guidance to those persons subject to DOE's Nuclear Safety Requirements as specified in the PAAA. It is not intended to establish a "cookbook" approach to the initiation and resolution of situations involving noncompliance with DOE Nuclear Safety Requirements. Rather, DOE intends to consider the particular facts of each noncompliance situation in determining whether enforcement sanctions are appropriate and, if so, the appropriate magnitude of those sanctions. DOE may well deviate from this policy statement when appropriate in the circumstances of particular cases. This policy statement is not applicable to activities and facilities covered under E.O. 12344, 42 U.S.C. 7158 note, pertaining to Naval nuclear propulsion.

- (b) Both the Department of Energy Organization Act, 42 U.S.C. 7101, and the Atomic Energy Act of 1954, as amended, 42 U.S.C. 2011, require DOE to protect the public health and safety, as well as the safety of workers at DOE facilities, in conducting its nuclear activities, and grant DOE broad authority to achieve this goal.
- (c) The DOE goal in the compliance arena is to enhance and protect the radiological health and safety of the public and worker at DOE facilities by fostering a culture among both the DOE line organizations and the contractors that activity seeks to attain and sustain compliance with DOE Nuclear Safety Requirements. The enforcement program and policy have been developed with the express purpose of achieving safety inquisitiveness and voluntary compliance. DOE will establish effective administrative processes and positive incentives to the contractors for the open and prompt identification and reporting of noncompliances, and the initiation of comprehensive corrective actions to resolve both the noncompliance conditions and the program or process deficiencies that led to noncompliance.
- (d) In the development of the DOE enforcement policy, DOE recognizes that the reasonable exercise of its enforcement authority can help to reduce the likelihood of serious incidents. This can be accomplished by providing greater emphasis on a culture of safety in existing DOE operations, and strong incentives for contractors to identify and correct noncompliance conditions and processes in order to protect human health and the environment. DOE wants to facilitate, encourage, and support contractor initiatives for the prompt identification and correction of problems. These initiatives and activities will be duly considered in exercising enforcement discretion.
- (e) The PAAA provides DOE with the authority to compromise, modify, or remit civil penalties with or without conditions. In

implementing the PAAA, DOE will carefully consider the facts of each case of noncompliance and will exercise appropriate discretion in taking any enforcement action. Part of the function of a sound enforcement program is to assure a proper and continuing level of safety vigilance. The reasonable exercise of enforcement authority will be facilitated by the appropriate application of safety requirements to nuclear facilities and by promoting and coordinating the proper contractor and DOE safety compliance attitude toward those requirements.

#### II. Purpose

The purpose of the DOE enforcement program is to promote and protect the radiological health and safety of the public and workers at DOE facilities by:

- a. Ensuring compliance by DOE contractors with applicable DOE Nuclear Safety Requirements.
- b. Providing positive incentives for a DOE contractor's:
- (1) Timely self-identification of nuclear safety deficiencies,
- (2) Prompt and complete reporting of such deficiencies to DOE,
- (3) Root cause analyses of nuclear safety deficiencies.
- (4) Prompt correction of nuclear safety deficiencies in a manner which precludes recurrence, and
- (5) Identification of modifications in practices or facilities that can improve public or worker radiological health and safety.
- c. Deterring future violations of DOE requirements by a DOE contractor.
- d. Encouraging the continuous overall improvement of operations at DOE nuclear facilities.

## III. Statutory Authority

Section 17 of the PAAA makes most DOE contractors covered by the DOE Price-Anderson indemnification system, and their subcontractors and suppliers, subject to civil penalties for violations of applicable DOE nuclear safety rules, regulations and orders. 42 U.S.C. 2282a. Furthermore, section 18 of the PAAA makes all employees of DOE contractors, and their subcontractors and suppliers, subject to criminal penalties, including monetary penalties and imprisonment, for knowing and willful violations of applicable DOE nuclear safety rules, regulations and orders. 42 U.S.C. 2273(c). Suspected, or alleged, criminal violations are referred to the Department of Justice for appropriate action. 42 U.S.C. 2271. Therefore, DOE's enforcement authority and policy will apply only to civil penalties since decisions on criminal violations are the responsibility of the Department of Justice. However, referral of a case to the Department of Justice does

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not preclude DOE from taking civil enforcement action in accordance with this policy statement. Such actions will be coordinated with the Department of Justice to the extent practicable.

#### IV. Responsibilities

The Director, as the principal enforcement officer of the DOE, has been delegated the authority to conduct enforcement investigations and conferences, issue Notices of Violations and proposed civil penalties, and represent DOE in an enforcement adjudication.

#### V. Procedural Framework

(a) 10 CFR part 820 sets forth the procedures DOE will use in exercising its enforcement authority, including the issuance of Notices of Violation and the resolution of contested enforcement actions in the event a DOE contractor elects to litigate contested issues before an Administrative Law Judge.

(b) Pursuant to 10 CFR 820.22, the Director initiates the civil penalty process by issuing a Preliminary Notice of Violation and Proposed Civil Penalty (PNOV). The DOE contractor is required to respond in writing to the PNOV, either admitting the violation and waiving its right to contest the proposed civil penalty and paying it, admitting the violation but asserting the existence of mitigating circumstances that warrant either the total or partial remission of the civil penalty, or denying that the violation has occurred and providing the basis for its belief that the PNOV is incorrect. After evaluation of the DOE contractor's response, the Director of Enforcement may determine that no violation has occurred, that the violation occurred as alleged in the PNOV but that the proposed civil penalty should be remitted in whole or in part, or that the violation occurred as alleged in the PNOV and that the proposed civil penalty is appropriate notwithstanding the asserted mitigating circumstances. In the latter two instances, the Director will issue a Final Notice of Violation (FNOV) or an FNOV and Proposed Civil

(c) An opportunity to challenge a proposed civil penalty either before an Administrative Law Judge or in a United States District Court is provided in the PAAA, 42 U.S.C. 2282a(c), and 10 CFR part 820 sets forth the procedures associated with an administrative hearing, should the contractor opt for that method of challenging the proposed civil penalty. A formal administrative enforcement proceeding pursuant to section 554 of the Administrative Procedures Act is not initiated until the DOE contractor against which a civil penalty has been proposed requests an administrative hearing rather than waiving its right to contest the civil penalty and paying it. However, it should be emphasized that DOE encourages the voluntary

resolution of a noncompliance situation at any time, either informally prior to the initiation of an administrative proceeding or by consent order after a formal proceeding has begun.

#### VI. Severity of Violations

(a) Violations of DOE Nuclear Safety Requirements have varying degrees of safety significance. Therefore, the relative importance of each violation must be identified as the first step in the enforcement process. Violations of DOE Nuclear Safety Requirements are categorized in three levels of severity to identify their relative safety significance, and Notices of Violation are issued for noncompliance which, when appropriate, propose civil penalties commensurate with the severity level of the violation(s) involved.

(b) Severity Level I has been assigned to violations that are the most significant and Severity Level III violations are the least significant. Severity Level I is reserved for violations of DOE Nuclear Safety Requirements which involve actual or high potential for adverse impact on the safety of the public or workers at DOE facilities. Severity level II violations represent a significant lack of attention or carelessness toward responsibilities of DOE contractors for the protection of public or worker safety which could, if uncorrected, potentially lead to an adverse impact on public or worker safety at DOE facilities. Severity Level III violations are less serious but are of more than minor concern: i.e., if left uncorrected, they could lead to a more serious concern. In some cases, violations may be evaluated in the aggregate and a single severity level assigned for a group of violations.

(c) Isolated minor violations of DOE Nuclear Safety Requirements will not be the subject of formal enforcement action through the issuance of a Notice of Violation. However, these minor violations will be identified as noncompliances and tracked to assure that appropriate corrective/remedial action is taken to prevent their recurrence, and evaluated to determine if generic or specific problems exist. If circumstances demonstrate that a number of related minor noncompliances have occurred in the same time frame (e.g. all identified during the same assessment), or that related minor noncompliances have recurred despite prior notice to the DOE contractor and sufficient opportunity to correct the problem, DOE may choose in its discretion to consider the noncompliances in the aggregate as a more serious violation warranting a Severity Level III designation, a Notice of Violation and a possible civil penalty.

(d) The severity level of a violation will be dependent, in part, on the degree of culpability of the DOE contractor with regard to the violation. Thus, inadvertent or negligent

violations will be viewed differently than those in which there is gross negligence, deception or wilfulness. In addition to the significance of the underlying violation and level of culpability involved, DOE will also consider the position, training and experience of the person involved in the violation. Thus, for example, a violation may be deemed to be more significant if a senior manager of an organization is involved rather than a foreman or non-supervisory employee. In this regard, while management involvement, direct or indirect, in a violation may lead to an increase in the severity level of a violation and proposed civil penalty, the lack of such involvement will not constitute grounds to reduce the severity level of a violation or mitigate a civil penalty. Allowance of mitigation in such circumstances could encourage lack of management involvement in DOE contractor activities and a decrease in protection of public and worker health and safety.

(e) Other factors which will be considered by DOE in determining the appropriate severity level of a violation are the duration of the violation, the past performance of the DOE contractor in the particular activity area involved, whether the DOE contractor had prior notice of a potential problem, and whether there are multiple examples of the violation in the same time frame rather than an isolated occurrence. The relative weight given to each of these factors in arriving at the appropriate severity level will be dependent on the circumstances of each case.

(f) DOE expects contractors to provide full, complete, timely, and accurate information and reports. Accordingly, the severity level of a violation involving either failure to make a required report or notification to the DOE or an untimely report or notification, will be based upon the significance of, and the circumstances surrounding, the matter that should have been reported. A contractor will not normally be cited for a failure to report a condition or event unless the contractor was actually aware, or should have been aware of the condition or event which it failed to report.

### VII. Enforcement Conferences

(a) Should DOE determine, after completion of all assessment and investigation activities associated with a potential or alleged violation of DOE Nuclear Safety Requirements, that there is a reasonable basis to believe that a violation has actually occurred, and the violation may warrant a civil penalty or issuance of an enforcement order, DOE will normally hold an enforcement conference with the DOE contractor involved prior to taking enforcement action. DOE may also elect to hold an enforcement conference for potential violations which would not ordinarily warrant a civil penalty or en-

forcement order but which could, if repeated, lead to such action. The purpose of the enforcement conference is to assure the accuracy of the facts upon which the preliminary determination to consider enforcement action is based, discuss the potential or alleged violations, their significance and causes, and the nature of and schedule for the DOE contractor's corrective actions, determine whether there are any aggravating or mitigating circumstances, and obtain other information which will help determine the appropriate enforcement action.

(b) DOE contractors will be informed prior to a meeting when that meeting is considered to be an enforcement conference. Such conferences are informal mechanisms for candid pre-decisional discussions regarding potential or alleged violations and will not normally be open to the public. In circumstances for which immediate enforcement action is necessary in the interest of public or worker health and safety, such action will be taken prior to the enforcement conference, which may still be held after the necessary DOE action has been taken

## $VIII.\ Enforcement\ Letter$

a. In cases where DOE has decided not to issue a Preliminary Notice of Violation, DOE may send an Enforcement Letter to the contractor signed by the Director. The Enforcement Letter is intended to communicate the basis of the decision not to pursue further enforcement action for a noncompliance. The Enforcement Letter is intended to direct contractors to the desired level of nuclear safety performance. It may be used when DOE concludes the specific noncompliance at issue is not of the level of significance warranted for issuance of a Preliminary Notice of Violation (PNOV). Even where a noncompliance may be significant, the Enforcement Letter recognizes that the contractor's actions may have attenuated the need for further enforcement action. The Letter will typically recognize how the contractor handled the circumstances surrounding the noncompliance and address additional areas requiring the contractor's attention and DOE's expectations for corrective action. The Enforcement Letter notifies the contractor that, when verification is received that corrective actions have been implemented, DOE will close the enforcement action.

b. In many investigations, an Enforcement Letter may not be required. When DOE decides that a contractor has appropriately corrected a noncompliance or that the significance of the noncompliance is sufficiently low, it may close out an investigation simply through an annotation in the DOE Noncompliance Tracking System (NTS). See Guidance for Identifying, Reporting and Tracking Nuclear Safety Noncompliances,

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and Addendum, Noncompliance Tracking System Users Manual, DOE-HDBK-1089-95, July 1995. A closeout of a noncompliance with or without an Enforcement Letter may only take place after DOE has confirmed that corrective actions have been completed.

#### IX. Enforcement Actions

a. This section describes the enforcement sanctions available to DOE and specifies the conditions under which each may be used. The basic sanctions are Notices of Violation and civil penalties. In determining whether to impose enforcement sanctions, DOE will consider enforcement actions taken by other Federal or State regulatory bodies having concurrent jurisdiction, e.g., instances which involve NRC licensed entities which are also DOE contractors, and in which the NRC exercises its own enforcement authority.

b. The nature and extent of the enforcement action is intended to reflect the seriousness of the violation involved. For the vast majority of violations for which DOE assigns severity levels as described previously, a Notice of Violation will be issued, requiring a formal response from the recipient describing the nature of and schedule for corrective actions it intends to take regarding the violation. Administrative actions, such as determination of award fees where DOE contracts provide for such determinations, will be considered separately from any civil penalties that may be imposed under this Enforcement Policy. Likewise, imposition of a civil penalty will be based on the circumstances of each case, unaffected by any award fee determination.

### 1. Notice of Violation

a. A Notice of Violation (either a Preliminary or Final Notice) is a document setting forth the conclusion of the DOE Office of Nuclear Safety that one or more violations of DOE Nuclear Safety Requirements has occurred. Such a notice normally requires the recipient to provide a written response which may take one of several positions described in Section V of this policy statement. In the event that the recipient concedes the occurrence of the violation, it is required to describe corrective steps which have been taken and the results achieved; remedial actions which will be taken to prevent recurrence; and the date by which full compliance will be achieved.

b. DOE will use the Notice of Violation as the standard method for formalizing the existence of a violation and, in appropriate cases as described in this section, the notice of violation will be issued in conjunction with the proposed imposition of a civil penalty. In certain limited instances, as described in this section, DOE may refrain from the issuance of an otherwise appropriate Notice of Violation. However, a Notice

of Violation will virtually always be issued for willful violations, if past corrective actions for similar violations have not been sufficient to prevent recurrence and there are no other mitigating circumstances, or if the circumstances otherwise warrant increasing Severity Level III violations to a higher severity level.

c. DOE contractors are not ordinarily cited for violations resulting from matters not within their control, such as equipment failures that were not avoidable by reasonable quality assurance measures, proper maintenance, or management controls. With regard to the issue of funding, however, DOE does not consider an asserted lack of funding to be a justification for noncompliance with DOE Nuclear Safety Requirements.

Should a contractor believe that a shortage of funding precludes it from achieving compliance with one or more DOE Nuclear Safety Requirements, it must pursue one of two alternative courses of action. First, it may request, in writing, an exemption from the requirement(s) in question from the appropriate Secretarial Officer (SO), explicitly addressing the criteria for exemptions set forth in 10 CFR 820.62. A justification for continued operation for the period during which the exemption request is being considered should also be submitted. In such a case, the SO must grant or deny the request in writing, explaining the rationale for the decision. Second, if the criteria for approval of an exemption cannot be demonstrated, the contractor, in conjunction with the SO, must take appropriate steps to modify, curtail, suspend or cease the activities which cannot be conducted in compliance with the DOE Nuclear Safety Requirement(s) in question.

- d. DOE expects the contractors which operate its facilities to have the proper management and supervisory systems in place to assure that all activities at DOE facilities, regardless of who performs them, are carried out in compliance with all DOE Nuclear Safety Requirements. Therefore, contractors are normally held responsible for the acts of their employees and subcontractor employees in the conduct of activities at DOE facilities. Accordingly, this policy should not be construed to excuse personnel errors.
- e. Finally, certain contractors are explicitly exempted from the imposition of civil penalties pursuant to the provisions of the PAAA, 42 U.S.C. 2282a(d), for activities conducted at specified facilities. See 10 CFR 820.20(c). In addition, in fairness to non-profit educational institutions, the Department has determined that they should be likewise exempted. See 10 CFR 820.20(d). However, compliance with DOE Nuclear Safety Requirements is no less important for these facilities than for other facilities in the DOE complex which work with, store or dispose of radioactive materials. Indeed, the exempted

contractors conduct some of the most important nuclear-related research and development activities performed for the Department. Therefore, in order to serve the purposes of this enforcement policy and to emphasize the importance the Department places on compliance with all of its nuclear safety requirements, DOE intends to issue Notices of Violation to the exempted contractors and non-profit educational institutions when appropriate under this policy statement, notwithstanding the statutory and regulatory exemptions from the imposition of civil penalties.

#### 2. Civil Penalty

- a. A civil penalty is a monetary penalty that may be imposed for violations of applicable DOE Nuclear Safety Requirements, including Compliance Orders. See 10 CFR 820.20(b). Civil penalties are designed to emphasize the need for lasting remedial action, deter future violations, and underscore the importance of DOE contractor self-identification, reporting and correction of violations of DOE Nuclear Safety Requirements.
- b. Absent mitigating circumstances as described below, or circumstances otherwise warranting the exercise of enforcement discretion by DOE as described in this section. civil penalties will be proposed for Severity Level I and II violations. Civil penalties will be proposed for Severity Level III violations which are similar to previous violations for which the contractor did not take effective corrective action. "Similar" violations are those which could reasonably have been expected to have been prevented by corrective action for the previous violation. DOE normally considers civil penalties only for similar Severity Level III violations that occur over a reasonable period of time to be determined at the discretion of DOE.
- c. DOE will impose different base level civil penalties considering the severity level of the violation(s) by Price-Anderson indemnified contractors. Table 1 shows the daily base civil penalties for the various categories of severity levels. However, as described above in Section IV, the imposition of civil penalties will also take into account the gravity, circumstances, and extent of the violation or violations and, with respect to the violator, any history of prior similar violations and the degree of culpability and knowledge.
- d. Regarding the factor of ability of DOE contractors to pay the civil penalties, it is not DOE's intention that the economic impact of a civil penalty be such that it puts a DOE contractor out of business. Contract termination, rather than civil penalties, is used when the intent is to terminate these activities. The deterrent effect of civil penaltics of the contractor of the contracto

alties is best served when the amount of such penalties takes this factor into account. However, DOE will evaluate the relationship of affiliated entities to the contractor (such as parent corporations) when it asserts that it cannot pay the proposed penalty.

e. DOE will review each case involving a proposed civil penalty on its own merits and adjust the base civil penalty values upward or downward appropriately. As indicated above, Table 1 identifies the daily base civil penalty values for different severity levels. After considering all relevant circumstances, civil penalties may be escalated or mitigated based upon the adjustment factors described below in this section. In no instance will a civil penalty for any one violation exceed the statutory limit. However, it should be emphasized that if the DOE contractor is or should have been aware of a violation and has not reported it to DOE and taken corrective action despite an opportunity to do so. each day the condition existed may be considered as a separate violation and, as such, subject to a separate civil penalty. Further, as described in this section, the duration of a violation will be taken into account in determining the appropriate severity level of the base civil penalty.

TABLE 1.—SEVERITY LEVEL BASE CIVIL PENALTIES

Severity level	Base civil penalty amount (percentage of maximum civil penalty per violation per day)
I	100
II	50
III	10

## 3. Adjustment Factors

a. DOE's enforcement program is not an end in itself, but a means to achieve compliance with DOE Nuclear Safety Requirements, and civil penalties are not collected to swell the coffers of the United States Treasury, but to emphasize the importance of compliance and to deter future violations. The single most important goal of the DOE enforcement program is to encourage early identification and reporting of nuclear safety deficiencies and violations of DOE Nuclear Safety Requirements by the DOE contractors themselves rather than by DOE, and the prompt correction of any deficiencies and violations so identified. DOE believes

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that DOE contractors are in the best position to identify and promptly correct noncompliance with DOE Nuclear Safety Requirements. DOE expects that these contractors should have in place internal compliance programs which will ensure the detection, reporting and prompt correction of nuclear safety-related problems that may constitute, or lead to, violations of DOE Nuclear Safety Requirements before, rather than after, DOE has identified such violations. Thus, DOE contractors will almost always be aware of nuclear safety problems before they are discovered by DOE. Obviously, public and worker health and safety is enhanced if deficiencies are discovered (and promptly corrected) by the DOE contractor, rather than by DOE, which may not otherwise become aware of a deficiency until later on, during the course of an inspection, performance assessment, or following an incident at the facility. Early identification of nuclear safetyrelated problems by DOE contractors has the added benefit of allowing information which could prevent such problems at other facilities in the DOE complex to be shared with all appropriate DOE contractors.

- b. Pursuant to this enforcement philosophy, DOE will provide substantial incentive for the early self-identification, reporting and prompt correction of problems which constitute, or could lead to, violations of DOE Nuclear Safety Requirements. Thus, application of the adjustment factors set forth below may result in no civil penalty being assessed for violations that are identified, reported, and promptly and effectively corrected by the DOE contractor.
- c. On the other hand, ineffective programs for problem identification and correction are unacceptable. Thus, for example, where a contractor fails to disclose and promptly correct violations of which it was aware or should have been aware, substantial civil penalties are warranted and may be sought, including the assessment of civil penalties for continuing violations on a per day basis.
- d. Further, in cases involving willfulness, flagrant DOE-identified violations, repeated poor performance in an area of concern, or serious breakdown in management controls, DOE intends to apply its full statutory enforcement authority where such action is warranted.

### 4. Identification and Reporting

Reduction of up to 50% of the base civil penalty shown in Table 1 may be given when a DOE contractor identifies the violation and promptly reports the violation to the DOE. In weighing this factor, consideration will be given to, among other things, the opportunity available to discover the violation, the ease of discovery and the promptness and completeness of any required report. No consideration will be given to a reduction in penalty if the DOE contractor does not take

prompt action to report the problem to DOE upon discovery, or if the immediate actions necessary to restore compliance with DOE Nuclear Safety Requirements or place the facility or operation in a safe configuration are not taken.

#### 5. Self-Identification and Tracking Systems

a. DOE strongly encourages contractors to self-identify noncompliances with DOE Nuclear Safety Requirements before the noncompliances lead to a string of similar and potentially more significant events or consequences. When a contractor identifies a noncompliance through its own self-monitoring activity, DOE will normally allow a reduction in the amount of civil penalties, regardless of whether prior opportunities existed for contractors to identify the noncompliance. DOE will normally not allow a reduction in civil penalties for self-identification if significant DOE intervention was required to induce the contractor to report a noncompliance.

b. Self-identification of a noncompliance is possibly the single most important factor in considering a reduction in the civil penalty amount. Consideration of self-identification is linked to, among other things, whether prior opportunities existed to discover the violation, and if so, the age and number of such opportunities; the extent to which proper contractor controls should have identified or prevented the violation; whether discovery of the violation resulted from a contractor's self-monitoring activity: the extent of DOE involvement in discovering the violation or in prompting the contractor to identify the violation; and the promptness and completeness of any required report. Selfidentification is also considered by DOE in deciding whether to pursue an investigation.

c. DOE has established a voluntary Noncompliance Tracking System (NTS) which allows contractors to elect to report noncompliances. In the guidance document supporting the NTS (DOE-HDBK-1089-95), DOE has established reporting thresholds for reporting items of noncompliance of potentially greater safety significance into the NTS. Contractors may, however, use their own self-tracking systems to track noncompliances below the reporting threshold. This self-tracking is considered to be acceptable self-reporting as long as DOE has access to the contractor's system and the contractor's system notes the item as a noncompliance with a DOE Nuclear Safety Requirement. For noncompliances that are below the reportability thresholds. DOE will credit contractor self-tracking as representing selfreporting. If an item is not reported in NTS but only tracked in the contractor's system and DOE subsequently finds the facts and their safety significance have been significantly mischaracterized, DOE will not credit

the internal tracking as representing appropriate self-reporting.

#### 6. Self-Disclosing Events

- a. DOE expects contractors to demonstrate acceptance of responsibility for safety of the public, workers, and the environment and to proactively identify noncompliance conditions in their programs and processes. In deciding whether to reduce any civil penalty proposed for violations revealed by the occurrence of a self-disclosing event, DOE will consider the ease with which a contractor could have discovered the noncompliance and the prior opportunities that existed to discover the noncompliance. When the occurrence of an event discloses noncompliances that the contractor could have or should have identified before the event, DOE will not generally allow a reduction in civil penalties for self-identification, even if the underlying noncompliances were reported to DOE. If a contractor simply reacts to events that disclose potentially significant consequences or downplays noncompliances which did not result in significant consequences to workers, the public, and the environment, such contractor actions do not lead to the improvement in nuclear safety contemplated by the Act.
- b. The key test is whether the contractor reasonably could have detected any of the underlying noncompliances that contributed to the event. Examples of events that provide opportunities to identify noncompliances include, but are not limited to:
- (1) prior notifications of potential problems such as those from DOE operational experience publications or vendor equipment deficiency reports;
- (2) normal surveillance, quality assurance assessments, and post-maintenance testing;
- (3) readily observable parameter trends; and
- (4) contractor employee or DOE observations of potential safety problems. Failure to utilize these types of events and activities to address noncompliances may result in higher civil penalty assessments or a DOE decision not to reduce civil penalty amounts.
- c. For example, a critique of the event might find that one of the root causes was a lack of clarity in a Radiation Work Permit (RWP) which led to improper use of anti-contamination clothing and resulting uptake of contamination by the individual. DOE could subsequently conclude that no reduction in civil penalties for self-identification should be allowed since the event itself disclosed the inadequate RWP and the contractor could have, through proper independent assessment or by fostering a questioning attitude by its workers and supervisors, identified the inadequate RWP before the event.
- d. Alternatively, if, following a self-disclosing event, DOE found that the contractor's processes and procedures were adequate

and the contractor's personnel generally behaved in a manner consistent with the contractor's processes and procedures, DOE could conclude that the contractor could not have been reasonably expected to find the single procedural noncompliance that led to the event and thus, might allow a reduction in civil penalties.

#### 7. Corrective Action To Prevent Recurrence

The promptness (or lack thereof) and extent to which the DOE contractor takes corrective action, including actions to identify root cause and prevent recurrence, may result in up to a 50% increase or decrease in the base civil penalty shown in Table 1. For example, very extensive corrective action may result in reducing the proposed civil penalty as much as 50% of the base value shown in Table 1. On the other hand, the civil penalty may be increased as much as 50% of the base value if initiation or corrective action is not prompt or if the corrective action is only minimally acceptable. In weighing this factor, consideration will be given to, among other things, the appropriateness, timeliness and degree of initiative associated with the corrective action. The comprehensiveness of the corrective action will also be considered, taking into account factors such as whether the action is focused narrowly to the specific violation or broadly to the general area of concern.

## 8. DOE's Contribution to a Violation

There may be circumstances in which a violation of a DOE Nuclear Safety Requirement results, in part or entirely, from a direction given by DOE personnel to a DOE contractor to either take, or forbear from taking an action at a DOE facility. In such cases, DOE may refrain from issuing an NOV, and may mitigate, either partially or entirely, any proposed civil penalty, provided that the direction upon which the DOE contractor relied is documented in writing. contemporaneously with the direction. It should be emphasized, however, that pursuant to 10 CFR 820.50, no interpretation of a DOE Nuclear Safety Requirement is binding upon DOE unless issued in writing by the General Counsel. Further, as discussed in this section of this policy statement, lack of funding by itself will not be considered as a mitigating factor in enforcement actions.

## 9. Exercise of Discretion

Because DOE wants to encourage and support DOE contractor initiative for prompt self-identification, reporting and correction of problems, DOE may exercise discretion as follows:

a. In accordance with the previous discussion, DOE may refrain from issuing a civil penalty for a violation which meets all of the following criteria:

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- (1) The violation is promptly identified and reported to DOE before DOE learns of it.
- (2) The violation is not willful or a violation that could reasonably be expected to have been prevented by the DOE contractor's corrective action for a previous violation.
- (3) The DOE contractor, upon discovery of the violation, has taken or begun to take prompt and appropriate action to correct the violation.
- (4) The DOE contractor has taken, or has agreed to take, remedial action satisfactory to DOE to preclude recurrence of the violation and the underlying conditions which caused it.
- b. DOE may refrain from proposing a civil penalty for a violation involving a past problem, such as in engineering design or installation, that meets all of the following criteria:
- (1) It was identified by a DOE contractor as a result of a formal effort such as a Safety System Functional Inspection, Design Reconstitution program, or other program that has a defined scope and timetable which is being aggressively implemented and reported:
- (2) Comprehensive corrective action has been taken or is well underway within a reasonable time following identification; and
- (3) It was not likely to be identified by routine contractor efforts such as normal surveillance or quality assurance activities.
- c. DOE will not issue a Notice of Violation for cases in which the violation discovered by the DOE contractor cannot reasonably be linked to the conduct of that contractor in the design, construction or operation of the DOE facility involved, provided that prompt and appropriate action is taken by the DOE contractor upon identification of the past violation to report to DOE and remedy the problem.
- d. DOE may refrain from issuing a Notice of Violation for an item of noncompliance that meets all of the following criteria:
- (1) It was promptly identified by the DOE nuclear entity:
- (2) It is normally classified at a Severity Level  ${\rm III};$
- (3) It was promptly reported to DOE;
- (4) Prompt and appropriate corrective action will be taken, including measures to prevent recurrence; and
- (5) It was not a willful violation or a violation that could reasonably be expected to have been prevented by the DOE contractor's corrective action for a previous violation.
- e. DOE may refrain from issuing a Notice of Violation for an item of noncompliance that meets all of the following criteria:
- (1) It was an isolated Severity Level III violation identified during a Tiger Team inspection conducted by the Office of Environment, Safety and Health, during an inspection or integrated performance assessment

- conducted by the Office of Nuclear Safety, or during some other DOE assessment activity.
- (2) The identified noncompliance was properly reported by the contractor upon discovery.
- (3) The contractor initiated or completed appropriate assessment and corrective actions within a reasonable period, usually before the termination of the onsite inspection or integrated performance assessment.
- (4) The violation is not willful or one which could reasonably be expected to have been prevented by the DOE contractor's corrective action for a previous violation.
- f. In situations where corrective actions have been completed before termination of an inspection or assessment, a formal response from the contractor is not required and the inspection or integrated performance assessment report serves to document the violation and the corrective action. However, in all instances, the contractor is required to report the noncompliance through established reporting mechanisms so the noncompliance issue and any corrective actions can be properly tracked and monitored.
- g. If DOE initiates an enforcement action for a violation at a Severity Level II or III and, as part of the corrective action for that violation, the DOE contractor identifies other examples of the violation with the same root cause, DOE may refrain from initiating an additional enforcement action. In determining whether to exercise this discretion, DOE will consider whether the DOE contractor acted reasonably and in a timely manner appropriate to the safety significance of the initial violation, the comprehensiveness of the corrective action, whether the matter was reported, and whether the additional violation(s) substantially change the safety significance or character of the concern arising out of the initial vio-
- h. It should be emphasized that the preceding paragraphs are solely intended to be examples indicating when enforcement discretion may be exercised to forego the issuance of a civil penalty or, in some cases, the initiation of any enforcement action at all. However, notwithstanding these examples, a civil penalty may be proposed or Notice of Violation issued when, in DOE's judgment, such action is warranted on the basis of the circumstances of an individual case.

#### X. Procurement of Products or Services and the Reporting of Defects

(a) DOE's enforcement policy is also applicable to subcontractors and suppliers to DOE Price-Anderson indemnified contractors. Through procurement contracts with these DOE contractors, subcontractors and suppliers are generally required to have quality assurance programs that meet applicable DOE Nuclear Safety Requirements. Suppliers of products or services provided in support of

or for use in DOE facilities operated by Price-Anderson indemnified contractors are subject to certain requirements designed to ensure the high quality of the products or services supplied to DOE facilities that could, if deficient, adversely affect public or worker safety. DOE regulations require that DOE be notified whenever a DOE contractor obtains information reasonably indicating that a DOE facility (including its structures, systems and components) which conducts activities subject to the provisions of the Atomic Energy Act of 1954, as amended or DOE Nuclear Safety Requirements either fails to comply with any provision of the Atomic Energy Act or any applicable DOE Nuclear Safety Requirement, or contains a defect or has been supplied with a product or service which could create or result in a substantial safety hazard.

(b) DOE will conduct audits and assessments of its contractors to determine whether they are ensuring that subcontractors and suppliers are meeting their contractual obligations with regard to quality of products or services that could have an adverse effect on public or worker radiological safety, and ensure that DOE contractors have in place adequate programs to determine whether products or services supplied to them for DOE facilities meet applicable DOE requirements and that substandard products or services are not used by Price-Anderson indemnified contractors at the facilities they operate for DOE. As part of the effort of ensuring that contractual and regulatory requirements are met, DOE may also audit or assess subcontractors and suppliers. These assessments could include examination of the quality assurance programs and their implementation by the subcontractors and suppliers through examination of product quality.

(c) When audits or assessments determine that subcontractors or suppliers have failed to comply with applicable DOE Nuclear Safety Requirements or to fulfill contractual commitments designed to ensure the quality of a safety significant product or service, enforcement action will be taken. Notices of Violations and civil penalties will be issued, as appropriate, for DOE contractor failures to ensure that their subcontractors and suppliers provide products and services that meet applicable DOE requirements. Notices of Violations and civil penalties will also be issued to subcontractors and suppliers of DOE contractors which fail to comply with the reporting requirements set forth in any other applicable DOE Nuclear Safety Requirements.

### XI. Inaccurate and Incomplete Information

(a) A violation of DOE Nuclear Safety Requirements for failure to provide complete and accurate information to DOE, 10 CFR 820.11, can result in the full range of enforce-

ment sanctions, depending upon the circumstances of the particular case and consideration of the factors discussed in this section. Violations involving inaccurate or incomplete information or the failure to provide significant information identified by a DOE contractor normally will be categorized based on the guidance in section VI, "Severity of Violations".

(b) DOE recognizes that oral information may in some situations be inherently less reliable than written submittals because of the absence of an opportunity for reflection and management review. However, DOE must be able to rely on oral communications from officials of DOE contractors concerning significant information. In determining whether to take enforcement action for an oral statement, consideration will be given to such factors as

(b)(1) The degree of knowledge that the communicator should have had regarding the matter in view of his or her position, training, and experience:

(b)(2) The opportunity and time available prior to the communication to assure the accuracy or completeness of the information;

(b)(3) The degree of intent or negligence, if any, involved;

(b)(4) The formality of the communication; (b)(5) The reasonableness of DOE reliance on the information;

(b)(6) The importance of the information that was wrong or not provided; and

(b)(7) The reasonableness of the explanation for not providing complete and accurate information

(c) Absent gross negligence or willfulness, an incomplete or inaccurate oral statement normally will not be subject to enforcement action unless it involves significant information provided by an official of a DOE contractor. However, enforcement action may be taken for an unintentionally incomplete or inaccurate oral statement provided to DOE by an official of a DOE contractor or others on behalf of the DOE contractor, if a record was made of the oral information and provided to the DOE contractor thereby permitting an opportunity to correct the oral information, such as if a transcript of the communication or meeting summary containing the error was made available to the DOE contractor and was not subsequently corrected in a timely manner.

(d) When a DOE contractor has corrected inaccurate or incomplete information, the decision to issue a citation for the initial inaccurate or incomplete information normally will be dependent on the circumstances, including the ease of detection of the error, the timeliness of the correction, whether DOE or the DOE contractor identified the problem with the communication, and whether DOE relied on the information prior to the correction. Generally, if the

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matter was promptly identified and corrected by the DOE contractor prior to reliance by DOE, or before DOE raised a question about the information, no enforcement action will be taken for the initial inaccurate or incomplete information. On the other hand, if the misinformation is identified after DOE relies on it, or after some question is raised regarding the accuracy of the information, then some enforcement action normally will be taken even if it is in fact corrected.

- (e) If the initial submission was accurate when made but later turns out to be erroneous because of newly discovered information or advance in technology, a citation normally would not be appropriate if, when the new information became available, the initial submission was corrected.
- (f) The failure to correct inaccurate or incomplete information that the DOE contractor does not identify as significant normally will not constitute a separate violation. However, the circumstances surrounding the failure to correct may be considered relevant to the determination of enforcement action for the initial inaccurate or incomplete statement. For example, an unintentionally inaccurate or incomplete submission may be treated as a more severe matter if a DOE contractor later determines that the initial submission was in error and does not correct it or if there were clear opportunities to identify the error.

#### XII. Secretarial Notification and Consultation

The Secretary will be provided written notification of all enforcement actions involving proposed civil penalties. The Secretary will be consulted prior to taking action in the following situations:

- a. Proposals to impose civil penalties in an amount equal to or greater than the statutory limit;
- b. Any proposed enforcement action that involves a Severity Level I violation;
- c. Any action the Director believes warrants the Secretary's involvement; or
- d. Any proposed enforcement action on which the Secretary asks to be consulted.

#### XIII. Whistleblower Enforcement Policy

a. DOE contractors may not retaliate against any employee because the employee has disclosed information, participated in activities or refused to participate in activities listed in 10 CFR 708.5 (a)—(c) as provided by 10 CFR 708.43. DOE contractor employees may seek remedial relief for allegations of retaliation from the DOE Office of Hearings and Appeals (OHA) under 10 CFR part 708 (Part 708) or from the Department of Labor (DOL) under sec. 211 of the Energy Reorganization Act (sec. 211), implemented in 29 CFR part 24.

- b An act of retaliation by a DOE contractor, proscribed under 10 CFR 708.43, that results from a DOE contractor employee's involvement in an activity listed in 10 CFR 708.5(a)-(c) concerning nuclear safety in connection with a DOE nuclear activity, may constitute a violation of a DOE Nuclear Safety Requirement under 10 CFR part 820 (Part 820). The retaliation may be subject to the investigatory and adjudicatory procedures of both Part 820 and Part 708. The same facts that support remedial relief to employees under Part 708 may be used by the Director of the Office of Investigation and Enforcement (Director) to support issuance of a Preliminary Notice of Violation (PNOV), a Final Notice of Violation (FNOV), and assessment of civil penalties. 10 CFR 820.24-
- c. When an employee files a complaint with DOL under sec. 211 and DOL collects information relating to allegations of DOE contractor retaliation against a contractor employee for actions taken concerning nuclear safety, the Director may use this information as a basis for initiating enforcement action by issuing a PNOV. 10 CFR 820.24. DOE may consider information collected in the DOL proceedings to determine whether the retaliation may be related to a contractor employee's action concerning a DOE nuclear activity.
- d. The Director may also use DOL information to support the determination that a contractor has violated or is continuing to violate the nuclear safety requirements against contractor retaliation and to issue civil penalties or other appropriate remedy in a FNOV. 10 CFR 820.25.
- e. The Director will have discretion to give appropriate weight to information collected in DOL and OHA investigations and proceedings. In deciding whether additional investigation or information is needed, the Director will consider the extent to which the facts in the proceedings have been adjudicated as well as any information presented by the contractor. In general, the Director may initiate an enforcement action without additional investigation or information.
- f. Normally, the Director will await the completion of a Part 708 proceeding before OHA or a sec. 211 proceeding at DOL before deciding whether to take any action, including an investigation under Part 820 with respect to alleged retaliation. A Part 708 or sec. 211 proceeding would be considered completed when there is either a final decision or a settlement of the retaliation complaint, or no additional administrative action is available.
- g. DOE encourages its contractors to cooperate in resolving whistleblower complaints raised by contractor employees in a prompt and equitable manner. Accordingly,

in deciding whether to initiate an enforcement action, the Director will take into account the extent to which a contractor cooperated in a Part 708 or sec. 211 proceeding, and, in particular, whether the contractor resolved the matter promptly without the need for an adjudication hearing.

- h. In considering whether to initiate an enforcement action and, if so, what remedy is appropriate, the Director will also consider the egregiousness of the particular case including the level of management involved in the alleged retaliation and the specificity of the acts of retaliation.
- i. In egregious cases, the Director has the discretion to proceed with an enforcement action, including an investigation with respect to alleged retaliation irrespective of the completion status of the Part 708 or sec. 211 proceeding. Egregious cases would include: (1) Cases involving credible allegations for willful or intentional violations of DOE rules, regulations, orders or Federal statutes which, if proven, would warrant criminal referrals to the U.S. Department of Justice for prosecutorial review; and (2) cases where an alleged retaliation suggests widespread, high-level managerial involvement and raises significant public health and safety concerns.
- j. When the Director undertakes an investigation of an allegation of DOE contractor retaliation against an employee under Part 820, the Director will apprise persons interviewed and interested parties that the investigative activity is being taken pursuant to the nuclear safety procedures of Part 820 and not pursuant to the procedures of Part 708.
- k. At any time, the Director may begin an investigation of a noncompliance of the substantive nuclear safety rules based on the underlying nuclear safety concerns raised by the employee regardless of the status of completion of any related whistleblower retaliation proceedings. The nuclear safety rules include: 10 CFR part 830 (nuclear safety management); 10 CFR part 835 (occupational radiation protection); and 10 CFR part 820.11 (information accuracy requirements).

 $[58\ FR\ 43692,\ Aug.\ 17,\ 1993,\ as\ amended\ at\ 62\ FR\ 52481,\ Oct.\ 8,\ 1997;\ 65\ FR\ 15220,\ Mar.\ 22,\ 2000]$ 

# PART 830—NUCLEAR SAFETY MANAGEMENT

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APPENDIX A TO SUBPART B TO PART 830—GEN-ERAL STATEMENT OF SAFETY BASIS POL-ICY

AUTHORITY: 42 U.S.C. 201; 42 U.S.C. 7101 et seq.; and 50 U.S.C. 2401 et seq.

Source: At 65 FR 60308, Oct. 10, 2000, unless otherwise noted.

#### §830.1 Scope.

This part governs the conduct of DOE contractors, DOE personnel, and other persons conducting activities (including providing items and services) that affect, or may affect, the safety of DOE nuclear facilities.

### §830.2 Exclusions.

This Part does not apply to:

- (a) Activities that are regulated through a license by the Nuclear Regulatory Commission (NRC) or a State under an Agreement with the NRC, including activities certified by the NRC under section 1701 of the Atomic Energy Act (Act);
- (b) Activities conducted under the authority of the Director, Naval Nuclear Propulsion, pursuant to Executive Order 12344, as set forth in Public Law 106-65:
- (c) Transportation activities which are regulated by the Department of Transportation;
- (d) Activities conducted under the Nuclear Waste Policy Act of 1982, as amended; and
- (e) Activities related to the launch approval and actual launch of nuclear energy systems into space.

## § 830.3 Definitions.

(a) The following definitions apply to this part:

#### §830.3

Administrative controls means the provisions relating to organization and management, procedures, record-keeping, assessment, and reporting necessary to ensure safe operation of a facility.

Bases appendix means an appendix that describes the basis of the limits and other requirements in technical safety requirements.

Critical assembly means special nuclear devices designed and used to sustain nuclear reactions, which may be subject to frequent core and lattice configuration change and which frequently may be used as mockups of reactor configurations.

Criticality means the condition in which a nuclear fission chain reaction becomes self-sustaining.

Design features means the design features of a nuclear facility specified in the technical safety requirements that, if altered or modified, would have a significant effect on safe operation.

Document means recorded information that describes, specifies, reports, certifies, requires, or provides data or results.

Documented safety analysis means a documented analysis of the extent to which a nuclear facility can be operated safely with respect to workers, the public, and the environment, including a description of the conditions, safe boundaries, and hazard controls that provide the basis for ensuring safety.

Environmental restoration activities means the process(es) by which contaminated sites and facilities are identified and characterized and by which contamination is contained, treated, or removed and disposed.

Existing DOE nuclear facility means a DOE nuclear facility in operation before April 9, 2001.

Fissionable materials means a nuclide capable of sustaining a neutron-induced chain reaction (e.g., uranium-233, uranium-235, plutonium-238, plutonium-239, plutonium-241, neptunium-237, americium-241, and curium-244).

Graded approach means the process of ensuring that the level of analysis, documentation, and actions used to comply with a requirement in this part are commensurate with

- (1) The relative importance to safety, safeguards, and security;
- (2) The magnitude of any hazard involved;
- (3) The life cycle stage of a facility;
- (4) The programmatic mission of a facility:
- (5) The particular characteristics of a facility:
- (6) The relative importance of radiological and nonradiological hazards; and
  - (7) Any other relevant factor.

Hazard means a source of danger (i.e., material, energy source, or operation) with the potential to cause illness, injury, or death to a person or damage to a facility or to the environment (without regard to the likelihood or credibility of accident scenarios or consequence mitigation).

Hazard controls means measures to eliminate, limit, or mitigate hazards to workers, the public, or the environment, including

- (1) Physical, design, structural, and engineering features:
- (2) Safety structures, systems, and components;
  - (3) Safety management programs;
- (4) Technical safety requirements; and
- (5) Other controls necessary to provide adequate protection from hazards.

Item is an all-inclusive term used in place of any of the following: appurtenance, assembly, component, equipment, material, module, part, product, structure, subassembly, subsystem, system, unit, or support systems.

Limiting conditions for operation means the limits that represent the lowest functional capability or performance level of safety structures, systems, and components required for safe operations.

Limiting control settings means the settings on safety systems that control process variables to prevent exceeding a safety limit.

Low-level residual fixed radioactivity means the remaining radioactivity following reasonable efforts to remove radioactive systems, components, and stored materials. The remaining radioactivity is composed of surface contamination that is fixed following chemical cleaning or some similar

process; a component of surface contamination that can be picked up by smears; or activated materials within structures. The radioactivity can be characterized as low-level if the smearable radioactivity is less than the values defined for removable contamination by 10 CFR Part 835, Appendix D, Surface Contamination Values, and the hazard analysis results show that no credible accident scenario or work practices would release the remaining fixed radioactivity or activation components at levels that would prudently require the use of active safety systems, structures, or components to prevent or mitigate a release of radioactive materials.

Major modification means a modification to a DOE nuclear facility that is completed on or after April 9, 2001 that substantially changes the existing safety basis for the facility.

New DOE nuclear facility means a DOE nuclear facility that begins operation on or after April 9, 2001.

Nonreactor nuclear facility means those facilities, activities or operations that involve, or will involve, radioactive and/or fissionable materials in such form and quantity that a nuclear or a nuclear explosive hazard potentially exists to workers, the public, or the environment, but does not include accelerators and their operations and does not include activities involving only incidental use and generation of radioactive materials or radiation such as check and calibration sources, use of radioactive sources in research and experimental and analytical laboratory activities, electron microscopes, and Xray machines.

Nuclear facility means a reactor or a nonreactor nuclear facility where an activity is conducted for or on behalf of DOE and includes any related area, structure, facility, or activity to the extent necessary to ensure proper implementation of the requirements established by this Part.

Operating limits means those limits required to ensure the safe operation of a nuclear facility, including limiting control settings and limiting conditions for operation.

Preliminary documented safety analysis means documentation prepared in connection with the design and construction of a new DOE nuclear facility or a major modification to a DOE nuclear facility that provides a reasonable basis for the preliminary conclusion that the nuclear facility can be operated safely through the consideration of factors such as

- (1) The nuclear safety design criteria to be satisfied;
- (2) A safety analysis that derives aspects of design that are necessary to satisfy the nuclear safety design criteria; and
- (3) An initial listing of the safety management programs that must be developed to address operational safety considerations.

*Process* means a series of actions that achieves an end or result.

Quality means the condition achieved when an item, service, or process meets or exceeds the user's requirements and expectations.

Quality assurance means all those actions that provide confidence that quality is achieved.

Quality Assurance Program (QAP) means the overall program or management system established to assign responsibilities and authorities, define policies and requirements, and provide for the performance and assessment of work

Reactor means any apparatus that is designed or used to sustain nuclear chain reactions in a controlled manner such as research, test, and power reactors, and critical and pulsed assemblies and any assembly that is designed to perform subcritical experiments that could potentially reach criticality; and, unless modified by words such as containment, vessel, or core, refers to the entire facility, including the housing, equipment and associated areas devoted to the operation and maintenance of one or more reactor cores.

Record means a completed document or other media that provides objective evidence of an item, service, or process.

Safety basis means the documented safety analysis and hazard controls that provide reasonable assurance that a DOE nuclear facility can be operated safely in a manner that adequately protects workers, the public, and the environment.

#### §830.3

Safety class structures, systems, and components means the structures, systems, or components, including portions of process systems, whose preventive or mitigative function is necessary to limit radioactive hazardous material exposure to the public, as identified by the documented safety analysis.

Safety evaluation report means the report prepared by DOE to document.

- (1) The sufficiency of the documented safety analysis for a hazard category 1, 2, or 3 DOE nuclear facility;
- (2) The extent to which a contractor has satisfied the requirements of Subpart B of this part; and
- (3) The basis for approval by DOE of the safety basis for the facility, including any conditions for approval.

Safety limits means the limits on process variables associated with those safety class physical barriers, generally passive, that are necessary for the intended facility function and that are required to guard against the uncontrolled release of radioactive materials.

Safety management program means a program designed to ensure a facility is operated in a manner that adequately protects workers, the public, and the environment by covering a topic such as: quality assurance; maintenance of safety systems; personnel training; conduct of operations; inadvertent criticality protection; emergency preparedness; fire protection; waste management; or radiological protection of workers, the public, and the environment.

Safety management system means an integrated safety management system established consistent with 48 CFR 970.5204-2.

Safety significant structures, systems, and components means the structures, systems, and components which are not designated as safety class structures, systems, and components, but whose preventive or mitigative function is a major contributor to defense in depth and/or worker safety as determined from safety analyses.

Safety structures, systems, and components means both safety class structures, systems, and components and safety significant structures, systems, and components.

Service means the performance of work, such as design, manufacturing, construction, fabrication, assembly, decontamination, environmental restoration, waste management, laboratory sample analyses, inspection, non-destructive examination/testing, environmental qualification, equipment qualification, repair, installation, or the like.

Surveillance requirements means requirements relating to test, calibration, or inspection to ensure that the necessary operability and quality of safety structures, systems, and components and their support systems required for safe operations are maintained, that facility operation is within safety limits, and that limiting control settings and limiting conditions for operation are met.

Technical safety requirements (TSRs) means the limits, controls, and related requirements necessary for the safe operation of a nuclear facility and, as appropriate for the work and the hazards identified in the documented safety analysis for the facility, includes safety limits, operating limits, surveillance requirements, administrative and management controls, use and application provisions, and design features, as well as a bases appendix.

Unreviewed Safety Question (USQ) means a situation where

- (1) The probability of the occurrence or the consequences of an accident or the malfunction of equipment important to safety previously evaluated in the documented safety analysis could be increased:
- (2) The possibility of an accident or malfunction of a different type than any evaluated previously in the documented safety analysis could be created;
- (3) A margin of safety could be reduced; or
- (4) The documented safety analysis may not be bounding or may be otherwise inadequate.

Unreviewed Safety Question process means the mechanism for keeping a safety basis current by reviewing potential unreviewed safety questions, reporting unreviewed safety questions to DOE, and obtaining approval from DOE prior to taking any action that involves an unreviewed safety question.

Use and application provisions means the basic instructions for applying technical safety requirements.

(b) Terms defined in the Act or in 10 CFR Part 820 and not defined in this section of the rule are to be used consistent with the meanings given in the Act or in 10 CFR Part 820.

#### §830.4 General requirements.

- (a) No person may take or cause to be taken any action inconsistent with the requirements of this part.
- (b) A contractor responsible for a nuclear facility must ensure implementation of, and compliance with, the requirements of this part.
- (c) The requirements of this part must be implemented in a manner that provides reasonable assurance of adequate protection of workers, the public, and the environment from adverse consequences, taking into account the work to be performed and the associated hazards.
- (d) If there is no contractor for a DOE nuclear facility, DOE must ensure implementation of, and compliance with, the requirements of this part.

#### §830.5 Enforcement.

The requirements in this part are DOE Nuclear Safety Requirements and are subject to enforcement by all appropriate means, including the imposition of civil and criminal penalties in accordance with the provisions of 10 CFR Part 820.

#### §830.6 Recordkeeping.

A contractor must maintain complete and accurate records as necessary to substantiate compliance with the requirements of this part.

## §830.7 Graded approach.

Where appropriate, a contractor must use a graded approach to implement the requirements of this part, document the basis of the graded approach used, and submit that documentation to DOE.

# Subpart A—Quality Assurance Requirements

#### §830.120 Scope.

This subpart establishes quality assurance requirements for contractors conducting activities, including providing items or services, that affect, or may affect, nuclear safety of DOE nuclear facilities.

# §830.121 Quality Assurance Program (QAP).

- (a) Contractors conducting activities, including providing items or services, that affect, or may affect, the nuclear safety of DOE nuclear facilities must conduct work in accordance with the Quality Assurance criteria in §830.122.
- (b) The contractor responsible for a DOE nuclear facility must:
- (1) Submit a QAP to DOE for approval and regard the QAP as approved 90 days after submittal, unless it is approved or rejected by DOE at an earlier date.
- (2) Modify the QAP as directed by DOE.
- (3) Annually submit any changes to the DOE-approved QAP to DOE for approval. Justify in the submittal why the changes continue to satisfy the quality assurance requirements.
- (4) Conduct work in accordance with the QAP.
  - (c) The QAP must:
- (1) Describe how the quality assurance criteria of §830.122 are satisfied.
- (2) Integrate the quality assurance criteria with the Safety Management System, or describe how the quality assurance criteria apply to the Safety Management System.
- (3) Use voluntary consensus standards in its development and implementation, where practicable and consistent with contractual and regulatory requirements, and identify the standards used.
- (4) Describe how the contractor responsible for the nuclear facility ensures that subcontractors and suppliers satisfy the criteria of §830.122.

#### §830.122

#### §830.122 Quality Assurance Criteria.

The QAP must address the following management, performance, and assessment criteria:

- (a) Criterion 1—Management/Program.
- (1) Establish an organizational structure, functional responsibilities, levels of authority, and interfaces for those managing, performing, and assessing the work.
- (2) Establish management processes, including planning, scheduling, and providing resources for the work.
- (b) Criterion 2—Management/Personnel Training and Qualification.
- (1) Train and qualify personnel to be capable of performing their assigned work.
- (2) Provide continuing training to personnel to maintain their job proficiency.
- (c) Criterion 3—Management/Quality Improvement.
- (1) Establish and implement processes to detect and prevent quality problems.
- (2) Identify, control, and correct items, services, and processes that do not meet established requirements.
- (3) Identify the causes of problems and work to prevent recurrence as a part of correcting the problem.
- (4) Review item characteristics, process implementation, and other quality-related information to identify items, services, and processes needing improvement.
- (d) Criterion 4—Management/Documents and Records.
- (1) Prepare, review, approve, issue, use, and revise documents to prescribe processes, specify requirements, or establish design.
- (2) Specify, prepare, review, approve, and maintain records.
- (e) Criterion 5—Preformance/Work Processes.
- (1) Perform work consistent with technical standards, administrative controls, and other hazard controls adopted to meet regulatory or contract requirements, using approved instructions, procedures, or other appropriate means.
- (2) Identify and control items to ensure their proper use.
- (3) Maintain items to prevent their damage, loss, or deterioration.

- (4) Calibrate and maintain equipment used for process monitoring or data collection.
  - (f) Criterion 6—Performance/Design.
- (1) Design items and processes using sound engineering/scientific principles and appropriate standards.
- (2) Incorporate applicable requirements and design bases in design work and design changes.
- (3) Identify and control design interfaces.
- (4) Verify or validate the adequacy of design products using individuals or groups other than those who performed the work.
- (5) Verify or validate work before approval and implementation of the design.
- $\begin{array}{ccc} \hbox{(g)} & \hbox{Criterion} & \hbox{7--Performance/Procurement.} \end{array}$
- (1) Procure items and services that meet established requirements and perform as specified.
- (2) Evaluate and select prospective suppliers on the basis of specified criteria.
- (3) Establish and implement processes to ensure that approved suppliers continue to provide acceptable items and services.
- (h) Criterion 8—Performance/Inspection and Acceptance Testing.
- (1) Inspect and test specified items, services, and processes using established acceptance and performance criteria.
- (2) Calibrate and maintain equipment used for inspections and tests.
- (i) Criterion 9—Assessment/Management Assessment. Ensure managers assess their management processes and identify and correct problems that hinder the organization from achieving its objectives.
- (j) Criterion 10—Assessment/Independent Assessment.
- (1) Plan and conduct independent assessments to measure item and service quality, to measure the adequacy of work performance, and to promote improvement.
- (2) Establish sufficient authority, and freedom from line management, for the group performing independent assessments.
- (3) Ensure persons who perform independent assessments are technically

qualified and knowledgeable in the areas to be assessed.

# Subpart B—Safety Basis Requirements

#### §830.200 Scope.

This Subpart establishes safety basis requirements for hazard category 1, 2, and 3 DOE nuclear facilities.

#### §830.201 Performance of work.

A contractor must perform work in accordance with the safety basis for a hazard category 1, 2, or 3 DOE nuclear facility and, in particular, with the hazard controls that ensure adequate protection of workers, the public, and the environment.

#### § 830.2021 Safety basis.

- (a) The contractor responsible for a hazard category 1, 2, or 3 DOE nuclear facility must establish and maintain the safety basis for the facility.
- (b) In establishing the safety basis for a hazard category 1, 2, or 3 DOE nuclear facility, the contractor responsible for the facility must:
- (1) Define the scope of the work to be performed:
- (2) Identify and analyze the hazards associated with the work;
- (3) Categorize the facility consistent with DOE-STD-1027-92 ("Hazard Categorization and Accident Analysis Techniques for compliance with DOE Order 5480.23, Nuclear Safety Analysis Reports," Change Notice 1, September 1997:
- (4) Prepare a documented safety analysis for the facility; and
- (5) Establish the hazard controls upon which the contractor will rely to ensure adequate protection of workers, the public, and the environment.
- (c) In maintaining the safety basis for a hazard category 1, 2, or 3 DOE nuclear facility, the contractor responsible for the facility must:
- (1) Update the safety basis to keep it current and to reflect changes in the facility, the work and the hazards as they are analyzed in the documented safety analysis;
- (2) Annually submit to DOE either the updated documented safety analysis for approval or a letter stating that there have been no changes in the

documented safety analysis since the prior submission; and

(3) Incorporate in the safety basis any changes, conditions, or hazard controls directed by DOE.

# §830.203 Unreviewed safety question process.

The contractor responsible for a hazard category 1, 2, or 3 DOE nuclear facility must:

- (a) Submit for DOE approval a USQ process that meets the requirements of this section:
- (1) For an existing DOE nuclear facility, by April 10, 2001. Pending DOE approval of the USQ process, the contractor must continue to use its existing, DOE-approved USQ process. If the existing process already meets the requirements of this section, the contractor must notify DOE by April 10, 2001 and request that DOE issue an approval of the existing process; and
- (2) For a new DOE nuclear facility, on a schedule that allows DOE approval in a safety evaluation report issued pursuant to section 207(d) of this Part.
- (b) Implement the DOE-approved USQ process in situations where there is a:
- (1) Temporary or permanent change in the facility as described in the existing documented safety analysis;
- (2) Temporary or permanent change in the procedures as described in the existing documented safety analysis;
- (3) Test or experiment not described in the existing documented safety analysis; or
- (4) Potential inadequacy of the documented safety analysis because the analysis potentially may not be bounding or may be otherwise inadequate;
- (c) Obtain DOE approval prior to taking any action determined to involve a USQ;
- (d) Annually submit to DOE a summary of the USQ determinations performed since the prior submission; and
- (e) If the contractor discovers or is made aware of a potential inadequacy of the documented safety analysis:
- (1) Take action, as appropriate, to place or maintain the facility in a safe condition until an evaluation of the safety of the situation is completed;
  - (2) Notify DOE of the situation;

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- (3) Perform a USQ determination and notify DOE promptly of the results; and
- (4) Submit the evaluation of the safety of the situation to DOE prior to removing any operational restrictions initiated to meet paragraph (e)(1) of this section.

#### §830.204 Documented safety analysis.

- (a) The contractor responsible for a hazard category 1, 2, or 3 DOE nuclear facility must obtain approval from DOE for the methodology used to prepare the documented safety analysis for the facility unless the contractor uses a methodology set forth in Table 2 of Appendix A to this Part.
- (b) The documented safety analysis for a hazard category 1, 2, or 3 DOE nuclear facility must, as appropriate for the complexities and hazards associated with the facility:
- (1) Describe the facility (including the design of safety structures, systems and components) and the work to be performed:
- (2) Provide a systematic identification of both natural and man-made hazards associated with the facility;
- (3) Evaluate normal, abnormal, and accident conditions, including consideration of natural and man-made external events, identification of energy sources or processes that might contribute to the generation or uncontrolled release of radioactive and other hazardous materials, and consideration of the need for analysis of accidents which may be beyond the design basis of the facility:
- (4) Derive the hazard controls necessary to ensure adequate protection of workers, the public, and the environment, demonstrate the adequacy of these controls to eliminate, limit, or mitigate identified hazards, and define the process for maintaining the hazard controls current at all times and controlling their use;
- (5) Define the characteristics of the safety management programs necessary to ensure the safe operation of the facility, including (where applicable) quality assurance, procedures, maintenance, personnel training, conduct of operations, emergency preparedness, fire protection, waste management, and radiation protection; and

- (6) With respect to a nonreactor nuclear facility with fissionable material in a form and amount sufficient to pose a potential for criticality, define a criticality safety program that:
- (i) Ensures that operations with fissionable material remain subcritical under all normal and credible abnormal conditions.
- (ii) Identifies applicable nuclear criticality safety standards, and
- (iii) Describes how the program meets applicable nuclear criticality safety standards.

# §830.205 Technical safety requirements.

- (a) A contractor responsible for a hazard category 1, 2, or 3 DOE nuclear facility must:
- (1) Develop technical safety requirements that are derived from the documented safety analysis;
- (2) Prior to use, obtain DOE approval of technical safety requirements and any change to technical safety requirements; and
- (3) Notify DOE of any violation of a technical safety requirement.
- (b) A contractor may take emergency actions that depart from an approved technical safety requirement when no actions consistent with the technical safety requirement are immediately apparent, and when these actions are needed to protect workers, the public or the environment from imminent and significant harm. Such actions must be approved by a certified operator for a reactor or by a person in authority as designated in the technical safety requirements for nonreactor nuclear facilities. The contractor must report the emergency actions to DOE as soon as practicable.
- (c) A contractor for an environmental restoration activity may follow the provisions of 29 CFR 1910.120 or 1926.65 to develop the appropriate hazard controls [rather than the provisions for technical safety requirements in paragraph (a) of this section], provided the activity involves either:
- (1) Work not done within a permanent structure, or
- (2) The decommissioning of a facility with only low-level residual fixed radioactivity.

# § 830.206 Preliminary documented safety analysis.

The contractor responsible for a hazard category 1, 2, or 3 new DOE nuclear facility or a major modification to a hazard category 1, 2, or 3 DOE nuclear facility must:

- (a) Prepare a preliminary documented safety analysis for the facility, and
  - (b) Obtain DOE approval of:
- (1) The nuclear safety design criteria to be used in preparing the preliminary documented safety analysis unless the contractor uses the design criteria in DOE Order 420.1. Facility Safety; and
- (2) The preliminary documented safety analysis before the contractor can procure materials or components or begin construction; provided that DOE may authorize the contractor to perform limited procurement and construction activities without approval of a preliminary documented safety analysis if DOE determines that the activities are not detrimental to public health and safety and are in the best interests of DOE.

### §830.207 DOE approval of safety basis.

- (a) By April 10, 2003, a contractor responsible for a hazard category 1, 2, or 3 existing DOE nuclear facility must submit for DOE approval a safety basis that meets the requirements of this Subpart.
- (b) Pending issuance of a safety evaluation report in which DOE approves a safety basis for a hazard category 1, 2, or 3 existing DOE nuclear facility, the contractor responsible for the facility must continue to perform work in accordance with the safety basis for the facility in effect on October 10, 2000 and maintain the existing safety basis consistent with the requirements of this Subpart.
- (c) If the safety basis for a hazard category 1, 2, or 3 existing DOE nuclear facility already meets the requirements of this Subpart and reflects the current work and hazards associated with the facility, the contractor responsible for the facility must, by April 9, 2001, notify DOE, document the adequacy of the existing safety basis and request DOE to issue a safety evaluation report that approves the existing safety basis. If DOE does not issue

a safety evaluation report by October 10, 2001, the contractor must submit a safety basis pursuant to paragraph (a) of this section.

(d) With respect to a hazard category 1, 2, or 3 new DOE nuclear facility or a major modification to a hazard category 1, 2, or 3 DOE nuclear facility, a contractor may not begin operation of the facility or modification prior to the issuance of a safety evaluation report in which DOE approves the safety basis for the facility or modification.

APPENDIX A TO SUBPART B TO PART 830—GENERAL STATEMENT OF SAFE-TY BASIS POLICY

#### A. INTRODUCTION

This appendix describes DOE's expectations for the safety basis requirements of 10 CFR Part 830, acceptable methods for implementing these requirements, and criteria DOE will use to evaluate compliance with these requirements. This Appendix does not create any new requirements and should be used consistently with DOE Policy 450.2A, "Identifying, Implementing and Complying with Environment, Safety and Health Requirements" (May 15, 1996).

#### B. Purpose

- 1. The safety basis requirements of Part 830 require the contractor responsible for a DOE nuclear facility to analyze the facility, the work to be performed, and the associated hazards and to identify the conditions, safe boundaries, and hazard controls necessary to protect workers, the public and the environment from adverse consequences. These analyses and hazard controls constitute the safety basis upon which the contractor and DOE rely to conclude that the facility can be operated safely. Performing work consistent with the safety basis provides reasonable assurance of adequate protection of workers, the public, and the environment.
- 2. The safety basis requirements are intended to further the objective of making safety an integral part of how work is performed throughout the DOE complex. Developing a thorough understanding of a nuclear facility, the work to be performed, the associated hazards and the needed hazard controls is essential to integrating safety into management and work at all levels. Performing work in accordance with the safety basis for a nuclear facility is the realization of that objective.

#### C. SCOPE

1. A contractor must establish and maintain a safety basis for a hazard category 1, 2,

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or 3 DOE nuclear facility because these facilities have the potential for significant radiological consequences. DOE-STD-1027-92 ("Hazard Categorization and Accident Analysis Techniques for compliance with DOE Order 5480.23, Nuclear Safety Analysis Reports," Change Notice 1, September 1997) set forth the methodology for categorizing a DOE nuclear facility. The hazard categoriza-

tion must be based on an inventory of all radioactive materials within a nuclear facility.

2. Unlike the quality assurance requirements of Part 830 that apply to all DOE nuclear and radiological facilities, the safety basis requirements only apply to hazard category 1, 2, and 3 nuclear facilities and do not apply to nuclear facilities below hazard category 3.

TABLE 1

A DOE nuclear facility categorized as * * *	has the potential for * * *
hazard category 3	significant on-site consequences beyond localized consequences. only local significant consequences.

#### D. INTEGRATED SAFETY MANAGEMENT

- 1. The safety basis requirements are consistent with integrated safety management. DOE expects that, if a contractor complies with the Department of Energy Acquisition Regulation (DEAR) clause on integration of environment, safety, and health into work planning and execution (48 CFR 970.5204-2, Integration of Environment, Safety and Health into Work Planning and Execution) and the DEAR clause on laws, regulations, and DOE directives (48 CFR 970.5204-78, Laws, Regulations and DOE Directives), the contractor will have established the foundation to meet the safety basis requirements.
- 2. The processes embedded in a safety management system should lead to a contractor establishing adequate safety bases and safety management programs that will meet the safety basis requirements of this Subpart. Consequently, the DOE expects if a contractor has adequately implemented integrated safety management, few additional requirements will stem from this Subpart and, in such cases, the existing safety basis prepared in accordance with integrated safety management provisions, including existing DOE safety requirements in contracts, should meet the requirements of this Subpart.
- 3. DOE does not expect there to be any conflict between contractual requirements and regulatory requirements. In fact, DOE expects that contract provisions will be used to provide more detail on implementation of safety basis requirements such as preparing a documented safety analysis, developing technical safety requirements, and implementing a USQ process.

# E. ENFORCEMENT OF SAFETY BASIS REQUIREMENTS

1. Enforcement of the safety basis requirements will be performance oriented. That is, DOE will focus its enforcement efforts on

- whether a contractor operates a nuclear facility consistent with the safety basis for the facility and, in particular, whether work is performed in accordance with the safety basis.
- 2. As part of the approval process, DOE will review the content and quality of the safety basis documentation. DOE intends to use the approval process to assess the adequacy of a safety basis developed by a contractor to ensure that workers, the public, and the environment are provided reasonable assurance of adequate protection from identified hazards. Once approved by DOE, the safety basis documentation will not be subject to regulatory enforcement actions unless DOE determines that the information which supports the documentation is not complete and accurate in all material respects, as required by 10 CFR 820.11. This is consistent with the DOE enforcement provisions and policy in 10 CFR Part 820.
- 3. DOE does not intend the adoption of the safety basis requirements to affect the existing quality assurance requirements or the existing obligation of contractors to comply with the quality assurance requirements. In particular, in conjunction with the adoption of the safety basis requirements, DOE revised the language in 10 CFR 830.122(e)(1) to make clear that hazard controls are part of the work processes to which a contractor and other persons must adhere when performing work. This obligation to perform work consistent with hazard controls adopted to meet regulatory or contract requirements existed prior to the adoption of the safety basis requirements and is both consistent with and independent of the safety basis requirements.
- 4. A documented safety analysis must address all hazards (that is, both radiological and nonradiological hazards) and the controls necessary to provide adequate protection to the public, workers, and the environment from these hazards. Section 234A of the

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Atomic Energy Act, however, only authorizes DOE to issue civil penalties for violations of requirements related to nuclear safety. Therefore, DOE will impose civil penalties for violations of the safety basis requirements (including hazard controls) only if they are related to nuclear safety.

#### F. DOCUMENTED SAFETY ANALYSIS

- 1. A documented safety analysis must demonstrate the extent to which a nuclear facility can be operated safely with respect to workers, the public, and the environment.
- 2. DOE expects a contractor to use a graded approach to develop a documented safety analysis and describe how the graded approach was applied. The level of detail, analysis, and documentation will reflect the complexity and hazard associated with a particular facility. Thus, the documented safety analysis for a simple, low hazard facility may be relatively short and qualitative in nature, while the documented safety analysis for a complex, high hazard facility may be quite elaborate and more quantitative. DOE will work with its contractors to ensure a documented safety analysis is appropriate

for the facility for which it is being developed.

- 3. Because DOE has ultimate responsibility for the safety of its facilities, DOE will review each documented safety analysis to determine whether the rigor and detail of the documented safety analysis are appropriate for the complexity and hazards expected at the nuclear facility. In particular, DOE will evaluate the documented safety analysis by considering the extent to which the documented safety analysis (1) satisfies the provisions of the methodology used to prepare the documented safety analysis and (2) adequately addresses the criteria set forth in 10 CFR 830.204(b). DOE will prepare a Safety Evaluation Report to document the results of its review of the documented safety analvsis. A documented safety analysis must contain any conditions or changes required by DOE.
- 4. In most cases, the contract will provide the framework for specifying the methodology and schedule for developing a documented safety analysis. Table 2 sets forth acceptable methodologies for preparing a documented safety analysis.

# TABLE 2

The contractor responsible for * * *	may prepare its documented safety analyses * * *
(1) a DOE reactor	using the method in U.S. Nuclear Regulatory Commission Regulatory Guide 1.70, Standard Format and Content of Safety Analysis Reports for Nuclear Power Plants or suc- cessor document.
(2) a DOE nonreactor nuclear facility	using the method in DOE-STD-3009-94, Preparation Guide for U.S. Department of Energy Nonreactor Nuclear Facility Safety Analysis Reports, July 1994 or successor document.
(3) a DOE nuclear facility with limited operational life	using the method in either: (1) DOE–STD–3009–94 or successor document or (2) DOE–STD–3011–94, Guidance for Preparation of DOE 5480.22 (TSR) and DOE 5480.23 (SAR) Implementation Plans, November 1994 or successor document.
(4) the deactivation or the transition surveillance and maintenance of a DOE nuclear facility.	Using the method in either: (1) DOE–STD–3009–94 or successor document or (2) DOE–STD–3011–94 or successor document.
(5) the decommissioning of a DOE nuclear facility	(1) using the method in DOE-STD-1120-98, May 1998, Integration of Environment, Safety, and Health into Facility Disposition Activities or nuclear successor document; (2) using the provisions in 29 CFR 1910.120 (or 29 CFR 1926.65 for construction activities) for developing Safety and Health Programs, Work Plans, Health and Safety Plans, and Emergency Response Plans to address public safety, as well as worker safety; and (3) deriving hazard controls based on the Safety and Health Programs, the Work Plans, the Health and Safety Plans, and the Emergency Response Plans.
(6) a DOE environmental restoration activity that involves either work not done within a permanent structure or the decommis- sioning of a facility with only low-level residual fixed radioactivity.	(1) using the method in DOE-STD-1120-98 or successor document and (2) using the provisions in 29 CFR 1910.120 (or activity that 29 CFR 1926.65 for construction activities) for devel- oping a Safety and Health Program and a site-specific Health and Safety Plan (including elements for Emer- gency Response Plans, conduct operations, training and qualifications, and maintenance management).
(7) a DOE nuclear explosive facility and the nuclear explosive opertions conducted therein.	developing its documented safety analysis in two pieces: (1) a Safety Analysis Report for the nuclear facility that considers the generic nuclear explosive operations and is prepared in accordance with DOE–STD–3009–94 or successor document and

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### TABLE 2—Continued

The contractor responsible for * * *	may prepare its documented safety analyses * * *
(8) a DOE hazard category 3 nonreactor nuclear facility	(2) a Hazard Analysis Report for the specific nuclear explosive operations prepared in accordance with DOE-STD-3016-99, Hazards Analysis Reports for Nuclear Explosive Operations, February 1999 or successor document. using the methods in Chapters 2, 3, 4, and 5 of DOE-STD-3009-94 or successor document to address in a simplified fashion:  (1) the basic description of the facility/activity and its operations, including safety structures, systems, and components; (2) a qualitative hazards analysis; and (3) the hazard controls (consisting primarily of inventory limits and safety management programs) and their bases.

5. Table 2 refers to specific types of nuclear facilities. These references are not intended to constitute an exhaustive list of the specific types of nuclear facilities. Part 830 defines nuclear facility broadly to include all those facilities, activities, or operations that involve, or will involve, radioactive and/or fissionable materials in such form and quantity that a nuclear or a nuclear explosive hazard potentially exists to the employees or

the general public, and to include any related area, structure, facility, or activity to the extent necessary to ensure proper implementation of the requirements established by Part 830. The only exceptions are those facilities specifically excluded such as accelerators. Table 3 defines the specific nuclear facilities referenced in Table 2 that are not defined in 10 CFR 830.3

#### TABLE 3

For purposes of Table 2, * * *	means * * *
(1) deactivation	the process of placing a facility in a stable and known condition including the removal of hazardous and radioactive materials.
(2) decontamination	the removal or reduction of residual radioactive and haz- ardous materials by mechanical, chemical, or other tech- niques to achieve a stated objective or end condition.
(3) decommissioning	those actions taking place after deactivation of a nuclear facility to retire it from service and includes surveillance and maintenance, decontamination, and/or dismantlement.
(4) environmental restoration activities	the process by which contaminated sites and facilities are identified and characterized and by which existing contamination is contained or removed and disposed.
(5) generic nuclear explosive operation	a characterization that considers the collective attributes (such as special facility system requirements, physical weapon characteristics, or quantities and chemical/physical forms of hazardous materials) for all projected nuclear explosive operations to be conducted at a facility.
(6) nuclear explosive facility	a nuclear facility at which nuclear operations and activities involving a nuclear explosive may be conducted.
(7) nuclear explosive operation	any activity involving a nuclear explosive, including activities in which main-charge, high-explosive parts and pits are collocated.
(8) nuclear facility with a limited operational life	a nuclear facility for which there is a short remaining oper- ational period before ending the facility's mission and ini- tiating deactivation and decommissioning and for which there are no intended additional missions other than cleanup.
(9) specific nuclear explosive operation	a specific nuclear explosive subjected to the stipulated steps of an individual operation, such as assembly or disassembly.

#### TABLE 3—Continued

For purposes of Table 2, * * *	means * * *
(10) transition surveillance and maintenance activities	activities conducted when a facility is not operating or during deactivation, decontamination, and decommissioning operations when surveillance and maintenance are the predominant activities being conducted at the facility. These activities are necessary for satisfactory containment of hazardous materials and protection of workers, the public, and the environment. These activities include providing periodic inspections, maintenance of structures, systems, and components, and actions to prevent the alteration of hazardous materials to an unsafe state.

6. The contractor responsible for the design and construction of a new DOE nuclear facility or of a major modification to an existing DOE nuclear facility must prepare a preliminary documented safety analysis. A preliminary documented safety analysis can ensure that substantial costs and time are not wasted in constructing a nuclear facility that will not be acceptable to DOE. If a contractor is required to prepare a preliminary documented safety analysis, the contractor must obtain DOE approval of the preliminary documented safety analysis prior to procuring materials or components or beginning construction. DOE, however, may authorize the contractor to perform limited procurement and construction activities without approval of a preliminary documented safety analysis if DOE determines that the activities are not detrimental to public health and safety and are in the best interests of DOE. DOE Order 420.1, Facility Safety, sets forth acceptable nuclear safety design criteria for use in preparing a preliminary documented safety analysis. As a general matter, DOE does not expect preliminary documented safety analyses to be needed for activities that do not involve significant construction such as environmental restoration activities, decontamination and decommissioning activities, specific nuclear explosive operations, or transition surveillance and maintenance activities.

### G. HAZARD CONTROLS

- 1. Hazard controls are measures to eliminate, limit, or mitigate hazards to workers, the public, or the environment. They include (1) physical, design, structural, and engineering features; (2) safety structures, systems, and components; (3) safety management programs; (4) technical safety requirements; and (5) other controls necessary to provide adequate protection from hazards.
- 2. The types and specific characteristics of the safety management programs necessary for a DOE nuclear facility will be dependent on the complexity and hazards associated with the nuclear facility and the work being performed. In most cases, however, a contractor should consider safety management

- programs covering topics such as quality assurance, procedures, maintenance, personnel training, conduct of operations, criticality safety, emergency preparedness, fire protection, waste management, and radiation protection. In general, DOE Orders set forth DOE's expectations concerning specific topics. For example, DOE Order 420.1 provides DOE's expectations with respect to fire protection and criticality safety.
- 3. Safety structures, systems, and components require formal definition of minimum acceptable performance in the documented safety analysis. This is accomplished by first defining a safety function, then describing the structure, systems, and components, placing functional requirements on those portions of the structures, systems, and components required for the safety function, and identifying performance criteria that will ensure functional requirements are met. Technical safety requirements are developed to ensure the operability of the safety structures, systems, and components and define actions to be taken if a safety structure, system, or component is not operable.
- 4. Technical safety requirements establish limits, controls, and related requirements necessary for the safe operation of a nuclear facility. The exact form and contents of technical safety requirements will depend on the circumstances of a particular nuclear facility as defined in the documented safety analysis for the nuclear facility. As appropriate, technical safety requirements may have sections on (1) safety limits, (2) operating limits. (3) surveillance requirements. (4) administrative controls, (5) use and application, and (6) design features. It may also have an appendix on the bases for the limits and requirements. DOE Guide 423.X. Implementation Guide for Use in Developing Technical Safety Requirements (TSRs) provides a complete description of what technical safety requirements should contain and how they should be developed and maintained.
- 5. DOE will examine and approve the technical safety requirements as part of preparing the safety evaluation report and reviewing updates to the safety basis. As with

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all hazard controls, technical safety requirements must be kept current and reflect changes in the facility, the work and the hazards as they are analyzed in the documented safety analysis. In addition, DOE expects, appropriate the maintain technical pects a contractor to maintain technical

safety requirements, and other hazard controls as appropriate, as controlled documents with an authorized users list.
6. Table 4 sets forth DOE's expectations concerning acceptable technical safety requirements.

quirements.

#### TABLE 4

As appropriate for a particular DOE nuclear facility, the section of the technical safety requirements on * * *	will provide information on * * *
(1) safety limits	the limits on process variables associated with those safety class physical barriers, generally passive, that are necessary for the intended facility function and that are required to guard against the uncontrolled release of radioactive materials.
	The safety limit section describes, as precisely as possible, the parameters being limited, states the limit in measurable units (pressure, temperature, flow, etc.), and indicates the applicability of the limit. The safety limit section also describes the actions to be taken in the event that the safety limit is exceeded. These actions should first place the facility in the safe, stable condition attainable, including total shutdown (except where such action might reduce the margin of safety) or should verify that the facility already is safe and stable and will remain so. The technical safety requirement should state that the contractor must obtain DOE authorization to restart the nuclear facility following a violation of a safety limit. The safety limit section also establishes the steps and time limits to correct the out-of-specification condition.
(2) operating limits	those limits which are required to ensure the safe operation of a nuclear facility. The operating limits section may include subsections on limiting control settings and limiting conditions for operation.
(3) limiting control settings	the settings on safety systems that control process variables to prevent exceeding a safety limit. The limited control settings section normally contains the settings for automatic alarms and for the automatic or nonautomatic initiation of protective actions related to those variables associated with the function of safety class structures, systems, or components if the safety analyses show that they are relied upon to mitigate or prevent an accident. The limited control settings section also identifies the protective actions to be taken at the specific settings chosen in order to correct a situation automatically or manually such that the related safety limit is not exceeded. Protective actions may include maintaining the variables within the requirements and repairing the automatic device promptly or shutting down the affected part of the process and, if required, the entire facility.
(4) limiting conditions for operations	the limits that represent the lowest functional capability or performance level of safety structures, systems, and components required to perform an activity safety. The limiting conditions for operation section describes, as precisely as possible, the lowest functional capability or performance level of equipment required for continued safe operation of the facility. The limiting conditions for operation section also states the action to be taken to address a condition not meeting the limiting conditions for operation. Normally this simply provides for the adverse condition being corrected in a certain time frame and for further action if this is impossible.

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#### TABLE 4—Continued

As appropriate for a particular DOE nuclear facility, the section of the technical safety requirements on * * * *	will provide information on * * *
(5) surveillance requirements	requirements relating to test, calibration, or inspection to assure that the necessary operability and quality of safety structures, systems, and components is maintained, that facility operation is within safety limits, and that limiting control settings and limiting conditions for operation are met. If a required surveillance is not successfully completed, the contractor is expected to assume the systems or components involved are inoperable and take the actions defined by the technical safety requirement until the systems or components can be shown to be operable. If, however, a required surveillance is not performed within its required frequency, the contractor is allowed to perform the surveillance within 24 hours or the original frequency, whichever is smaller, and confirm operability.
(6) administrative controls	organization and management, procedures, recordkeeping, assessment, and reporting necessary to ensure safe operation of a facility consistent with the technical safety requirement. In general, the administrative controls section addresses (1) the requirements associated with administrative controls, (including those for reporting violations of the technical safety requirement); (2) the staffing requirements for facility positions important to safe conduct of the facility; and (3) the commitments to the safety management programs identified in the documented safety analysis as necessary components of the safety basis for the facility.
(7) use and application provisions	the basic instructions for applying the safety restrictions contained in a technical safety requirement. The use and application section includes definitions of terms, operating modes, logical connectors, completion times, and frequency notations.
(8) design features	design features of the facility that, if altered or modified,
(9) bases appendix	would have a significant effect on safe operation. the reasons for the safety limits, operating limits, and associated surveillance requirements in the technical safety requirements. The statements for each limit or requirement shows how the numeric value, the condition, or the surveillance fulfills the purpose derived from the safety documentation. The primary purpose for describing the basis of each limit or requirement is to ensure that any future changes to the limit or requirement is done with full knowledge of the original intent or purpose of the limit or requirement.

### H. UNREVIEWED SAFETY QUESTIONS

- 1. The USQ process is an important tool to evaluate whether changes affect the safety basis. A contractor must use the USQ process to ensure that the safety basis for a DOE nuclear facility is not undermined by changes in the facility, the work performed, the associated hazards, or other factors that support the adequacy of the safety basis.
- 2. The USQ process permits a contractor to make physical and procedural changes to a nuclear facility and to conduct tests and experiments without prior approval, provided these changes do not cause a USQ. The USQ process provides a contractor with the flexibility needed to conduct day-to-day operations by requiring only those changes and tests with a potential to impact the safety basis (and therefore the safety of the nuclear facility) be approved by DOE. This allows

DOE to focus its review on those changes significant to safety. The USQ process helps keeps the safety basis current by ensuring appropriate review of and response to situations that might adversely affect the safety basis.

3. DOE Guide 424.X, Implementation Guide for Addressing Unreviewed Safety Question (USQ) Requirements provides DOE's expectations for a USQ process. The contractor must obtain DOE approval of any USQ process.

#### I. FUNCTIONS AND RESPONSIBILITIES

1. The DOE Management Official for a DOE nuclear facility (that is, the Assistant Secretary, the Assistant Administrator, or the Office Director who is primarily responsible for the management of the facility) has primary responsibility within DOE for ensuring

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that the safety basis for the facility is adequate and complies with the safety basis requirements of Part 830. The DOE Management Official is responsible for ensuring the timely and proper (1) review of all safety basis documents submitted to DOE and (2) preparation of a safety evaluation report concerning the safety basis for a facility.

2. DOE will maintain a public list on the internet that provides the status of the safety basis for each hazard category 1, 2, or 3 DOE nuclear facility and, to the extent practicable, provides information on how to obtain a copy of the safety basis and related documents for a facility.

# PART 835—OCCUPATIONAL RADIATION PROTECTION

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APPENDIX E TO PART 835—VALUES FOR ESTAB-LISHING SEALED RADIOACTIVE SOURCE AC-COUNTABILITY AND RADIOACTIVE MATERIAL POSTING AND LABELING REQUIREMENTS

AUTHORITY: 42 U.S.C. 2201; 7191

SOURCE: 58 FR 65485, Dec. 14, 1993, unless otherwise noted.

# **Subpart A—General Provisions**

#### §835.1 Scope.

- (a) General. The rules in this part establish radiation protection standards, limits, and program requirements for protecting individuals from ionizing radiation resulting from the conduct of DOE activities.
- (b) Exclusion. Except as discussed in paragraph (c) of this section, the requirements in this part do not apply to:
- (1) Activities that are regulated through a license by the Nuclear Regulatory Commission or a State under an Agreement with the Nuclear Regulatory commission, including activities certified by the Nuclear Regulatory Commission under section 1701 of the Atomic Energy Act;
- (2) Activities conducted under the authority of the Director, Naval Nuclear Propulsion Program, as described in Pub. L. 98–525;
- (3) Activities conducted under the Nuclear Explosives and Weapons Surety Program relating to the prevention of accidental or unauthorized nuclear detonations;
- (4) Radioactive material transportation as defined in this part;
- (5) DOE activities conducted outside the United States on territory under the jurisdiction of a foreign government to the extent governed by occupational radiation protection requirements agreed to between the United States and the cognizant government; or
- (6) Background radiation, radiation doses received as a patient for the purposes of medical diagnosis or therapy, or radiation doses received from participation as a subject in medical research programs.
- (c) Occupational doses received as a result of excluded activities and radioactive material transportation, as listed in paragraphs (b)(1) through (b)(5) of this section, shall be considered when

determining compliance with the occupational dose limits at §§835.202 and 835.207, and with the limits for the embryo/fetus at §835.206. Occupational doses resulting from authorized emergency exposures and planned special exposures shall not be considered when determining compliance with the dose limits at §§835.202 and 835.207.

[58 FR 65485, Dec. 14, 1993, as amended at 63 FR 59679, Nov. 4, 1998]

### §835.2 Definitions.

(a) As used in this part:

Accountable sealed radioactive source means a sealed radioactive source having a half-life equal to or greater than 30 days and an isotopic activity equal to or greater than the corresponding value provided in appendix E of this part.

Airborne radioactive material or airborne radioactivity means radioactive material dispersed in the air in the form of dusts, fumes, particulates, mists, vapors, or gases.

Airborne radioactivity area means any area, accessible to individuals, where:

- (1) The concentration of airborne radioactivity, above natural background, exceeds or is likely to exceed the derived air concentration (DAC) values listed in appendix A or appendix C of this part: or
- (2) An individual present in the area without respiratory protection could receive an intake exceeding 12 DAC-hours in a week.

ALARA means "As Low As is Reasonably Achievable," which is the approach to radiation protection to manage and control exposures (both individual and collective) to the work force and to the general public to as low as is reasonable, taking into account social, technical, economic, practical, and public policy considerations. As used in this part, ALARA is not a dose limit but a process which has the objective of attaining doses as far below the applicable limits of this part as is reasonably achievable.

Annual limit on intake (ALI) means the derived limit for the amount of radioactive material taken into the body of an adult worker by inhalation or ingestion in a year. ALI is the smaller value of intake of a given radionuclide in a year by the reference man (ICRP)

#### § 835.2

Publication 23) that would result in a committed effective dose equivalent of 5 rems (0.05 sievert) or a committed dose equivalent of 50 rems (0.5 sievert) to any individual organ or tissue. ALI values for intake by ingestion and inhalation of selected radionuclides are based on Table 1 of the U.S. Environmental Protection Agency's Federal Guidance Report No. 11, Limiting Values of Radionuclide Intake and Air Concentration and Dose Conversion Factors for Inhalation, Submersion, and Ingestion, published September 1988. This document is available from the National Technical Information Service, Springfield, VA.

Background means radiation from:

- (i) Naturally occurring radioactive materials which have not been technologically enhanced;
  - (ii) Cosmic sources;
- (iii) Global fallout as it exists in the environment (such as from the testing of nuclear explosive devices);
- (iv) Radon and its progeny in concentrations or levels existing in buildings or the environment which have not been elevated as a result of current or prior activities; and
- (v) Consumer products containing nominal amounts of radioactive material or producing nominal amounts of radiation.

Bioassay means the determination of kinds, quantities, or concentrations, and, in some cases, locations of radioactive material in the human body, whether by direct measurement or by analysis, and evaluation of radioactive materials excreted or removed from the human body.

Calibration means to adjust and/or determine either:

- (i) The response or reading of an instrument relative to a standard (e.g., primary, secondary, or tertiary) or to a series of conventionally true values; or
- (ii) The strength of a radiation source relative to a standard (e.g., primary, secondary, or tertiary) or conventionally true value.

Contamination area means any area, accessible to individuals, where removable surface contamination levels exceed or are likely to exceed the removable surface contamination values specified in appendix D of this part, but do not exceed 100 times those values.

Contractor means any entity under contract with the Department of Energy with the responsibility to perform activities at a DOE site or facility.

Controlled area means any area to which access is managed by or for DOE to protect individuals from exposure to radiation and/or radioactive material.

Declared pregnant worker means a woman who has voluntarily declared to her employer, in writing, her pregnancy for the purpose of being subject to the occupational dose limits to the embryo/fetus as provided at §835.206. This declaration may be revoked, in writing, at any time by the declared pregnant worker.

Derived airconcentrationmeans, for the radionuclides listed in appendix A of this part, the airborne concentration that equals the ALI divided by the volume of air breathed by an average worker for a working year of 2000 hours (assuming a breathing volume of 2400 m<sup>3</sup>). For the radionuclides listed in appendix C of this part, the air immersion DACs were calculated for a continuous, non-shielded exposure via immersion in a semi-infinite atmospheric cloud. The value is based upon the derived airborne concentration found in Table 1 of the U.S. Environmental Protection Agency's Federal Guidance Report No. 11. Limiting Values of Radionuclide Intake and Air Concentration and Dose Conversion Factors for Inhalation, Submersion, and Ingestion, published September 1988. This document is available from the National Technical Information Service, Springfield, VA.

Derived air concentration-hour (DAC-hour) means the product of the concentration of radioactive material in air (expressed as a fraction or multiple of the DAC for each radionuclide) and the time of exposure to that radionuclide, in hours.

DOE activity means an activity taken for or by DOE in a DOE operation or facility that has the potential to result in the occupational exposure of an individual to radiation or radioactive material. The activity may be, but is not limited to, design, construction, operation, or decommissioning. To the extent appropriate, the activity may involve a single DOE facility or operation or a combination of facilities and

operations, possibly including an entire site or multiple DOE sites.

Entrance or access point means any location through which an individual could gain access to areas controlled for the purposes of radiation protection. This includes entry or exit portals of sufficient size to permit human entry, irrespective of their intended use.

General employee means an individual who is either a DOE or DOE contractor employee; an employee of a subcontractor to a DOE contractor; or an individual who performs work for or in conjunction with DOE or utilizes DOE facilities.

High contamination area means any area, accessible to individuals, where removable surface contamination levels exceed or are likely to exceed 100 times the removable surface contamination values specified in appendix D of this part.

High radiation area means any area, accessible to individuals, in which radiation levels could result in an individual receiving a deep dose equivalent in excess of 0.1 rem (0.001 sievert) in 1 hour at 30 centimeters from the radiation source or from any surface that the radiation penetrates.

Individual means any human being.

Member of the public means an individual who is not a general employee. An individual is not a "member of the public" during any period in which the individual receives an occupational

Minor means an individual less than 18 years of age.

Monitoring means the measurement of radiation levels, airborne radioactivity concentrations, radioactive contamination levels, quantities of radioactive material, or individual doses and the use of the results of these measurements to evaluate radiological hazards or potential and actual doses resulting from exposures to ionizing radiation.

Nonstochastic effects means effects due to radiation exposure for which the severity varies with the dose and for which a threshold normally exists (e.g., radiation-induced opacities within the lens of the eye).

Occupational dose means an individual's ionizing radiation dose (external and internal) as a result of that individual's work assignment. Occupational dose does not include doses received as a medical patient or doses resulting from background radiation or participation as a subject in medical research programs.

Person means any individual, corporation, partnership, firm, association, trust, estate, public or private institution, group, Government agency, any State or political subdivision of, or any political entity within a State, any foreign government or nation or other entity, and any legal successor, representative, agent or agency of the foregoing; provided that person does not include the Department or the United States Nuclear Regulatory Commission.

Radiation means ionizing radiation: alpha particles, beta particles, gamma rays, X-rays, neutrons, high-speed electrons, high-speed protons, and other particles capable of producing ions. Radiation as used in this part, does not include non-ionizing radiation, such as radio- or micro-waves, or visible, infrared, or ultraviolet light.

Radiation area means any area accessible to individuals in which radiation levels could result in an individual receiving a deep dose equivalent in excess of 0.005 rem (0.05 millisievert) in 1 hour at 30 centimeters from the source or from any surface that the radiation penetrates.

Radioactive material area means any area within a controlled area, accessible to individuals, in which items or containers of radioactive material exist and the total activity of radioactive material exceeds the applicable values provided in appendix E of this part.

Radioactive material transportation means the movement of radioactive material by aircraft, rail, vessel, or highway vehicle when such movement is subject to Department of Transportation regulations or DOE Orders that govern such movements. Radioactive material transportation does not include preparation of material or packagings for transportation, monitoring required by this part, storage of material awaiting transportation, or application of markings and labels required for transportation.

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Radiological area means any area within a controlled area defined in this section as a "radiation area," "high radiation area," "contamination area," "high contamination area," or "airborne radioactivity area."

Radiological worker means a general employee whose job assignment involves operation of radiation producing devices or working with radioactive materials, or who is likely to be routinely occupationally exposed above 0.1 rem (0.001 sievert) per year total effective dose equivalent.

Real-time air monitoring means measurement of the concentrations or quantities of airborne radioactive materials on a continuous basis.

Respiratory protective device means an apparatus, such as a respirator, worn by an individual for the purpose of reducing the individual's intake of airborne radioactive materials.

Sealed radioactive source means a radioactive source manufactured, obtained, or retained for the purpose of utilizing the emitted radiation. The sealed radioactive source consists of a known or estimated quantity of radioactive material contained within a sealed capsule, sealed between layer(s) of non-radioactive material, or firmly fixed to a non-radioactive surface by electroplating or other means intended to prevent leakage or escape of the radioactive material. Sealed radioactive sources do not include reactor fuel elements, nuclear explosive devices, and radioisotope thermoelectric generators.

Source leak test means a test to determine if a sealed radioactive source is leaking radioactive material.

Stochastic effects means malignant and hereditary diseases for which the probability of an effect occurring, rather than its severity, is regarded as a function of dose without a threshold for radiation protection purposes.

Very high radiation area means any area accessible to individuals in which radiation levels could result in an individual receiving an absorbed dose in excess of 500 rads (5 grays) in one hour at 1 meter from a radiation source or from any surface that the radiation penetrates.

Week means a period of seven consecutive days.

Year means the period of time beginning on or near January 1 and ending on or near December 31 of that same year used to determine compliance with the provisions of this part. The starting and ending date of the year used to determine compliance may be changed provided that the change is made at the beginning of the year and that no day is omitted or duplicated in consecutive years.

(b) As used in this part to describe various aspects of radiation dose:

Absorbed dose (D) means the energy absorbed by matter from ionizing radiation per unit mass of irradiated material at the place of interest in that material. The absorbed dose is expressed in units of rad (or gray) (1 rad = 0.01 gray).

Committed dose equivalent ( $H_{T,50}$ ) means the dose equivalent calculated to be received by a tissue or organ over a 50-year period after the intake of a radionuclide into the body. It does not include contributions from radiation sources external to the body. Committed dose equivalent is expressed in units of rem (or sievert).

Committed effective dose equivalent  $(H_{E,50})$  means the sum of the committed dose equivalents to various tissues in the body  $(H_{T,50})$ , each multiplied by the appropriate weighting factor  $(w_T)$ —that is,  $H_{E,50} = \Sigma$   $w_T$   $H_{T,50}$ . Committed effective dose equivalent is expressed in units of rem (or sievert).

Cumulative total effective dose equivalent means the sum of all total effective dose equivalent values recorded for an individual, where available, for each year occupational dose was received, beginning January 1, 1989.

Deep dose equivalent means the dose equivalent derived from external radiation at a depth of 1 cm in tissue.

Dose is a general term for absorbed dose, dose equivalent, effective dose equivalent, committed dose equivalent, committed effective dose equivalent, or total effective dose equivalent as defined in this part.

Dose equivalent (H) means the product of absorbed dose (D) in rad (or gray) in tissue, a quality factor (Q), and other modifying factors (N). Dose equivalent

is expressed in units of rem (or sievert) (1 rem = 0.01 sievert).

Effective dose equivalent ( $H_E$ ) means the summation of the products of the dose equivalent received by specified tissues of the body ( $H_T$ ) and the appropriate weighting factor ( $w_T$ )—that is,  $H_E = \Sigma w_T H_T$ . It includes the dose from radiation sources internal and/or external to the body. For purposes of compliance with this part, deep dose equivalent to the whole body may be used as effective dose equivalent for external exposures. The effective dose equivalent is expressed in units of rem (or sievert).

External dose or exposure means that portion of the dose equivalent received from radiation sources outside the body (i.e., "external sources").

Extremity means hands and arms below the elbow or feet and legs below the knee.

Internal dose or exposure means that portion of the dose equivalent received from radioactive material taken into the body (e.g., "internal sources").

Lens of the eye dose equivalent means the external exposure of the lens of the eye and is taken as the dose equivalent at a tissue depth of 0.3 cm.

Quality factor (Q) means the modifying factor used to calculate the dose equivalent from the absorbed dose; the absorbed dose (expressed in rad or gray) is multiplied by the appropriate quality factor.

(i) The quality factors to be used for determining dose equivalent in rem are as follow:

#### **QUALITY FACTORS**

Radiation type	Quality factor
X-rays, gamma rays, positrons, electrons (including tritium beta particles)	1
Neutrons, ≤10 keV	3
Neutrons, >10 keV	10
Protons and singly-charged particles of un- known energy with rest mass greater than	
one atomic mass unit	10
energy	20

When spectral data are insufficient to identify the energy of the neutrons, a quality factor of 10 shall be used.

(ii) When spectral data are sufficient to identify the energy of the neutrons,

the following mean quality factor values may be used:

#### **QUALITY FACTORS FOR NEUTRONS**

[Mean quality factors,  $\bar{Q}$  (maximum value in a 30-cm dosimetry phantom), and values of neutron flux density that deliver in 40 hours, a maximum dose equivalent of 0.1 rem (0.001 sievert). Where neutron energy falls between listed values, the more restrictive mean quality factor shall be used.]

Neutron energy (MeV)	Mean quality fac- tor	Neutron flux density (cm <sup>-2</sup> s <sup>-1</sup> )
2.5×10 <sup>-8</sup> thermal	2	680
1×10 <sup>-7</sup>	2	680
1×10 <sup>-6</sup>	2	560
1×10 <sup>-5</sup>	2	560
1×10 <sup>-4</sup>	2	580
1×10 <sup>-3</sup>	2	680
1×10 <sup>-2</sup>	2.5	700
1×10 <sup>-1</sup>	7.5	115
5×10 <sup>-1</sup>	11	27
1	11	19
2.5	9	20
5	8	16
7	7	17
10	6.5	17
14	7.5	12
20	8	11
40	7	10
60	5.5	11
1×10 <sup>2</sup>	4	14
2×10 <sup>2</sup>	3.5	13
3×10 <sup>2</sup>	3.5	11
4×10 <sup>2</sup>	3.5	10

Shallow dose equivalent means the dose equivalent deriving from external radiation at a depth of 0.007 cm in tissue.

Total effective dose equivalent (TEDE) means the sum of the effective dose equivalent (for external exposures) and the committed effective dose equivalent (for internal exposures).

Weighting factor  $(w_T)$  means the fraction of the overall health risk, resulting from uniform, whole body irradiation, attributable to specific tissue (T). The dose equivalent to tissue  $(H_T)$  is multiplied by the appropriate weighting factor to obtain the effective dose equivalent contribution from that tissue. The weighting factors are as follows:

WEIGHTING FACTORS FOR VARIOUS ORGANS AND TISSUES

Organs or tissues, T	Weighting factor, $w_T$
Gonads	0.25
Breasts	0.15
Red bone marrow	0.12
Lungs	0.12
Thyroid	0.03

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WEIGHTING FACTORS FOR VARIOUS ORGANS AND TISSUES—Continued

Organs or tissues, T	Weighting factor, w <sub>T</sub>
Bone surfaces	0.03
Remainder 1	0.30
Whole body 2	1.00

1 "Remainder" means the five other organs or tissues, excluding the skin and lens of the eye, with the highest dose (e.g., liver, kidney, spleen, thymus, adrenal, pancreas, stomach, small intestine, and upper large intestine). The weighting factor for each remaining organ or tissue is 0.06.

<sup>2</sup> For the case of uniform external irradiation of the whole body, a weighting factor (w<sub>T</sub>) equal to 1 may be used in determination of the effective dose equivalent.

Whole body means, for the purposes of external exposure, head, trunk (including male gonads), arms above and including the elbow, or legs above and including the knee.

(c) Terms defined in the Atomic Energy Act and not defined in this part are used consistent with the meanings given in the Act.

[58 FR 65485, Dec. 14, 1993, as amended at 63 FR 59680, Nov. 4, 1998]

# §835.3 General rule.

- (a) No person or DOE personnel shall take or cause to be taken any action inconsistent with the requirements of:
  - (1) This part; or
- (2) Any program, plan, schedule, or other process established by this part.
- (b) With respect to a particular DOE activity, contractor management shall be responsible for compliance with the requirements of this part.
- (c) Where there is no contractor for a DOE activity, DOE shall ensure implementation of and compliance with the requirements of this part.
- (d) Nothing in this part shall be construed as limiting actions that may be necessary to protect health and safety.
- (e) For those activities that are required by §§835.102, 835.901(e), 835.1202 (a), and 835.1202(b), the time interval to conduct these activities may be extended by a period not to exceed 30 days to accommodate scheduling needs.

[58 FR 65485, Dec. 14, 1993, as amended at 63 FR 59682, Nov. 4, 1998]

# §835.4 Radiological units.

Unless otherwise specified, the quantities used in the records required by this part shall be clearly indicated in special units of curie, rad, roentgen, or

rem, including multiples and subdivisions of these units. The SI units, becquerel (Bq), gray (Gy), and sievert (Sv), are only provided parenthetically in this part for reference with scientific standards.

[58 FR 65485, Dec. 14, 1993, as amended at 63 FR 59682, Nov. 4, 1998]

### Subpart B—Management and **Administrative Requirements**

#### §835.101 Radiation protection programs.

- (a) A DOE activity shall be conducted in compliance with a documented radiation protection program (RPP) as approved by the DOE.
- (b) The DOE may direct or make modifications to a RPP.
- (c) The content of each RPP shall be commensurate with the nature of the activities performed and shall include formal plans and measures for applying the as low as reasonably achievable (ALARA) process to occupational exposure.
- (d) The RPP shall specify the existing and/or anticipated operational tasks that are intended to be within the scope of the RPP. Except as provided in §835.101(h), any task outside the scope of a RPP shall not be initiated until an update of the RPP is approved by DOE.
- (e) The content of the RPP shall address, but shall not necessarily be limited to, each requirement in this part.
- (f) The RPP shall include plans, schedules, and other measures for achieving compliance with regulations of this part. Unless otherwise specified in this part, compliance with amendments to this part shall be achieved no later than 180 days following approval of the revised RPP by DOE. Compliwith the requirements §835.402(d) for radiobioassay program accreditation shall be achieved no later than January 1, 2002.
- (g) An update of the RPP shall be submitted to DOE:
- (1) Whenever a change or an addition to the RPP is made:
- (2) Prior to the initiation of a task not within the scope of the RPP; or
- (3) Within 180 days of the effective date of any modifications to this part.

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- (h) Changes, additions, or updates to the RPP may become effective without prior Department approval only if the changes do not decrease the effectiveness of the RPP and the RPP, as changed, continues to meet the requirements of this part. Proposed changes that decrease the effectiveness of the RPP shall not be implemented without submittal to and approval by the Department.
- (i) An initial RPP or an update shall be considered approved 180 days after its submission unless rejected by DOE at an earlier date.

[58 FR 65485, Dec. 14, 1993, as amended at 63 FR 59682, Nov. 4, 1998]

#### §835.102 Internal audits.

Internal audits of the radiation protection program, including examination of program content and implementation, shall be conducted through a process that ensures that all functional elements are reviewed no less frequently than every 36 months.

[63 FR 59682, Nov. 4, 1998]

# §835.103 Education, training and skills.

Individuals responsible for developing and implementing measures necessary for ensuring compliance with the requirements of this part shall have the appropriate education, training, and skills to discharge these responsibilities.

[63 FR 59682, Nov. 4, 1998]

#### §835.104 Written procedures.

Written procedures shall be developed and implemented as necessary to ensure compliance with this part, commensurate with the radiological hazards created by the activity and consistent with the education, training, and skills of the individuals exposed to those hazards.

[63 FR 59682, Nov. 4, 1998]

# Subpart C—Standards for Internal and External Exposure

#### §835.201 [Reserved]

# §835.202 Occupational dose limits for general employees.

- (a) Except for planned special exposures conducted consistent with §835.204 and emergency exposures authorized in accordance with §835.1302, the occupational dose received by general employees shall be controlled such that the following limits are not exceeded in a year:
- (1) A total effective dose equivalent of 5 rems (0.05 sievert);
- (2) The sum of the deep dose equivalent for external exposures and the committed dose equivalent to any organ or tissue other than the lens of the eye of 50 rems (0.5 sievert);
- (3) A lens of the eye dose equivalent of 15 rems (0.15 sievert); and
- (4) A shallow dose equivalent of 50 rems (0.5 sievert) to the skin or to any extremity.
- (b) All occupational doses received during the current year, except doses resulting from planned special exposures conducted in compliance with §835.204 and emergency exposures authorized in accordance with §835.1302, shall be included when demonstrating compliance with §835.202(a) and 835.207.
- (c) Doses from background, therapeutic and diagnostic medical radiation, and participation as a subject in medical research programs shall not be included in dose records or in the assessment of compliance with the occupational dose limits.

[58 FR 65485, Dec. 14, 1993, as amended at 63 FR 59682, Nov. 4, 1998]

# §835.203 Combining internal and external dose equivalents.

(a) The total effective dose equivalent during a year shall be determined by summing the effective dose equivalent from external exposures and the

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committed effective dose equivalent from intakes during the year.

(b) Determinations of the effective dose equivalent shall be made using the weighting factor values provided in §835.2.

[58 FR 65485, Dec. 14, 1993, as amended at 63 FR 59682, Nov. 4, 1998]

#### §835.204 Planned special exposures.

- (a) A planned special exposure may be authorized for a radiological worker to receive doses in addition to and accounted for separately from the doses received under the limits specified in \$835.202(a), provided that each of the following conditions is satisfied:
- (1) The planned special exposure is considered only in an exceptional situation when alternatives that might prevent a radiological worker from exceeding the limits in §835.202(a) are unavailable or impractical;
- (2) The contractor management (and employer, if the employer is not the contractor) specifically requests the planned special exposure, in writing; and
- (3) Joint written approval is received from the appropriate DOE Head-quarters program office and the Secretarial Officer responsible for environment, safety and health matters.
- (b) Prior to requesting an individual to participate in an authorized planned special exposure, the individual's dose from all previous planned special exposures and all doses in excess of the occupational dose limits shall be determined
- (c) An individual shall not receive a planned special exposure that, in addition to the doses determined in §835.204(b), would result in a dose exceeding the following:
- (1) In a year, the numerical values of the dose limits established at §835.202(a); and
- (2) Over the individual's lifetime, five times the numerical values of the dose limits established at §835.202(a).
- (d) Prior to a planned special exposure, written consent shall be obtained from each individual involved. Each such written consent shall include:
- (1) The purpose of the planned operations and procedures to be used;
- (2) The estimated doses and associated potential risks and specific radio-

logical conditions and other hazards which might be involved in performing the task; and

- (3) Instructions on the measures to be taken to keep the dose ALARA considering other risks that may be present.
- (e) Records of the conduct of a planned special exposure shall be maintained and a written report submitted within 30 days after the planned special exposure to the approving organizations identified in §835.204(a)(3).
- (f) The dose from planned special exposures is not to be considered in controlling future occupational dose of the individual under §835.202(a), but is to be included in records and reports required under this part.

[58 FR 65485, Dec. 14, 1993, as amended at 63 FR 59682, Nov. 4, 1998]

# § 835.205 Determination of compliance for non-uniform exposure of the skin.

- (a) Non-uniform exposures of the skin from X-rays, beta radiation, and/or radioactive material on the skin are to be assessed as specified in this section.
- (b) For purposes of demonstrating compliance with §835.202(a)(4), assessments shall be conducted as follows:
- (1) Area of skin irradiated is 100 cm² or more. The non-uniform dose equivalent received during the year shall be averaged over the 100 cm² of the skin receiving the maximum dose, added to any uniform dose equivalent also received by the skin, and recorded as the shallow dose equivalent to any extremity or skin for the year.
- (2) Area of skin irradiated is 10 cm² or more, but is less than 100 cm². The non-uniform dose equivalent (H) to the irradiated area received during the year shall be added to any uniform dose equivalent also received by the skin and recorded as the shallow dose equivalent to any extremity or skin for the year. H is the dose equivalent averaged over the 1 cm² of skin receiving the maximum absorbed dose, D, reduced by the fraction f, which is the irradiated area in cm² divided by 100 cm² (i.e., H=fD). In no case shall a value of f less than 0.1 be used.
- (3) Area of skin irradiated is less than 10 cm<sup>2</sup>. The non-uniform dose equivalent shall be averaged over the 1 cm<sup>2</sup> of

skin receiving the maximum dose. This dose equivalent shall:

- (i) Be recorded in the individual's occupational exposure history as a special entry; and
- (ii) Not be added to any other shallow dose equivalent to any extremity or skin recorded as the dose equivalent for the year.

#### §835.206 Limits for the embryo/fetus.

- (a) The dose equivalent limit for the embryo/fetus from the period of conception to birth, as a result of occupational exposure of a declared pregnant worker, is 0.5 rem (0.005 sievert).
- (b) Substantial variation above a uniform exposure rate that would satisfy the limits provided in §835.206(a) shall be avoided.
- (c) If the dose equivalent to the embryo/fetus is determined to have already exceeded 0.5 rem (0.005 sievert) by the time a worker declares her pregnancy, the declared pregnant worker shall not be assigned to tasks where additional occupational exposure is likely during the remaining gestation period.

# § 835.207 Occupational dose limits for minors.

The dose equivalent limits for minors occupationally exposed to radiation and/or radioactive materials at a DOE activity are 0.1 rem (0.001 sievert) total effective dose equivalent in a year and 10% of the occupational dose limits specified at §835.202(a)(3) and (a)(4).

[63 FR 59682, Nov. 4, 1998]

# § 835.208 Limits for members of the public entering a controlled area.

The total effective dose equivalent limit for members of the public exposed to radiation and/or radioactive material during access to a controlled area is 0.1 rem (0.001 sievert) in a year.

[63 FR 59682, Nov. 4, 1998]

#### §835.209 Concentrations of radioactive material in air.

(a) The derived air concentration (DAC) values given in appendices A and C of this part shall be used in the control of occupational exposures to airborne radioactive material.

- (b) The estimation of internal dose shall be based on bioassay data rather than air concentration values unless bioassay data are:
  - (1) Unavailable:
  - (2) Inadequate; or
- (3) Internal dose estimates based on air concentration values are demonstrated to be as or more accurate.

[58 FR 65485, Dec. 14, 1993, as amended at 63 FR 59682, Nov. 4, 1998]

# Subpart D [Reserved]

### Subpart E—Monitoring of Individuals and Areas

#### §835.401 General requirements.

- (a) Monitoring of individuals and areas shall be performed to:
- (1) Demonstrate compliance with the regulations in this part;
- (2) Document radiological conditions;
- (3) Detect changes in radiological conditions;
- (4) Detect the gradual buildup of radioactive material;
- (5) Verify the effectiveness of engineering and process controls in containing radioactive material and reducing radiation exposure; and
- (6) Identify and control potential sources of individual exposure to radiation and/or radioactive material.
- (b) Instruments and equipment used for monitoring shall be:
- (1) Periodically maintained and calibrated on an established frequency;
- (2) Appropriate for the type(s), levels, and energies of the radiation(s) encountered;
- (3) Appropriate for existing environmental conditions; and
  - (4) Routinely tested for operability.

[58 FR 65485, Dec. 14, 1993, as amended at 63 FR 59682, Nov. 4, 1998]

#### §835.402 Individual monitoring.

- (a) For the purpose of monitoring individual exposures to external radiation, personnel dosimeters shall be provided to and used by:
- (1) Radiological workers who, under typical conditions, are likely to receive one or more of the following:
- (i) An effective dose equivalent to the whole body of 0.1 rem (0.001 sievert) or more in a year;

#### § 835.403

- (ii) A shallow dose equivalent to the skin or to any extremity of 5 rems (0.05 sievert) or more in a year;
- (iii) A lens of the eye dose equivalent of 1.5 rems (0.015 sievert) or more in a year:
- (2) Declared pregnant workers who are likely to receive from external sources a dose equivalent to the embryo/fetus in excess of 10 percent of the limit at \$835.206(a);
- (3) Occupationally exposed minors likely to receive a dose in excess of 50 percent of the applicable limits at §835.207 in a year from external sources;
- (4) Members of the public entering a controlled area likely to receive a dose in excess of 50 percent of the limit at §835.208 in a year from external sources; and
- (5) Individuals entering a high or very high radiation area.
- (b) External dose monitoring programs implemented to demonstrate compliance with §835.402(a) shall be adequate to demonstrate compliance with the dose limits established in subpart C of this part and shall be:
- (1) Accredited, or excepted from accreditation, in accordance with the DOE Laboratory Accreditation Program for Personnel Dosimetry; or
- (2) Determined by the Secretarial Officer responsible for environment, safety and health matters to have performance substantially equivalent to that of programs accredited under the DOE Laboratory Accreditation Program for Personnel Dosimetry.
- (c) For the purpose of monitoring individual exposures to internal radiation, internal dosimetry programs (including routine bioassay programs) shall be conducted for:
- (1) Radiological workers who, under typical conditions, are likely to receive a committed effective dose equivalent of 0.1 rem (0.001 sievert) or more from all occupational radionuclide intakes in a year;
- (2) Declared pregnant workers likely to receive an intake or intakes resulting in a dose equivalent to the embryo/fetus in excess of 10 percent of the limit stated at §835.206(a);
- (3) Occupationally exposed minors who are likely to receive a dose in excess of 50 percent of the applicable

limit stated at §835.207 from all radionuclide intakes in a year; or

- (4) Members of the public entering a controlled area likely to receive a dose in excess of 50 percent of the limit stated at \$835.208 from all radionuclide intakes in a year.
- (d) Internal dose monitoring programs implemented to demonstrate compliance with §835.402(c) shall be adequate to demonstrate compliance with the dose limits established in subpart C of this part and shall be:
- (1) Accredited, or excepted from accreditation, in accordance with the DOE Laboratory Accreditation Program for Radiobioassay; or,
- (2) Determined by the Secretarial Officer responsible for environment, safety and health matters to have performance substantially equivalent to that of programs accredited under the DOE Laboratory Accreditation Program for Radiobioassy.

[63 FR 59683, Nov. 4, 1998]

#### §835.403 Air monitoring.

- (a) Monitoring of airborne radioactivity shall be performed:
- (1) Where an individual is likely to receive an exposure of 40 or more DAC-hours in a year; or
- (2) As necessary to characterize the airborne radioactivity hazard where respiratory protective devices for protection against airborne radionuclides have been prescribed.
- (b) Real-time air monitoring shall be performed as necessary to detect and provide warning of airborne radioactivity concentrations that warrant immediate action to terminate inhalation of airborne radioactive material.

[63 FR 59683, Nov. 4, 1998]

#### §835.404 [Reserved]

# §835.405 Receipt of packages containing radioactive material.

- (a) If packages containing quantities of radioactive material in excess of a Type A quantity (as defined at 10 CFR 71.4) are expected to be received from radioactive material transportation, arrangements shall be made to either:
- (1) Take possession of the package when the carrier offers it for delivery; or

- (2) Receive notification as soon as practicable after arrival of the package at the carrier's terminal and to take possession of the package expeditiously after receiving such notification.
- (b) Upon receipt from radioactive material transportation, external surfaces of packages known to contain radioactive material shall be monitored if the package:
- (1) Is labeled with a Radioactive White I, Yellow II, or Yellow III label (as specified at 49 CFR 172.403 and 172.436-440); or
- (2) Has been transported as low specific activity material (as defined at 10 CFR 71.4) on an exclusive use vehicle (as defined at 10 CFR 71.4); or
- (3) Has evidence of degradation, such as packages that are crushed, wet, or damaged.
- (c) The monitoring required by paragraph (b) of this section shall include:
- (1) Measurements of removable contamination levels, unless the package contains only special form (as defined at 10 CFR 71.4) or gaseous radioactive material; and
- (2) Measurements of the radiation levels, unless the package contains less than a Type A quantity (as defined at 10 CFR 71.4) of radioactive material.
- (d) The monitoring required by paragraph (b) of this section shall be completed as soon as practicable following receipt of the package, but not later than 8 hours after the beginning of the working day following receipt of the package.

[63 FR 59683, Nov. 4, 1998]

# **Subpart F—Entry Control Program**

#### §835.501 Radiological areas.

- (a) Personnel entry control shall be maintained for each radiological area.
- (b) The degree of control shall be commensurate with existing and potential radiological hazards within the area.
- (c) One or more of the following methods shall be used to ensure control:
  - (1) Signs and barricades;
  - (2) Control devices on entrances;
- (3) Conspicuous visual and/or audible alarms;
  - (4) Locked entrance ways; or
  - (5) Administrative controls.

- (d) Written authorizations shall be required to control entry into and perform work within radiological areas. These authorizations shall specify radiation protection measures commensurate with the existing and potential hazards.
- (e) No control(s) shall be installed at any radiological area exit that would prevent rapid evacuation of personnel under emergency conditions.

[58 FR 65485, Dec. 14, 1993, as amended at 63 FR 59684, Nov. 4, 1998]

# § 835.502 High and very high radiation areas.

- (a) The following measures shall be implemented for each entry into a high radiation area:
- (1) The area shall be monitored as necessary during access to determine the exposure rates to which the individuals are exposed; and
- (2) Each individual shall be monitored by a supplemental dosimetry device or other means capable of providing an immediate estimate of the individual's integrated deep dose equivalent during the entry.
- (b) Physical controls. One or more of the following features shall be used for each entrance or access point to a high radiation area where radiation levels exist such that an individual could exceed a deep dose equivalent to the whole body of 1 rem (0.01 sievert) in any one hour at 30 centimeters from the source or from any surface that the radiation penetrates:
- (1) A control device that prevents entry to the area when high radiation levels exist or upon entry causes the radiation level to be reduced below that level defining a high radiation area:
- (2) A device that functions automatically to prevent use or operation of the radiation source or field while individuals are in the area;
- (3) A control device that energizes a conspicuous visible or audible alarm signal so that the individual entering the high radiation area and the supervisor of the activity are made aware of the entry.
- (4) Entryways that are locked. During periods when access to the area is required, positive control over each entry is maintained;

#### § 835.601

- (5) Continuous direct or electronic surveillance that is capable of preventing unauthorized entry;
- (6) A control device that will automatically generate audible and visual alarm signals to alert personnel in the area before use or operation of the radiation source and in sufficient time to permit evacuation of the area or activation of a secondary control device that will prevent use or operation of the source.
- (c) Very high radiation areas. In addition to the above requirements, additional measures shall be implemented to ensure individuals are not able to gain unauthorized or inadvertent access to very high radiation areas.
- (d) No control(s) shall be established in a high or very high radiation area that would prevent rapid evacuation of personnel.

[58 FR 65485, Dec. 14, 1993, as amended at 63 FR 59684, Nov. 4, 1998]

# Subpart G—Posting and Labeling

#### §835.601 General requirements.

- (a) Except as otherwise provided in this subpart, postings and labels required by this subpart shall include the standard radiation warning trefoil in black or magenta imposed upon a yellow background.
- (b) Signs required by this subpart shall be clearly and conspicuously posted and may include radiological protection instructions.
- (c) The posting and labeling requirements in this subpart may be modified to reflect the special considerations of DOE activities conducted at private residences or businesses. Such modifications shall provide the same level of protection to individuals as the existing provisions in this subpart.

[63 FR 59684, Nov. 4, 1998]

#### §835.602 Controlled areas.

(a) Each access point to a controlled area (as defined at §835.2) shall be posted whenever radiological areas or radioactive material areas exist in the area. Individuals who enter only controlled areas without entering radiological areas or radioactive material areas are not expected to receive a

total effective dose equivalent of more than 0.1 rem (0.001 sievert) in a year.

(b) Signs used for this purpose may be selected by the contractor to avoid conflict with local security requirements.

[58 FR 65485, Dec. 14, 1993, as amended at 63 FR 59684, Nov. 4, 1998]

#### § 835.603 Radiological areas and radioactive material areas.

Each access point to radiological areas and radioactive material areas (as defined at §835.2) shall be posted with conspicuous signs bearing the wording provided in this section.

- (a) Radiation area. The words "Caution, Radiation Area" shall be posted at each radiation area.
- (b) High radiation area. The words "Caution, High Radiation Area" or "Danger, High Radiation Area" shall be posted at each high radiation area.
- (c) Very high radiation area. The words "Grave Danger, Very High Radiation Area" shall be posted at each very high radiation area.
- (d) Airborne radioactivity area. The words "Caution, Airborne Radioactivity Area" or "Danger, Airborne Radioactivity Area" shall be posted at each airborne radioactivity area.
- (e) Contamination area. The words "Caution, Contamination Area" shall be posted at each contamination area.
- (f) High contamination area. The words "Caution, High Contamination Area" or "Danger, High Contamination Area" shall be posted at each high contamination area.
- (g) Radioactive material area. The words "Caution, Radioactive Material(s)" shall be posted at each radioactive material area.

[63 FR 59684, Nov. 4, 1998]

# § 835.604 Exceptions to posting requirements.

- (a) Areas may be excepted from the posting requirements of §835.603 for periods of less than 8 continuous hours when placed under continuous observation and control of an individual knowledgeable of, and empowered to implement, required access and exposure control measures.
- (b) Areas may be excepted from the radioactive material area posting requirements of §835.603(g) when:

- (1) Posted in accordance with §§ 835.603(a) through (f); or
- (2) Each item or container of radioactive material is labeled in accordance with this subpart such that individuals entering the area are made aware of the hazard; or
- (3) The radioactive material of concern consists solely of structures or installed components which have been activated (i.e., such as by being exposed to neutron radiation or particles produced by an accelerator).
- (c) Areas containing only packages received from radioactive material transportation labeled and in non-degraded condition need not be posted in accordance with §835.603 until the packages are monitored in accordance with §835.405.

[63 FR 59684, Nov. 4, 1998]

# § 835.605 Labeling items and containers.

Except as provided at §835.606, each item or container of radioactive material shall bear a durable, clearly visible label bearing the standard radiation warning trefoil and the words "Caution, Radioactive Material." or "Danger, Radioactive Material." The label shall also provide sufficient information to permit individuals handling, using, or working in the vicinity of the items or containers to take precautions to avoid or control exposures.

[63 FR 59684, Nov. 4, 1998]

# §835.606 Exceptions to labeling requirements.

- (a) Items and containers may be excepted from the radioactive material labeling requirements of §835.605 when:
- (1) Used, handled, or stored in areas posted and controlled in accordance with this subpart and sufficient information is provided to permit individuals to take precautions to avoid or control exposures; or
- (2) The quantity of radioactive material is less than one tenth of the values specified in appendix E of this part; or
- (3) Packaged, labeled, and marked in accordance with the regulations of the Department of Transportation or DOE Orders governing radioactive material transportation; or

- (4) Inaccessible, or accessible only to individuals authorized to handle or use them, or to work in the vicinity; or
- (5) Installed in manufacturing, process, or other equipment, such as reactor components, piping, and tanks; or
- (6) The radioactive material consists solely of nuclear weapons or their components.
- (b) Radioactive material labels applied to sealed radioactive sources may be excepted from the color specifications of §835.601(a).

[63 FR 59684, Nov. 4, 1998]

#### Subpart H—Records

# §835.701 General provisions.

- (a) Records shall be maintained to document compliance with this part and with radiation protection programs required by §835.101.
- (b) Unless otherwise specified in this subpart, records shall be retained until final disposition is authorized by DOE.

# § 835.702 Individual monitoring records.

- (a) Records shall be maintained to document doses received by all individuals for whom monitoring was required pursuant to \$835.402 and to document doses received during planned special exposures, unplanned doses exceeding the monitoring thresholds of \$835.402, and authorized emergency exposures.
- (b) The results of individual external and internal dose monitoring that is performed, but not required by §835.402, shall be recorded. Recording of non-uniform shallow dose equivalent to the skin is not required if the dose is less than 2 percent of the limit specified for the skin at §835.202(a)(4).
- (c) The records required by this section shall:
- (1) Be sufficient to evaluate compliance with subpart C of this part;
- (2) Be sufficient to provide dose information necessary to complete reports required by subpart I of this part;
- (3) Include the following quantities for external dose received during the year:
- (i) The effective dose equivalent from external sources of radiation (deep dose equivalent may be used as effective dose equivalent for external exposure);

#### § 835.703

- (ii) The lens of the eye dose equivalent:
- (iii) The shallow dose equivalent to the skin; and
- (iv) The shallow dose equivalent to the extremities.
- (4) Include the following information for internal dose resulting from intakes received during the year:
- (i) Committed effective dose equivalent:
- (ii) Committed dose equivalent to any organ or tissue of concern; and
  - (iii) Identity of radionuclides.
- (5) Include the following quantities for the summation of the external and internal dose:
- (i) Total effective dose equivalent in a year;
- (ii) For any organ or tissue assigned an internal dose during the year, the sum of the deep dose equivalent from external exposures and the committed dose equivalent to that organ or tissue;
- (iii) Cumulative total effective dose equivalent.
- (6) Include the dose equivalent to the embryo/fetus of a declared pregnant worker.
- (d) Documentation of all occupational doses received during the current year, except for doses resulting from planned special exposures conducted in compliance with \$835.204 and emergency exposures authorized in accordance with \$835.1302(d), shall be obtained to demonstrate compliance with \$835.202(a). If complete records documenting previous occupational dose during the year cannot be obtained, a written estimate signed by the individual may be accepted to demonstrate compliance.
- (e) For radiological workers whose occupational dose is monitored in accordance with §835.402, reasonable efforts shall be made to obtain complete records of prior years occupational internal and external doses.
- (f) The records specified in this section that are identified with a specific individual shall be readily available to that individual.
- (g) Data necessary to allow future verification or reassessment of the recorded doses shall be recorded.
- (h) All records required by this section shall be transferred to the DOE

upon cessation of activities at the site that could cause exposure to individ-

[58 FR 65485, Dec. 14, 1993, as amended at 63 FR 59685, Nov. 4, 1998]

#### §835.703 Other monitoring records.

The following information shall be documented and maintained:

- (a) Results of monitoring for radiation and radioactive material as required by subparts E and L of this part, except for monitoring required by §835.1102(d);
- (b) Results of monitoring used to determine individual occupational dose from external and internal sources;
- (c) Results of monitoring for the release and control of material and equipment as required by §835.1101; and
- (d) Results of maintenance and calibration performed on instruments and equipment as required by §835.401(b).

[58 FR 65485, Dec. 14, 1993, as amended at 63 FR 59685, Nov. 4, 1998]

#### §835.704 Administrative records.

- (a) Training records shall be maintained, as necessary, to demonstrate compliance with §§ 835.901.
- (b) Actions taken to maintain occupational exposures as low as reasonably achievable, including the actions required for this purpose by §835.101, as well as facility design and control actions required by §835.1001, 835.1002, and 835.1003, shall be documented.
- (c) Records shall be maintained to document the results of internal audits and other reviews of program content and implementation.
- (d) Written declarations of pregnancy, including the estimated date of conception, and revocations of declarations of pregnancy shall be maintained.
- (e) Changes in equipment, techniques, and procedures used for monitoring shall be documented.
- (f) Records shall be maintained as necessary to demonstrate compliance with the requirements of §§ 835.1201 and 835.1202 for sealed radioactive source control, inventory, and source leak tests.

[58 FR 65485, Dec. 14, 1993, as amended at 63 FR 59685, Nov. 4, 1998]

# Subpart I—Reports to Individuals

#### §835.801 Reports to individuals.

- (a) Radiation exposure data for individuals monitored in accordance with §835.402 shall be reported as specified in this section. The information shall include the data required under §835.702(c). Each notification and report shall be in writing and include: the DOE site or facility name, the name of the individual, and the individual's social security number, employee number, or other unique identification number.
- (b) Upon the request from an individual terminating employment, records of exposure shall be provided to that individual as soon as the data are available, but not later than 90 days after termination. A written estimate of the radiation dose received by that employee based on available information shall be provided at the time of termination, if requested.
- (c) Each DOE- or DOE-contractor-operated site or facility shall, on an annual basis, provide a radiation dose report to each individual monitored during the year at that site or facility in accordance with §835.402.
- (d) Detailed information concerning any individual's exposure shall be made available to the individual upon request of that individual, consistent with the provisions of the Privacy Act (5 U.S.C. 552a).
- (e) When a DOE contractor is required to report to the Department, pursuant to Departmental requirements for occurrence reporting and processing, any exposure of an individual to radiation and/or radioactive material, or planned special exposure in accordance with §835.204(e), the contractor shall also provide that individual with a report on his or her exposure data included therein. Such report shall be transmitted at a time not later than the transmittal to the Department.

[58 FR 65485, Dec. 14, 1993, as amended at 63 FR 59685, Nov. 4, 1998]

# Subpart J—Radiation Safety Training

#### §835.901 Radiation safety training.

- (a) Each individual shall complete radiation safety training on the topics established at §835.901(c) commensurate with the hazards in the area and the required controls:
- (1) Before being permitted unescorted access to controlled areas; and
- (2) Before receiving occupational dose during access to controlled areas at a DOE site or facility.
- (b) Each individual shall demonstrate knowledge of the radiation safety training topics established at §835.901(c), commensurate with the hazards in the area and required controls, by successful completion of an examination and performance demonstrations:
- (1) Before being permitted unescorted access to radiological areas; and
- (2) Before performing unescorted assignments as a radiological worker.
- (c) Radiation safety training shall include the following topics, to the extent appropriate to each individual's prior training, work assignments, and degree of exposure to potential radiological hazards:
- (1) Risks of exposure to radiation and radioactive materials, including prenatal radiation exposure:
- (2) Basic radiological fundamentals and radiation protection concepts;
- (3) Physical design features, administrative controls, limits, policies, procedures, alarms, and other measures implemented at the facility to manage doses and maintain doses ALARA, including both routine and emergency actions:
- (4) Individual rights and responsibilities as related to implementation of the facility radiation protection program:
- (5) Individual responsibilities for implementing ALARA measures required by §835.101; and
- (6) Individual exposure reports that may be requested in accordance with §835.801.
- (d) When an escort is used in lieu of training in accordance with paragraph

#### §§ 835.902-835.903

- (a) or (b) of this section, the escort shall:
- (1) Have completed radiation safety training, examinations, and performance demonstrations required for entry to the area and performance of the work; and
- (2) Ensure that all escorted individuals comply with the documented radiation protection program.
- (e) Radiation safety training shall be provided to individuals when there is a significant change to radiation protection policies and procedures that may affect the individual and at intervals not to exceed 24 months. Such training provided for individuals subject to the requirements of §835.901(b)(1) and (b)(2) shall include successful completion of an examination.

[63 FR 59685, Nov. 4, 1998]

#### §§ 835.902-835.903 [Reserved]

# Subpart K—Design and Control

# §835.1001 Design and control.

- (a) Measures shall be taken to maintain radiation exposure in controlled areas ALARA through physical design features and administrative control. The primary methods used shall be physical design features (e.g., confinement, ventilation, remote handling, and shielding). Administrative controls shall be employed only as supplemental methods to control radiation exposure.
- (b) For specific activities where use of physical design features is demonstrated to be impractical, administrative controls shall be used to maintain radiation exposures ALARA.

[63 FR 59686, Nov. 4, 1998]

# §835.1002 Facility design and modifications.

During the design of new facilities or modification of existing facilities, the following objectives shall be adopted:

- (a) Optimization methods shall be used to assure that occupational exposure is maintained ALARA in developing and justifying facility design and physical controls.
- (b) The design objective for controlling personnel exposure from external sources of radiation in areas of contin-

uous occupational occupancy (2000 hours per year) shall be to maintain exposure levels below an average of 0.5 mrem (5 microsieverts) per hour and as far below this average as is reasonably achievable. The design objectives for exposure rates for potential exposure to a radiological worker where occupancy differs from the above shall be ALARA and shall not exceed 20 percent of the applicable standards in §835.202.

- (c) Regarding the control of airborne radioactive material, the design objective shall be, under normal conditions, to avoid releases to the workplace atmosphere and in any situation, to control the inhalation of such material by workers to levels that are ALARA; confinement and ventilation shall normally be used.
- (d) The design or modification of a facility and the selection of materials shall include features that facilitate operations, maintenance, decontamination, and decommissioning.

[58 FR 65485, Dec. 14, 1993, as amended at 63 FR 59686, Nov. 4, 1998]

#### §835.1003 Workplace controls.

During routine operations, the combination of physical design features and administrative controls shall provide that:

- (a) The anticipated occupational dose to general employees shall not exceed the limits established at §835.202; and
- (b) The ALARA process is utilized for personnel exposures to ionizing radiation.

[63 FR 59686, Nov. 4, 1998]

# Subpart L—Radioactive Contamination Control

Source: 63 FR 59686, Nov. 4, 1998, unless otherwise noted.

# §835.1101 Control of material and equipment.

- (a) Except as provided in paragraphs (b) and (c) of this section, material and equipment in contamination areas, high contamination areas, and airborne radioactivity areas shall not be released to a controlled area if:
- (1) Removable surface contamination levels on accessible surfaces exceed the

removable surface contamination values specified in appendix D of this part; or

- (2) Prior use suggests that the removable surface contamination levels on inaccessible surfaces are likely to exceed the removable surface contamination values specified in appendix D of this part.
- (b) Material and equipment exceeding the removable surface contamination values specified in appendix D of this part may be conditionally released for movement on-site from one radiological area for immediate placement in another radiological area only if appropriate monitoring is performed and appropriate controls for the movement are established and exercised.
- (c) Material and equipment with fixed contamination levels that exceed the total contamination values specified in appendix D of this part may be released for use in controlled areas outside of radiological areas only under the following conditions:
- (1) Removable surface contamination levels are below the removable surface contamination values specified in appendix D of this part; and
- (2) The material or equipment is routinely monitored and clearly marked or labeled to alert personnel of the contaminated status.

### §835.1102 Control of areas.

- (a) Appropriate controls shall be maintained and verified which prevent the inadvertent transfer of removable contamination to locations outside of radiological areas under normal operating conditions.
- (b) Any area in which contamination levels exceed the values specified in appendix D of this part shall be controlled in a manner commensurate with the physical and chemical characteristics of the contaminant, the radionuclides present, and the fixed and removable surface contamination levels.
- (c) Areas accessible to individuals where the measured total surface contamination levels exceed, but the removable surface contamination levels are less than, corresponding surface contamination values specified in appendix D of this part, shall be controlled as follows when located outside of radiological areas:

- (1) The area shall be routinely monitored to ensure the removable surface contamination level remains below the removable surface contamination values specified in appendix D of this part; and
- (2) The area shall be conspicuously marked to warn individuals of the contaminated status.
- (d) Individuals exiting contamination, high contamination, or airborne radioactivity areas shall be monitored, as appropriate, for the presence of surface contamination.
- (e) Protective clothing shall be required for entry to areas in which removable contamination exists at levels exceeding the removable surface contamination values specified in appendix D of this part.

### Subpart M—Sealed Radioactive Source Control

Source: 63 FR 59686, Nov. 4, 1998, unless otherwise noted.

# § 835.1201 Sealed radioactive source control.

Sealed radioactive sources shall be used, handled, and stored in a manner commensurate with the hazards associated with operations involving the sources.

#### § 835.1202 Accountable sealed radioactive sources.

- (a) Each accountable sealed radioactive source shall be inventoried at intervals not to exceed six months. This inventory shall:
- (1) Establish the physical location of each accountable sealed radioactive source;
- (2) Verify the presence and adequacy of associated postings and labels: and
- (3) Establish the adequacy of storage locations, containers, and devices.
- (b) Except for sealed radioactive sources consisting solely of gaseous radioactive material or tritium, each accountable sealed radioactive source shall be subject to a source leak test upon receipt, when damage is suspected, and at intervals not to exceed six months. Source leak tests shall be capable of detecting radioactive material leakage equal to or exceeding 0.005 microcurie.

#### §835.1301

- (c) Notwithstanding the requirements of paragraph (b) of this section, an accountable sealed radioactive source is not subject to periodic source leak testing if that source has been removed from service. Such sources shall be stored in a controlled location, subject to periodic inventory as required by paragraph (a) of this section, and subject to source leak testing prior to being returned to service.
- (d) Notwithstanding the requirements of paragraphs (a) and (b) of this section, an accountable sealed radioactive source is not subject to periodic inventory and source leak testing if that source is located in an area that is unsafe for human entry or otherwise inaccessible.
- (e) An accountable sealed radioactive source found to be leaking radioactive material shall be controlled in a manner that minimizes the spread of radioactive contamination.

# Subpart N—Emergency Exposure Situations

#### §835.1301 General provisions.

- (a) A general employee whose occupational dose has exceeded the numerical value of any of the limits specified in §35.202 as a result of an authorized emergency exposure may be permitted to return to work in radiological areas during the current year providing that all of the following conditions are met:
- (1) Approval is first obtained from the contractor management and the Head of the responsible DOE field organization;
- (2) The individual receives counseling from radiological protection and medical personnel regarding the consequences of receiving additional occupational exposure during the year; and
- (3) The affected employee agrees to return to radiological work.
- (b) All doses exceeding the limits specified in §835.202 shall be recorded in the affected individual's occupational dose record.
- (c) When the conditions under which a dose was received in excess of the limits specified in §835.202, except those received in accordance with §835.204, have been eliminated, operating management shall notify the

Head of the responsible DOE field organization.

(d) Operations after a dose was received in excess of the limits specified in §835.202, except those received in accordance with §835.204, may be resumed only with the approval of DOE.

[58 FR 65485, Dec. 14, 1993, as amended at 63 FR 59687, Nov. 4, 1998]

# §835.1302 Emergency exposure situations.

- (a) The risk of injury to those individuals involved in rescue and recovery operations shall be minimized.
- (b) Operating management shall weigh actual and potential risks against the benefits to be gained.
- (c) No individual shall be required to perform a rescue action that might involve substantial personal risk.
- (d) Each individual authorized to perform emergency actions likely to result in occupational doses exceeding the values of the limits provided at §835.202(a) shall be trained in accordance with §835.901(b) and briefed beforehand on the known or anticipated hazards to which the individual will be subjected.

[58 FR 65485, Dec. 14, 1993, as amended at 63 FR 59687, Nov. 4, 1998]

#### §835.1303 [Reserved]

#### §835.1304 Nuclear accident dosimetry.

- (a) Installations possessing sufficient quantities of fissile material to potentially constitute a critical mass, such that the excessive exposure of individuals to radiation from a nuclear accident is possible, shall provide nuclear accident dosimetry for those individuals.
- (b) Nuclear accident dosimetry shall include the following:
- (1) A method to conduct initial screening of individuals involved in a nuclear accident to determine whether significant exposures to radiation occurred;
- (2) Methods and equipment for analysis of biological materials;
- (3) A system of fixed nuclear accident dosimeter units; and

(4) Personal nuclear accident dosimeters.

[58 FR 65485, Dec. 14, 1993, as amended at 63 FR 59687, Nov. 4, 1998]

APPENDIX A TO PART 835—DERIVED AIR CONCENTRATIONS (DAC) FOR CONTROLLING RADIATION EXPOSURE TO WORKERS AT DOE FACILITIES

The data presented in appendix A are to be used for controlling individual internal doses in accordance with \$835.209, identifying the need for air monitoring in accordance with \$835.403, and identifying the need for posting of airborne radioactivity areas in accordance with \$835.603(d).

The DAC values are given for individual radionuclides. For known mixtures of radionuclides, determine the sum of the ratio of the observed concentration of a particular radionuclide and its corresponding DAC for all radionuclides in the mixture. If this sum exceeds unity (1), then the DAC has been exceeded. For unknown radionuclides, the most restrictive DAC (lowest value) for those isotopes not known to be absent shall be used.

The derived air concentrations (DAC) for limiting radiation exposures through inhalation of radionuclides by workers are listed in this appendix. The values are based on either a stochastic (committed effective dose equivalent) dose limit of 5 rems (0.05 Sv) or a non-

stochastic (organ) dose limit of 50 rems (0.5 Sv) per year, whichever is more limiting.

NOTE: the 15 rems [0.15 Sv] dose limit for the lens of the eye does not appear as a critical organ dose limit.)

The columns in this appendix contain the following information: (1) Radionuclide; (2) inhaled air DAC for lung retention class D, W, and Y in units of µCi/ml; (3) inhaled air DAC for lung retention class D, W, and Y in units of  $Bq/m^3$ ; and (4) an indication of whether or not the DAC for each class is controlled by the stochastic (effective dose equivalent) or nonstochastic (tissue) dose. The classes D, W, and Y have been established to describe the clearance of inhaled radionuclides from the lung. This classification refers to the approximate length of retention in the pulmonary region. Thus, the range of half-times for retention in the pulmonary region is less than 10 days for class D (days), from 10 to 100 days for class W (weeks), and greater than 100 days for class Y (years). The DACs are listed by radionuclide, in order of increasing atomic mass, and are based on the assumption that the particle size distribution of the inhaled material is unknown and an assumed particle size distribution of 1  $\mu m$  is used. For situations where the particle size distribution is known to differ significantly from 1 µm, appropriate corrections can be made to both the estimated dose to workers and the DACs.

	Inhaled	air-lung retentio	n class <sup>3</sup>	Inhaled	air-lung retentio	n class <sup>3</sup>	Stochastic or organ 1
Radionuclide		μCi/ml			Bq/m <sup>3</sup>		
	D	W	Y	D	W	Y	( D/ W/ Y)
H-3 (Water) <sup>2</sup> H-3 (Elemental) <sup>2</sup>	2.E - 05 5.E - 01	2.E - 05 5.E - 01	2.E - 05 5.E - 01	8.E + 05 2.E + 10	8.E + 05 2.E + 10	8.E + 05 2.E + 10	St/St/St St/St/St
Be-7 Be-10	_ _	9.E – 06 6.E – 08	8.E – 06 6.E – 09	-	3.E+05 2.E+03	3.E + 05 2.E + 02	/St/St /St/St
C-11 (Org) <sup>2</sup> C-11 (CO) <sup>2</sup>		2.E – 04 5.E – 04	2.E – 04 5.E – 04	6.E + 06 2.E + 07	6.E + 06 2.E + 07	6.E + 06 2.E + 07	St/St/St St/St/St
C-11 (CO <sub>2</sub> ) <sup>2</sup>	3.E – 04	3.E - 04	3.E - 04	1.E + 07	1.E + 07	1.E + 07	St/St/St
C-14 (Org) <sup>2</sup> C-14 (CO) <sup>2</sup>	7.E – 04	1.E – 06 7.E – 04	1.E – 06 7.E – 04	4.E + 07 3.E + 07	4.E + 04 3.E + 07	4.E + 07 3.E + 07	St/St/St St/St/St
C-14 (CO <sub>2</sub> ) <sup>2</sup>		9.E – 05 4.E – 05	9.E – 05 3.E – 05	3.E + 06 1.E + 06	3.E+06 1.E+06	3.E+06 1.E+06	St/St/St St/St/St
Na-22 Na-24	3.E - 07	-	-	1.E + 04 8.E + 04	=	-	St/ /
Mg-28 Al-26		5.E – 07 3.E – 08	_	3.E + 04 1.E + 03	2.E + 04 1.E + 03	_	St/St/ St/St/
Si-31	1.E - 05	1.E-05	1.E – 05	4.E + 05	5.E + 05	4.E + 05	St/St/St
Si-32 P-32	1.E – 07 4.E – 07	5.E – 08 2.E – 07	2.E – 09 –	4.E + 03 1.E + 04	2.E + 03 6.E + 03	8.E + 01 -	St/St/St St/St/
P-33 S-35	3.E – 06 7.E – 06	1.E - 06 9.E - 07	_ _	1.E + 05 3.E + 05	4.E + 04 3.E + 04	_	St/St/ St/St/
S-35 (Gas) Cl-36	_ 1.E – 06	6.E-06 1.E-07	_	- 4.E + 04	2.E + 05 4.E + 03	_	/St/ St/St/
CI-38	2.E - 05 2.E - 05	2.E - 05 2.E - 05	_	6.E + 05 8.E + 05	7.E + 05 9.E + 05		St/St/ St/St/
K-40	2.E - 07	2.E - U5 -	_	6.E + 03	9.E + 05	_	St/ /
K-42 K-43	2.E – 06 4.E – 06	_ _	_ _	7.E + 04 1.E + 05	_ _	_	St/ / St/ /
K-44 K-45	3.E - 05 5.E - 05	_ _	_ _	1.E + 06 2.E + 06	_ _	_ _	St/ / St/ /
Ca-41 Ca-45	_	2.E - 06 3.E - 07	_	-	6.E + 04 1.E + 04	_	/E/ /St/
Ga-40	_	J.E-01	_		1.6 + 04	_	1 /30

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	Inhaled	air-lung retention	on class <sup>3</sup>	Inhale	d air-lung retent	on class 3	Stochastic organ 1
Radionuclide		μCi/ml			Bq/m <sup>3</sup>		
	D	W	Y	D	W	Y	( D/ W/ Y
Ca-47	-	4.E-07	_	_	1.E + 04	_	/St/
Sc-43	_	_	1.E - 05	-	_	4.E + 05	/ /St
c-44m	_	_	3.E - 07	_	-	1.E + 04	/ /St
c-44	_	-	5.E - 06	_	-	2.E + 05	/ /St
c-46	_	-	1.E - 07	_	-	4.E + 03	/ /St
ic-47	_	-	1.E – 06	_	-	5.E + 04	/ /St
ic-48	_	-	6.E – 07	_	-	2.E + 04	/ /St
ic-49	_	-	2.E – 05	_	-	8.E + 05	/ /St
ï-44	5.E – 09	1.E – 08	2.E – 09	2.E + 02	4.E + 02	9.E + 01	St/St/St
ï-45	1.E – 05	1.E – 05	1.E – 05	4.E + 05	5.E + 05	5.E + 05	St/St/St
/-47	4.E – 05	4.E – 05	_	1.E + 06	1.E + 06	_	St/St/
/-48	4.E – 07	3.E – 07	-	2.E + 04	1.E + 04	_	St/St/
/-49	1.E - 05	7.E – 06	-	5.E + 05	3.E + 05	4 5 . 05	BS/St/
r-48	5.E – 06	3.E – 06	3.E - 06	2.E + 05	1.E + 05	1.E + 05	St/St/St
r-49	3.E - 05	4.E – 05	4.E – 05	1.E + 06	2.E + 06	1.E + 06	St/St/St
r-51	2.E - 05	1.E – 05	8.E – 06	7.E + 05	4.E + 05	3.E + 05	St/St/St
In-51	2.E – 05	2.E - 05	_	8.E + 05	9.E + 05	_	St/St/
In-52m	4.E – 05	4.E – 05	_	1.E + 06	2.E + 06	_	St/St/
In-52	5.E – 07	4.E – 07	_	2.E + 04	1.E + 04	_	St/St/
In-53	5.E – 06	5.E – 06	_	2.E + 05	2.E + 05	_	BS/St/
/n-54	4.E – 07	3.E - 07	i	1.E + 04	1.E + 04	_	St/St/
n-56 e-52	6.E - 06	9.E - 06	_	2.E + 05	3.E + 05	_	St/St/
	1.E – 06	1.E - 06	_	5.E + 04	4.E + 04	_	St/St/
e-55	8.E – 07	2.E – 06	_	3.E + 04	6.E + 04	_	St/St/
e-59	1.E – 07 3.E – 09	2.E - 07	_	5.E + 03	8.E + 03	_	St/St/
e-60	3.⊑ - 09	8.E - 09	1 = 06	1.E + 02	3.E + 02	4.E + 04	St/St/
0-55	_	1.E - 06	1.E – 06 8.E – 08	_	4.E + 04		/St/St
Co-56 Co-57	_	1.E - 07		_	5.E + 03	3.E + 03	/St/St
Co-58m	_	1.E – 06	3.E – 07	_	4.E + 04 1.E + 06	1.E + 04 1.E + 06	/St/St /St/St
Co-58	_	4.E – 05 5.E – 07	3.E – 05 3.E – 07	_	2.E + 04	1.E + 04	/St/St
Co-60m	_	2.E - 03	1.E – 03	_	6.E + 07	4.E + 07	/St/St
Co-60	_	7.E – 08	1.E – 03 1.E – 08	_	3.E + 03	5.E + 02	/St/St
Co-61	_	3.E – 05	2.E – 05	_	1.E + 06	9.E + 05	/St/St
Co-62m	_	7.E – 05	7.E – 05	_	3.E + 06	2.E + 06	/St/St
Ni-56 (Inorg)	8.E – 07	5.E – 07	7.L - 03	3.E + 04	2.E + 04	2.L + 00	St/St/
Ni-56 (Vapor)	0.L 01	5.E - 07		3.L 1 04	2.E + 04		/St/
Ni-50 (Vapor)	2.E – 06	1.E – 06	_	7.E + 04	5.E + 04		St/St/
Ni-57 (Morg)	2.L 00	3.E - 06	_	7.2 1 04	1.E + 05		/St/
Ni-57 (Vapor)	2.E – 06	3.E - 06		6.E + 04	1.E + 05		St/St/
Ni-59 (Vapor)	2.L 00	8.E – 07	_	0.2 1 04	3.E + 04	_	/St/
Ni-63 (Inorg)	7.E – 07	1.E – 06	_	3.E+04	4.E + 04		St/St/
Ni-63 (Vapor)	7.2 07	3.E - 07	_	3.L 1 04	1.E + 04		/St/
Ni-65 (Inorg)	1.E – 05	1.E – 05	_	4.E+05	5.E + 05	_	St/St/
Ni-65 (Vapor)	1.2 03	7.E – 06	_	4.L 1 03	3.E + 05		/St/
li-66 (Inorg)	7.E – 07	3.E - 07	_	3.E + 04	1.E + 04	_	St/St/
Ni-66 (Vapor)		1.E – 06	_	0.2	5.E + 04	_	/St/
Cu-60	4.E - 05	5.E – 05	4.E-05	1.E+06	2.E + 06	2.E+06	St/St/St
Cu-61	1.E - 05	2.E – 05	1.E - 05	5.E + 05	6.E + 05	5.E + 05	St/St/St
Cu-64	1.E – 05	1.E – 05	9.E – 06	5.E + 05	4.E + 05	3.E + 05	St/St/St
Cu-67	3.E - 06	2.E - 06	2.E - 06	1.E + 05	8.E + 04	7.E + 04	St/St/St
'n-62	_	_	1.E-06	_	-	4.E + 04	/ /St
'n-63	_	_	3.E - 05	_	_	1.E + 06	/ /St
'n-65	_	_	1.E - 07	_	_	4.E + 03	/ /St
n-69m	_	_	3.E - 06	_	_	1.E + 05	/ /St
n-69	_	_	6.E - 05	_	_	2.E + 06	/ /St
'n-71m	_	_	7.E - 06	_	_	3.E + 05	/ /St
n-72	_	-	5.E - 07	_	-	2.E + 04	/ /St
a-65	7.E - 05	8.E - 05	_	3.E+06	3.E + 06	_	St/St/
a-66	1.E – 06	1.E – 06	_	5.E + 04	5.E + 04	_	St/St/
a-67	6.E – 06	4.E – 06	_	2.E + 05	2.E + 05	_	St/St/
a-68	2.E – 05	2.E – 05	_	6.E + 05	8.E + 05	_	St/St/
Ga-70	7.E – 05	8.E – 05	_	3.E + 06	3.E + 06	_	St/St/
a-72	2.E – 06	1.E – 06		6.E + 04	5.E + 04	_	St/St/
a-73	6.E – 06	6.E – 06	_	2.E + 05	2.E + 05	_	St/St/
Se-66	1.E – 05	8.E – 06	_	4.E + 05	3.E + 05	_	St/St/
Se-67	4.E – 05	4.E – 05		1.E + 06	2.E + 06	_	St/St/
Se-68	4.E - 05 2.E - 06	4.E – 03 4.E – 08		6.E + 04	2.E + 03	_	St/St/
e-69							
	6.E – 06 2.E – 04	3.E – 06 2.E – 05	_	2.E + 05 7.E + 06	1.E + 05 6.E + 05	_	St/St/ St/St/
Se-71				1 / F + UD	+ 0.⊏ ± 00		

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	Inhaled	air-lung retentio	n class <sup>3</sup>	Inhaled	air-lung retentio	n class <sup>3</sup>	Stochastic or
Radionuclide		μCi/ml			Bq/m <sup>3</sup>		organ 1
	D	W	Y	D	W	Y	( D/ W/ Y)
Ge-77	4.E – 06	2.E-06	-	2.E+05	9.E + 04	-	St/St/
Ge-78	9.E – 06	9.E – 06	_	4.E + 05	3.E + 05	_	St/St/
As-69 As-70	_	5.E - 05 2.E - 05	_	_	2.E + 06 8.E + 05	_	/St/ /St/
As-71	_	2.E - 06	_	_	7.E + 04	_	/St/
As-72	_	6.E-07	-	_	2.E + 04	_	/St/
As-73	_	7.E – 07	-	-	3.E + 04	-	/St/
As-74 As-76	_	3.E - 07 6.E - 07	_	_	1.E + 04 2.E + 04	_	/St/ /St/
As-77	_	2.E – 06	_	_	8.E + 04	_	/St/
As-78	_	9.E – 06	_	_	3.E + 05	_	/St/
Se-70	1.E – 05	2.E - 05	_	6.E + 05	7.E + 05	_	St/St/
Se-73m Se-73	6.E – 05 6.E – 06	6.E – 05 7.E – 06	_	2.E + 06 2.E + 05	2.E + 06 2.E + 05	_	St/St/ St/St/
Se-75	3.E – 07	3.E – 07	_	1.E + 04	9.E + 03	_	St/St/
Se-79	3.E - 07	2.E - 07	_	1.E + 04	9.E + 03	_	St/St/
Se-81m	3.E - 05	3.E - 05	_	1.E + 06	1.E + 06	_	St/St/
Se-81	9.E – 05	1.E – 04	_	3.E+06	4.E+06	_	St/St/
Se-83 Br-74m	5.E - 05 1.E - 05	5.E - 05 2.E - 05	_	2.E + 06 6.E + 05	2.E + 06 6.E + 05	_	St/St/ St/St/
Br-74	3.E - 05	3.E - 05	_	1.E + 06	1.E + 06	_	St/St/
Br-75	2.E - 05	2.E-05	_	7.E + 05	8.E + 05	_	St/St/
Br-76	2.E - 06	2.E - 06	-	7.E + 04	7.E + 04	_	St/St/
Br-77 Br-80m	1.E – 05 7.E – 06	8.E – 06 6.E – 06	_	4.E + 05 3.E + 05	3.E + 05 2.E + 05	_	St/St/ St/St/
Br-80	8.E – 05	9.E – 05	_	3.E + 06	3.E+06	_	St/St/
Br-82	2.E-06	2.E-06	_	6.E + 04	6.E + 04	_	St/St/
Br-83	3.E - 05	3.E - 05	_	1.E + 06	1.E + 06	_	St/St/
Br-84	2.E – 05	3.E – 05	_	9.E + 05	1.E + 06	_	St/St/
Rb-79 Rb-81m	5.E – 05 1.E – 04	_	_	2.E + 06 5.E + 06	_	_	St/ /   St/ /
Rb-81	2.E - 05	_	_	8.E + 05	_	_	St/ /
Rb-82m	7.E – 06	_	_	3.E + 05	_	_	St/ /
Rb-83	4.E – 07	-	_	2.E + 04	_	_	St/ /
Rb-84 Rb-86	3.E - 07 3.E - 07	_	_	1.E + 04 1.E + 04	_	_	St/ /   St/ /
Rb-87	6.E - 07	_	_	2.E + 04	_	_	St/ /
Rb-88	3.E - 05	_	_	1.E + 06	_	_	St/ /
Rb-89	6.E – 05	-	-	2.E + 06	_	_ 	St/ /
Sr-80 Sr-81	5.E – 06 3.E – 05		5.E - 06 3.E - 05	2.E + 05 1.E + 06	_	2.E + 05 1.E + 06	St/ /St St/ /St
Sr-83	3.E - 06	_	2.E – 06	1.E + 05	_	5.E + 04	St/ /St
Sr-85m	3.E - 04	_	3.E – 04	9.E + 06	_	1.E + 07	St/ /St
Sr-85	1.E - 06	_	7.E - 07	4.E + 04	_	2.E + 04	St/ /St
Sr-87m	5.E – 05	_	6.E – 05	2.E + 06	_	2.E+06	St/ /St St/ /St
Sr-89 Sr-90	3.E - 07 8.E - 09	_	6.E - 08 2.E - 09	1.E + 04 3.E + 02	_	2.E + 03 6.E + 01	BS/ /St
Sr-91	2.E - 06	_	1.E – 06	9.E + 04	_	5.E + 04	St/ /St
Sr-92	4.E-06	=	3.E - 06	1.E + 05	<del>-</del>	1.E + 05	St/ /St
Y-86m	_	2.E - 05 1.E - 06	2.E - 05	_	9.E + 05 5.E + 04	9.E + 05	/St/St /St/St
Y-86 Y-87	_	1.E – 06	1.E-06 1.E-06	_	5.E + 04	5.E + 04 5.E + 04	/St/St
Y-88	_	1.E - 07	1.E - 07	-	4.E + 03	4.E + 03	/St/St
Y-90m	_	5.E - 06	5.E – 06	-	2.E + 05	2.E + 05	/St/St
Y-90	_	3.E - 07	2.E – 07	-	1.E + 04	9.E + 03	/St/St
Y-91m Y-91	_	1.E – 04 7.E – 08	7.E – 05 5.E – 08		4.E+06 3.E+03	3.E + 06 2.E + 03	/St/St /St/St
Y-92	_	3.E - 06	3.E - 06	_	1.E + 05	1.E + 05	/St/St
Y-93	_	1.E-06	1.E - 06	-	4.E + 04	4.E+04	/St/St
Y-94	_	3.E - 05	3.E - 05	-	1.E + 06	1.E + 06	/St/St
Y-95	2.E – 06	6.E - 05	6.E - 05	- 6 E + 04	2.E + 06	2.E + 06	/St/St
Zr-86 Zr-88	9.E – 06	1.E-06 2.E-07	1.E-06 1.E-07	6.E + 04 3.E + 03	4.E + 04 7.E + 03	4.E+04 5.E+03	St/St/St St/St/St
Zr-89	2.E – 06	1.E – 06	1.E – 06	5.E + 04	4.E + 04	4.E + 04	St/St/St
Zr-93	3.E-09	1.E – 08	2.E - 08	1.E + 02	4.E + 02	9.E + 02	BS/BS/BS
Zr-95	6.E – 08	2.E - 07	1.E – 07	2.E + 03	6.E+03	4.E + 03	BS/St/St
Zr-97	8.E – 07	6.E - 07	5.E – 07	3.E + 04	2.E + 04	2.E + 04	St/St/St /St/St
Nb-88 Nb-89 (66 min)	_	1.E - 04 2.E - 05	9.E - 05 2.E - 05	_	4.E + 06 6.E + 05	3.E+06 6.E+05	/St/St
Nb-89 (122 min)	_	8.E – 06	7.E – 06	_	3.E+05	2.E + 05	/St/St
Nb-90 `	l –	1.E – 06	1.E – 06	_	4.E + 04	4.E + 04	/St/St

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	Inhaled	air-lung retention	on class <sup>3</sup>	Inhaled	d air-lung retention	on class <sup>3</sup>	Stochastic or
Radionuclide		μCi/ml			Bq/m <sup>3</sup>		organ 1
rtadionadiad	D	W	Y	D	W	Y	( D/ W/ Y)
Nb-93m	_	5.E – 07	7.E – 08	_	2.E + 04	3.E+03	/St/St
Nb-94	_	8.E – 08	6.E - 09	_	3.E + 03	2.E + 02	/St/St
Nb-95m	_	1.E-06	9.E - 07	_	4.E + 04	4.E + 04	/St/St
Nb-95	_	5.E - 07	5.E - 07	_	2.E + 04	2.E + 04	/St/St
Nb-96	_	1.E – 06	1.E – 06	_	4.E + 04	4.E + 04	/St/St
Nb-97	-	3.E – 05	3.E - 05	_	1.E + 06	1.E + 06	/St/St
Nb-98 Mo-90	3.E – 06	2.E – 05	2.E – 05 2.E – 06	1.E+05	8.E + 05	8.E + 05 7.E + 04	/St/St St/ /St
Mo-93m	7.E – 06		6.E – 06	3.E + 05		2.E + 05	St/ /St
Mo-93	2.E - 06	_	7.E – 08	8.E + 04	_	3.E + 03	St/ /St
Mo-99	1.E – 06	_	6.E - 07	4.E + 04	_	2.E + 04	St/ /St
Mo-101	6.E – 05	I	6.E – 05	2.E + 06	I	2.E + 06	St/ /St
Tc-93m	7.E – 05	1.E – 04	-	2.E + 06	5.E + 06	_	St/St/
Tc-93	3.E - 05	4.E – 05	_	1.E + 06	2.E + 06	_	St/St/
Tc-94m	2.E - 05 8.E - 06	2.E - 05 1.E - 05	_	7.E + 05 3.E + 05	9.E + 05 4.E + 05	_	St/St/ St/St/
Tc-96m	1.E – 04	1.E – 04	_	4.E + 06	4.E + 06	_	St/St/
Tc-96	1.E - 06	9.E – 07	_	5.E + 04	3.E + 04	_	St/St/
Tc-97m	3.E - 06	5.E - 07	_	1.E + 05	2.E + 04	_	SW/St/
Tc-97	2.E - 05	2.E – 06	_	8.E + 05	9.E + 04	-	St/St/
Tc-98	7.E – 07	1.E – 07	-	3.E + 04	5.E + 03	_	St/St/
Tc-99m	6.E – 05	1.E – 04	_	2.E + 06	4.E + 06	_	St/St/
Tc-99	2.E - 06 1.E - 04	3.E – 07 2.E – 04		8.E + 04 5.E + 06	1.E + 04 6.E + 06		SW/St/ St/St/
Tc-104	3.E – 05	4.E – 05	_	1.E + 06	1.E + 06	_	St/St/
Ru-94	2.E – 05	3.E - 05	2.E-05	7.E + 05	1.E + 06	9.E + 05	St/St/St
Ru-97	8.E – 06	5.E-06	5.E-06	3.E + 05	2.E + 05	2.E + 05	St/St/St
Ru-103	7.E – 07	4.E – 07	3.E – 07	3.E + 04	2.E + 04	1.E + 04	St/St/St
Ru-105	6.E – 06	6.E – 06	5.E – 06	2.E + 05	2.E + 05	2.E + 05	St/St/St
Ru-106 Rh-99m	4.E – 08 2.E – 05	2.E – 08	5.E – 09	1.E + 03 9.E + 05	8.E + 02 1.E + 06	2.E + 02 1.E + 06	St/St/St St/St/St
Rh-99	1.E – 06	3.E – 05 9.E – 07	3.E – 05 8.E – 07	5.E + 04	3.E + 04	3.E + 04	St/St/St
Rh-100	2.E - 06	2.E - 06	2.E - 06	8.E + 04	6.E + 04	6.E + 04	St/St/St
Rh-101m	5.E - 06	3.E-06	3.E-06	2.E + 05	1.E + 05	1.E + 05	St/St/St
Rh-101	2.E – 07	3.E – 07	7.E – 08	8.E + 03	1.E + 04	2.E + 03	St/St/St
Rh-102m	2.E – 07	2.E – 07	5.E – 08	8.E + 03	6.E + 03	2.E + 03	St/St/St
Rh-102 Rh-103m	4.E – 08 4.E – 04	7.E – 08 5.E – 04	2.E – 08 5.E – 04	1.E + 03 2.E + 07	3.E + 03 2.E + 07	9.E + 02 2.E + 07	St/St/St St/St/St
Rh-105	5.E – 06	3.E - 06	2.E – 06	2.E + 05	1.E + 05	9.E + 04	St/St/St
Rh-106m	1.E – 05	1.E – 05	1.E – 05	4.E + 05	6.E + 05	5.E + 05	St/St/St
Rh-107	1.E - 04	1.E - 04	1.E – 04	4.E + 06	4.E + 06	4.E + 06	St/St/St
Pd-100	6.E – 07	5.E – 07	6.E – 07	2.E + 04	2.E + 04	2.E + 04	St/St/St
Pd-101	1.E – 05	1.E – 05	1.E – 05	5.E + 05	5.E + 05	5.E + 05	St/St/St
Pd-103	3.E - 06	2.E – 06	1.E – 06	1.E + 05	7.E + 04	5.E + 04	St/St/St
Pd-107 Pd-109	9.E - 06 3.E - 06	3.E – 06 2.E – 06	2.E – 07 2.E – 06	3.E + 05 1.E + 05	1.E + 05 8.E + 04	6.E + 03 7.E + 04	K /St/St St/St/St
Ag-102	8.E – 05	9.E – 05	8.E – 05	3.E + 06	3.E+06	3.E+06	St/St/St
Ag-103	4.E - 05	6.E-05	5.E - 05	2.E + 06	2.E + 06	2.E + 06	St/St/St
Ag-104m	4.E – 05	5.E – 05	5.E - 05	2.E + 06	2.E + 06	2.E + 06	St/St/St
Ag-104	3.E - 05	6.E – 05	6.E - 05	1.E + 06	2.E + 06	2.E + 06	St/St/St
Ag-105	4.E – 07	7.E – 07 4.E – 07	7.E – 07	2.E + 04	3.E + 04	3.E + 04	St/St/St
Ag-106m Ag-106	3.E – 07 7.E – 05	8.E – 07	4.E – 07 8.E – 05	1.E + 04 3.E + 06	1.E + 04 3.E + 06	1.E + 04 3.E + 06	St/St/St St/St/St
Ag-108m	8.E – 08	1.E - 07	1.E – 08	3.E + 03	4.E + 03	4.E + 02	St/St/St
Ag-110m	6.E – 08	8.E – 08	4.E – 08	2.E + 03	3.E + 03	1.E + 03	St/St/St
Ag-111	7.E – 07	4.E – 07	4.E – 07	2.E + 04	1.E + 04	1.E + 04	L /St/St
Ag-112	3.E - 06	4.E – 06	4.E – 06	1.E + 05	2.E + 05	1.E + 05	St/St/St
Ag-115	4.E – 05	4.E – 05	3.E – 05	1.E + 06	1.E + 06	1.E + 06	St/St/St
Cd-104	3.E – 05	5.E – 05	5.E – 05	1.E + 06	2.E + 06	2.E + 06	St/St/St
Cd-107 Cd-109	2.E - 05 1.E - 08	2.E - 05 5.E - 08	2.E – 05 5.E – 08	8.E + 05 5.E + 02	9.E + 05 2.E + 03	8.E + 05 2.E + 03	St/St/St K /K /St
Cd-113m	1.E - 09	4.E – 09	5.E – 09	4.E + 01	1.E + 02	2.E + 02	K /K /St
Cd-113	9.E – 10	3.E – 09	6.E – 09	4.E + 01	1.E + 02	2.E + 02	K /K /St
Cd-115m	2.E – 08	5.E – 08	6.E – 08	8.E + 02	2.E + 03	2.E + 03	K /St/St
Cd-115	6.E - 07	5.E - 07	6.E - 07	2.E + 04	2.E + 04	2.E + 04	St/St/St
Cd-117m	5.E – 06	7.E – 06	6.E – 06	2.E + 05	3.E + 05	2.E + 05	St/St/St
Cd-117	5.E - 06 2.E - 05	7.E – 06	6.E – 06	2.E + 05	3.E + 05	2.E + 05	St/St/St
In-109 In-110 (69 min)	2.E - 05 2.E - 05	3.E - 05 2.E - 05		7.E + 05 7.E + 05	1.E + 06 9.E + 05	1 -	St/St/ St/St/
In-110 (69 IIIII) In-110 (5 h)	7.E – 06	8.E – 06		3.E + 05	3.E + 05	1 -	St/St/
In-111		3.E – 06	_	1.E + 05	1.E + 05	_	St/St/

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	Inhaled	air-lung retentio	n class <sup>3</sup>	Inhaled	air-lung retentio	n class <sup>3</sup>	Stochastic or
Radionuclide		μCi/ml			Bq/m <sup>3</sup>		organ <sup>1</sup>
	D	W	Y	D	w	Y	( D/ W/ Y)
			'				+
In-112	3.E – 04	3.E – 04	_	1.E + 07	1.E + 07 3.E + 06	_	St/St/
In-113m In-114m	6.E – 05 3.E – 08	8.E – 05 4.E – 08	_	2.E + 06 1.E + 03	2.E+03	_	St/St/ St/St/
In-115m	2.E - 05	2.E - 05	_	7.E + 05	7.E + 05	_	St/St/
In-115	6.E – 10	2.E - 09	_	2.E + 01	8.E + 01	_	St/St/
In-116m	3.E - 05	5.E – 05	_	1.E + 06	2.E + 06	_	St/St/
In-117m	1.E - 05	2.E - 05	_	5.E + 05	7.E + 05	-	St/St/
In-117 In-119m	7.E – 05 5.E – 05	9.E – 05 6.E – 05	_ _	3.E + 06 2.E + 06	3.E + 06 2.E + 06	_	St/St/ St/St/
Sn-110	5.E – 06	5.E – 06	_	2.E + 05	2.E + 05	_	St/St/
Sn-111	9.E – 05	1.E – 04	_	4.E + 06	4.E + 06	_	St/St/
Sn-113	5.E - 07	2.E-07	_	2.E + 04	9.E + 03	-	St/St/
Sn-117m	5.E – 07	6.E – 07	_	2.E + 04	2.E + 04	_	BS/St/
Sn-119m	1.E – 06	4.E – 07	_	4.E + 04	1.E + 04	_	St/St/
Sn-121m Sn-121	4.E – 07 6.E – 06	2.E – 07 5.E – 06	_	1.E + 04 2.E + 05	9.E + 03 2.E + 05	_	St/St/ St/St/
Sn-123m	5.E - 05	6.E - 05	_	2.E+06	2.E + 06	_	St/St/
Sn-123	3.E - 07	7.E-08	_	1.E + 04	3.E + 03	_	St/St/
Sn-125	4.E - 07	2.E - 07	_	1.E + 04	5.E + 03	_	St/St/
Sn-126	2.E – 08	3.E - 08	_	9.E + 02	1.E + 03	_	St/St/
Sn-127 Sn-128	8.E – 06 1.E – 05	8.E – 06 1.E – 05	_ _	3.E + 05 4.E + 05	3.E + 05 6.E + 05	_	St/St/
Sb-115	1.E – 04	1.E - 04	_	4.E+06	5.E + 06	_	St/St/
Sb-116m	3.E - 05	6.E - 05	_	1.E + 06	2.E + 06	_	St/St/
Sb-116	1.E – 04	1.E-04	_	4.E + 06	5.E + 06	-	St/St/
Sb-117	9.E – 05	1.E – 04	_	3.E + 06	4.E + 06	_	St/St/
Sb-118m Sb-119	8.E – 06 2.E – 05	9.E – 06	_	3.E + 05 7.E + 05	3.E + 05 4.E + 05	_	St/St/ St/St/
Sb-120 (16 min)	2.E – 04	1.E – 05 2.E – 04	_	7.E+05	8.E+06	_	St/St/
Sb-120 (6 d)	9.E – 07	6.E – 07	_	3.E + 04	2.E + 04	_	St/St/
Sb-122	1.E-06	4.E-07	_	4.E + 04	2.E + 04	-	St/St/
Sb-124m	3.E - 04	3.E - 04	_	1.E + 07	9.E + 06	-	St/St/
Sb-124	4.E – 07	1.E – 07	_	1.E + 04	4.E+03	-	St/St/
Sb-125 Sb-126m	1.E – 06 8.E – 05	2.E – 07 8.E – 05	_	4.E + 04 3.E + 06	8.E + 03 3.E + 06	_	St/St/
Sb-126	4.E – 07	2.E - 07	_	2.E + 04	8.E + 03	_	St/St/
Sb-127	9.E – 07	4.E-07	_	3.E + 04	1.E + 04	-	St/St/
Sb-128 (9 h)	2.E - 06	1.E – 06	_	6.E + 04	5.E + 04	_	St/St/
Sb-128 (10 min)	2.E – 04 4.E – 06	2.E - 04	_	6.E + 06 1.E + 05	7.E + 06 1.E + 05	_	St/St/
Sb-129 Sb-130	3.E – 05	4.E – 06 3.E – 05	_	1.E+05	1.E + 06	_	St/St/ St/St/
Sb-131	1.E – 05	1.E – 05	_	4.E + 05	4.E + 05	_	T /T /
Te-116	9.E – 06	1.E - 05	_	3.E + 05	5.E + 05	-	St/St/
Te-121m	8.E - 08	2.E - 07	_	3.E + 03	6.E + 03	-	BS/St/
Te-121	2.E - 06	1.E – 06	_	7.E + 04	5.E + 04	_	St/St/
Te-123m Te-123	9.E – 08 8.E – 08	2.E - 07 2.E - 07	_	3.E+03 3.E+03	8.E + 03 7.E + 03	_	BS/St/ BS/BS/
Te-125m	2.E - 07	3.E - 07	_	7.E + 03	1.E + 04	_	BS/St/
Te-127m	1.E - 07	1.E-07	_	4.E + 03	4.E + 03	_	BS/St/
Te-127	9.E – 06	7.E – 06	_	4.E + 05	3.E + 05	_	St/St/
Te-129m Te-129	3.E – 07 3.E – 05	1.E – 07 3.E – 05	_	1.E + 04	4.E + 03 1.E + 06	_	St/St/ St/St/
Te-131m	2.E – 07	2.E – 07	_	1.E + 06 6.E + 03	6.E+03	_	T /T /
Te-131	2.E – 06	2.E - 06	_	8.E + 04	8.E + 04	_	T /T /
Te-132	9.E – 08	9.E - 08	_	4.E + 03	3.E + 03	-	T /T /
Te-133m	2.E - 06	2.E – 06	_	8.E + 04	8.E + 04	_	T /T /
Te-133	9.E – 06	9.E – 06	_	4.E + 05	4.E + 05	_	T /T /
Te-134 I-120m	1.E – 05 9.E – 06	1.E – 05	_	4.E + 05 3.E + 05	4.E + 05	_	T /T / St/ /
I-120	4.E – 06	_	_	1.E + 05	_	_	T / /
I-121	7.E – 06	_	_	3.E + 05	_	_	T / /
I-123	3.E – 06	_	_ _	1.E + 05	-	- - -	T / /
I-124	3.E – 08	_	_	1.E + 03	_		T / /
I-125	3.E - 08	_	_	1.E + 03	_	_	T / /
I-126 I-128	1.E – 08 5.E – 05	_	- - - - -	5.E + 02 2.E + 06		- - -	T / / St/ /
I-129	4.E – 09	_	_	1.E + 02	_	_	T / /
I-130	3.E - 07	_	_	1.E + 04	_	- - -	T / /
I-131	2.E - 08	-	_	7.E + 02	-	_	T / /
I-132m	4.E – 06	_	_	1.E + 05	_	_	T / /
I-132	ı 3.⊑−06	ı –	-	1.E + 05	I –	-	T / /

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### 10 CFR Ch. III (1-1-01 Edition)

	Inhaled	air-lung retentio	n class <sup>3</sup>	Inhaled	air-lung retentio	n class <sup>3</sup>	Stochastic or
Radionuclide		μCi/ml			Bq/m <sup>3</sup>		organ 1
	D	W	Y	D	W	Y	( D/ W/ Y)
I-133	1.E – 07	_	_	4.E+03	_	_	т//
I-134	2.E - 05	_	_	7.E + 05	_	_	E / /
I-135	7.E – 07	_	_	2.E + 04	_	_	T / /
Cs-125 Cs-127	6.E – 05 4.E – 05	_	_	2.E + 06 2.E + 06	_	_	St/ /   St/ /
Cs-129	1.E – 05	_	_	5.E + 05	_	_	St/ /
Cs-130	8.E - 05	_	_	3.E + 06	_	_	St/ /
Cs-131	1.E – 05	_	_	5.E + 05	-	_	St/ /
Cs-132	2.E – 06	_	_	6.E + 04	-	_	St/ /
Cs-134m Cs-134	6.E – 05 4.E – 08	_	_	2.E + 06 2.E + 03	_	_	St/ /   St/ /
Cs-135m	8.E – 05	_	_	3.E+06	_	_	St/ /
Cs-135	5.E - 07	_	_	2.E + 04	_	_	St/ /
Cs-136	3.E - 07	-	_	1.E + 04	-	_	St/ /
Cs-137	7.E – 08	_	_	2.E + 03	_	_	St/ /
Cs-138 Ba-126	2.E - 05 6.E - 06	_	_	9.E + 05 2.E + 05	_	_	St/ /   St/ /
Ba-128	7.E – 07	_	_	3.E + 04	_	_	St/ /
Ba-131m	6.E – 04	_	_	2.E + 07	_	_	St/ /
Ba-131	3.E-06	-	_	1.E + 05	-	_	St/ /
Ba-133m	4.E – 06	-	_	1.E + 05	-	_	St/ /
Ba-133 Ba-135m	3.E - 07 5.E - 06	_	_	1.E + 04 2.E + 05	_	_	St/ /   St/ /
Ba-139	1.E – 05	_	_	5.E + 05	_	_	St/ /
Ba-140	6.E - 07	_	_	2.E + 04	_	_	St/ /
Ba-141	3.E - 05	_	_	1.E + 06	-	_	St/ /
Ba-142	6.E – 05	7 5 05	_	2.E + 06		_	St/ /
La-131 La-132	5.E – 05 4.E – 06	7.E – 05 5.E – 06	_	2.E + 06 2.E + 05	3.E + 06 2.E + 05	_	St/St/ St/St/
La-135	4.E - 05	4.E - 05	_	2.E + 06	2.E + 06	_	St/St/
La-137	3.E-08	1.E-07	_	1.E + 03	4.E+03	_	L/E/
La-138	2.E - 09	6.E - 09	_	5.E + 01	2.E + 02	_	St/St/
La-140 La-141	6.E – 07 4.E – 06	5.E – 07 5.E – 06	_	2.E + 04 1.E + 05	2.E + 04 2.E + 05	_	St/St/ St/St/
La-142	9.E – 06	1.E – 05	_	4.E + 05	5.E+05	_	St/St/
La-143	4.E – 05	4.E – 05	_	2.E + 06	1.E + 06	_	St/St/
Ce-134	_	3.E - 07	3.E - 07	-	1.E + 04	1.E + 04	/St/St
Ce-135	_	2.E – 06	2.E – 06	-	6.E + 04	5.E + 04	/St/St
Ce-137m Ce-137	_	2.E – 06 6.E – 05	2.E - 06 5.E - 05	_	7.E + 04 2.E + 06	6.E + 04 2.E + 06	/St/St /St/St
Ce-139	_	3.E - 07	3.E - 07	_	1.E + 04	1.E + 04	/St/St
Ce-141	_	3.E-07	2.E - 07	-	1.E + 04	9.E+03	/St/St
Ce-143	_	8.E – 07	7.E – 07	-	3.E + 04	2.E + 04	/St/St
Ce-144	_	1.E - 08	6.E – 09	-	4.E + 02 4.E + 06	2.E + 02	/St/St
Pr-136 Pr-137	_	1.E – 04 6.E – 05	9.E – 05 6.E – 05	_	2.E + 06	4.E + 06 2.E + 06	/St/St /St/St
Pr-138m	_	2.E - 05	2.E - 05	_	8.E + 05	7.E + 05	/St/St
Pr-139	_	5.E - 05	5.E – 05	-	2.E+06	2.E+06	/St/St
Pr-142m	-	7.E – 05	6.E – 05	-	3.E + 06	2.E+06	/St/St
Pr-142 Pr-143	_	8.E – 07 3.E – 07	8.E – 07 3.E – 07	_	3.E + 04 1.E + 04	3.E + 04 1.E + 04	/St/St /St/St
Pr-144	_	5.E - 05	5.E – 05	_	2.E + 06	2.E+06	/St/St
Pr-145	_	4.E – 06	3.E - 06	_	1.E + 05	1.E + 05	/St/St
Pr-147	_	8.E – 05	8.E – 05	-	3.E+06	3.E+06	/St/St
Nd-136 Nd-138		2.E - 05 3.E - 06	2.E – 05 2.E – 06	_	9.E + 05	8.E + 05 8.E + 04	/St/St /St/St
Nd-139m	_	7.E – 06	6.E – 06	_	1.E + 05 3.E + 05	2.E + 05	/St/St
Nd-139	_	1.E - 04	1.E – 04	_	5.E + 06	4.E + 06	/St/St
Nd-141	_	3.E - 04	3.E – 04	-	1.E + 07	9.E + 06	/St/St
Nd-147	_	4.E – 07	3.E – 07	_	2.E + 04	1.E + 04	/St/St
Nd-149 Nd-151	_	1.E – 05 8.E – 05	1.E – 05 8.E – 05		4.E+05 3.E+06	4.E + 05 3.E + 06	/St/St /St/St
Pm-141	_	8.E – 05	7.E – 05	I -	3.E + 06	3.E+06	/St/St
Pm-143	_	3.E - 07	3.E - 07	-	9.E + 03	1.E + 04	/St/St
Pm-144	_	5.E – 08	5.E – 08	_	2.E + 03	2.E+03	/St/St
Pm-145	_	7.E – 08	8.E – 08	_	3.E + 03	3.E + 03	/BS/St
Pm-146 Pm-147	_	2.E - 08 6.E - 08	2.E - 08 6.E - 08	_	8.E+02 2.E+03	7.E + 02 2.E + 03	/St/St /BS/St
Pm-148m	_	1.E – 07	1.E – 07	_	5.E+03	5.E + 03	/St/St
Pm-148	_	2.E - 07	2.E - 07		8.E + 03	8.E+03	/St/St
Pm-149	l –	8.E – 07	8.E – 07	-	3.E + 04	3.E + 04	/St/St

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	Inhaled	air-lung retention	on class 3	Inhale	d air-lung retention	on class <sup>3</sup>	Stochastic or
Radionuclide		μCi/ml			Bq/m <sup>3</sup>		organ 1
	D	W	Y	D	W	Y	( D/ W/ Y)
Pm-150	_	8.E-06	7.E – 06	-	3.E + 05	3.E + 05	/St/St
Pm-151	-	2.E-06	1.E – 06	-	6.E + 04	5.E + 04	/St/St
Sm-141m	_	4.E – 05	-	_	2.E + 06	_	/St/
Sm-141 Sm-142	_	7.E – 05 1.E – 05	_	_	3.E + 06 4.E + 05	_	/St/ /St/
Sm-145	_	2.E - 07	_	_	8.E + 03	_	/St/
Sm-146	_	1.E – 11	_	_	6.E - 01	_	/BS/
Sm-147	_	2.E – 11	-	_	6.E – 01	_	/BS/
Sm-151	-	4.E – 08	-	_	2.E + 03	_	/BS/
Sm-153 Sm-155	_	1.E – 06 9.E – 05	_	_	4.E + 04 3.E + 06	_	/St/ /St/
Sm-156	_	4.E – 06	_	_	1.E + 05	_	/St/
Eu-145	_	8.E – 07	_	_	3.E + 04	_	/St/
Eu-146	_	5.E - 07	-	_	2.E + 04	_	/St/
Eu-147	_	7.E – 07	_	_	3.E + 04	_	/St/
Eu-148	_	2.E – 07	_	_	6.E + 03	_	/St/
Eu-149 Eu-150 (12 h)	-	1.E – 06 3.E – 06	_	_	5.E + 04 1.E + 05	1 =	/St/ /St/
Eu-150 (34 yr)	_	8.E – 09	_	_	3.E + 02	_	/St/
Eu-152m	_	3.E - 06	_	-	1.E + 05	_	/St/
Eu-152	-	1.E - 08	-	-	4.E + 02	_	/St/
Eu-154	-	8.E – 09	-	_	3.E + 02	_	/St/
Eu-155	_	4.E – 08 2.E – 07	_	_	1.E + 03 7.E + 03	_	/BS/ /St/
Eu-157	_	2.E – 06	_	_	7.E + 04	_	/St/
Eu-158	_	2.E - 05	_	_	9.E + 05	_	/St/
Gd-145	7.E – 05	7.E – 05	-	2.E + 06	3.E + 06	_	St/St/
Gd-146	5.E – 08	1.E – 07	_	2.E + 03	4.E + 03	_	St/St/
Gd-147 Gd-148	2.E – 06 3.E – 12	2.E – 06 1.E – 11	_	6.E + 04 1.E - 01	5.E + 04 5.E - 01	_	St/St/ BS/BS/
Gd-149	9.E – 07	1.E – 06	_	3.E + 04	4.E + 04	_	St/St/
Gd-151	2.E – 07	5.E - 07	_	6.E + 03	2.E + 04	_	BS/St/
Gd-152	4.E – 12	2.E – 11	-	2.E - 01	6.E – 01	_	BS/BS/
Gd-153	6.E – 08	3.E - 07	-	2.E + 03	9.E + 03	-	BS/St/
Gd-159	3.E – 06 –	2.E - 06	_	1.E + 05	9.E + 04 5.E + 05	_	St/St/ /St/
Tb-147 Tb-149	_	1.E – 05 3.E – 07	_		1.E + 04	_	/St/
Tb-150	_	9.E – 06	_	_	3.E + 05	_	/St/
Tb-151	_	4.E – 06	-	_	1.E + 05	_	/St/
Tb-153	-	3.E – 06	-	_	1.E + 05	_	/St/
Tb-154 Tb-155	_	2.E - 06	_	_	7.E + 04 1.E + 05	_	/St/ /St/
Tb-156m (24 h)	_	3.E – 06 3.E – 06	_	_	1.E + 05	_	/St/
Tb-156m (5 h)	_	1.E – 05	_	_	4.E + 05	_	/St/
Tb-156	-	6.E – 07	-	_	2.E + 04	_	/St/
Tb-157	-	1.E – 07	-	_	5.E + 03	_	/BS/
Tb-158 Tb-160	_	8.E - 09 1.E - 07	_	_	3.E + 02 4.E + 03	_	/St/ /St/
Tb-161	_	7.E – 07	_	_	2.E + 04	-	/St/
Dy-155	_	1.E - 05	_	_	4.E + 05	_	/St/
Dy-157	-	3.E - 05	-	_	1.E + 06	_	/St/
Dy-159	_	1.E - 06	-	_	4.E + 04	_	/St/
Dy-165 Dy-166		2.E - 05 3.E - 07	_	_	7.E + 05 1.E + 04		/St/ /St/
Ho-155	I -	7.E – 05	_	_	2.E + 06	-	/St/
Ho-157	_	6.E – 04	_	_	2.E + 07	_	/St/
Ho-159	_	4.E - 04	_	_	2.E + 07	_	/St/
Ho-161	_	2.E – 04	_	_	7.E + 06	_	/St/
Ho-162m	_	1.E - 04	_	_	4.E + 06	_	/St/
Ho-162 Ho-164m	_	1.E – 03 1.E – 04	I -	_	4.E + 07 5.E + 06	_	/St/ /St/
Ho-164	_	3.E – 04	_	_	1.E + 07	_	/St/
Ho-166m	_	3.E - 09	_	_	1.E + 02	_	/St/
Ho-166	_	7.E – 07	_	_	3.E + 04	_	/St/
Ho-167	_	2.E - 05	-	-	9.E + 05	_	/St/
Er-161	_	3.E - 05	_	_	1.E + 06	_	/St/
Er-165 Er-169		8.E – 05 1.E – 06	I -	_	3.E + 06 4.E + 04		/St/ /St/
Er-171	_	4.E – 06	-	_	2.E + 05	-	/St/
Er-172	_	6.E – 07	_	-	2.E + 04	_	/St/
Tm-162	l –	1.E – 04	_	_	4.E + 06	_	/St/

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	Inhaled	air-lung retention	in class <sup>3</sup>	Inhaled	I air-lung retention	n class <sup>3</sup>	Stochastic or
Radionuclide		μCi/ml	0.000	minaro	Bq/m <sup>3</sup>	0.000	organ <sup>1</sup>
Radionucide		1		_	<del>_</del>		( D/ W/ Y)
	D	W	Y	D	W	Υ	( 2,,
Tm-166	_	6.E-06	_	-	2.E + 05	_	/St/
Tm-167 Tm-170	_	8.E – 07 9.E – 08	_	_	3.E + 04 3.E + 03	_	/St/ /St/
Tm-171	_	1.E - 07	_	_	5.E + 03	_	/BS/
Tm-172	_	5.E – 07	_	-	2.E + 04	_	/St/
Tm-173	_	5.E – 06 1.E – 04	_	_	2.E + 05 4.E + 06	_	/St/ /St/
Yb-162	_	1.E - 04	1.E – 04	_	5.E+06	4.E + 06	/St/St
Yb-166	-	8.E - 07	8.E - 07	_	3.E + 04	3.E + 04	/St/St
Yb-167 Yb-169	_	3.E – 04 3.E – 07	3.E - 04 3.E - 07	_	1.E + 07 1.E + 04	1.E + 07 1.E + 04	/St/St /St/St
Yb-175	_	1.E - 06	1.E – 06	_	5.E + 04	5.E + 04	/St/St
Yb-177	_	2.E - 05	2.E - 05	-	8.E + 05	7.E + 05	/St/St
Yb-178 Lu-169	_	2.E - 05 2.E - 06	1.E - 05 2.E - 06	_	6.E + 05 7.E + 04	6.E + 05 7.E + 04	/St/St /St/St
Lu-170	_	9.E – 07	8.E - 07	-	3.E + 04	3.E + 04	/St/St
Lu-171	-	8.E - 07	8.E – 07	-	3.E + 04	3.E + 04	/St/St
Lu-172 Lu-173	_	5.E - 07 1.E - 07	5.E - 07 1.E - 07	_	2.E + 04 4.E + 03	2.E + 04 4.E + 03	/St/St /BS/St
Lu-174m	_	1.E – 07	9.E – 08	-	4.E + 03	3.E + 03	/BS/St
Lu-174	-	5.E – 08	7.E – 08	-	2.E + 03	2.E + 03	/BS/St /St/St
Lu-176m Lu-176	_	1.E - 05 2.E - 09	1.E - 05 3.E - 09	_	4.E + 05 7.E + 01	4.E + 05 1.E + 02	/BS/St
Lu-177m	_	5.E – 08	3.E – 08	-	2.E + 03	1.E + 03	/BS/St
Lu-177 Lu-178m	_	9.E - 07 8.E - 05	9.E - 07 7.E - 05	_	3.E + 04 3.E + 06	3.E + 04 3.E + 06	/St/St /St/St
Lu-178	_	5.E – 05	5.E – 05	_	2.E + 06	2.E + 06	/St/St
Lu-179	<u> </u>	8.E – 06	6.E – 06		3.E + 05	2.E + 05	/St/St
Hf-170 Hf-172	2.E - 06 4.E - 09	2.E - 06 2.E - 08	_	9.E + 04 1.E + 02	7.E + 04 6.E + 02	_	St/St/ BS/BS/
Hf-173	5.E – 06	5.E – 06	_	2.E + 05	2.E + 05	_	St/St/
Hf-175	4.E - 07	5.E - 07	_	2.E + 04	2.E + 04	_	BS/St/
Hf-177m Hf-178m	2.E – 05 6.E – 10	4.E – 05 2.E – 09	_	9.E + 05 2.E + 01	1.E+06 8.E+01	_	St/St/ BS/BS/
Hf-179m	1.E - 07	3.E - 07	_	5.E + 03	9.E + 03	_	BS/St/
Hf-180m	9.E – 06	1.E – 05	-	3.E + 05	4.E + 05	_	St/St/
Hf-181 Hf-182m	7.E – 08 4.E – 05	2.E - 07 6.E - 05	_	3.E + 03 1.E + 06	7.E + 03 2.E + 06	_	BS/St/ St/St/
Hf-182	3.E – 10	1.E – 09	_	1.E + 01	5.E + 01	_	BS/BS/
Hf-183 Hf-184	2.E - 05 3.E - 06	2.E - 05 3.E - 06	_	7.E + 05 1.E + 05	8.E + 05 1.E + 05	_	St/St/ St/St/
Ta-172	J.L 00	5.E – 05	4.E – 05	-	2.E+06	2.E+06	/St/St
Ta-173	_	8.E – 06	7.E – 06	-	3.E + 05	3.E + 05	/St/St
Ta-174 Ta-175	_	4.E - 05 7.E - 06	4.E - 05 6.E - 06	_	1.E + 06 3.E + 05	1.E + 06 2.E + 05	/St/St /St/St
Ta-176	_	5.E - 06	5.E - 06	_	2.E + 05	2.E + 05	/St/St
Ta-177	-	8.E - 06	7.E – 06	-	3.E + 05	3.E + 05	/St/St
Ta-178 Ta-179	_	4.E - 05 2.E - 06	3.E - 05 4.E - 07	_	1.E+06 8.E+04	1.E + 06 1.E + 04	/St/St /St/St
Ta-180m	_	3.E - 05	2.E - 05	-	1.E + 06	9.E + 05	/St/St
Ta-180	-	2.E - 07	1.E – 08	-	7.E + 03	4.E + 02	/St/St
Ta-182m Ta-182	_	2.E - 04 1.E - 07	2.E - 04 6.E - 08	_	8.E + 06 5.E + 03	6.E + 06 2.E + 03	/St/St /St/St
Ta-183	_	5.E – 07	4.E – 07	_	2.E + 04	2.E + 04	/St/St
Ta-184 Ta-185	_	2.E - 06 3.E - 05	2.E - 06 3.E - 05	-	8.E + 04 1.E + 06	7.E + 04	/St/St /St/St
Ta-186	_	1.E – 04	9.E – 05	_	4.E + 06	1.E+06 3.E+06	/St/St
W-176	2.E - 05	_	_	8.E + 05	_	_	St/ /
W-177 W-178	4.E – 05	-	_	1.E + 06	_	_	St/ /
W-179	8.E – 06 7.E – 04	_	_	3.E + 05 3.E + 07	-	_	St/ /   St/ /
W-181	1.E - 05	_	_ _	5.E + 05	-	-	St/ /
W-185 W-187	3.E – 06 4.E – 06	_	_	1.E + 05 2.E + 05	_	_	St/ /   St/ /
W-188	5.E – 07	_	- - -	2.E + 05 2.E + 04	-		St/ /
Re-177	1.E – 04	2.E-04	_	4.E + 06	5.E + 06	-	St/St/
Re-178 Re-181	1.E – 04 4.E – 06	1.E - 04	_	4.E + 06	4.E + 06 1.E + 05	_	St/St/ St/St/
Re-182 (64 h)	1.E – 06	4.E – 06 9.E – 07	_ _	1.E + 05 4.E + 04	3.E + 04		St/St/
Re-182 (12 h)	5.E – 06	6.E – 06	_	2.E + 05	2.E + 05	_	St/St/
Re-184m	1.E−06	2.E – 07	I –	5.E + 04	7.E+03	I –	St/St/

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	Inhaled	air-lung retention	n class <sup>3</sup>	Inhaled	l air-lung retention	on class <sup>3</sup>	Stochastic or
Radionuclide		μCi/ml				organ 1	
	D	W	Y	D	w	Y	( D/ W/ Y)
Re-184	2.E – 06	6.E – 07	_	6.E+04	2.E+04	_	St/St/
Re-186m	7.E – 07	6.E – 08	_	3.E + 04	2.E+03	_	SW/St/
Re-186	1.E-06	7.E – 07	-	5.E + 04	3.E + 04	_	St/St/
Re-187	3.E - 04	4.E – 05	_	1.E + 07	2.E + 06	_	SW/St/
Re-188m Re-188	6.E – 05 1.E – 06	6.E - 05 1.E - 06	_	2.E + 06 4.E + 04	2.E + 06 4.E + 04	_	St/St/ St/St/
Re-189	2.E - 06	2.E - 06	_	8.E + 04	7.E + 04	_	St/St/
Os-180	2.E – 04	2.E – 04	2.E - 04	6.E+06	8.E + 06	7.E + 06	St/St/St
Os-181	2.E - 05	2.E - 05	2.E - 05	7.E + 05	7.E + 05	7.E + 05	St/St/St
Os-182	2.E – 06	2.E – 06	2.E - 06	9.E + 04	7.E + 04	6.E + 04	St/St/St
Os-185 Os-189m	2.E – 07 1.E – 04	3.E - 07 9.E - 05	3.E - 07 7.E - 05	8.E + 03 4.E + 06	1.E+04 3.E+06	1.E + 04 3.E + 06	St/St/St St/St/St
Os-191m	1.E – 05	9.E – 06	7.E – 06	4.E + 05	3.E + 05	3.E + 05	St/St/St
Os-191	9.E - 07	7.E - 07	6.E - 07	3.E+04	3.E + 04	2.E + 04	St/St/St
Os-193	2.E - 06	1.E – 06	1.E - 06	7.E + 04	5.E + 04	4.E + 04	St/St/St
Os-194	2.E – 08	2.E – 08	3.E – 09	7.E + 02	9.E + 02	1.E + 02	St/St/St
Ir-182 Ir-184	6.E – 05 1.E – 05	6.E - 05 1.E - 05	5.E - 05 1.E - 05	2.E + 06 4.E + 05	2.E + 06 5.E + 05	2.E + 06 4.E + 05	St/St/St St/St/St
Ir-185	5.E – 06	5.E - 06	4.E – 06	2.E + 05	2.E + 05	2.E + 05	St/St/St
Ir-186	3.E - 06	3.E - 06	2.E - 06	1.E + 05	1.E + 05	9.E + 04	St/St/St
Ir-187	1.E – 05	1.E – 05	1.E – 05	5.E + 05	5.E + 05	4.E + 05	St/St/St
Ir-188	2.E – 06	2.E – 06	1.E – 06	7.E + 04	6.E + 04	5.E + 04	St/St/St
Ir-189 Ir-190m	2.E – 06 8.E – 05	2.E - 06 9.E - 05	2.E - 06 8.E - 05	7.E + 04 3.E + 06	6.E + 04 3.E + 06	6.E + 04 3.E + 06	St/St/St St/St/St
Ir-190	4.E – 07	4.E – 07	4.E – 07	1.E + 04	2.E + 04	1.E + 04	St/St/St
Ir-192m	4.E – 08	9.E – 08	6.E – 09	1.E + 03	3.E + 03	2.E + 02	St/St/St
Ir-192	1.E – 07	2.E - 07	9.E – 08	4.E + 03	6.E + 03	3.E + 03	St/St/St
Ir-194m	4.E – 08	7.E – 08	4.E – 08	2.E+03	3.E+03	2.E + 03	St/St/St
Ir-194 Ir-195m	1.E – 06 1.E – 05	8.E - 07 1.E - 05	8.E – 07 9.E – 06	5.E + 04 4.E + 05	3.E + 04 4.E + 05	3.E + 04 3.E + 05	St/St/St St/St/St
Ir-195	2.E – 05	2.E – 05	2.E – 05	6.E + 05	8.E + 05	7.E + 05	St/St/St
Pt-186	2.E – 05			6.E + 05	-	_	St/ /
Pt-188	7.E – 07	-	_	3.E+04	_	-	St/ /
Pt-189	1.E - 05	_	_	4.E + 05	_	-	St/ /
Pt-191 Pt-193m	3.E – 06 2.E – 06	_	_	1.E + 05 9.E + 04	_	_	St/ /   St/ /
Pt-193	1.E – 05	_	_	4.E + 05	_	_	St/ /
Pt-195m	2.E - 06	_	_	7.E + 04	_	_	St/ /
Pt-197m	2.E - 05	-	-	7.E + 05	_	-	St/ /
Pt-197	4.E – 06	_	_	2.E + 05	_	_	St/ /
Pt-199 Pt-200	6.E – 05 1.E – 06		_	2.E + 06 5.E + 04			St/ /   St/ /
Au-193	1.E – 05	8.E - 06	8.E – 06	4.E + 05	3.E + 05	3.E+05	St/St/St
Au-194	3.E-06	2.E - 06	2.E - 06	1.E + 05	9.E + 04	8.E + 04	St/St/St
Au-195	5.E - 06	6.E - 07	2.E - 07	2.E + 05	2.E + 04	6.E + 03	St/St/St
Au-198m	1.E – 06	5.E – 07	5.E – 07	4.E + 04	2.E + 04	2.E + 04	St/St/St
Au-198 Au-199	2.E – 06 4.E – 06	7.E – 07 2.E – 06	7.E – 07 2.E – 06	6.E + 04 1.E + 05	3.E + 04 6.E + 04	3.E + 04 6.E + 04	St/St/St St/St/St
Au-200m	1.E – 06	1.E - 06	1.E – 06	5.E + 04	4.E + 04	4.E+04	St/St/St
Au-200	3.E - 05	3.E - 05	3.E - 05	1.E + 06	1.E + 06	1.E + 06	St/St/St
Au-201	9.E – 05	1.E – 04	9.E – 05	3.E+06	4.E + 06	4.E + 06	St/St/St
Hg-193m (Org)	6.E – 06 4.E – 06	3.E – 06	_	2.E + 05	1.E + 05	_	St/ / St/St/
Hg-193m (Inorg) Hg-193m (Vapor)	4.6-06	4.E – 06	_	1.E + 05	1.E + 05	_	/St/
Hg-193 (Org)	3.E - 05	-	_	1.E+06	-	_	St/ /
Hg-193 (Inorg)	2.E - 05	2.E - 05	-	7.E + 05	6.E + 05	-	St/St/
Hg-193 (Vapor)	_	1.E – 05	_	_	5.E + 05	_	/St/
Hg-194 (Org)	1.E – 08	- - -	_	4.E + 02	2 = 102	_	St/ /
Hg-194 (Inorg) Hg-194 (Vapor)	2.E – 08	5.E - 08 1.E - 08	_	7.E + 02	2.E + 03 5.E + 02	_	St/St/ /St/
Hg-195m (Org)	3.E - 06	-	-	9.E + 04	-	_	St/ /
Hg-195m (Inorg)	2.E-06	2.E-06		8.E + 04	6.E + 04	_	St/St/
Hg-195m (Vapor)		-2.E - 06	-		6.E + 04	_	/St/
Hg-195 (Org)	2.E - 05	4 5 05	_	7.E + 05		_	St/ /
Hg-195 (Inorg) Hg-195 (Vapor)	1.E – 05	1.E – 05 1.E – 05	_ _	5.E + 05	5.E + 05 5.E + 05		St/St/ /St/
Hg-197m (Org)	4.E – 06		-	1.E + 05	J.L   03	-	St/ /
Hg-197m (Inorg)	3.E - 06	2.E-06	- - -	1.E + 05	8.E + 04	-	St/St/
Hg-197m (Vapor)		2.E-06	-		8.E + 04	_	/St/
Hg-197 (Org)	6.E – 06	4 5 00		2.E + 05	45.05	_	St/ /
Hg-197 (Inorg)	5.⊑-06	4.E – 06	-	2.E + 05	1.E+05	-	St/St/

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	Inhaled	l air-lung retention	on class <sup>3</sup>	Inhale	d air-lung retenti	on class <sup>3</sup>	Stochastic or
Radionuclide		μCi/ml			Bq/m <sup>3</sup>		organ <sup>1</sup>
	D	W	Y	D	W	Y	( D/ W/ Y)
Hg-197 (Vapor)	-	3.E - 05	-	-	1.E + 05	_	/St/
Hg-199m (Org)	7.E – 05		_	3.E+06		_	St/ /
Hg-199m (Inorg)	6.E – 05	7.E – 05	_	2.E + 06	3.E + 06	_	St/St/
Hg-199m (Vapor) Hg-203 (Org)	3.E – 07	3.E – 05	_	1.E + 04	1.E + 06		/St/  St/ /
Hg-203 (Inorg)	5.E – 07	5.E - 07	_	2.E + 04	2.E + 04	_	St/St/
Hg-203 (Vapor)	_	3.E - 07	_	_	1.E + 04	_	/St/
TI-194m	6.E – 05	_	-	2.E+06	_	_	St/ /
TI-194	3.E – 04	_	-	9.E + 06	_	_	St/ /
TI-195 TI-197	5.E – 05 5.E – 05	_	_	2.E + 06 2.E + 06	_	_	St/ /   St/ /
TI-198m	2.E - 05	_	_	9.E + 05	_	_	St/ /
TI-198	1.E – 05	_	_	5.E + 05	_	_	St/ /
TI-199	3.E - 05	_	_	1.E + 06	-	_	St/ /
TI-200	5.E – 06	_	_	2.E + 05	-	_	St/ /
TI-201 TI-202	9.E – 06 2.E – 06	_	_	3.E + 05	_	_	St/ /
TI-204	9.E – 06	_	_	8.E + 04 3.E + 04	_	_	St/ /   St/ /
Pb-195m	8.E – 05	_	_	3.E + 06	_	_	St/ /
Pb-198	3.E - 05	_	_	1.E + 06	_	_	St/ /
Pb-199	3.E - 05	_	_	1.E + 06	-	_	St/ /
Pb-200	3.E – 06	_	_	1.E + 05	_	_	St/ /
Pb-201	9.E – 06	_	-	3.E + 05	-	-	St/ /
Pb-202m Pb-202	1.E – 05 2.E – 08	_	_	4.E + 05 8.E + 02	_	_	St/ /   St/ /
Pb-203	4.E – 06	_	_	2.E + 05	_	_	St/ /
Pb-205	6.E - 07	_	_	2.E + 04	_	_	St/ /
Pb-209	2.E – 05	_	_	9.E + 05	-	_	St/ /
Pb-210	1.E – 10	_	-	4.E + 00	_	_	BS/ /
Pb-211 Pb-212	3.E – 07 1.E – 08	_	_	1.E + 04 5.E + 02	_	_	St/ /   St/ /
Pb-214	3.E - 07		_	1.E + 04			St/ /
Bi-200	3.E - 05	4.E - 05	_	1.E + 06	2.E+06	_	St/St/
Bi-201	1.E – 05	2.E - 05	_	4.E + 05	6.E + 05	_	St/St/
Bi-202	2.E - 05	3.E - 05	_	6.E + 05	1.E + 06	_	St/St/
Bi-203	3.E - 06	2.E – 06	-	1.E + 05	9.E + 04	_	St/St/
Bi-205 Bi-206	1.E – 06 6.E – 07	5.E - 07 4.E - 07		4.E + 04 2.E + 04	2.E + 04 1.E + 04		St/St/ St/St/
Bi-207	7.E – 07	2.E - 07	_	3.E+04	5.E + 03	_	St/St/
Bi-210m	2.E - 09	3.E - 10	_	7.E + 01	1.E + 01	_	K /St/
Bi-210	1.E – 07	1.E – 08	_	4.E + 03	4.E + 02	_	K /St/
Bi-212	1.E – 07	1.E – 07	_	4.E + 03	4.E + 03	_	St/St/
Bi-213 Bi-214	1.E – 07	2.E – 07	_	5.E + 03 1.E + 04	5.E + 03 1.E + 04	_	St/St/ St/St/
Po-203	3.E – 07 3.E – 05	4.E - 07 4.E - 05	_	1.E + 04	1.E + 04	_	St/St/
Po-205	2.E - 05	3.E - 05	_	6.E + 05	1.E + 06	_	St/St/
Po-207	1.E – 05	1.E – 05	_	4.E + 05	4.E + 05	_	St/St/
Po-210	3.E – 10	3.E – 10	_	1.E + 01	1.E + 01	_	E /St/
At-207 At-211	1.E – 06 3.E – 08	9.E – 07	-	4.E + 04	3.E + 04	-	St/St/
Rn-220	8.E – 09 <sup>4</sup>	2.E – 08 4	4	1.E + 03 3.E + 02 4	8.E + 02 4	4	St/St/ 4
Rn-222	3.E - 084	4	4	1.E + 03 <sup>4</sup>	4	4	4
Fr-222	2.E - 07	-	_	7.E + 03	-	_	St/ /
Fr-223	3.E – 07		_	1.E + 04	. <b>_</b>	_	St/ /
Ra-223	_	3.E – 10	_	_	1.E + 01	_	/St/
Ra-224 Ra-225	_	7.E – 10 3.E – 10	_	_	3.E + 01 1.E + 01		/St/ /St/
Ra-226	_	3.E – 10	_	_	1.E + 01	-	/St/
Ra-227	_	6.E – 06	_	_	2.E + 05	_	/BS/
Ra-228	_	5.E - 10	_	_	2.E + 01	_	/St/
Ac-224	1.E - 08	2.E – 08	2.E - 08	4.E + 02	8.E + 02	7.E + 02	BS/St/St
Ac-225	1.E – 10	3.E – 10	3.E – 10	4.E + 00	1.E + 01	1.E + 01	BS/St/St
Ac-226	1.E – 09 2.E – 13	2.E - 09 7.E - 13	2.E – 09	5.E + 01 7.E - 03	8.E + 01	7.E + 01 6.E - 02	BS/St/St BS/BS/St
Ac-227 Ac-228	4.E – 13	2.E – 08	2.E – 12 2.E – 08	2.E + 02	3.E - 02 6.E + 02	7.E + 02	BS/BS/St BS/BS/St
Th-226	55	7.E – 08	6.E – 08		2.E+03	2.E + 03	/St/St
Th-227	-	1.E – 10	1.E – 10	_	5.E + 00	5.E + 00	/St/St
Th-228	_	4.E – 12	7.E – 12	_	2.E - 01	3.E - 01	/BS/St
Th-229	-	4.E – 13	1.E – 12	_	1.E - 02	4.E – 02	/BS/BS
Th-230	_	3.E – 12	7.E – 12	_	9.E – 02	2.E - 01	/BS/BS
Th-231	-	3.E-06	3.E-06	. –	1.E+05	1.E + 05	l /St/St

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	Inhaled	air-lung retention	n class <sup>3</sup>	Inhaled	d air-lung retention	on class <sup>3</sup>	Stochastic or
Radionuclide		μCi/ml			Bq/m <sup>3</sup>		organ 1
	D	W	Y	D	W	Y	( D/ W/ Y)
							/00/00
Th-232 Th-234	_	5.E – 13 9.E – 08	1.E – 12 6.E – 08	_	2.E - 02 3.E + 03	4.E - 02 2.E + 03	/BS/BS /St/St
Pa-227	_	5.E – 08	4.E – 08	_	2.E + 03	2.E + 03 2.E + 03	/St/St
Pa-228	_	5.E – 09	5.E – 09	_	2.E + 02	2.E + 02	/BS/St
Pa-230	_	2.E – 09	1.E – 09	_	7.E + 01	5.E + 01	/St/St
Pa-231	_	7.E – 13	2.E – 12	_	2.E - 02	6.E – 02	/BS/BS
Pa-232	_	9.E – 09	2.E – 08	_	3.E + 02	9.E + 02	/BS/BS
Pa-233	_	3.E - 07	2.E – 07	_	1.E + 04 1.E + 05	9.E + 03	/St/St
Pa-234 U-230	2.E – 10	3.E - 06 1.E - 10	3.E - 06 1.E - 10	6.E + 00	5.E + 00	1.E + 05 4.E + 00	/St/St BS/St/St
U-231	3.E - 06	2.E – 06	2.E - 06	1.E + 05	9.E + 04	7.E + 04	St/St/St
U-232	9.E – 11	2.E - 10	3.E – 12	3.E + 00	6.E + 00	1.E - 01	BS/St/St
U-233	5.E – 10	3.E – 10	2.E – 11	2.E + 01	1.E + 01	6.E – 01	BS/St/St
U-234	5.E – 10	3.E – 10	2.E – 11	2.E + 01	1.E + 01	6.E – 01	BS/St/St
U-235 U-236	6.E – 10 6.E – 10	3.E – 10 3.E – 10	2.E – 11   2.E – 11	2.E + 01 2.E + 01	1.E + 01 1.E + 01	6.E – 01 6.E – 01	BS/St/St BS/St/St
U-237	1.E – 06	7.E – 07	6.E – 07	4.E + 04	3.E + 04	2.E + 04	St/St/St
U-238	6.E – 10	3.E – 10	2.E – 11	2.E + 01	1.E + 01	6.E - 01	BS/St/St
U-239	8.E - 05	7.E - 05	6.E - 05	3.E + 06	3.E + 06	2.E + 06	St/St/St
U-240	2.E-06	1.E – 06	1.E – 06	6.E + 04	4.E + 04	4.E + 04	St/St/St
Np-232	_	1.E – 06	_	_	4.E + 04	_	/BS/
Np-233 Np-234	_	1.E – 03 1.E – 06	_	_	5.E + 07 4.E + 04	_	/St/ /St/
Np-235	_	5.E – 07	_	_	2.E + 04	_	/BS/
Np-236 (1.E+05	_	1.E – 11	_	_	4.E – 01	_	/BS/
yr).							
Np-236 (22 h)	-	2.E – 08	_	_	6.E + 02	-	/BS/
Np-237	_	2.E – 12	_	_	9.E – 02	_	/BS/
Np-238 Np-239	_	4.E - 08 1.E - 06	_	_	1.E + 03 4.E + 04	_	/BS/ /St/
Np-240	_	3.E - 05	_	_	1.E + 06	_	/St/
Pu-234	_	9.E – 08	8.E – 08	_	3.E + 03	3.E + 03	/St/St
Pu-235	_	1.E-03	1.E – 03	_	5.E + 07	4.E + 07	/St/St
Pu-236	_	7.E – 12	1.E – 11	_	3.E - 01	6.E - 01	/BS/St
Pu-237	_	1.E – 06	1.E – 06 7.E – 12	_	5.E + 04	5.E + 04	/St/St
Pu-238 Pu-239	_	3.E – 12 2.E – 12	6.E – 12	_	9.E - 02 8.E - 02	3.E - 01 2.E - 01	/BS/BS /BS/BS
Pu-240	_	2.E – 12	6.E – 12	_	8.E – 02	2.E – 01	/BS/BS
Pu-241	_	1.E – 10	3.E – 10	_	4.E + 00	1.E + 01	/BS/BS
Pu-242	-	2.E – 12	6.E – 12	-	9.E – 02	2.E – 01	/BS/BS
Pu-243	-	1.E – 05	1.E – 05	_	5.E + 05	6.E + 05	/St/St
Pu-244 Pu-245	_	2.E – 12 2.E – 06	6.E – 12 2.E – 06	_	9.E - 02 7.E + 04	2.E - 01 6.E + 04	/BS/BS /St/St
Am-237	_	1.E – 04		_	4.E+06	0.2 1 04	/St/
Am-238	_	1.E – 06	_	_	4.E + 04	_	/BS/
Am-239	_	5.E – 06	_	_	2.E + 05	_	/St/
Am-240	_	1.E – 06	_	_	4.E + 04	_	/St/
Am-241 Am-242m	_	2.E – 12 2.E – 12	_	_	8.E - 02 8.E - 02	_	/BS/ /BS/
Am-242	-	3.E – 12	_	_	1.E + 03	-	/BS/
Am-243	_	2.E – 12	_	_	8.E - 02	_	/BS/
Am-244m	_	2.E – 06	_	-	6.E + 04	_	/BS/
Am-244	_	7.E – 08	_	_	3.E + 03	_	/BS/
Am-245	_	3.E - 05	_	_	1.E+06	_	/St/
Am-246m Am-246		7.E – 05 4.E – 05	_	_	3.E + 06 2.E + 06	_	/St/ /St/
Cm-238	-	4.E - 05 4.E - 07	-	_	2.E + 06 2.E + 04	-	/St/
Cm-240	_	2.E – 10	-	_	8.E + 00	_	/BS/
Cm-241	_	9.E - 09	_	_	4.E + 02	_	/BS/
Cm-242	_	1.E – 10	-	-	4.E + 00	-	/BS/
Cm-243	_	3.E – 12	_	_	1.E – 01	-	/BS/
Cm-244	_	4.E – 12	_	_ _ _	2.E - 01	- - - -	/BS/
Cm-245 Cm-246		2.E – 12	_		8.E - 02 8.E - 02	_	/BS/
Cm-247	_	2.E – 12 2.E – 12	-		9.E – 02	-	/BS/ /BS/
Cm-248	_	6.E – 13	_ _	_ _ _	2.E – 02	_	/BS/
Cm-249	_	6.E - 06	-	_	2.E + 05	_	/BS/
Bk-245	_	5.E – 07	_ _	-	2.E + 04	_ _	/St/
Bk-246	_	1.E - 06	-	_	5.E + 04	_	/St/
Bk-247	_	2.E – 12	-	_	8.E – 02	_	/BS/
Bk-249	-	9.E – 10	ı –	-	3.E + 01	-	l /BS/

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	Inhaled	Inhaled air-lung retention class 3			Inhaled air-lung retention class <sup>3</sup>			
Radionuclide		μCi/ml			Bq/m <sup>3</sup>			
	D	W	Y	D	W	Y	( D/ W/ Y)	
Bk-250	_	2.E - 07	_	_	7.E + 03	_	/BS/	
Cf-244	_	2.E - 07	2.E - 07	_	9.E + 03	9.E + 03	/St/St	
Cf-246	_	4.E - 09	4.E – 09	_	2.E + 02	1.E + 02	/St/St	
Cf-248	_	4.E – 11	5.E – 11	_	1.E + 00	2.E+00	/BS/St	
Cf-249	_	2.E - 12	6.E – 12	_	8.E - 02	2.E - 01	/BS/BS	
Cf-250	_	5.E - 12	1.E – 11	_	2.E - 01	4.E - 01	/BS/St	
Cf-251	_	2.E - 12	5.E – 12	_	8.E - 02	2.E - 01	/BS/BS	
Cf-252	_	1.E – 11	2.E – 11	_	4.E - 01	6.E - 01	/BS/St	
Cf-253	_	8.E - 10	7.E – 10	_	3.E + 01	3.E + 01	/St/St	
Cf-254	_	9.E - 12	7.E – 12	_	3.E - 01	3.E - 01	/St/St	
Es-250	_	3.E - 07	_	_	1.E + 04	_	/BS/	
Es-251	_	4.E - 07	_	_	2.E + 04	_	/BS/	
Es-253	_	6.E - 10	_	_	2.E + 01	_	/St/	
Es-254m	_	4.E - 09	_	_	2.E + 02	_	/St/	
Es-254	_	4.E – 11	_	_	2.E + 00	_	/BS/	
Fm-252	_	6.E - 09	_	_	2.E + 02	_	/St/	
Fm-253	_	4.E - 09	_	_	2.E + 02	_	/St/	
Fm-254	_	4.E - 08	_	_	2.E + 03	_	/St/	
Fm-255	_	9.E - 09	_	_	3.E + 02	_	/St/	
Fm-257	_	1.E – 10	-	_	4.E + 00	_	/E /	
Md-257	_	4.E - 08	_	_	2.E + 03	_	/St/	
Md-258	_	1.E – 10	_	_	4.E + 00	_	/BS/	

Footnotes for Appendix A

1A determination of whether the DACs are controlled by stochastic (St) or nonstochastic (organ) dose, or if they both give the same result (E), for each lung retention class, is given in this column. The key to the organ notation for nonstochastic dose is: BS= Bone surface, K= Kidney, L= Liver, SW= Stomach wall, and T= Thyroid. A blank indicates that no calculations were performed for the lung retention class shown.

2 The ICRP identifies tritiated water and carbon as having immediate uptake and distribution; therefore no solubility classes are designated. For the purposes of this table, the DAC values are shown as being constant, independent of solubility class. For tritiated water, the inhalation DAC values allow for an additional 50% absorption through the skin, as described in ICRP Publication No. 30: Limits for Intakes of Radionuclides by Workers. For elemental tritium, the DAC values are based solely on consideration of the dose-equivalent rate to the tissues of the lung from inhaled tritium gas contained within the lung, without absorption in the tissues.

ation of the dose-equivalent rate to the tissues of the lung from inhaled tritium gas contained within the lung, without absorption in the tissues.

3 A dash indicates no values given for this data category.

4 These values are appropriate for protection from radon combined with its short-lived daughters and are based on information given in ICRP publication 32: Limits for Inhalation of Radon Daughters by Workers and Federal Guidance Report No. 11: Limiting Values of Radionuclide Intake and Air Concentrations, and Dose Conversion Factors for Inhalation, Submersion, and Ingestion (EPA 5201 – 88 – 020). The values given are for 100% equilibrium concentration conditions of the radon daughters with the parent. To allow for an actual measured equilibrium concentration or a demonstrated equilibrium concentration, the values given in this table should be multiplied by the ratio (100%/actual %) or (100%/demonstrated %), respectively. Alternatively, the DAC values for Rn-220 and Rn-222 may be replaced by 1 WL\* and 1/3 WL\* respectively, for appropriate limiting of daughter concentrations. Because of the dosimetric considerations for radon, no f, or lung clearance values are listed.

4 "Working Level" (WL) is any combination of short-lived radon daughters, in one liter of air without regard to the degree of equilibrium, that will result in the ultimate emission of 1.3 E +05 MeV of alpha energy.

[58 FR 65485, Dec. 14, 1993, as amended at 63 FR 59687, Nov. 4, 1998]

#### APPENDIX B TO PART 835 [RESERVED]

APPENDIX C TO PART 835—DERIVED AIR CONCENTRATIONS (DAC) FOR WORK-ERS FROM EXTERNAL EXPOSURE DURING IMMERSION IN A CONTAMI-NATED ATMOSPHERIC CLOUD

a. The data presented in appendix C are to be used for controlling occupational exposures in accordance with §835.209, identifying the need for air monitoring in accordance with §835.403, and identifying the need for posting of airborne radioactivity areas in accordance with §835.603(d).

b The air immersion DAC values shown in this appendix are based on a stochastic dose limit of 5 rems (0.05 Sv) per year or a  $nonstochastic\ (organ)\ dose\ limit\ of\ 50\ rems$ (0.5 Sv) per year. Four columns of information are presented: (1) Radionuclide; (2) halflife in units of seconds (s), minutes (min), hours (h), days (d), or years (yr); (3) air immersion DAC in units of  $\mu \text{Ci/ml};$  and (4) air immersion DAC in units of Bq/m3. The data are listed by radionuclide in order of increasing atomic mass. The air immersion DACs were calculated for a continuous, nonshielded exposure via immersion in a semiinfinite atmospheric cloud. The DACs listed in this appendix may be modified to allow for submersion in a cloud of finite dimensions.

c. The DAC value for air immersion listed for a given radionuclide is determined either by a yearly limit on effective dose equivalent, which provides a limit on stochastic radiation effects, or by a limit on yearly dose equivalent to any organ, which provides a limit on nonstochastic radiation effects. For most of the radionuclides listed, the DAC value is determined by the yearly limit on

effective dose equivalent. Thus, the few cases where the DAC value is determined by the yearly limit on shallow dose equivalent to the skin are indicated in the table by an appropriate footnote. Again, the DACs listed in this appendix account only for immersion in a semi-infinite cloud and do not account for inhalation or ingestion exposures.

- d. Three classes of radionuclides are included in the air immersion DACs as described below.
- (1) Class 1. The first class of radionuclides includes selected noble gases and short-lived activation products that occur in gaseous form. For these radionuclides, inhalation doses are negligible compared to the external dose from immersion in an atmospheric cloud.
- (2) Class 2. The second class of radionuclides includes those for which a DAC value for inhalation has been calculated, but for which the DAC value for external exposure to a contaminated atmospheric cloud is more restrictive (i.e., results in a lower DAC value). These radionuclides generally have half-lives of a few hours or less, or are elimi-

nated from the body following inhalation sufficiently rapidly to limit the inhalation dose.

- (3) Class 3. The third class of radionuclides includes selected isotopes with relatively short half-lives. These radionuclides typically have half-lives that are less than 10 minutes, they do not occur as a decay product of a longer lived radionuclide, or they lack sufficient decay data to permit internal dose calculations. These radionuclides are also typified by a radioactive emission of highly intense, high-energy photons and rapid removal from the body following inhalation.
- e. The DAC values are given for individual radionuclides. For known mixtures of radionuclides, determine the sum of the ratio of the observed concentration of a particular radionuclide and its corresponding DAC for all radionuclides in the mixture. If this sum exceeds unity (1), then the DAC has been exceeded. For unknown radionuclides, the most restrictive DAC (lowest value) for those isotopes not known to be absent shall be used.

Radionuclide	Half-Life	Air Immersion DAC		
Radionaciae	nali-Lile	(μCi/ml)	(Bq/m <sup>3</sup> )	
C-11	20.48 min	4.E-06	1.E+05	
N-13	9.97 min	4.E-06	1.E+05	
N-16	7.13 s	7.E-07	3.E+04	
O-15	122.24 s	4.E-06	1.E+05	
F-18 <sup>1</sup>	109.74 min	4.E-06	1.E+05	
Na-24 <sup>1</sup>	15.00 h	9.E-07	3.E+04	
Mg-27 <sup>2</sup>	9.458 min	5.E-06	2.E+05	
Al-282	2.240 min	2.E-06	7.E+04	
CI-38 1	37.21 min	3.E-06	1.E+05	
Ar-37	35.02 d	3.E+00	1.E+11	
Ar-39	269 yr	2.E-043	7.E+06 <sup>3</sup>	
Ar-41	1.827 h	3.E-06	1.E+05	
K-43 <sup>1</sup>	22.6 h	5.E-06	2.E+05	
Ca-492	8.719 min	1.E-06	4.E+04	
Sc-44 1	3.927 h	2.E-06	7.E+04	
Sc-46m <sup>2</sup>	18.72 s	5.E-05	2.E+06	
Ti-45 <sup>1</sup>	3.08 h	5.E-06	2.E+05	
Ti-51 <sup>2</sup>	5.752 min	1.E-05	4.E+05	
V-52 <sup>2</sup>	3.75 min	3.E-06	1.E+05	
Cr-491	42.09 min	5.E-06	2.E+05	
Mn-52m 1	21.4 min	2.E-06	7.E+04	
Mn-56 1	2.5785 h	2.E-06	7.E+04	
Mn-57 <sup>2</sup>	1.47 min	6.E-05	2.E+06	
Co-60m 1	10.47 min	1.E-03	4.E+07	
Ni-57 1,4	36.08 h	2.E-06	7.E+04	
Ni-65 1,5	2.520 h	8.E-06	3.E+05	
Cu-61 <sup>1</sup>	3.408 h	5.E-06	2.E+05	
Cu-62 <sup>2</sup>	9.74 min	5.E-06	2.E+05	
Ga-66 <sup>1</sup>	9.40 h	2.E-06	7.E+04	
Ga-68 <sup>1</sup>	68.0 min	5.E-06	2.E+05	
Ga-72 <sup>1</sup>	14.1 h	1.E-06	4.E+04	
Se-731	7.15 h	4.E-06	1.E+05	
Br-77 <sup>1</sup>	57.04 h	1.E-056	4.E+056	
Br-80 <sup>1</sup>	17.4 min	5.E-05	2.E+06	
Br-82 <sup>1</sup>	35.30 h	1.E-06	4.E+04	
Br-84 1	31.80 min	2.E-06	7.E+04	
Br-85 <sup>2</sup>	172 s	5.E-05	2.E+06	
Kr-79	35.04 h	2.E-05	7.E+05	
Kr-81	2.1E+05 yr	5.E-04	2.E+07	
Kr–83m	1.83 h	5.E-02	2.E+09	
Kr-85	10.72 yr	1.E-04 <sup>3</sup>	4.E+06 <sup>3</sup>	
Kr-85m	4.48 h	3.E-05	1.E+06	

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Radionuclide	Half-Life	Air Immersion DAC		
	rian-Liie	(μCi/ml)	(Bq/m <sup>3</sup> )	
Kr–87	76.3 min	5.E-06	2.E+05	
Kr–88	2.84 h	2.E-06	7.E+04	
Kr–89	3.16 min	2.E-06	7.E+04	
Kr-90	32.32 s	3.E-06	1.E+05	
Rb-81 <sup>1</sup>	4.58 h	8.E-06	3.E+05	
Rb-822	1.25 min	2.E-06	7.E+04	
Rb-881	17.8 min	7.E-06	3.E+05	
Rb-891	15.44 min	2.E-06	7.E+04	
Rb-90 <sup>2</sup>	157 s	2.E-06	7.E+04	
Rb-90m <sup>2</sup>	258 s	1.E-06	4.E+04	
Sr-85m <sup>1</sup>	67.66 min	2.E-05	7.E+04	
Sr–87m <sup>1</sup>	2.805 h	6.E-05	2.E+06	
Sr-92 <sup>1</sup>	2.71 h	3.E-06	1.E+05	
Sr-93 <sup>2</sup>	7.3 min	2.E-06	7.E+04	
/-86 <sup>1</sup>	14.74 h	1.E-06	4.E+04	
∕–90m ¹	3.19 h	5.E-06 <sup>6</sup>	2.E+05 <sup>6</sup>	
/–91m ¹	49.71 min	9.E-06	3.E+05	
Nb-90 <sup>1</sup>	14.60 h	1.E-07	4.E+03	
Nb-94m <sup>2</sup>	6.26 min	9.E-04	3.E+07	
Nb-94111- Nb-971	72.1 min	7.E-06	3.E+05	
Nb-97 m 1	60 s	6.E-06	2.E+05	
/lo-91 <sup>2</sup>	15.9 min	4.E-06	1.E+05	
/lo-101 <sup>1</sup>	14.61 min	3.E-06	1.E+05	
Гс-95 ¹	20.0 h	5.E-06	2.E+05	
C-96m <sup>1</sup>	51.5 min	1.E-04	4.E+06	
c–99m <sup>1</sup>	6.02 h	3.E-05	1.E+06	
Гс-101 ¹	14.2 min	1.E-05	4.E+05	
Ru–105 <sup>1</sup>	4.44 h	5.E-06	2.E+05	
Rh–105m <sup>2</sup>	45 s	1.E-04	4.E+06	
Rh-1062	29.92 s	2.E-05	7.E+05	
\g-108 <sup>2</sup>	2.37 min	2.E-04	7.E+06	
\g_109m <sup>2</sup>	39.6 s	1.E-03	4.E+07	
\g_1102	24.57 s	9.E-05	3.E+06	
Cd-111m <sup>2</sup>	48.7 min	1.E-05	4.E+05	
Cd-1171	2.49 h	4.E-06	1.E+05	
Cd-117m <sup>1</sup>	3.36 h	2.E-06	7.E+04	
n–113m <sup>1</sup>	1.658 h	2.E-05	7.E+05	
n–1142	71.9 s		4.E+06	
		1.E-04		
n–116m ¹	54.15 min	2.E-06	7.E+04	
n-1171	43.8 min	7.E-06	3.E+05	
Sb-1171	2.80 h	3.E-05	1.E+06	
Sb-126m <sup>1</sup>	19.0 min	3.E-06	1.E+05	
Sb-129 <sup>1</sup>	4.40 h	3.E-06	1.E+05	
e–1331	12.45 min	5.E-06	2.E+05	
e–133m <sup>1</sup>	55.4 min	2.E-06	7.E+04	
e-1341	41.8 min	5.E-06	2.E+05	
-122 <sup>2</sup>	3.62 min	5.E-06	2.E+05	
-128 <sup>1</sup>	24.99 min	5.E-05	2.E+06	
-132 <sup>1</sup>	2.30 h	2.E-06	7.E+04	
-134 <sup>1</sup>	52.6 min	1.E-06	4.E+04	
-135 ¹	6.61 h	7.E-076	3.E+046	
-136 <sup>2</sup>	83 s	1.E-06	4.E+04	
(e-122	20.1 h	8.E-05	3.E+06	
(e-123	2.14 h	7.E-06	3.E+05	
(e–125	16.8 h	2.E-05	7.E+05	
(e-127	36.406 d	1.E-05	4.E+05	
e-129m	8.89 d	2.E-04	7.E+06	
e-131m	11.84 d	5.E-04	2.E+07	
e-133	5.245 d	1.E-04	4.E+06	
(e–133m	2.19 d	1.E-04	4.E+06	
(e-135	9.11 h	2.E-05	7.E+05	
(e-135m	15.36 min	1.E-05	4.E+05	
(e–137	3.83 min	2.E-05	7.E+05	
(e-138	14.13 min	4.E-06	1.E+05	
Cs-126 <sup>2</sup>	1.64 min	4.E-06	1.E+05	
S-1291	32.06 h	1.E-056	4.E+056	
S-138 <sup>1</sup>	32.2 min	2.E-06	7.E+04	
cs-1392	9.40 min	1.E-05	4.E+05	
3a-137m <sup>2</sup>	2.552 min			
		7.E-06	3.E+05	
3a-141 <sup>1</sup>	18.27 min	5.E-06 5.E-06	2.E+05	
3a-1421	10.70 min		2.E+05	

Radionuclide	Half-Life Half-Life		sion DAC
		(μCi/ml)	(Bq/m <sup>3</sup> )
Pr-144m <sup>2</sup>	7.2 min	9.E-04	3.E+07
Nd-149 <sup>1</sup>	1.73 h	1.E-05	4.E+05
Gd-162 <sup>2</sup>	9.7 min	1.E-05	4.E+05
Td-1622	7.76 min	4.E-06	1.E+05
Dy-157 1	8.06 h	1.E-05	4.E+05
Re-182m <sup>1</sup>	12.7 h	4.E-06	1.E+05
Os-190m <sup>2</sup>	9.9 min	3.E-06	1.E+05
Ir-190m 1	3.2 h	8.E-056	3.E+066
Au-195m <sup>2</sup>	30.6 s	2.E-05	7.E+05
TI-200 <sup>1</sup>	26.1 h	3.E-06	1.E+05
TI-207 <sup>2</sup>	4.77 min	4.E-05 <sup>3</sup>	1.E+06 <sup>3</sup>
TI-208 <sup>2</sup>	3.053 min	1.E-06	4.E+04
TI-209 <sup>2</sup>	2.20 min	2.E-06	7.E+04
TI-210 <sup>2</sup>	1.30 min	1.E-06	4.E+04
Pb-204m <sup>2</sup>	66.9 min	2.E-06	7.E+04
Bi-211 <sup>2</sup>	2.13 min	1.E-04	4.E+06
Po-2112	0.516 s	5.E-04	2.E+07
Th-2332	22.3 min	1.E-04	4.E+06
Pa-234 <sup>1</sup>	6.70 h	2.E-06	7.E+04
Pa-234m <sup>2</sup>	1.17 min	4.E-05 <sup>3</sup>	1.E+06 <sup>3</sup>
U-239 1	23.40 min	8.E-05 <sup>6</sup>	3.E+06 <sup>6</sup>
Np-240 <sup>1</sup>	65 min	4.E-06	1.E+05
Np-240m <sup>2</sup>	7.4 min	1.E-05	4.E+05
Am-246 1	25.0 min	4.E-06	1.E+05

[58 FR 65485, Dec. 14, 1993, as amended at 63 FR 59687, Nov. 4, 1998]

#### APPENDIX D TO PART 835—SURFACE CONTAMINATION VALUES

The data presented in appendix D are to be used in identifying the need for posting of  $contamination \ and \ high \ contamination \ areas$ in accordance with \$835.603(e) and (f) and identifying the need for surface contamination monitoring and control in accordance with §§ 835.1101 and 835.1102.

#### SURFACE CONTAMINATION VALUES 1 IN DPM/100 CM2

Radionuclide	Removable <sup>2</sup> <sup>4</sup>	Total (Fixed + Removable) <sup>2</sup> ,
U-nat, U-235, U-238, and associated decay products	71,000	75,000
Transuranics, Ra-226, Ra-228, Th-230, Th-228, Pa-231, Ac-227, I-125, I-129	20	500
Th-nat, Th-232, Sr-90, Ra-223, Ra-224, U-232, I-126, I-131, I-133	200	1,000
Beta-gamma emitters (nuclides with decay modes other than alpha emission or spontaneous		
fission) except Sr-90 and others noted above 5	1,000	5,000
Tritium and tritiated compounds 6	10,000	N/A

<sup>&</sup>lt;sup>1</sup>The values in this appendix, with the exception noted in footnote 5, apply to radioactive contamination deposited on, but not incorporated into the interior or matrix of, the contaminated item. Where surface contamination by both alpha-and beta-gamma-emitting nuclides exists, the limits established for alpha-and beta-gamma-emitting nuclides apply independently.

¹ Committed effective dose equivalent from inhalation is calculated in ICRP Publication 30, but the DAC value for external exposure to a contaminated atmospheric cloud is more restrictive than the DAC value for inhalation. ² Committed effective dose equivalent from inhalation is not calculated in ICRP Publication 30, but DAC value for external exposure to contaminated cloud should be more restrictive than DAC value for inhalation due to relatively short half-life of radio-

<sup>3</sup> DAC value is determined by limit on annual shallow dose equivalent to skin, rather than yearly limit on effective dose equiva-

lent.

4 DAC value applies to radionuclide in vapor form only; DAC value for inhalation is more restrictive for radionuclide in inorganic. form.

5 DAC value applies to radionuclide in inorganic or vapor form.

6 DAC value for exposure to contaminated atmospheric cloud is the same as DAC value for inhalation.

emitting nuclides exists, the limits established for alpha-and beta-gamma-emitting nuclides apply independently.

2 As used in this table, dpm (disintegrations per minute) means the rate of emission by radioactive material as determined by correcting the counts per minute observed by an appropriate detector for background, efficiency, and geometric factors associated with the instrumentation.

3 The levels may be averaged over one square meter provided the maximum surface activity in any area of 100 cm² is less than three times the value specified. For purposes of averaging, any square meter of surface shall be considered to be above the surface contamination value if: (1) From measurements of a representative number of sections it is determined that the average contamination level exceeds the applicable value; or (2) it is determined that the sum of the activity of all isolated spots or particles in any 100 cm² area exceeds three times the applicable value.

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<sup>4</sup>The amount of removable radioactive material per 100 cm<sup>2</sup> of surface area should be determined by swiping the area with dry filter or soft absorbent paper, applying moderate pressure, and then assessing the amount of radioactive material on the swipe with an appropriate instrument of known efficiency. (Note—The use of dry material may not be appropriate for tritium.) When removable contamination on objects of surface area less than 100 cm<sup>2</sup> is determined, the activity per unit area shall be based on the actual area and the entire surface shall be wiped. It is not necessary to use swiping techniques to measure removable contamination levels if direct scan surveys indicate that the total residual surface contamination levels are within the limits for removable contamination.

<sup>5</sup>This category of radionuclides includes mixed fission products, including the Sr-90 which is present in them. It does not apply to Sr-90 which has been separated from the other fission products or mixtures where the Sr-90 has been enriched.

<sup>6</sup>Tritium contamination may diffuse into the volume or matrix of materials. Evaluation of surface contamination shall consider the extent to which such contamination may migrate to the surface in order to ensure the surface contamination value provided in this appendix is not exceeded. Once this contamination migrates to the surface, it may be removable, not fixed; therefore, a "Total" value does not apply.

<sup>7</sup>(alpha)

[58 FR 65485, Dec. 14, 1993, as amended at 63 FR 59688, Nov. 4, 1998]

APPENDIX E TO PART 835—VALUES FOR ESTABLISHING SEALED RADIOACTIVE SOURCE ACCOUNTABILITY AND RADIO-ACTIVE MATERIAL POSTING AND LA-BELING REQUIREMENTS

The data presented in this appendix E are to be used for identifying accountable sealed radioactive sources as defined at \$835.2(a), establishing the need for radioactive matearea posting in accordance with §835.603(g), and establishing the need for radioactive material labeling in accordance with §835.605.

NOTE: The data are listed in alphabetical order by nuclide.

Nuclide	Activity (μCi)	Nuclide	Activity (μCi)	Nuclide	Activity (μCi)
Ac-227	1.5E+00	H-3	1.6E+08	Re-184m	1.5E+02
Ag-105	2.1E+06	Hf-172	3.1E+04	Re-186m	2.8E+05
Ag-108m	1.8E+01	Hf-175	1.8E+06	Rh-101	2.5E+05
Ag-110m	2.2E+01	Hf-178m	4.1E+03	Rh-102	8.3E+04
Al-26	1.6E+01	Hf-181	3.5E+02	Rh-102m	2.1E+05
Am-241	2.3E+01	Hf-182	3.0E+03	Ru-103	4.4E+02
Am-242m	2.4E+01	Hg-194	3.5E+04	Ru-106	2.1E+04
Am-243	2.3E+01	Hg-203	4.9E+02	S-35	4.0E+06
As-73	5.4E+02	Ho-166m	2.2E+01	Sb-124	9.1E+01
Au-195	4.8E+02	I-125	3.5E+02	Sb-125	6.8E+01
Ba-133	5.2E+01	I-129	1.8E+02	Sc-46	6.2E+01
Be-10	2.8E+04	In-114m	7.8E+02	Se-75	6.4E+01
Be-7	3.2E+03	Ir-192	1.4E+02	Se-79	1.0E+06
Bi-207	1.7E+01	Ir-192m	2.6E+04	Si-32	9.9E+03
Bi-208	1.5E+01	Ir-194m	2.7E+01	Sm-145	9.1E+05
Bi-210m	1.3E+03	K-40	2.8E+02	Sm-146	1.2E+02
Bk-247	1.7E+01	La-137	1.1E+05	Sm-151	2.5E+05
Bk-249	7.2E+03	Lu-173	4.4E+05	Sn-113	3.1E+02
C-14	4.8E+06	Lu-174	2.5E+05	Sn-119m	3.3E+02
Ca-41	7.4E+06	Lu-174m	3.9E+05	Sn-121m	8.7E+05
Ca-45	1.5E+06	Lu-177m	5.8E+01	Sn-123	1.3E+04
Cd-109	1.6E+02	Md-258	6.0E+02	Sn-126	1.8E+02
Cd-113m	6.5E+03	Mn-53	2.0E+07	Sr-85	1.2E+02
Cd-115m	1.0E+04	Mn-54	6.5E+01	Sr-89	2.4E+05
Ce-139	2.4E+02	Mo-93	7.7E+01	Sr-90	7.7E+03
Ce-141	2.4E+03	Na-22	1.9E+01	Ta-179	1.5E+06
Ce-144	1.5E+03	Nb-91	7.0E+01	Ta-182	7.3E+01
Cf-248	2.0E+02	Nb-91m	3.6E+02	Tb-157	2.5E+03
Cf-249	1.7E+01	Nb-92	1.8E+01	Tb-158	3.9E+04
Cf-250	3.8E+01	Nb-93m	4.4E+02	Tb-160	1.2E+02
Cf-251	1.7E+01	Nb-94	2.3E+01	Tc-95m	1.3E+02
Cf-252	6.4E+01	Nb-95	3.4E+02	Tc-97	8.1E+01
Cf-254	3.4E+01	Ni-59	7.5E+06	Tc-97m	3.6E+02
CI-254	4.6E+05	Ni-63	3.2E+06	Tc-98	2.5E+01
Cm-241	6.8E+04	Np-235	1.2E+02	Tc-99	6.8E+06
Cm-242	5.8E+02	Np-236	2.2E+01	Te-121m	1.9E+02
Cm-243	3.3E+01	Np-237	1.9E+01	Te-123m	2.8E+02
Cm-244	4.0E+01		1.4E+02	Te-125m	4.4E+02
		Os-185			
Cm-245	2.2E+01	Os-194	1.5E+04	Te-127m	8.0E+02
Cm-246	2.2E+01	Pa-231	7.8E+00	Te-129m	2.3E+03
Cm-247	2.4E+01	Pb-202	1.0E+05	Th-228	2.9E+01
Cm-248	6.0E+00	Pb-205	9.1E+01	Th-229	4.7E+00
Cm-250	1.1E+00	Pb-210	9.2E+01	Th-230	3.1E+01
Co-56	4.0E+01	Pd-107	7.8E+05	Th-232	6.1E+00
Co-57	2.3E+02	Pm-143	1.3E+02	Ti-44	1.6E+02
Co-58	1.4E+02	Pm-144	2.9E+01	TI-204	2.2E+04
Co-60	1.8E+01	Pm-145	2.6E+02	Tm-170	8.4E+03

Nuclide	Activity (μCi)	Nuclide	Activity (μCi)	Nuclide	Activity (μCi)
Cs-134	2.7E+01 2.2E+06 6.0E+01 4.1E+06 6.3E+01 4.6E+04 7.0E+05 5.3E+01 3.1E+01 3.7E+02 2.0E+02 1.3E+04 4.3E+04 4.3E+04 1.1E+06	Pm-146 Pm-147 Pm-148m Po-209 Po-210 Pt-193 Pu-236 Pu-237 Pu-238 Pu-239 Pu-240 Pu-241 Pu-242 Pu-244 Ra-226 Ra-228 Rb-83 Rb-83	4.5E+01 2.5E+05 1.1E+02 6.3E+03 1.1E+03 4.4E+07 6.9E+01 2.3E+01 2.3E+01 1.2E+03 2.4E+01 1.2E+03 2.1E+03 9.2E+01	Tm-171 U-232 U-233 U-234 U-235 U-236 U-238 V-49 W-181 W-185 W-188 W-188 Y-91 Y-91 Yb-169 Zn-65 Zr-88 Zr-93 Zr-95	2.8E+04 1.5E+01 7.4E+01 7.5E+01 6.7E+01 8.0E+01 8.4E+01 2.9E+07 1.1E+03 3.9E+06 6.4E+04 5.5E+02 1.1E+02 3.1E+04 2.0E+02
Gd-153 Ge-68	2.1E+02 5.7E+02	Re-183	5.4E+02 2.6E+02		2.32+02

Any alpha emitting radionuclide not listed above and mixtures of alpha emitters of unknown composition have a value of 10 microcuries

Any radionuclide other than alpha emitting radionuclides not listed above and mixtures of beta emitters of unknown composition have a value of 100 microcuries.

Note: Where there is involved a combination of radionuclides in known amounts, derive the value for the combination as follows: determine, for each radionuclide in the combination, the ratio between the quantity present in the combination and the value otherwise established for the specific radionuclide when not in combination. If the sum of such ratios for all radionuclides in the combination exceeds unity (1), then the accountability criterion has been exceeded.

[63 FR 59688, Nov. 4, 1998]

# PART 840—EXTRAORDINARY NUCLEAR OCCURRENCES

Sec.

840.1 Scope and purpose.

840.2 Procedures.

840.3 Determination of extraordinary nuclear occurrence.

840.4 Criterion I—Substantial discharge of radioactive material or substantial radiation levels offsite.

840.5 Criterion II—Substantial damages to persons offsite or property offsite.

AUTHORITY: Sec. 161 of the Atomic Energy Act of 1954, Pub. L. 83-703, 68 Stat. 919 (42 U.S.C. 2201); sec. 170 of the Atomic Energy Act of 1954, Pub. L. 85-256, 71 Stat. 576, as amended by Pub. L. 89-645, 80 Stat. 891 (42 U.S.C. 2210); Department of Energy Organiza-

tion Act, Pub. L. 95-91, 91 Stat. 565-613 (42 U.S.C. 7101-7352).

SOURCE: 49 FR 21473, May 21, 1984, unless otherwise noted.

#### §840.1 Scope and purpose.

(a) *Scope*. This subpart applies to those DOE contractor activities to which the nuclear hazards indemnity provisions in 41 CFR 9-50.704-6 apply, and to other persons indemnified with respect to such activities.

(b) Purpose. One purpose of this subpart is to set forth the criteria which the DOE proposes to follow in order to determine whether there has been an "extraordinary nuclear occurrence." The other purpose is to establish the conditions of the waivers of defenses proposed for incorporation in indemnity agreements.

(1) The system is to come into effect only where the discharge or dispersal constitutes a substantial amount of source, special nuclear or byproduct material, or has caused substantial radiation levels offsite. The various limits in present DOE regulations are not appropriate for direct application in the determination of an "extraordinary nuclear occurrence," for they were arrived at with other purposes in mind, and those limits have been set at a level which is conservatively arrived at by incorporating a significant safety factor. Thus, a discharge or dispersal which exceeds the limits in DOE regulations, or in DOE orders, although possible cause for concern, is not one

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which would be expected to cause substantial injury or damage unless it exceeds by some significant multiple the appropriate regulatory limit. Accordingly, in arriving at the values in the criteria to be deemed "substantial" it is more appropriate to adopt values separate from DOE health and safety orders, and, of course the selection of these values will not in any way affect such orders. A substantial discharge, for purposes of the criteria, represents perturbation of the environment which is clearly above that which could be anticipated from the conduct of normal activities. The criteria are intended solely for the purposes of administration of DOE statutory responsibilities under Pub. L. 89-645, and are not intended to indicate a level of discharge or dispersal at which damage is likely to occur, or even a level at which some type of protective action is indicated. It should be clearly understood that the criteria in no way establish or indicate that there is a specific threshold of exposure at which biological damage from radiation will take place. It cannot be emphasized too frequently that the levels set to be used as criteria for the first part of the determination, that is, the criteria for amounts offsite or radiation levels offsite which are substantial, are not meant to indicate that, because such amounts or levels are determined to be substantial for purposes of administration, they are "substantial" in terms of their propensity for causing injury or damage.

(2) It is the purpose of the second part of the determination that DOE decide whether there have in fact been or will probably be substantial damages to persons offsite or property offsite. The criteria for substantial damages were formulated, and the numerical values selected, on a wholly different basis from that on which the criteria used for the first part of the determination with respect to substantial discharge were derived. The only interrelation between the values selected for the discharge criteria and the damage criteria is that the discharge values are set so low that it is extremely unlikely the damage criteria could be satisfied unless the discharge values have been exceeded.

(3) The first part of the test is designed so that DOE can assure itself that something exceptional has occurred; that something untoward and unexpected has in fact taken place and that this event is of sufficient significance to raise the possibility that some damage to persons or property offsite has resulted or may result. If there appears to be no damage, the waivers will not apply because DOE will be unable, under the second part of the test, to make a determination that "substantial damages" have resulted or will probably result. If damages have resulted or will probably result, they could vary from de minimis to serious, and the waivers will not apply until the damages, both actual and probable, are determined to be "substantial" within the second part of the test.

(4) The presence or absence of an extraordinary nuclear occurrence determination does not concomitantly determine whether or not a particular claimant will recover on his claim. In effect, it is intended primarily to determine whether certain potential obstacles to recovery are to be removed from the route the claimant would ordinarily follow to seek compensation for his injury or damage. If there has not been an extraordinary nuclear occurrence determination, the claimant must proceed (in the absence of settlement) with a tort action subject to whatever issues must be met, and whatever defenses are available to the defendant, under the law applicable in the relevant jurisdiction. If there has been an extraordinary nuclear occurrence determination, the claimant must still proceed (in the absence of settlement) with a tort action, but the claimant's burden is substantially eased by the elimination of certain issues which may be involved and certain defenses which may be available to the defendant. In either case the defendant may defend with respect to such of the following matters as are in issue in any given claim: the nature of the claimant's alleged damages, the causal relationship between the event and the alleged damages, and the amount of the alleged damages.

#### §840.2 Procedures.

(a) DOE may initiate, on its own motion, the making of a determination as to whether or not there has been an extraordinary nuclear occurrence. In the event DOE does not so initiate the making of a determination, any affected person, or any person with whom an indemnity agreement is executed may petition DOE for a determination of whether or not there has been an extraordinary nuclear occurrence. If DOE does not have, or does not expect to have, within 7 days after it has received notification of an alleged event, enough information available to make a determination that there has been an extraordinary nuclear occurrence, DOE will publish a notice in the FEDERAL REGISTER setting forth the date and place of the alleged event and requesting any persons having knowledge thereof to submit their information to DOE.

(b) When a procedure is initiated under paragraph (a) of this section, the principal staff which will begin immediately to assemble the relevant information and prepare a report on which the DOE can make its determination will consist of the Directors or their designees of the following Divisions or Offices: Office of Nuclear Safety, Office of Operational Safety, Office of Health and Environmental Research, the General Counsel or his designee, and a representative of the program division whose facility or device may be involved.

## § 840.3 Determination of extraordinary nuclear occurrence.

If the DOE determines that both of the criteria set forth in §840.4 and §840.5 have been met, it will make the determination that there has been an extraordinary nuclear occurrence. If the DOE publishes a notice in the FED-ERAL REGISTER in accordance with §840.2(a) and does not make a determination within 90 days thereafter that there has been an extraordinary nuclear occurrence, the alleged event will be deemed not to be an extraordinary nuclear occurrence. The time for the making of a determination may be extended by DOE by notice published in the FEDERAL REGISTER.

#### § 840.4 Criterion I—Substantial discharge of radioactive material or substantial radiation levels offsite.

DOE will determine that there has been a substantial discharge or dispersal of radioactive material offsite, or that there have been substantial levels of radiation offsite, when as a result of an event comprised of one or more related happenings, radioactive material is released from its intended place of confinement or radiation levels occur offsite and either of the following findings are also made:

(a) DOE finds that one or more persons offsite were, could have been, or might be exposed to radiation or to radioactive material, resulting in a dose or in a projected dose in excess of one of the levels in the following table:

TOTAL PROJECTED RADIATION DOSES

Critical organ	Dose (rems)
Thyroid Whole Body Bone Marrow Skin Other organs or tissues	30 20 20 60 30

Exposures from the following types of sources of radiation shall be included:

- (1) Radiation from sources external to the body;
- (2) Radioactive material that may be taken into the body from its occurrence in air or water; and
- (3) Radioactive material that may be taken into the body from its occurrence in food or on terrestrial surfaces.
  - (b) DOE finds that—
- (1) Surface contamination of at least a total of any 100 square meters of off-site property has occurred as the result of a release of radioactive material from a production or utilization facility or device and such contamination is characterized by levels of radiation in excess of one of the values listed in column 1 or column 2 of the following table, or
- (2) Surface contamination of any offsite property has occurred as the result of a release of radioactive material in the course of transportation and such contamination is characterized by levels of radiation in excess of one of the values listed in column 2 of the following table:

#### § 840.5

TOTAL SURFACE CONTAMINATION LEVELS 1

Type of emitter	Column 1—Offsite property <sup>2</sup>	Column 2—Other offsite property
Alpha emission from transuranic isotopes. Alpha emission from isotopes other than trans- uranic isotopes.	3.5 microcuries per square meter. 35 microcuries per square meter.	0.35 microcuries per square meter. 3.5 microcuries per square meter.
Beta or gamma emission.	40 millirads/hour 1 cm (measured through not more than 7 milligrams per square centimeter of total absorber).	4 millirads/hour 1 cm (measured through not more than 7 mil- ligrams per square centi- meter of total absorber).

<sup>&</sup>lt;sup>1</sup>The maximum levels (above background), observed or projected, 8 or more hours after initial deposition. 
<sup>2</sup>Contiguous to site, owned or leased by person with whom an indemnity agreement is executed.

[49 FR 21473, May 21, 1984; 49 FR 24374, June 13, 1984]

# § 840.5 Criterion II—Substantial damages to persons offsite or property offsite.

- (a) After DOE has determined that an event has satisfied Criterion I, DOE will determine that the event has resulted or will probably result in substantial damages to persons offsite or property offsite if any of the following findings are made:
- (1) DOE finds that such event has resulted in the death or hospitalization, within 30 days of the event, of five or more people located offsite showing objective clinical evidence of physical injury from exposure to the radioactive, toxic, explosive, or other hazardous properties of source, special nuclear, or byproduct material; or
- (2) DOE finds that \$2,500,000 or more of damage offsite has been or will probably be sustained by any one person, or \$5 million or more of such damage in the aggregate has been or will probably be sustained, as the result of such event: or
- (3) DOE finds that \$5,000 or more of damage offsite has been or will probably be sustained by each of 50 or more persons, provided that \$1 million or more of such damage in the aggregate has been or will probably be sustained, as the result of such event.
- (b) As used in paragraphs (a) (2) and (3) of this section "damage" shall be that arising out of or resulting from the radioactive, toxic, explosive, or

other hazardous properties of source, special nuclear, or byproduct material, and shall be based upon estimates of one or more of the following:

- (1) Total cost necessary to put affected property back into use.
- (2) Loss of use of affected property.
- (3) Value of affected property where not practical to restore to use.
- (4) Financial loss resulting from protective actions appropriate to reduce or avoid exposure to radiation or to radioactive materials.

# PART 850—CHRONIC BERYLLIUM DISEASE PREVENTION PROGRAM

#### **Subpart A—General Provisions**

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APPENDIX A TO PART 850—CHRONIC BERYLLIUM DISEASE PREVENTION PROGRAM INFORMED CONSENT FORM.

AUTHORITY: 42 U.S.C. 2201(i)(3), (p); 29 U.S.C. 668; E.O. 12196, 3 CFR 1981 comp., p. 145 as amended.

SOURCE: 64 FR 68905, Dec. 8, 1999, unless otherwise noted.

#### **Subpart A—General Provisions**

#### §850.1 Scope.

This part establishes a chronic beryllium disease prevention program (CBDPP) that supplements and is integrated into existing worker protection programs that are established for Department of Energy (DOE) employees and DOE contractor employees.

#### §850.2 Applicability.

- (a) This part applies to:
- (1) DOE offices responsible for operations or activities that involve present or past exposure, or the potential for exposure, to beryllium at DOE facilities:
- (2) DOE contractors with operations or activities that involve present or past exposure, or the potential for exposure, to beryllium at DOE facilities; and
- (3) Any current DOE employee, DOE contractor employee, or other worker at a DOE facility who is or was exposed or potentially exposed to beryllium at a DOE facility.
  - (b) This part does not apply to:
  - (1) Beryllium articles; and
- (2) DOE laboratory operations that meet the definition of laboratory use of hazardous chemicals in 29 CFR 1910.1450, Occupational Exposure to Hazardous Chemical in Laboratories.

#### §850.3 Definitions.

(a) As used in this part:

Action level means the level of airborne concentration of beryllium established pursuant to section 850.23 of this part that, if met or exceeded, requires the implementation of worker protection provisions specified in that section.

Authorized person means any person required by work duties to be in a regulated area.

Beryllium means elemental beryllium and any insoluble beryllium compound

or alloy containing 0.1 percent beryllium or greater that may be released as an airborne particulate.

Beryllium activity means an activity taken for, or by, DOE at a DOE facility that can expose workers to airborne beryllium, including but not limited to design, construction, operation, maintenance, or decommissioning, and which may involve one DOE facility or operation or a combination of facilities and operations.

Beryllium article means a manufactured item that is formed to a specific shape or design during manufacture, that has end-use functions that depend in whole or in part on its shape or design during end use, and that does not release beryllium or otherwise result in exposure to airborne concentrations of beryllium under normal conditions of

Beryllium-associated worker means a current worker who is or was exposed or potentially exposed to airborne concentrations of beryllium at a DOE facility, including:

- (1) A beryllium worker:
- (2) A current worker whose work history shows that the worker may have been exposed to airborne concentrations of beryllium at a DOE facility:
- (3) A current worker who exhibits signs or symptoms of beryllium exposure; and
- (4) A current worker who is receiving medical removal protection benefits.

Beryllium emergency means any occurrence such as, but not limited to, equipment failure, container rupture, or failure of control equipment or operations that results in an unexpected and significant release of beryllium at a DOE facility.

Beryllium-induced lymphocyte proliferation test (Be-LPT) is an in vitro measure of the beryllium antigen-specific, cell-mediated immune response.

Beryllium worker means a current worker who is regularly employed in a DOE beryllium activity.

Breathing zone is defined as a hemisphere forward of the shoulders, centered on the mouth and nose, with a radius of 6 to 9 inches.

 $\it DOE$  means the U.S. Department of Energy.

#### § 850.4

DOE contractor means any entity under contract with DOE (or its subcontractor) that has responsibility for performing beryllium activities at DOE facilities.

DOE facility means any facility operated by or for DOE.

Head of DOE Field Element means an individual who is the manager or head of the DOE operations office or field office, or any official to whom the Head of DOE Field Element delegates his or her functions under this part.

High-efficiency particulate air (HEPA) filter means a filter capable of trapping and retaining at least 99.97 percent of 0.3 micrometer monodispersed particles.

Immune response refers to the series of cellular events by which the immune system reacts to challenge by an antigen.

Medical removal protection benefits means the employment rights established by section 850.35 of this part for beryllium-associated workers who voluntarily accept temporary or permanent medical removal from beryllium areas following a recommendation by the Site Occupational Medicine Director.

Operational area means an area where workers are routinely in the presence of beryllium as part of their work activity.

Regulated area means an area demarcated by the responsible employer in which the airborne concentration of beryllium exceeds, or can reasonably be expected to exceed, the action level.

Removable contamination means beryllium contamination that can be removed from surfaces by nondestructive means, such as casual contact, wiping, brushing or washing.

Responsible employer means:

- (1) For DOE contractor employees, the DOE contractor office that is directly responsible for the safety and health of DOE contractor employees while performing a beryllium activity or other activity at a DOE facility; or
- (2) For DOE employees, the DOE office that is directly responsible for the safety and health of DOE Federal employees while performing a beryllium

activity or other activity at a DOE facility; and

(3) Any person acting directly or indirectly for such office with respect to terms and conditions of employment of beryllium-associated workers.

Site Occupational Medical Director (SOMD) means the physician responsible for the overall direction and operation of the site occupational medicine program.

Unique identifier means the part of a paired set of labels, used in records that contain confidential information, that does not identify individuals except by using the matching label.

Worker means a person who performs work for or on behalf of DOE, including a DOE employee, an independent contractor, a DOE contractor or subcontractor employee, or any other person who performs work at a DOE facility.

Worker exposure means the exposure of a worker to airborne beryllium that would occur if the worker were not using respiratory protective equipment.

(b) Terms undefined in this part that are defined in the Atomic Energy Act of 1954 shall have the same meaning as under that Act.

#### § 850.4 Enforcement.

DOE may take appropriate steps under its contracts with DOE contractors to ensure compliance with this part. These steps include, but are not limited to, contract termination or reduction in fee.

#### §850.5 Dispute resolution.

- (a) Subject to paragraphs (b) and (c) of this section, any worker who is adversely affected by an action taken, or failure to act, under this part may petition the Office of Hearings and Appeals for relief in accordance with 10 CFR part 1003, Subpart G.
- (b) The Office of Hearings and Appeals may not accept a petition from a worker unless the worker requested the responsible employer to correct the violation, and the responsible employer refused or failed to take corrective action within a reasonable time.

(c) If the dispute relates to a term or condition of employment that is covered by a grievance-arbitration provision in a collective bargaining agreement, the worker must exhaust all applicable grievance-arbitration procedures before filing a petition for relief with the Office of Hearings and Appeals. A worker is deemed to have exhausted all applicable grievance-arbitration procedures if 150 days have passed since the filing of a grievance and a final decision on it has not been issued.

# Subpart B—Administrative Requirements

# §850.10 Development and approval of the CBDPP.

- (a) Preparation and submission of initial CBDPP to DOE. (1) The responsible employer at a DOE facility must ensure that a CBDPP is prepared for the facility and submitted to the appropriate Head of DOE Field Element before beginning beryllium activities, but no later than April 6, 2000 of this part.
- (2) If the CBDPP has separate sections addressing the activities of multiple contractors at the facility, the Head of DOE Field Element will designate a single DOE contractor to review and approve the sections prepared by other contractors, so that a single consolidated CBDPP for the facility is submitted to the Head of DOE Field Element for review and approval.
- (b) *DOE review and approval*. The appropriate Head of DOE Field Element must review and approve the CBDPP.
- (1) The initial CBDPP and any updates are deemed approved 90 days after submission if they are not specifically approved or rejected by DOE earlier.
- (2) The responsible employer must furnish a copy of the approved CBDPP, upon request, to the DOE Assistant Secretary for Environment, Safety and Health or designee, DOE program offices, and affected workers or their designated representatives.
- (c) *Update*. The responsible employer must submit an update of the CBDPP to the appropriate Head of DOE Field Element for review and approval whenever a significant change or significant addition to the CBDPP is made or a

- change in contractors occurs. The Head of DOE Field Element must review the CBDPP at least annually and, if necessary, require the responsible employer to update the CBDPP.
- (d) Labor Organizations. If a responsible employer employs or supervises beryllium-associated workers who are represented for collective bargaining by a labor organization, the responsible employer must:
- (1) Give the labor organization timely notice of the development and implementation of the CBDPP and any updates thereto; and
- (2) Upon timely request, bargain concerning implementation of this part, consistent with the Federal labor laws.

#### §850.11 General CBDPP requirements.

- (a) The CBDPP must specify the existing and planned operational tasks that are within the scope of the CBDPP. The CBDPP must augment and, to the extent feasible, be integrated into the existing worker protection programs that cover activities at the facility.
- (b) The detail, scope, and content of the CBDPP must be commensurate with the hazard of the activities performed, but in all cases the CBDPP must:
- (1) Include formal plans and measures for maintaining exposures to beryllium at or below the permissible exposure level prescribed in §850.22;
- (2) Satisfy each requirement in subpart C of this part;
  - (3) Contain provisions for:
- (i) Minimizing the number of workers exposed and potentially exposed to beryllium;
- (ii) Minimizing the number of opportunities for workers to be exposed to beryllium;
- (iii) Minimizing the disability and lost work time of workers due to chronic beryllium disease, beryllium sensitization and associated medical care: and
- (iv) Setting specific exposure reduction and minimization goals that are appropriate for the beryllium activities covered by the CBDPP to further reduce exposure below the permissible exposure limit prescribed in §850.22.

#### §850.12

#### §850.12 Implementation.

- (a) The responsible employer must manage and control beryllium exposures in all DOE beryllium activities consistent with the approved CBDPP.
- (b) No person employed by DOE or a DOE contractor may take or cause any action inconsistent with the requirements of:
  - (1) This part,
  - (2) An approved CBDPP, and
- (3) Any other Federal statute or regulation concerning the exposure of workers to beryllium at DOE facilities.
- (c) No task involving potential exposure to airborne beryllium that is outside the scope of the existing CBDPP may be initiated until an update of the CBDPP is approved by the Head of DOE Field Element, except in an unexpected situation and, then, only upon approval of the Head of DOE Field Element.
- (d) Nothing in this part precludes a responsible employer from taking any additional protective action that it determines to be necessary to protect the health and safety of workers.
- (e) Nothing in this part affects the responsibilities of DOE officials under the Federal Employee Occupational Safety and Health Program (29 CFR part 1960) and related DOE directives.

#### §850.13 Compliance.

- (a) The responsible employer must conduct activities in compliance with its CBDPP.
- (b) The responsible employer must achieve compliance with all elements of its CBDPP no later than January 7, 2002.
- (c) With respect to a particular beryllium activity, the contractor in charge of the activity is responsible for complying with this part. If no contractor is responsible for a beryllium activity, DOE must ensure implementation of, and compliance with, this part.

# Subpart C—Specific Program Requirements

#### §850.20 Baseline beryllium inventory.

(a) The responsible employer must develop a baseline inventory of the locations of beryllium operations and other locations of potential beryllium contamination, and identify the work-

ers exposed or potentially exposed to beryllium at those locations.

- (b) In conducting the baseline inventory, the responsible employer must:
- (1) Review current and historical records:
  - (2) Interview workers;
- (3) Document the characteristics and locations of beryllium at the facility;
- (4) Conduct air, surface, and bulk sampling.
- (c) The responsible employer must ensure that:
- (1) The baseline beryllium inventory is managed by a qualified individual (e.g., a certified industrial hygienist); and
- (2) The individuals assigned to this task have sufficient knowledge and experience to perform such activities properly.

#### §850.21 Hazard assessment.

- (a) If the baseline inventory establishes the presence of beryllium, the responsible employer must conduct a beryllium hazard assessment that includes an analysis of existing conditions, exposure data, medical surveillance trends, and the exposure potential of planned activities. The exposure determinants, characteristics and exposure potential of activities must be prioritized so that the activities with the greatest risks of exposure are evaluated first.
- (b) The responsible employer must ensure that:
- (1) The hazard assessment is managed by a qualified individual (e.g., a certified industrial hygienist); and
- (2) The individuals assigned to this task have sufficient knowledge and experience to perform such activities properly.

#### §850.22 Permissible exposure limit.

The responsible employer must assure that no worker is exposed to an airborne concentration of beryllium greater than the permissible exposure limit established in 29 CFR 1910.1000, as measured in the worker's breathing zone by personal monitoring, or a more stringent TWA PEL that may be promulgated by the Occupational Safety and Health Administration as a health standard.

#### §850.23 Action level.

- (a) The responsible employer must include in its CBDPP an action level that is no greater than  $0.2 \mu g/m^3$ , calculated as an 8-hour TWA exposure, as measured in the worker's breathing zone by personal monitoring.
- (b) If an airborne concentration of beryllium is at or above the action level, the responsible employer must implement §§ 850.24(c) (periodic monitoring), 850.25 (exposure reduction and minimization), 850.26 (regulated areas), 850.27 (hygiene facilities and practices), 850.28 (respiratory protection), 850.29 (protective clothing and equipment), and 850.38 (warning signs) of this part.

#### §850.24 Exposure monitoring.

- (a) *General*. The responsible employer must ensure that:
- (1) Exposure monitoring is managed by a qualified individual (e.g., a certified industrial hygienist); and
- (2) The individuals assigned to this task have sufficient industrial hygiene knowledge and experience to perform such activities properly.
- (b) Initial monitoring. The responsible employer must perform initial monitoring in areas that may have airborne beryllium, as shown by the baseline inventory and hazard assessment. The responsible employer must apply statistically-based monitoring strategies to obtain a sufficient number of sample results to adequately characterize exposures, before reducing or terminating monitoring.
- (1) The responsible employer must determine workers' 8-hour TWA exposure levels by conducting personal breathing zone sampling.
- (2) Exposure monitoring results obtained within the 12 months preceding the effective date of this part may be used to satisfy this requirement if the measurements were made as provided in paragraph (b)(1) of this section.
- (c) Periodic exposure monitoring. The responsible employer must conduct periodic monitoring of workers who work in areas where airborne concentrations of beryllium are at or above the action level. The monitoring must be conducted in a manner and at a frequency necessary to represent workers' exposure, as specified in the CBDPP. This periodic exposure moni-

toring must be performed at least every 3 months (quarterly).

- (d) Additional exposure monitoring. The responsible employer must perform additional monitoring if operations, maintenance or procedures change, or when the responsible employer has any reason to suspect such a change has occurred.
- (e) Accuracy of monitoring. The responsible employer must use a method of monitoring and analysis that has an accuracy of not less than plus or minus 25 percent, with a confidence level of 95 percent, for airborne concentrations of beryllium at the action level.
- (f) Analysis. The responsible employer must have all samples collected to satisfy the monitoring requirements of this part analyzed in a laboratory accredited for metals by the American Industrial Hygiene Association (AIHA) or a laboratory that demonstrates quality assurance for metals analysis that is equivalent to AIHA accreditation.
- (g) Notification of monitoring results.
  (1) The responsible employer must, within 10 working days after receipt of any monitoring results, notify the affected workers of monitoring results in writing. This notification of monitoring results must be:
- (i) Made personally to the affected worker; or
- (ii) Posted in location(s) that is readily accessible to the affected worker, but in a manner that does not identify the individual to other workers.
- (2) If the monitoring results indicate that a worker's exposure is at or above the action level, the responsible employer must include in the notice:
- (i) A statement that the action level has been met or exceeded; and
- (ii) A description of the corrective action being taken by the responsible employer to reduce the worker's exposure to below the action level, if practicable
- (3) If the monitoring results indicate that worker exposure is at or above the action level, the responsible employer must also notify DOE and the SOMD of these results within 10 working days after receipt.

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## §850. 25 Exposure reduction and minimization.

- (a) The responsible employer must ensure that no worker is exposed above the exposure limit prescribed in §850.22.
- (b) The responsible employer must, in addition:
- (1) Where exposure levels are at or above the action level, establish a formal exposure reduction and minimization program to reduce exposure levels to below the action level, if practicable. This program must be described in the responsible employer's CBDPP and must include:
- (i) Annual goals for exposure reduction and minimization;
- (ii) A rationale for and a strategy for meeting the goals:
- (iii) Actions that will be taken to achieve the goals; and
- (iv) A means of tracking progress towards meeting the goals or demonstrating that the goals have been met.
- (2) Where exposure levels are below the action level, implement actions for reducing and minimizing exposures, if practicable. The responsible employer must include in the CBDPP a description of the steps to be taken for exposure reduction and minimization and a rationale for those steps.
- (c) The responsible employer must implement exposure reduction and minimization actions using the conventional hierarchy of industrial hygiene controls (*i.e.*, engineering controls, administrative controls, and personal protective equipment in that order).

#### §850.26 Regulated areas.

- (a) If airborne concentrations of beryllium in areas in DOE facilities are measured at or above the action level, the responsible employer must establish regulated areas for those areas.
- (b) The responsible employer must demarcate regulated areas from the rest of the workplace in a manner that adequately alerts workers to the boundaries of such areas.
- (c) The responsible employer must limit access to regulated areas to authorized persons.
- (d) The responsible employer must keep records of all individuals who enter regulated areas. These records

must include the name, date, time in and time out, and work activity.

## §850.27 Hygiene facilities and practices.

- (a) General. The responsible employer must assure that in areas where workers are exposed to beryllium at or above the action level, without regard to the use of respirators:
- (1) Food or beverage and tobacco products are not used;
- (2) Cosmetics are not applied, except in change rooms or areas and shower facilities required under paragraphs (b) and (c) of this section; and
- (3) Beryllium workers are prevented from exiting areas that contain beryllium with contamination on their bodies or their personal clothing.
- (b) Change rooms or areas. The responsible employer must provide clean change rooms or areas for beryllium workers who work in regulated areas.
- (1) Separate facilities free of beryllium must be provided for beryllium workers to change into, and store, personal clothing, and clean protective clothing and equipment to prevent cross-contamination;
- (2) The change rooms or areas that are used to remove beryllium-contaminated clothing and protective equipment must be maintained under negative pressure or located so as to minimize dispersion of beryllium into clean areas; and
- (c) Showers and handwashing facilities.
  (1) The responsible employer must provide handwashing and shower facilities for beryllium workers who work in regulated areas.
- (2) The responsible employer must assure that beryllium workers who work in regulated areas shower at the end of the work shift.
- (d) Lunchroom facilities. (1) The responsible employer must provide lunchroom facilities that are readily accessible to beryllium workers, and ensure that tables for eating are free of beryllium, and that no worker in a lunchroom facility is exposed at any time to beryllium at or above the action level.
- (2) The responsible employer must assure that beryllium workers do not enter lunchroom facilities with protective work clothing or equipment unless

the surface beryllium has been removed from clothing and equipment by HEPA vacuuming or other method that removes beryllium without dispersing it.

(e) The change rooms or areas, shower and handwashing facilities, and lunchroom facilities must comply with 29 CFR 1910.141, Sanitation.

#### §850.28 Respiratory protection.

- (a) The responsible employer must establish a respiratory protection program that complies with the respiratory protection program requirements of 29 CFR 1910.134, Respiratory Protection.
- (b) The responsible employer must provide respirators to, and ensure that they are used by, all workers who:
- (1) Are exposed to an airborne concentration of beryllium at or above the action level, or
- (2) Are performing tasks for which analyses indicate the potential for exposures at or above the action level.
- (c) The responsible employer must include in the respiratory protection program any beryllium-associated worker who requests to use a respirator for protection against airborne beryllium, regardless of measured exposure levels.
- (d) The responsible employer must select for use by workers:
- (1) Respirators approved by the National Institute for Occupational Safety and Health (NIOSH) if NIOSH-approved respirators exist for a specific DOE task; or
- (2) Respirators that DOE has accepted under the DOE Respiratory Protection Acceptance Program if NIOSH-approved respirators do not exist for specific DOE tasks.

## § 850.29 Protective clothing and equipment.

- (a) The responsible employer must provide protective clothing and equipment to beryllium workers and ensure its appropriate use and maintenance, where dispersible forms of beryllium may contact worker's skin, enter openings in workers' skin, or contact workers' eyes, including where:
- (1) Exposure monitoring has established that airborne concentrations of

beryllium are at or above the action level:

- (2) Surface contamination levels measured or presumed prior to initiating work are above the level prescribed in §850.30;
- (3) Surface contamination levels results obtained to confirm housekeeping efforts are above the level prescribed in \$850.30; and
- (4) Any beryllium-associated worker who requests the use of protective clothing and equipment for protection against airborne beryllium, regardless of measured exposure levels.
- (b) The responsible employer must comply with 29 CFR 1910.132, Personal Protective Equipment General Requirements, when workers use personal protective clothing and equipment.
- (c) The responsible employer must establish procedures for donning, doffing, handling, and storing protective clothing and equipment that:
- (1) Prevent beryllium workers from exiting areas that contain beryllium with contamination on their bodies or their personal clothing; and
- (2) Include beryllium workers exchanging their personal clothing for full-body protective clothing and footwear before they begin work in regulated areas.
- (d) The responsible employer must ensure that no worker removes beryllium-contaminated protective clothing and equipment from areas that contain beryllium, except for workers authorized to launder, clean, maintain, or dispose of the clothing and equipment.
- (e) The responsible employer must prohibit the removal of beryllium from protective clothing and equipment by blowing, shaking, or other means that may disperse beryllium into the air.
- (f) The responsible employer must ensure that protective clothing and equipment is cleaned, laundered, repaired, or replaced as needed to maintain effectiveness. The responsible employer must:
- (1) Ensure that beryllium-contaminated protective clothing and equipment, when removed for laundering, cleaning, maintenance, or disposal, is placed in containers that prevent the dispersion of beryllium dust and that are labeled in accordance with §850.38 of this part; and

#### § 850.30

(2) Inform organizations that launder or clean DOE beryllium-contaminated protective clothing or equipment that exposure to beryllium is potentially harmful, and that clothing and equipment should be laundered or cleaned in a manner prescribed by the responsible employer to prevent the release of airborne beryllium.

#### §850.30 Housekeeping.

- (a) Where beryllium is present in operational areas of DOE facilities, the responsible employer must conduct routine surface sampling to determine housekeeping conditions. Surfaces contaminated with beryllium dusts and waste must not exceed a removable contamination level of 3  $\mu g/100~\rm cm^2$  during non-operational periods. This sampling would not include the interior of installed closed systems such as enclosures, glove boxes, chambers, or ventilation systems.
- (b) When cleaning floors and surfaces in areas where beryllium is present at DOE facilities, the responsible employer must clean beryllium-contaminated floors and surfaces using a wet method, vacuuming or other cleaning methods, such as sticky tack cloths, that avoid the production of airborne dust. Compressed air or dry methods must not be used for such cleaning.
- (c) The responsible employer must equip the portable or mobile vacuum units that are used to clean beryllium-contaminated areas with HEPA filters, and change the filters as often as needed to maintain their capture efficiency.
- (d) The responsible employer must ensure that the cleaning equipment that is used to clean beryllium-contaminated surfaces is labeled, controlled, and not used for non-hazardous materials.

#### §850.31 Release criteria.

(a) The responsible employer must clean beryllium-contaminated equipment and other items to the lowest contamination level practicable, but not to exceed the levels established in paragraphs (b) and (c) of this section, and label the equipment or other items, before releasing them to the general public or a DOE facility for non-beryllium use, or to another facility for work involving beryllium.

- (b) Before releasing beryllium-contaminated equipment or other items to the general public or for use in a non-beryllium area of a DOE facility, the responsible employer must ensure that:
- (1) The removable contamination level of equipment or item surfaces does not exceed the higher of 0.2  $\mu g/100$  cm² or the concentration level of beryllium in soil at the point or release, whichever is greater;
- (2) The equipment or item is labeled in accordance with §850.38(b); and
- (3) The release is conditioned on the recipient's commitment to implement controls that will prevent foreseeable beryllium exposure, considering the nature of the equipment or item and its future use and the nature of the beryllium contamination.
- (c) Before releasing beryllium-contaminated equipment or other items to another facility performing work with beryllium, the responsible employer must ensure that:
- (1) The removable contamination level of equipment or item surfaces does not exceed  $3 \mu g/100 \text{ cm}^2$ ;
- (2) The equipment or item is labeled in accordance with §850.38(b); and
- (3) The equipment or item is enclosed or placed in sealed, impermeable bags or containers to prevent the release of beryllium dust during handling and transportation.

#### §850.32 Waste disposal.

- (a) The responsible employer must control the generation of beryllium-containing waste, and beryllium-contaminated equipment and other items that are disposed of as waste, through the application of waste minimization principles.
- (b) Beryllium-containing waste, and beryllium-contaminated equipment and other items that are disposed of as waste, must be disposed of in sealed, impermeable bags, containers, or enclosures to prevent the release of beryllium dust during handling and transportation. The bags, containers, and enclosures that are used for disposal of beryllium waste must be labeled according to §850.38.

#### §850.33 Beryllium emergencies.

- (a) The responsible employer must comply with 29 CFR 1910.120(1) for handling beryllium emergencies related to decontamination and decommissioning operations.
- (b) The responsible employer must comply with 29 CFR 1910.120(q) for handling beryllium emergencies related to all other operations.

#### §850.34 Medical surveillance.

- (a) General. (1) The responsible employer must establish and implement a medical surveillance program for beryllium-associated workers who voluntarily participate in the program.
- (2) The responsible employer must designate a Site Occupational Medical Director (SOMD) who is responsible for administering the medical surveillance program.
- (3) The responsible employer must ensure that the medical evaluations and procedures required by this section are performed by, or under the supervision of, a licensed physician who is familiar with the health effects of beryllium.
- (4) The responsible employer must establish, and maintain, a list of beryllium-associated workers who may be eligible for protective measures under this part. The list must be:
- (i) Based on the hazard assessment, exposure records, and other information regarding the identity of beryllium-associated workers; and
- (ii) Adjusted at regular intervals based on periodic evaluations of beryllium-associated workers performed under paragraph (b)(2) of this section;
- (5) The responsible employer must provide the SOMD with the information needed to operate and administer the medical surveillance program, including the:
- (i) List of beryllium-associated workers required by paragraph (a)(4) of this section;
  - (ii) Baseline inventory;
- (iii) Hazard assessment and exposure monitoring data;
- (iv) Identity and nature of activities or operations on the site that are covered under the CBDPP, related duties of beryllium-associated workers; and
- (v) Type of personal protective equipment used.

- (6) The responsible employer must provide the following information to the SOMD and the examining physician:
- (i) A copy of this rule and its preamble:
- (ii) A description of the worker's duties as they pertain to beryllium exposure:
- (iii) Records of the worker's beryllium exposure; and
- (iv) A description of the personal protective and respiratory protective equipment used by the worker in the past, present, or anticipated future use.
- (b) Medical evaluations and procedures. The responsible employer must provide, to beryllium-associated workers who voluntarily participate in the medical surveillance program, the medical evaluations and procedures required by this section at no cost and at a time and place that is reasonable and convenient to the worker.
- (1) Baseline medical evaluation. The responsible employer must provide a baseline medical evaluation to beryllium-associated workers. This evaluation must include:
- (i) A detailed medical and work history with emphasis on past, present, and anticipated future exposure to beryllium;
- (ii) A respiratory symptoms questionnaire;
- (iii) A physical examination with special emphasis on the respiratory system, skin and eyes;
- (iv) A chest radiograph (posterior-anterior, 14 × 17 inches) interpreted by a National Institute for Occupational Safety and Health (NIOSH) B-reader of pneumoconiosis or a board-certified radiologist (unless a baseline chest radiograph is already on file);
- (v) Spirometry consisting of forced vital capacity (FVC) and forced expiratory volume at 1 second (FEV1);
  - (vi) A Be-LPT; and
- (vii) Any other tests deemed appropriate by the examining physician for evaluating beryllium-related health effects.
- (2) Periodic evaluation. (i) The responsible employer must provide to beryllium workers a medical evaluation annually, and to other beryllium-associated workers a medical evaluation

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every three years. The periodic medical evaluation must include:

- (A) A detailed medical and work history with emphasis on past, present, and anticipated future exposure to beryllium;
- (B) A respiratory symptoms questionnaire;
- (C) A physical examination with emphasis on the respiratory system;
  - (D) A Be-LPT; and
- (E) Any other medical evaluations deemed appropriate by the examining physician for evaluating beryllium-related health effects.
- (ii) The responsible employer must provide to beryllium-associated workers a chest radiograph every five years.
- (3) Emergency evaluation. The responsible employer must provide a medical evaluation as soon as possible to any worker who may have been exposed to beryllium because of a beryllium emergency. The medical evaluation must include the requirements of paragraph (b)(2) of this section.
- (c) Multiple physician review. The responsible employer must establish a multiple physician review process for beryllium-associated workers that allows for the review of initial medical findings, determinations, or recommendations from any medical evaluation conducted pursuant to paragraph (b) of this section.
- (1) If the responsible employer selects the initial physician to conduct any medical examination or consultation provided to a beryllium-associated worker, the worker may designate a second physician to:
- (i) Review any findings, determinations, or recommendations of the initial physician; and
- (ii) Conduct such examinations, consultations and laboratory tests, as the second physician deems necessary to facilitate this review.
- (2) The responsible employer must promptly notify a beryllium-associated worker in writing of the right to seek a second medical opinion after the initial physician provided by the responsible employer conducts a medical examination or consultation.
- (3) The responsible employer may condition its participation in, and payment for, multiple physician review upon the beryllium-associated worker

- doing the following within fifteen (15) days after receipt of the notice, or receipt of the initial physician's written opinion, whichever is later:
- (i) Informing the responsible employer in writing that he or she intends to seek a second medical opinion; and
- (ii) Initiating steps to make an appointment with a second physician.
- (4) If the findings, determinations, or recommendations of the second physician differ from those of the initial physician, then the responsible employer and the beryllium-associated worker must make efforts to encourage and assist the two physicians to resolve any disagreement.
- (5) If, despite the efforts of the responsible employer and the beryllium-associated worker, the two physicians are unable to resolve their disagreement, then the responsible employer and the worker, through their respective physicians, must designate a third physician to:
- (i) Review any findings, determinations, or recommendations of the other two physicians; and
- (ii) Conduct such examinations, consultations, laboratory tests, and consultations with the other two physicians, as the third physician deems necessary to resolve the disagreement among them.
- (6) The SOMD must act consistently with the findings, determinations, and recommendations of the third physician, unless the SOMD and the beryllium-associated worker reach an agreement that is consistent with the recommendations of at least one of the other two physicians.
- (d) Alternate physician determination. The responsible employer and the beryllium-associated worker or the worker's designated representative may agree upon the use of any alternate form of physician determination in lieu of the multiple physician review process provided by paragraph (c) of this section, so long as the alternative is expeditious and at least as protective of the worker.
- (e) Written medical opinion and recommendation. (1) Within two weeks of receipt of results, the SOMD must provide to the responsible employer a written, signed medical opinion for each medical evaluation performed on

each beryllium-associated worker. The written opinion must take into account the findings, determinations and recommendations of the other examining physicians who may have examined the beryllium-associated worker. The SOMD's opinion must contain:

- (i) The diagnosis of the worker's condition relevant to occupational exposure to beryllium, and any other medical condition that would place the worker at increased risk of material impairment to health from further exposure to beryllium;
- (ii) Any recommendation for removal of the worker from DOE beryllium activities, or limitation on the worker's activities or duties or use of personal protective equipment, such as a respirator; and
- (iii) A statement that the SOMD or examining physician has clearly explained to the worker the results of the medical evaluation, including all tests results and any medical condition related to beryllium exposure that requires further evaluation or treatment.
- (2) The SOMD's written medical opinion must not reveal specific records, findings, and diagnoses that are not related to medical conditions that may be affected by beryllium exposure.
- (f) Information provided to the beryllium-associated worker. (1) The SOMD must provide each beryllium-associated worker with a written medical opinion containing the results of all medical tests or procedures, an explanation of any abnormal findings, and any recommendation that the worker be referred for additional testing for evidence of CBD, within 10 working days after the SOMD's receipt of the results of the medical tests or procedures.
- (2) The responsible employer must, within 30 days after a request by a beryllium-associated worker, provide the worker with the information the responsible employer is required to provide the examining physician under paragraph (a)(6) of this section.
- (g) Reporting. The responsible employer must report on the applicable OSHA reporting form beryllium sensitization, CBD, or any other abnormal condition or disorder of workers caused or aggravated by occupational exposure to beryllium.

- (h) Data analysis. (1) The responsible employer must routinely and systematically analyze medical, job, and exposure data with the aim of identifying individuals or groups of individuals potentially at risk for CBD and working conditions that are contributing to that risk.
- (2) The responsible employer must use the results of these analyses to identify additional workers to whom the responsible employer must provide medical surveillance and to determine the need for additional exposure controls.

#### §850.35 Medical removal.

- (a) Medical removal protection. The responsible employer must offer a beryllium-associated worker medical removal from exposure to beryllium if the SOMD determines in a written medical opinion that it is medically appropriate to remove the worker from such exposure. The SOMD's determination must be based on one or more positive Be-LPT results, chronic beryllium disease diagnosis, an examining physician's recommendation, or any other signs or symptoms that the SOMD deems medically sufficient to remove a worker.
- (1) Temporary removal pending final medical determination. The responsible employer must offer a beryllium-associated worker temporary medical removal from exposure to beryllium on each occasion that the SOMD determines in a written medical opinion that the worker should be temporarily removed from such exposure pending a final medical determination of whether the worker should be removed permanently.
- (i) In this section, "final medical determination" means the outcome of the multiple physician review process or the alternate medical determination process provided for in paragraphs (c) and (d) of §850.34.
- (ii) If a beryllium-associated worker is temporarily removed from beryllium exposure pursuant to this section, the responsible employer must transfer the worker to a comparable job for which the worker is qualified (or for which the worker can be trained in a short period) and where beryllium exposures

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are as low as possible, but in no event at or above the action level.

- (iii) The responsible employer must maintain the beryllium-associated worker's total normal earnings, seniority, and other worker rights and benefits as if the worker had not been removed.
- (iv) If there is no such job available, the responsible employer must provide to the beryllium-associated worker the medical removal protection benefits specified in paragraph (b)(2) of this section, until a job becomes available or for one year, whichever comes first.
- (2) Permanent medical removal. (i) The responsible employer must offer a beryllium-associated worker permanent medical removal from exposure to beryllium if the SOMD determines in a written medical opinion that the worker should be permanently removed from exposure to beryllium.
- (ii) If a beryllium-associated worker is removed permanently from beryllium exposure based on the SOMD's recommendation pursuant to this section, the responsible employer must provide the worker the medical removal protection benefits specified in paragraph (b) of this section.
- (3) Worker consultation before temporary or permanent medical removal. If the SOMD determines that a beryllium-associated worker should be temporarily or permanently removed from exposure to beryllium, the SOMD must:
- (i) Advise the beryllium-associated worker of the determination that medical removal is necessary to protect the worker's health;
- (ii) Provide the beryllium-associated worker with a copy of this rule and its preamble, and any other information the SOMD deems necessary on the risks of continued exposure to beryllium and the benefits of removal;
- (iii) Provide the beryllium-associated worker the opportunity to have any questions concerning medical removal answered; and
- (iv) Obtain the beryllium-associated worker's signature acknowledging that the worker has been advised to accept medical removal from beryllium exposure as provided in this section, and has been provided with the information specified in this paragraph, on the ben-

efits of removal and the risks of continued exposure to beryllium.

- (4) Return to work after medical removal. (i) The responsible employer, subject to paragraph (a)(4)(ii) of this section, must not return a beryllium-associated worker who has been permanently removed under this section to the worker's former job status unless the SOMD first determines in a written medical opinion that continued medical removal is no longer necessary to protect the worker's health.
- (ii) Not withstanding paragraph (a)(4) (i) of this section, if, in the SOMD's opinion, continued exposure to beryllium will not pose an increased risk to beryllium-associated worker's health, and medical removal is an inappropriate remedy in the circumstances. the SOMD must fully discuss these matters with the worker and then, in a written determination, may authorize the responsible employer to return the worker to his or her former job status. Thereafter, the returned beryllium-associated worker must continue to be provided with medical surveillance under §850.34 of this part.
- (b) Medical removal protection benefits.
  (1) If a beryllium-associated worker has been permanently removed from beryllium exposure pursuant to paragraph (a)(2) of this section, the responsible employer must provide the beryllium-associated worker:
- (i) The opportunity to transfer to another position which is available, or later becomes available, for which the beryllium-associated worker is qualified (or for which the worker can be trained in a short period) and where beryllium exposures are as low as possible, but in no event at or above the action level; or
- (ii) If the beryllium-associated worker cannot be transferred to a comparable job where beryllium exposures are below the action level, a maximum of 2 years of permanent medical removal protection benefits (specified in paragraph (b)(2) of this section).
- (2) If required by this section to provide medical removal protection benefits, the responsible employer must maintain the removed worker's total normal earnings, seniority and other worker rights and benefits, as though the worker had not been removed.

- (3) If a removed beryllium-associated worker files a claim for workers' compensation payments for a beryllium-related disability, then the responsible employer must continue to provide medical removal protection benefits pending disposition of the claim. The responsible employer must receive no credit for the workers' compensation payments received by the worker for treatment related expenses.
- (4) The responsible employer's obligation to provide medical removal protection benefits to a removed beryllium-associated worker is reduced to the extent that the worker receives compensation for earnings lost during the period of removal either from a publicly- or employer-funded compensation program, or from employment with another employer made possible by virtue of the worker's removal.
- (5) For the purposes of this section, the requirement that a responsible employer provide medical removal protection benefits is not intended to expand upon, restrict, or change any rights to a specific job classification or position under the terms of an applicable collective bargaining agreement.
- (6) The responsible employer may condition the provision of medical removal protection benefits upon the beryllium-associated worker's participation in medical surveillance provided in accordance with §850.34 of this part.

#### §850.36 Medical consent.

- (a) The responsible employer must provide each beryllium-associated worker with a summary of the medical surveillance program established in §850.34 at least one week before the first medical evaluation or procedure or at any time requested by the worker. This summary must include:
- (1) The type of data that will be collected in the medical surveillance program:
- (2) How the data will be collected and maintained;
- (3) The purpose for which the data will be used; and
- (4) A description of how confidential data will be protected.
- (b) Responsible employers must also provide each beryllium-associated worker with information on the benefits and risks of the medical tests and

- examinations available to the worker at least one week prior to any such examination or test, and an opportunity to have the worker's questions answered.
- (c) The responsible employer must have the SOMD obtain a beryllium-associated worker's signature on the informed consent form found in Appendix A to this part, before performing medical evaluations or any tests.

#### §850.37 Training and counseling.

- (a) The responsible employer must develop and implement a beryllium training program and ensure participation for:
  - (1) Beryllium-associated workers;
- (2) All other individuals who work at a site where beryllium activities are conducted.
- (b) The training provided for workers identified in paragraph (a)(1) of this section, must:
- (1) Be in accordance with 29 CFR 1910.1200, Hazard Communication;
- (2) Include the contents of the CBDPP; and
- (3) Include potential health risks to beryllium worker family members and others who may come in contact with beryllium on beryllium workers or beryllium workers' personal clothing or other personal items as the result of a beryllium control failure at a DOE facility.
- (c) The training provided for workers identified in paragraph (a)(2) of this section must consist of general awareness about beryllium hazards and controls.
- (d) The responsible employer must provide the training required by this section before or at the time of initial assignment and at least every two years thereafter.
- (e) The employer must provide retraining when the employer has reason to believe that a beryllium worker lacks the proficiency, knowledge, or understanding needed to work safely with beryllium, including at least the following situations:
- (1) To address any new beryllium hazards resulting from a change to operations, procedures, or beryllium controls about which the beryllium worker was not previously trained; and

#### § 850.38

- (2) If a beryllium worker's performance involving beryllium work indicates that the worker has not retained the requisite proficiency.
- (f) The responsible employer must develop and implement a counseling program to assist beryllium-associated workers who are diagnosed by the SOMD to be sensitized to beryllium or to have CBD. This counseling program must include communicating with beryllium-associated workers concerning:
- (1) The medical surveillance program provisions and procedures;
  - (2) Medical treatment options;
- (3) Medical, psychological, and career counseling:
  - (4) Medical benefits;
- (5) Administrative procedures and workers rights under applicable Workers' Compensation laws and regulations:
- (6) Work practice procedures limiting beryllium-associated worker exposure to beryllium: and
- (7) The risk of continued beryllium exposure after sensitization.

#### §850.38 Warning signs and labels.

(a) Warning signs. The responsible employer must post warning signs at each access point to a regulated area with the following information:

#### DANGER

BERYLLIUM CAN CAUSE LUNG DAMAGE

#### CANCER HAZARD

#### AUTHORIZED PERSONNEL ONLY

- (b) Warning labels. (1) The responsible employer must affix warning labels to all containers of beryllium, beryllium compounds, or beryllium-contaminated clothing, equipment, waste, scrap, or debris.
- (2) Warning labels must contain the following information:

#### DANGER

CONTAMINATED WITH BERYLLIUM DO NOT REMOVE DUST BY BLOWING OR SHAKING

#### CANCER AND LUNG DISEASE HAZ-ARD

(c) Warning signs and labels must be in accordance with 29 CFR 1910.1200, Hazard Communication.

## §850. 39 Recordkeeping and use of information.

- (a) The responsible employer must establish and maintain accurate records of all beryllium inventory information, hazard assessments, exposure measurements, exposure controls, and medical surveillance.
- (b) Heads of DOE Departmental Elements must:
- (1) Designate all record series as required under this rule as agency records and, therefore, subject to all applicable agency records management and access laws; and
- (2) Ensure that these record series are retained for a minimum of seventy-five years.
- (c) The responsible employer must convey to DOE or its designee all record series required under this rule if the employer ceases to be involved in the CBDPP.
- (d) The responsible employer must link data on workplace conditions and health outcomes in order to establish a basis for understanding the beryllium health risk.
- (e) The responsible employer must ensure the confidentiality of all work-related records generated under this rule by ensuring that:
- (1) All records that are transmitted to other parties do not contain names, social security numbers or any other variables, or combination of variables, that could be used to identify particular individuals; and
- (2) Individual medical information generated by the CBDPP is:
- (i) Either included as part of the worker's site medical records and maintained by the SOMD, or is maintained by another physician designated by the responsible employer;
- (ii) Maintained separately from other records: and
- (iii) Used or disclosed by the responsible employer only in conformance with any applicable requirements imposed by the Americans with Disabilities Act, the Privacy Act of 1974, the Freedom of Information Act, and any other applicable law.
- (f) The responsible employer must maintain all records required by this

part in current and accessible electronic systems, which include the ability readily to retrieve data in a format that maintains confidentiality.

- (g) The responsible employer must transmit all records generated as required by this rule, in a format that protects the confidentiality of individuals, to the DOE Assistant Secretary for Environment, Safety and Health on request.
- (h) The responsible employer must semi-annually transmit to the DOE Office of Epidemiologic Studies within the Office of Environment, Safety and Health an electronic registry of beryllium-associated workers that protects confidentiality, and the registry must include, but is not limited to, a unique identifier, date of birth, gender, site, job history, medical screening test results, exposure measurements, and results of referrals for specialized medical evaluations.

#### §850.40 Performance feedback.

- (a) The responsible employer must conduct periodic analyses and assessments of monitoring activities, hazards, medical surveillance, exposure reduction and minimization, and occurrence reporting data.
- (b) To ensure that information is available to maintain and improve all elements of the CBDPP continuously, the responsible employer must give results of periodic analyses and assessments to the line managers, planners, worker protection staff, workers, medical staff, and labor organizations representing beryllium-associated workers who request such information.

APPENDIX A TO PART 850—CHRONIC BERYLLIUM DISEASE PREVENTION PROGRAM INFORMED CONSENT FORM

I, have carefully read and understand the attached information about the Be-LPT and other medical tests. I have had the opportunity to ask any questions that I may have had concerning these tests.

I understand that this program is voluntary and I am free to withdraw at any time from all or any part of the medical surveillance program. I understand that the tests are confidential, but not anonymous. I understand that if the results of any test suggest a

health problem, the examining physician will discuss the matter with me, whether or not the result is related to my work with beryllium. I understand that my employer will be notified of my diagnosis only if I have a beryllium sensitization or chronic beryllium disease. My employer will not receive the results or diagnoses of any health conditions not related to beryllium exposure.

I understand that, if the results of one or more of these tests indicate that I have a health problem that is related to beryllium, additional examinations will be recommended. If additional tests indicate I do have a beryllium sensitization or CBD, the Site Occupational Medical Director may recommend that I be removed from working with beryllium. If I agree to be removed, I understand that I may be transferred to another job for which I am qualified (or can be trained for in a short period) and where my beryllium exposures will be as low as possible, but in no case above the action level. I will maintain my total normal earnings, seniority, and other benefits for up to two years if I agree to be permanently removed.

I understand that if I apply for another job or for insurance, I may be requested to release my medical records to a future employer or an insurance company.

I understand that my employer will maintain all medical information relative to the tests performed on me in segregated medical files separate from my personnel files, treated as confidential medical records, and used or disclosed only as provided by the Americans with Disability Act, the Privacy Act of 1974, or as required by a court order or under other law.

I understand that the results of my medical tests for beryllium will be included in the Beryllium Registry maintained by DOE, and that a unique identifier will be used to maintain the confidentiality of my medical information. Personal identifiers will not be included in any reports generated from the DOE Beryllium Registry. I understand that the results of my tests and examinations may be published in reports or presented at meetings, but that I will not be identified.

#### Pt. 860

I consent to having the following medical evaluations:

- // Physical examination concentrating on my lungs and breathing
- // Chest X-ray
- // Spirometry (a breathing test)
- // Blood test called the beryllium-induced lymphocyte proliferation test or Be-LPT
- // Other test(s). Specify:

Signature of Participant:

Date:

I have explained and discussed any questions that the employee expressed concerning the Be-LPT, physical examination, and other medical testing as well as the implications of those tests.

Name of Examining Physician:

Signature of Examining Physician:

Dated:

# PART 860—TRESPASSING ON DE-PARTMENT OF ENERGY PROPERTY

Sec.

860.1 Purpose.

860.2 Scope.

860.3 Trespass.

860.4 Unauthorized introduction of weapons or dangerous materials.

860.5 Violations and penalties.

860.6 Posting.

860.7 Effective date of prohibition on designated locations.

860.8 Applicability of other laws.

AUTHORITY: Sec. 161, 68 Stat. 948, sec. 229, 70 Stat. 1070; (42 U.S.C. 2201; 2278a); sec. 104, 88 Stat. 1237, sec. 105, 88 Stat. 1238 (42 U.S.C. 5814, 5815); sec. 5, Pub. L. 100–185, 101 Stat. 1279 (18 U.S.C. 3559); sec. 6, Pub. L. 100–185, 101 Stat. 1280 (18 U.S.C. 3571); sec. 7041, Pub. L. 100–690, 102 Stat. 4899 (18 U.S.C. 3559).

SOURCE: 58 FR 47985, Sept. 14, 1993, unless otherwise noted.

#### §860.1 Purpose.

The regulations in this part are issued for the protection and security of facilities, installations and real property subject to the jurisdiction or administration, or in the custody of, the Department of Energy.

# § 860.2 Scope.

The regulations in this part apply to all facilities, installations and real

property subject to the jurisdiction or administration of the Department of Energy or in its custody which have been posted with a notice of the prohibitions and penalties set forth in this part.

### §860.3 Trespass.

Unauthorized entry upon any facility, installation or real property subject to this part is prohibited.

# §860.4 Unauthorized introduction of weapons or dangerous materials.

Unauthorized carrying, transporting, or otherwise introducing or causing to be introduced any dangerous weapon, explosive, or other dangerous instrument or material likely to produce substantial injury or damage to persons or property, into or upon any facility, installation or real property subject to this part, is prohibited.

# §860.5 Violations and penalties.

- (a) Whoever willfully violates either §860.3 or §860.4 shall, upon conviction, be guilty of an infraction punishable by a fine of not more than \$5,000.
- (b) Whoever willfully violates either \$860.3 or \$860.4 with respect to any facility, installation or real property enclosed by a fence, wall, floor, roof, or other structural barrier shall upon conviction, be guilty of a Class A misdemeanor punishable by a fine not to exceed \$100,000 or imprisonment for not more than one year, or both.

#### §860.6 Posting.

Notices stating the pertinent prohibitions of §860.3 and 860.4 and penalties of §860.5 will be conspicuously posted at all entrances of each designated facility, installation or parcel of real property and at such intervals along the perimeter as will provide reasonable assurance of notice to persons about to enter.

# §860.7 Effective date of prohibition on designated locations.

The prohibitions in §§ 860.3 and 860.4 shall take effect as to any facility, installation or real property on publication in the FEDERAL REGISTER of the notice designating the facility, installation or real property and posting in accordance with § 860.6.

### §860.8 Applicability of other laws.

Nothing in this part shall be construed to affect the applicability of the provisions of State or other Federal laws.

# PART 861—CONTROL OF TRAFFIC AT NEVADA TEST SITE

Sec.

861.1 Purpose.

861.2 Scope.

861.3 Definitions.

861.4 Use of site streets.

861.5 Penalties.

861.6 Posting and distribution.

861.7 Applicability of other laws.

APPENDIX A TO PART 861—PERIMETER DE-SCRIPTION OF DOE'S NEVADA TEST SITE

AUTHORITY: 62 Stat. 281, as amended; sec. 103, 63 Stat. 380, as amended, sec. 205, 63 Stat. 389; sec. 161, 68 Stat. 948, as amended, sec. 1, 81 Stat. 54; 40 U.S.C. 318; 42 U.S.C. 2201; 5 U.S.C. 552; Federal Property Management Regulations T.R. D-11, 34 FR 1997, and Delegation of Authority to Manager, Nevada Operations Office

SOURCE: 41 FR 56788, Dec. 30, 1976, unless otherwise noted.

# §861.1 Purpose.

The regulations in this part are designed to facilitate the control of traffic at the Nevada Test Site.

#### §861.2 Scope.

This part applies to all persons who use the streets of the Nevada Test Site.

#### §861.3 Definitions.

As used in this part:

- (a) DOE means the Department of Energy.
- (b) Nevada Test Site means DOE's Nevada Test Site located in Nye County, Nev. A perimeter description is attached as Appendix A to this part.
- (c) Nevada Test Site Traffic Regulations means the traffic directives promulgated by the Manager of the Nevada Operations Office pursuant to § 861.4.
- (d) *Person* means every natural person, firm, trust partnership, association or corporation.
- (e) Street means the entire width between the boundary lines of every way when any part thereof is open to the use of those admitted to the Nevada

Test Site for purposes of vehicular travel.

- (f) *Traffic* means pedestrians, ridden or herded animals, vehicles, and other conveyances, either singly or together, while using any roadway for purposes of travel.
- (g) Vehicle means every device in, upon or by which any person or property is or may be transported or drawn upon a roadway, excepting devices moved by human power or used exclusively upon stationary rails or tracks.

# §861.4 Use of site streets.

- All persons using the streets of the Nevada Test Site shall do so in a careful and safe manner.
- (a) The Nevada Test Site Traffic Regulations supplement this section by identifying the specific traffic requirements relating to such matters as:
- (1) Enforcement and obedience to Traffic Regulations, including the authority of police officers and traffic regulations, and responsibility to report accidents.
- (2) Traffic signs, signals, and markings, including required compliance with traffic lanes and traffic control devices, and prohibitions on display of unauthorized traffic signs, signals, or marking or interference with authorized traffic control devices.
- (3) Speeding or driving under the influence of intoxicating liquor or drugs, including prohibitions on reckless driving, and promulgation of maximum permissible speeds.
- (4) Turning movements, including required position and method of turning at intersections, limitations on turning around, and obedience to turning markers and no-turn signs.
- (5) Stopping and yielding, including obedience to stop and yield signs, requirements, when entering stop or yield intersections, emerging from alleys, driveways, or buildings, operation of vehicles on approach of authorized emergency vehicles and stops when traffic is obstructed.
- (6) Pedestrians' rights and duties, including pedestrian's right-of-way in crosswalks, when a pedestrian must yield, required use or right half of crosswalks and requirements concerning walking along roadways and prohibited pedestrian crossings.

#### §861.5

- (7) Parking, stopping, and standing, specifying when parking, stopping, and standing are prohibited, including special provisions applicable to buses, requirements that parking not obstruct traffic and be close to curb, and concerning lamps on parked vehicles.
- (8) Privileges of drivers of authorized emergency vehicles, including exemptions from parking and standing, stopping, speeding and turning limitations, under specified circumstances and within specified limitations.
- (9) Miscellaneous driving rules, including requirements for convoys, and limitations on backing, opening and closing vehicle doors, following fire apparatus, crossing a fire hose, driving through a safety zone, through convoys, on sidewalks or shoulders of roadways, boarding or alighting from vehicles, passing a bus on the right, and unlawful riding.
- (b) The Nevada Test Site Traffic Regulations, when posted and distributed as specified in §861.6, shall have the same force and effect as if made a part hereof.

#### §861.5 Penalties.

Any person doing any act forbidden or failing to do any act required by the Nevada Test Site Traffic Regulations shall, upon conviction, be punishable by a fine of not more than \$50 or imprisonment for not more than 30 days, or both.

#### §861.6 Posting and distribution.

Notices including the provisions of the Nevada Test Site Traffic Regulations will be conspicuously posted at the Nevada Test Site. Such other distribution of the Nevada Test Site Regulations will be made by the Manager as will provide reasonable assurance of notice to persons subject to the regulations.

### §861.7 Applicability of other laws.

Nothing in this part shall be construed to affect the applicability of the provisions of State laws or of other Federal laws.

APPENDIX A TO PART 861—PERIMETER
DESCRIPTION OF DOE'S NEVADA
TEST SITE

The Nevada Test Site, containing approximately 858,764 acres located in Nye County, Nev.. is described as follows:

- Beginning at the northwesterly corner of the tract of land hereinafter described, said corner being at latitude 37°20′45″, longitude 116°34′20″:
- Thence easterly approximately 6.73 miles, to a point at latitude 37°20′45″ longitude 116°27′00″:
- Thence northeasterly approximately 4.94 miles to a point at latitude 37°23′07″, longitude 116°22′30″;
- Thence easterly approximately 4.81 miles to a point at latitude 37°23'07", longitude 116°17'15":
- Thence southeasterly approximately 6.77 miles to a point at latitude 37°19′47″, longitude 116°11′10″:
- Thence southerly approximately 5.27 miles to a point at latitude 37°15′12.043″, longitude 116°11′10″;
- Thence easterly approximately 14.21 miles to a point at latitude 37°15′07.268″, longitude 115°55′42.268″;
- Thence southerly approximately 39.52 miles to a point at latitude 36°40′43.752″, longitude 115°55′37.687″;
- Thence westerly approximately 2.87 miles to a point at latitude 36°40′40.227″, longitude 115°58′43 956″.
- Thence southerly approximately 5.23 miles to a point at latitude 36°36′07.317″, longitude 115°58′41.227″;
- Thence southwesterly along a perimeter distance approximately 5.82 miles to a point at latitude 36°34′39.754″, longitude 116°04′11.167″;
- Thence northerly approximately 3.20 miles to a point at latitude 36°37′26.804″, longitude 116°04′11.355″;
- Thence northwesterly approximately 5.16 miles to a point at latitude 36°40′28.854″, longitude 116°08′17.749″;
- Thence westerly approximately 8.63 miles to a point at latitude 36°40′23.246″, longitude 116°17′37.466″;
- Thence southerly approximately 0.19 mile to a point at latitude  $36^{\circ}40'13.330''$ , longitude  $116^{\circ}17'37.461''$ ;
- Thence westerly approximately 8.49 miles to a point at latitude 36°40′13.666″, longitude 116°26′47.915″:
- Thence northerly approximately 32.87 miles to a point at latitude 37°08′50″, longitude 116°26′44.125″:

### **Department of Energy**

Thence northwesterly approximately 15.37 miles to a point at latitude 37°20′45″, longitude 116°34′20″, the point of beginning herein.

[41 FR 56788, Dec. 30. 1978, as amended at 44 FR 37939, June 29, 1979]

# PART 862—RESTRICTIONS ON AIR-CRAFT LANDING AND AIR DELIV-ERY AT DEPARTMENT OF ENERGY NUCLEAR SITES

Sec.

862.1 Purpose.

862.2 Scope.

862.3 Definitions.

862.4 Prohibitions and penalties.

862.5 Procedures for removal of downed aircraft.

862.6 Voluntary minimum altitude.

862.7 Designation of sites.

AUTHORITY: 42 U.S.C. 2201(b), 2201(i) and 2278(a).

Source: 52 FR 29838, Aug. 12, 1987, unless otherwise noted.

### §862.1 Purpose.

The purpose of this part is to set forth Department of Energy, hereinafter "DOE", security policy regarding aircraft and air delivery on nuclear sites under the jurisdiction of DOE pursuant to the Atomic Energy Act of 1954, as amended (42 U.S.C. 2011 et seq.).

### §862.2 Scope.

- (a) This part applies to all persons or aircraft entering or otherwise within or above areas within the boundaries of lands or waters subject to the jursidiction, administration, or in the custody of the DOE at sites designated by DOE.
  - (b) This part is not applicable to:
- (1) Aircraft operating pursuant to official business of the Federal Government:
- (2) Aircraft over-flying or in the process of landing pursuant to official business of a state or local law enforcement authority with prior notification to DOE; or
- (3) Aircraft in the process of landing on a DOE site due to circumstances beyond the control of the operator and with prior notification to DOE, if possible.
- (c) Aircraft in paragraphs (b)(2) and (b)(3) of this section are within the

scope of this part upon landing at a DOE designated site.

## §862.3 Definitions.

- (a) Air delivery. Delivering or retrieving a person or object by airborne means, including but not limited to, aircraft.
- (b) Aircraft. A manned a unmanned device or any portion thereof, that is commonly used or intended to be used for flight in the air, including powerless flight. Such devices include but are not limited to any parachute, hovercraft, helicopter, glider, airplane or lighter than air vehicle.
- (c) *Boundary*. A delineation on a map of Federal interest in land or water utilized by DOE pursuant to the Atomic Energy Act of 1954, as amended:
  - (1) Authorized by Congress, or
- (2) Published pursuant to law in the FEDERAL REGISTER, or
- (3) Filed or recorded with a State or political subdivision in accordance with applicable law.
- (d) Designated site. An area of land or water identified in accordance with §862.7 of this part.
- (e) Downed aircraft. An aircraft that is on a designated site due to emergency landing or for any other reason.
- (f) Manager of Operations. The Manager of a DOE Operations Office, the Manager of the Pittsburgh Naval Reactors Office, the Manager of the Schnectady Naval Reactors Office and, for designated sites administered directly by DOE Headquarters, the Director of the Office of Safeguards and Security.

### §862.4 Prohibitions and penalties.

- (a) The following activities are prohibited by his part:
- (1) Operation or use of aircraft on lands or waters of designated sites.
- (2) Air delivery to or from designated sites.
- (3) Removal or movement of downed aircraft, or participation in the removal or movement of downed aircraft, from or on a designated site unless prior authorization is obtained pursuant to §862.5 of this part.

### §862.5

- (4) Failure to remove a downed aircraft from a designated site in accordance with an order issued by the cognizant DOE Manager of Operations under §862.5 of this part.
- (5) Violation of Federal Aviation Administration regulations regarding minimum altitudes and prohibited flight maneuvers over a designated site.
- (b) A person willfully engaging in activities prohibited by this part may be subject to the imposition of criminal penalties set forth in sections 223 and 229 of the Atomic Energy Act, as amended (42 U.S.C. 2273 and 2278(a)).

# §862.5 Procedures for removal of downed aircraft.

- (a) An aircraft on or brought on to a designated site, except as provided in §862.2 (b)(1), shall not be moved within or removed from such areas except as provided for in this section. All such aircraft are subject to full inspection by DOE security personnel upon landing upon order of the Manager of Operations or his designee. Any attempt to depart or remove the aircraft from a designated site without clearance obtained pursuant to this section, may be assumed to be indicative of hostile intent by security forces at such sites.
- (b)(1) The cognizant DOE Manager of Operations for a designated site may, on his own initiative, issue a written order to the owner or operator of a downed aircraft to require the removal of that aircraft from the site within 20 days of this notice. Such an order shall specify:
- (i) The date upon which removal operations must be completed;
- (ii) The times and means of access to and from the downed aircraft to be removed.
  - (iii) The manner of removal; and
- (iv) An estimate of the cost of removal to DOE for which the owner or operator will be held liable if removal is accomplished by DOE.
- (2) The owner or operator of the downed aircraft may file a written petition, supported by affidavits, to the cognizant Manager of Operations requesting that the order be modified or set aside. The petition may be granted by the Manager of Operations for good cause shown, upon a finding that it is

clearly consistent with the national security, public safety, and federal property interests. Such petition must be filed at least 10 days prior to the date upon which removal is to be initiated, as specified in the order. The written decision of the Manager of Operations shall be a final agency action.

- (c)(1) The owner of a downed aircraft may petition the cognizant Manager of Operations of permission to move or remove the downed aircraft from or within a designated site. The petition must provide assurances that the owner will fully compensate DOE for all costs incurred or damages experienced as a result of landing or removal through a contact for services. The Manager of Operations may, for good cause shown, waive part or all of the compensation which might otherwise be due DOE.
- (2) The Manager of Operations may deny such petition in whole or part and prohibit removal of a downed aircraft upon finding that:
- (i) The removal of a downed aircraft would create an unacceptable safety or security risk;
- (ii) The removal of a downed aircraft would result in excessive resource loss of property damage or an unacceptable disruption of federal activities;
- (iii) The removal of downed aircraft is impracticable or impossible:
- (iv) The owner has failed to provide adequate assurances that all costs incurred or damages experienced by DOE due to landing or removal of aircraft will be fully paid immediately upon removal by the owner under a contract for services:
- (v) An inspection of the aircraft has not been conducted by DOE security personnel.
- (3) In the event that such petition is granted in whole or part, the cognizant Manager of Operations may issue an order, as set forth in (b)(1) (i) through (iv) of this section. In the event that a petition is denied in whole or part, the Manager of Operations shall issue a written decision which shall set forth the reasons for such denial.
- (d) Failure to comply with an order issued by the Manager of Operations pursuant to this section is basis for DOE to consider the downed aircraft to be abandoned property. DOE may take whatever measures it deems necessary

when it determines that downed aircraft is abandoned property.

(e) Notwithstanding paragraphs (b) and (c) of this section, the Manager of Operations may move or remove a downed aircraft from such an area upon oral or written notification to the owner or operator of such aircraft upon a finding that national security or operational requirements necessitate expedited movement or removal. The owner or operator may be held jointly and separately liable for all expenses incurred by DOE in the movement or removal of such aircraft. Such expenses shall be deemed to be incurred through an implied contract at law for services.

### §862.6 Voluntary minimum altitude.

In addition to complying with all applicable FAA prohibitions or restrictions, aircraft are requested to maintain a minimum altitude of 2,000 feet above the terrain of a designated site. Applicable FAA prohibitions or restrictions take precedence over this voluntary minimum altitude.

### §862.7 Designation of sites.

- (a) DOE shall designate sites covered by this part as deemed necessary, consistent with the national security and public safety, through notice in the FEDERAL REGISTER.
- (b) This part shall be effective as to any facility, installation, or real property on publication in the FEDERAL REGISTER of the notice designating the site.
- (c) Upon designation of a site, the cognizant Manager of Operations may inform the public of such designation through press release or posting of notice at airfields in the vicinity of the designated site.

# PART 871—AIR TRANSPORTATION OF PLUTONIUM

Sec

871.1 National security exemption.

871.2 Public health and safety exemption.

871.3 Records.

871.4 Limitation on redelegation of authority

AUTHORITY: Pub. L. 94–187, 88 Stat. 1077, 1078 (42 U.S.C. 2391 et seq.); Energy Reorganization Act, Pub. L. 93–438, 88 Stat. 1233 (42 U.S.C. 5801 et seq.); secs. 2, 3, 91, 123, and 161

of the Atomic Energy Act of 1954, as amended.

SOURCE: 42 FR 48332, Sept. 23, 1977, unless otherwise noted.

#### §871.1 National security exemption.

- (a) The following DOE air shipments of plutonium are considered as being made for the purposes of national security within the meaning of section 502(2) of Public Law 94–187:
- (1) Shipments made in support of the development, production, testing, sampling, maintenance, repair, modification, or retirement of atomic weapons or devices:
- (2) Shipments made pursuant to international agreements for cooperation for mutual defense purposes; and
- (3) Shipments necessary to respond to an emergency situation involving a possible threat to the national security.
- (b) The Managers of DOE's Albuquerque, San Francisco, Oak Ridge, Savannah River, and Nevada Operations Offices may authorize air shipments falling within paragraph (a)(1) of this section, on a case-by-case basis: Provided, That the matter falls within their respective scopes of responsibility and that they determine such shipment is required to be made by aircraft either because:
- (1) The delay resulting from using ground transportation methods would have serious adverse impact upon a national security requirement:
- (2) Safeguards or safety considerations dictate the use of air transportation:
- (3) The nature of the item to be shipped necessitates the use of air transportation in order to avoid possible damage which may be expected from other available transportation environments; or
- (4) The nature of the item being shipped necessitates rapid shipment by air in order to preserve the chemical, physical, or isotopic properties of the item.

They may also authorize air shipments falling within paragraph (a)(2) of this section in all cases since the inherent time delays of surface transportation for such shipments are considered unacceptable. They may also authorize air shipments falling within paragraph

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(a)(3) of this section in cases where failure to make shipments by air could jeopardize the national security of the United States.

# \$871.2 Public health and safety exemption.

The Managers of DOE's Albuquerque, San Francisco, Oak Ridge, Savannah River, Nevada, Chicago, Idaho, and Richland Operations Offices may authorize, on a case-by-case basis, DOE air shipments of plutonium where they determine that rapid shipment by air is required to respond to an emergency situation involving possible loss of life, serious personal injuries, considerable property damage, or other significant threat to the public health and safety.

#### §871.3 Records.

Determinations made by the authorizing officials pursuant to these rules shall be matters of record. Such authorizations shall be reported to the Assistant Administrator for National Security within twenty-four hours after authorization is granted.

# §871.4 Limitation on redelegation of authority.

The authority delegated in this part may not be redelegated without the prior approval of the Assistant Administrator for National Security.

# PART 903—POWER AND TRANSMISSION RATES

Subpart A—Procedures for Public Participation in Power and Transmission Rate Adjustments and Extensions for the Alaska, Southeastern, Southwestern, and Western Area Power Administrations

Sec.

903.1 Purpose and scope; application.

903.2 Definitions.

903.11 Advance announcement of rate adjustment.

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903.18 Revision of proposed rates.

903.21 Completion of rate development; provisional rates.

903.22 Final rate approval.

903.23 Rate extensions.

AUTHORITY: Secs. 301(b), 302(a), and 644 of Department of Energy Organization Act, Pub. L. 95-91 (42 U.S.C. 7101 et seq.); sec. 5 of the Flood Control Act of 1944 (16 U.S.C. 825s); the Reclamation Act of 1902 (43 U.S.C. 372 et seq.), as amended and supplemented by subsequent enactments, particularly sec. 9(c) of the Reclamation Project Act of 1939 (43 U.S.C. 485h(c)); and the Acts specifically applicable to individual projects or power systems

SOURCE: 50 FR 37837, Sept. 18, 1985, unless otherwise noted.

# Subpart A—Procedures for Public Participation in Power and Transmission Rate Adjustments and Extensions for the Alaska, Southeastern, Southwestern, and Western Area Power Administrations

### § 903.1 Purpose and scope; application.

(a) Except as otherwise provided herein, these regulations establish procedures for the development of power and transmission rates by the Administrators of the Alaska, Southeastern, Southwestern, and Western Area Power Administrations; for the providing of opportunities for interested members of the public to participate in the development of such rates; for the confirmation, approval, and placement in effect on an interim basis by the Deputy Secretary of the Department of Energy of such rates; and for the submission of such rates to the Federal Energy Regulatory Commission with or without prior interim approval. These regulations supplement Delegation Order No. 0204-108 of the Secretary of Energy, which was published in the FEDERAL REGISTER and became effective on December 14, 1983 (48 FR 55664), with respect to the activities of the Deputy Secretary and the Administrators.

(b) These procedures shall apply to all power and transmission rate adjustment proceedings for the Power Marketing Administrations (PMAs) which are commenced after these regulations become effective or were in process on the effective date of these regulations, but for which the FERC had not issued

any substantive orders on or before December 14, 1983. These procedures supersede "Procedures for Public Participation in Power and Transmission Rate Adjustments and Extensions for the Alaska, Southeastern, Southwestern, and Western Area Power Administrations" published in 45 FR 86983 (December 31, 1980) and amended at 46 FR 6864 (January 22, 1981) and 46 FR 25427 (May 7, 1981).

(c) Except to the extent deemed appropriate by the Administrator in accordance with applicable law, these procedures do not apply to rates for short term sales of capacity, energy, or transmission service.

[50 FR 37837, Sept. 18, 1985; 50 FR 48075, Nov. 21, 1985]

# § 903.2 Definitions.

As used herein-

- (a) Administrator means the Administrator of the PMA whose rate is involved in the rate adjustment, or anyone acting in such capacity.
- (b) Department means the Department of Energy, including the PMAs but excluding the Federal Energy Regulatory Commission.
- (c) Deputy Secretary means the Deputy Secretary of the Department of Energy, or anyone acting in such capacity
- (d) FERC means the Federal Energy Regulatory Commission.
- (e) Major rate adjustment means a rate adjustment other than a minor rate adjustment.
- (f) Minor rate adjustment means a rate adjustment which (1) will produce less than 1 percent change in the annual revenues of the power system or (2) is for a power system which has either annual sales normally less than 100 million kilowatt hours or an installed capacity of less than 20,000 kilowatts.
- (g) Notice means the statement which informs customers and the general public of Proposed Rates or proposed rate extensions, opportunities for consultation and comment, and public forums. The Notice shall be by and effective on the date of publication in the FEDERAL REGISTER. Whenever a time period is provided, the date of publication in the FEDERAL REGISTER shall determine the commencement of the time period, unless otherwise provided in the Notice.

The Notice shall include the name, address, and telephone number of the person to contact if participation or further information is sought.

- (h) Power Marketing Administration or PMA means the Alaska Power Administration, Southeastern Power Administration, Southwestern Power Administration, or Western Area Power Administration.
- (i) *Power system* means a powerplant or a group of powerplants and related facilities, including transmission facilities, or a transmission system, that the PMA treats as one unit for the purposes of establishing rates and demonstrating repayment.
- (j) Proposed Rate means a rate revision or a rate for a new service which is under consideration by the Department on which public comment is invited.
- (k) Provisional Rate means a rate which has been confirmed, approved, and placed in effect on an interim basis by the Deputy Secretary.
- (1) Rate means the monetary charge or the formula for computing such a charge for any electric service provided by the PMA, including but not limited to charges for capacity (or demand), energy, or transmission service; however, it does not include leasing fees, service facility charges, or other types of facility use charges. A rate may be set forth in a rate schedule or in a contract.
- (m) Rate adjustment means a change in an existing rate or rates, or the establishment of a rate or rates for a new service. It does not include a change in rate schedule provisions or in contract terms, other than changes in the price per unit of service, nor does it include changes in the monetary charge pursuant to a formula stated in a rate schedule or a contract.
- (n) Rate schedule means a document identified as a "rate schedule," "schedule of rates," or "schedule rate" which designates the rate or rates applicable to a class of service specified therein and may contain other terms and conditions relating to the service.
- (o) Short term sales means sales that last for no longer than one year.

#### § 903.11

(p) Substitute Rate means a rate which has been developed in place of the rate that was disapproved by the FERC.

[50 FR 37837, Sept. 18, 1985; 50 FR 48075, Nov.

# § 903.11 Advance announcement of rate adjustment.

The Administrator may announce that the development of rates for a new service or revised rates for an existing service is under consideration. The announcement shall contain pertinent information relevant to the rate adjustment. The announcement may be through direct contact with customers. at public meetings, by press release, by newspaper advertisement, and/or by FEDERAL REGISTER publication. Written comments relevant to rate policy and design and to the rate adjustment process may be submitted by interested parties in response to the announcement. Any comments received shall be considered in the development of Proposed Rates.

# § 903.13 Notice of proposed rates.

- (a) The Administrator shall give Notice tht Proposed Rates have been prepared and are under consideration. The Notice shall include:
  - (1) The Proposed Rates;
- (2) An explanation of the need for and derivation of the Proposed Rates;
- (3) The locations at which data, studies, reports, or other documents used in developing the Proposed Rates are available for inspection and/or copying;
- (4) The dates, times, and locations of any initially scheduled public forums; and
- (5) Address to which written comments relative to the Proposed Rates and requests to be informed of FERC actions concerning the rates may be submitted.
- (b) Upon request, customers of the power system and other interested persons will be provided with copies of the principal documents used in developing the Proposed Rates.

# § 903.14 Consultation and comment period.

All interested persons will have the opportunity to consult with and obtain information from the PMA, to examine backup data, and to make suggestions

for modification of the Proposed Rates for a period ending (a) 90 days in the case of major rate adjustments, or 30 days in the case of minor rate adjustments, after the Notice of Proposed Rates is published in the FEDERAL REG-ISTER, except that such periods may be shortened for good cause shown; (b) 15 days after any answer which may be provided pursuant to §903.15(b) hereof: (c) 15 days after the close of the last public forum; or (d) such other time as the Administrator may designate; whichever is later. At anytime during this period, interested persons may submit written comments to the PMA regarding the Proposed Rates. The Administrator may also provide additional time for the submission of written rebuttal comments. All written comments shall be available at a designated location for inspection, and copies also will be furnished on request for which the Administrator may assess a fee. Prior to the action described in §903.21, the Administrator may, by appropriate announcement postpone any procedural date or make other procedural changes for good cause shown at the request of any party or on the Administrator's own motion. The Administrator shall maintain, and distribute on request, a list of interested persons.

# § 903.15 Public information forums.

- (a) One or more public information forums shall be held for major rate adjustments, except as otherwise provided in paragraph (c) of this section, and may be held for minor adjustments, to explain, and to answer questions concerning, the Proposed Rates and the basis of and justification for proposing such rates. The number, dates, and locations of such forums will be determined by the Administrator in accordance with the anticipated or demonstrated interest in the Proposed Rates. Notice shall be given in advance of such forums. A public information forum may be combined with a public comment forum held in accordance with 8903 16
- (b) The Administrator shall appoint a forum chairperson. Questions raised at the forum concerning the Proposed Rates and the studies shall be answered by PMA representatives at the forum,

at a subsequent forum, or in writing at least 15 days before the end of the consultation and comment period. However, questions that involve voluminous data contained in the PMA records may be answered by providing an opportunity for consultation and for a review of the records at the PMA offices. As a minimum, the proceedings of the forum held at the principal location shall be transcribed. Copies of all documents introduced, and of questions and written answers shall be available at a designated location for inspection and copies will be furnished by the Administrator on request, for which a fee may be assessed. Copies of the transcript may be obtained from the transcribing service.

(c) No public information forum need be held for major rate adjustments if, after the Administrator has given Notice of a scheduled forum, no person indicates in writing by a prescribed date an intent to appear at such public forum.

### § 903.16 Public comment forums.

(a) One or more public comment forums shall be held for major rate adjustments, except as otherwise provided in paragraph (c) of this section, and may be held for minor rate adjustments, to provide interested persons an opportunity for oral presentation of views, data, and arguments regarding the Proposed Rates. The number, dates, and locations of such forums will be determined by the Administrator in accordance with the anticipated or demonstrated interest in the Proposed Rates. Notice shall be given at least 30 days in advance of the first public comment forum at each location and shall include the purpose, date, time, place, and other information relative to the forum, as well as the locations where pertinent documents are available for examination and/or copying.

(b) The Administrator shall designate a forum chairperson. At the forum, PMA representatives may question those persons making oral statements and comments. The chairperson shall have discretion to establish the sequence of, and the time limits for, oral presentations and to determine if the comments are relevant and noncumulative. Forum proceedings shall be

transcribed. Copies of all documents introduced shall be available at a designated location for inspection, and copies shall be furnished on request for which the Administrator may assess a fee. Copies of the transcript may be obtained from the transcribing service.

(c) No public comment forum need be held for major rate adjustments if, after the Administrator has given notice of a scheduled forum, no person indicates in writing by a prescribed date an intent to appear at such public forum.

# § 903.17 Informal public meetings for minor rate adjustments.

In lieu of public information or comment forums in conjunction with a minor rate adjustment, informal public meetings may be held if deemed appropriate by the Administrator. Such informal meetings will not require a Notice or a transcription.

## § 903.18 Revision of proposed rates.

During or after the consultation and comment period and review of the oral and written comments on the Proposed Rates, the Administrator may revise the Proposed Rates. If the Administrator determines that further public comment should be invited, the Administrator shall afford interested persons an appropriate period to submit further written comments to the PMA regarding the revised Proposed Rates. The Administrator may convene one or more additional public information and/or public comment forums. The Administrator shall give Notice of any such additional forums.

# § 903.21 Completion of rate development; provisional rates.

(a) Following completion of the consultation and comment period and review of any oral and written comments on the Proposed Rates, the Administrator may: (1) Withdraw the proposal; (2) develop rates which in the Administrator's and the Deputy Secretary's judgment should be confirmed, approved, and placed into effect on an interim basis (Provisional Rates); or (3) develop rates which in the Administrator's judgment should be confirmed, approved, and placed into effect by the FERC on a final basis without being

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placed into effect on an interim basis. A statement shall be prepared and made available to the public setting forth the principal factors on which the Deputy Secretary's or the Administrator's decision was based. The statement shall include an explanation responding to the major comments, criticisms, and alternatives offered during the comment period. The Administrator shall certify that the rates are consistent with applicable law and that they are the lowest possible rates to customers consistent with sound business principles. The rates shall be submitted promptly to the FERC for confirmation and approval on a final basis.

- (b) The Deputy Secretary shall set the effective date for Provisional Rates. The effective date shall be at least 30 days after the Deputy Secretary's decision except that the effective date may be sooner when appropriate to meet a contract deadline, to avoid financial difficulties, to provide a rate for a new service, or to make a minor rate adjustment.
- (c) The effective date may be adjusted by the Administrator to coincide with the beginning of the next billing period following the effective date set by the Deputy Secretary for the Provisional Rates.
- (d) Provisional Rates shall remain in effect on an interim basis until: (1) They are confirmed and approved on a final basis by the FERC; (2) they are disapproved and the rates last previously confirmed and approved on a final basis become effective; (3) they are disapproved and higher Substitute Rates are confirmed and approved on a final basis and placed in effect by the FERC; (4) they are disapproved and lower Substitute Rates are confirmed and approved on a final basis by the FERC; or (5) they are superseded by other Provisional Rates placed in effect by the Deputy Secretary, whichever occurs first.

### § 903.22 Final rate approval.

(a) Any rate submitted to the FERC for confirmation and approval on a final basis shall be accompanied with such supporting data, studies, and documents as the FERC may require, and also with the transcripts of forums, written answers to questions, written

comments, the Administrator's certification, and the statement of principal factors leading to the decision. The FERC shall also be furnished a listing of those customers and other participants in the rate proceeding who have requested they be informed of FERC action concerning the rates.

- (b) If the FERC confirms and approves Provisional Rates on a final basis, such confirmation and approval shall be effective as of the date such rates were placed in effect by the Deputy Secretary, as such date may have been adjusted by the Administrator. If the FERC confirms and approves on a final basis rates submitted by the Administrator without interim approval, such confirmation and approval shall be effective on a date set by the FERC.
- (c) If the FERC disapproves Provisional Rates or other submitted rates. the Administrator shall develop Substitute Rates which take into consideration the reasons given by the FERC for its disapproval. If, in the Administrator's judgment, public comment should be invited upon proposed Substitute Rates, the Administrator may provide for a public consultation and comment period before submitting the Substitute Rates. Whether or not such public consultation and comment periods are provided, the Administrator will, upon request, provide customers of the power system and other interested persons with copies of the principal documents used in the development of the Substitute Rates. Within 120 days of the date of FERC disapproval of submitted rates, including Substitute Rates, or such additional time periods as the FERC may provide, the Administrator will submit the Substitute Rates to the FERC. A statement explaining the Administrator's decision shall accompany the submis-
- (d) A Provisional Rate that is disapproved by the FERC shall remain in effect until higher or lower rates are confirmed and approved by the FERC on a final basis or are superseded by other rates placed into effect by the Deputy Secretary on an interim basis: Provided, That if the Administrator does not file a Substitute Rate within 120 days of the disapproval or such greater time as the FERC may provide,

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and if the rate has been disapproved because the FERC determined that it would result in total revenues in excess of those required by law, the rate last previously confirmed and approved on a final basis will become effective on a date and for a period determined by the FERC and revenues collected in excess of such rate during such period will be refunded in accordance with paragraph (g) of this section.

- (e) If a Substitute Rate confirmed and approved on a final basis by the FERC is higher than the provisional rate which was disapproved, the Substitute Rate shall become effective on a subsequent date set by the FERC, unless a subsequent Provisional Rate even higher than the Substitute Rate has been put into effect. FERC confirmation and approval of the higher Substitute Rate shall constitute final confirmation and approval of the lower disapproved Provisional Rate during the interim period that it was in effect.
- (f) If a Substitute Rate confirmed and approved by the FERC on a final basis is lower than the disapproved provisional rate, such lower rate shall be effective as of the date the higher disapproved rate was placed in effect.
- (g) Any overpayment shall be refunded with interest unless the FERC determines that the administrative cost of a refund would exceed the amount to be refunded, in which case no refund will be required. The interest rate applicable to any refund will be determined by the FERC.
- (h) A rate confirmed and approved by the FERC on a final basis shall remain in effect for such period or periods as the FERC may provide or until a different rate is confirmed, approved and placed in effect on an interim or final basis: Provided, That the Deputy Secretary may extend a rate on an interim basis beyond the period specified by the FERC.

# § 903.23 Rate extensions.

(a) The following regulations shall apply to the extension of rates which were previously confirmed and approved by the FERC or the Federal Power Commission, or established by the Secretary of the Interior, and for which no adjustment is comtemplated:

- (1) The Administrator shall give Notice of the proposed extension at least 30 days before the expiration of the prior confirmation and approval, except that such period may be shortened for good cause shown.
- (2) The Administrator may allow for consultation and comment, as provided in these procedures, for such period as the Administrator may provide. One or more public information and comment forums may be held, as provided in these procedures, at such times and locations and with such advance Notice as the Administrator may provide.
- (3) Following notice of the proposed extension and the conclusion of any consultation and comment period, the Deputy Secretary may extend the rates on an interim basis.
- (b) Provisional Rates and other existing rates may be extended on a temporary basis by the Deputy Secretary without advance notice or comment pending further action pursuant to these regulations or by the FERC. The Deputy Secretary shall publish notice in the FEDERAL REGISTER of such extension and shall promptly advise the FERC of the extension.

# PART 904—GENERAL REGULATIONS FOR THE CHARGES FOR THE SALE OF POWER FROM THE BOULDER CANYON PROJECT

# Subpart A—Power Marketing

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904.9 Excess capacity. 904.10 Excess energy.

904.11 Lay off of energy.

904.12 Payments to contractors.

904.13 Disputes.

904.14 Future regulations.

AUTHORITY: Reclamation Act of 1902 (32 Stat. 388); Boulder Canyon Project Act of 1928 (43 U.S.C. 617 et seq.); Boulder Canyon Project Adjustment Act of 1940 (43 U.S.C. 618 et seq.): Department of Energy Organization Act (42 U.S.C. 7101 et seq.); Colorado River Storage Project Act of 1956 (43 U.S.C. 620 et

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seq.); Colorado River Basin Project Act of 1968 (43 U.S.C. 1501 et seq.); and Hoover Power Plant Act of 1984 (98 Stat. 1333 (43 U.S.C. 619 et seq.)).

Source: 51 FR 43154, Nov. 28, 1986, unless otherwise noted.

# Subpart A—Power Marketing

#### § 904.1 Purpose.

- (a) The Secretary of Energy, acting by and through the Administrator of the Western Area Power Administration (Administrator), is authorized and directed to promulgate charges for the sale of power generated at the Boulder Canyon Project powerplant, and also to promulgate such general regulations as the Secretary finds necessary and appropriate in accordance with the power marketing authorities in the Reclamation Act of 1902 (32 Stat. 388) and all acts amendatory thereof and supplementary thereto, and the Department of Energy Organization Act (42 U.S.C. 7101 et seq.).
- (b) In accordance with the Boulder Canyon Project Act of 1928 (43 U.S.C. 617 et seq.), as amended and supplemented (Project Act): the Boulder Canyon Project Adjustment Act of 1940 (43 U.S.C. 618 et seq.), as amended and supplemented (Adjustment Act); the Department of Energy Organization Act (42 U.S.C. 7101 et seq.); and the Hoover Power Plant Act of 1984 (98 Stat. 1333 (43 U.S.C. 619 et seq.)) (Hoover Power Plant Act); the Western Area Power Administration (Western) promulgates these General Regulations for the Charges for the Sale of Power From the Boulder Canyon Project (General Regulations) defining the methodology to be used in the computation of the charges for the sale of power from the Boulder Canyon Project.

# § 904.2 Scope.

These General Regulations are effective June 1, 1987, and shall apply as the basis for computation of all charges applicable to any sale of power from the Boulder Canyon Project after May 31, 1987. "General Regulations for Power Generation, Operation, Maintenance, and Replacement at the Boulder Canyon Project, Arizona/Nevada" are the subject of a separate rulemaking of the Department of the Interior under 43

CFR part 431. The "General Regulations for Generation and Sale of Power in Accordance with the Boulder Canyon Project Adjustment Act" (1941 General Regulations) dated May 20, 1941, and the "General Regulations for Lease of Power" dated April 25, 1930, terminate May 31, 1987.

### § 904.3 Definitions.

The following terms wherever used herein shall have the following meanings:

- (a) Billing Period shall mean the service period beginning on the first day and extending through the last day of any calendar month.
- (b) Boulder City Area Projects shall mean the Boulder Canyon Project, the Parker-Davis Project, and the United States entitlement in the Navajo Generating Station (a feature of the Central Arizona Project).
- (c) Capacity shall mean the aggregate of contingent capacity specified in section 105(a)(1)(A) and the contingent capacity specified in section 105(A)(1)(B) of the Hoover Power Plant Act (43 U.S.C. 619).
- (d) Central Arizona Project shall mean those works as described in section 1521(a) of the Colorado River Basin Project Act of 1968 (43 U.S.C. 1501 et seq.), as amended.
- (e) Colorado River Dam Fund or Fund shall mean that special fund established by section 2 of the Project Act and which is to be used only for the purposes specified in the Project Act, the Adjustment Act, the Colorado River Basin Project Act of 1968, and the Hoover Power Plant Act.
- (f) Contract shall mean any contract for the sale of Boulder Canyon Project capacity and energy for delivery after May 31, 1987, between Western and any contractor.
- (g) Contractor shall mean the entities entering into contracts with Western for electric service pursuant to the Hoover Power Plant Act.
- (h) Excess Capacity shall mean capacity which is in excess of the lesser of: (1) Capacity that Hoover Powerplant is capable of generating with all units in service at a net effective head of 498 feet, or (2) 1,951,000 kW.
- (i) Excess Energy shall mean energy obligated from the Project pursuant to

section 105(a)(1)(C) of the Hoover Power Plant Act (43 U.S.C. 619).

- (j) Firm Energy shall mean energy obligated from the Project pursuant to section 105(a)(1)(A) and section 105(a)(1)(B) of the Hoover Power Plant Act (43 U.S.C. 619).
- (k) Overruns shall mean the use of capacity or energy, without the approval of Western, in amounts greater than Western's contract delivery obligation in effect for each type of service provided for in the Contract.
- (1) Project or Boulder Canyon Project shall mean all works authorized by the Project Act, the Hoover Power Plant Act, and any future additions authorized by Congress, to be constructed and owned by the United States, but exclusive of the main canal and appurtenances authorized by the Project Act, now known as the All-American Canal.
- (m) Replacements shall mean such work, materials, equipment, or facilities as determined by the United States to be necessary to keep the Project in good operating condition, but shall not include (except where used in conjunction with the word "emergency" or the phrase "however necessitated") work, materials, equipment, or facilities made necessary by any act of God, or of the public enemy, or by any major catastrophe.
- (n) Uprating Program shall mean the program authorized by section 101(a) of the Hoover Power Plant Act (43 U.S.C. 619(a)) for increasing the capacity of existing generating equipment and appurtenances at the Hoover Powerplant, as generally described in the report of the Department of the Interior, Bureau of Reclamation, entitled "Hoover Powerplant Uprating, Special Report," issued in May 1980, as supplemented in the report entitled, "January 1985 Supplement (revised September 1985) to Hoover Powerplant Uprating, Special Report-May 1980."

# § 904.4 Marketing responsibilities.

(a) Capacity and energy available from the Project will be marketed by Western under terms of the Conformed General Consolidated Power Marketing Criteria or Regulations for Boulder City Area Projects (Conformed Criteria) published in the FEDERAL REG- ISTER (49 FR 50582) on December 28, 1984. Western shall dispose of capacity and energy from the Project in accordance with section 105(a)(1) of the Hoover Power Plant Act (43 U.S.C. 619(a)(1)), these General Regulations, and the Contracts between the Contractors and Western.

(b) Procedures for the scheduling and delivery of capacity and energy shall be provided for in the Contracts between the Contractors and Western.

#### § 904.5 Revenue requirements.

- (a) Western shall collect all electric service revenues from the Project in accordance with applicable statutes and regulations and deposit such revenues into the Colorado River Dam Fund. All receipts from the Project shall be available for payment of the costs and financial obligations associated with the Project. The Secretary of the Interior is responsible for the administration of the Colorado River Dam Fund.
- (b) The electric service revenue of the Project shall be collected through a charge, computed to be sufficient, together with other net revenues from the Project, to recover the following costs and financial obligations associated with the Project over the appropriate repayment periods set out in paragraph (c) of this section:
- (1) Annual costs of operation and maintenance;
- (2) Annual interest on unpaid investments in accordance with appropriate statutory authorities;
- (3) Annual repayment of funds, and all reasonable costs incurred in obtaining such funds, advanced by non-Federal Contractors to the Secretary of the Interior for the Uprating Program;
- (4) The annual payment of \$300,000 to each of the States of Arizona and Nevada provided for in section 618(c) of the Adjustment Act and section 1543(c)(2) of the Colorado River Basin Project Act (43 U.S.C. 1501 et seq.) (Basin Act), as amended or supplemented;
- (5) Capital costs of investments and Replacements, including amounts readvanced from the United States Treasury (Treasury);
- (6) Repayment to the Treasury of the advances to the Colorado River Dam

### § 904.5

Fund for the Project made prior to May 31, 1987, for which payment was deferred because of a deficiency in firm energy generation due to a shortage of available water, as provided for in article 14(a) of the 1941 General Regulations and section 8 of the Boulder City Act of 1958 (72 Stat. 1726), as shown on the books of accounts of Reclamation as of May 31, 1987:

- (7) Repayment to the Treasury of the first \$25,000,000 of advances made to the Colorado River Dam Fund deemed to be allocated to flood control by section 617a(b) of the Project Act as provided by section 618f of the Adjustment Act; and
- (8) Any other financial obligations of the Project imposed in accordance with law
- (c) The Project repayment period shall extend to the final year allowed under applicable cost recovery criteria. The revenue for the costs and financial obligations set out in paragraph (b) of this section shall be collected over the following repayment periods:
- (1) The repayment period for advances made to the Colorado River Dam Fund from funds advanced to the Secretary of the Interior by non-Federal entities for the Uprating Program and associated work shall be the period commencing with the first day of the month following completion of each segment of the Uprating Program, or June 1, 1987, whichever is later, and ending September 30, 2017;
- (2) The repayment period for the payments to the Treasury of the advances to the Colorado River Dam Fund for the Project which were payable prior to May 31, 1987, but which were deferred pursuant to article 14(a) of the 1941 General Regulations and section 8 of the Boulder City Act of 1958, shall be the power contract period beginning June 1, 1987, and ending September 30, 2017. Such repayment period is based on a 50-year repayment period beginning June 1, 1937, adjusted for the periods the initial payments were deferred;
- (3) The repayment period for the payment to the Treasury of the first \$25,000,000 of advances made to the Colorado River Dam Fund deemed to be allocated to flood control by section 617a(b) of the Project Act and deferred by section 618(f) of the Adjustment Act

shall be the 50-year period beginning June 1, 1987;

- (4) The repayment period for advances to the Colorado River Dam Fund for the Project made on or after June 1, 1937, and prior to June 1, 1987, shall be the 50-year period beginning June 1 immediately following the year of operation in which the funds were advanced:
- (5) The repayment period for investments, other than for the visitor facilities authorized by section 101(a) of the Hoover Power Plant Act (43 U.S.C. 619(a)), made from Federal appropriations on or after June 1, 1987, shall be a 50-year period beginning with the first day of the fiscal year following the fiscal year the investment is placed in service: and
- (6) The repayment period for the visitor facilities authorized by section 101(a) of the Hoover Power Plant Act (43 U.S.C. 619(a)) shall be the 50-year period beginning June 1, 1987, or when substantially completed, as determined by the Secretary of the Interior, if later.
- (d) Annual costs for operation and maintenance and payments to States as set out in paragraph (b) of this section shall be collected as long as revenues accrue from the operation of the Project.
- (e) Surplus revenues will also be collected for transfer from the Colorado River Dam Fund for contribution to the Lower Colorado River Basin Development Fund pursuant to section 1543(c)(2) of the Basin Act as amended by the Hoover Power Plant Act to provide revenue for the purposes of sections 1543(f) and 1543(g) of the Basin Act.
- (f) All annual costs will be calculated based on a Federal fiscal year. To accommodate the transition from the pre-1987 operating year of June 1 to May 31 to a fiscal year, there will be a 4-month transition period beginning June 1, 1987, and ending September 30, 1987.
- (g) If integrated operation of the Boulder Canyon Project with other Boulder City Area Projects and other Federal projects on the Colorado River, as provided in §904.9 of these General Regulations, confers a direct power benefit upon such other Boulder City

Area Projects and such other Federal projects, or if a direct power benefit is conferred by other Boulder City Area Projects or other Federal projects on the Colorado River upon the Boulder Canyon Project, Western shall equitably apportion such benefits and appropriate charges among the Boulder Canyon Project, other Boulder City Area Projects, and other Federal projects on the Colorado River.

# §904.6 Charge for capacity and firm energy.

The charge for Capacity and Firm Energy from the Project shall be composed of two separate charges; a charge to provide for the basic revenue requirements, as identified in paragraphs (b), (c), and (d) of §904.5 of these General Regulations (Base Charge), and a charge to provide the surplus revenue for the Lower Colorado River Basin Development Fund contribution, as identified in paragraph (e) of §904.5 of these General Regulations (Lower Basin Development Fund Contribution Charge).

### § 904.7 Base charge.

(a) The Base Charge shall be developed by the Administrator and promulgated in accordance with appropriate DOE regulations. The Base Charge shall be composed of a capacity component and an energy component.

(b) The capacity component of the Base Charge shall be a dollar per kilowattmonth amount determined by (1) multiplying the estimated average annual revenue requirement developed pursuant to paragraphs (b), (c), and (d) of §904.5 of these General Regulations by 50 percent, and (2) dividing the results of that multiplication by the estimated average annual kW rating of the Project, and (3) dividing the quotient by 12. The total estimated kW rating will be based on the powerplant output capability with all units in service at 498 feet of net effective head or 1,951,000 kW, whichever is less. The capacity component of the Base Charge shall be applied each billing period to each kW of rated output to which each Contractor is entitled by Contract. Adjustments to the application of the capacity component shall be made during outages which cause significant reductions in capacity as provided by the Contract.

(c) The energy component of the Base Charge shall be a mills per kWh amount determined by (1) multiplying the estimated average annual revenue requirements developed pursuant to paragraphs (b), (c), and (d) of §904.5 of these General Regulations by 50 percent and (2) dividing the results of that multiplication by the average annual kWh estimated to be available from the Project. The energy component of the Base Charge shall be applied to each kWh made available to each Contractor, as provided for by Contract, except for the energy purchased by Western, at the request of a Contractor, to meet that Contractor's deficiency in Firm Energy pursuant to section 105(a)(2) of the Hoover Power Plant Act (43 U.S.C. 619(a)(2)) and section F of the Conformed Criteria, and that Contractor's Uprating Program credit carry forward, as provided by Contract.

(d) Application of the Base Charge to capacity and energy overruns will be provided for by Contract. The capacity component and the energy component of the Base Charge shall be applied each billing period for each Contractor.

(e) The Base Charge shall be reviewed annually. The Base Charge shall be adjusted either upward or downward, when necessary and administratively feasible, to assure sufficient revenues to effect payment of all costs and financial obligations associated with the Project pursuant to paragraphs (b), (c), and (d) of §904.5 of these General Regulations. The Administrator shall provide all Contractors an opportunity to comment on any proposed adjustment to the Base Charge pursuant to the DOE's power rate adjustment procedures then in effect.

# § 904.8 Lower basin development fund contribution charge.

(a) The Lower Basin Development Fund Contribution Charge will be developed by the Administrator of Western on the basis that the equivalent of 4½ mills or 2½ mills per kWh, as appropriate, required to be included in the rates charged to purchasers pursuant to section 1543(c)(2) of the Basin Act, as amended by the Hoover Power Plant

### § 904.9

Act, shall be collected from the energy sales of the Project.

- (b) The Lower Basin Development Fund Contribution Charge shall be applied to each kWh made available to each Contractor, as provided for by Contract, except for the energy purchased by Western at the request of a Contractor to meet:
- (1) That Contractor's deficiency in Firm Energy, pursuant to section 105(a)(2) of the Hoover Power Plant Act (43 U.S.C. 619(a)(2)) and section F of the Conformed Criteria; and
- (2) That Contractor's Uprating Program credit carry forward as provided by Contract. A 4½ mills per kWh charge shall be applied to each kWh made available to an Arizona Contractor, and a 21/2 mills per kWh charge shall be applied to each kWh made available to a California or Nevada Contractor; provided, that after the repayment period of the Central Arizona Project, a 21/2 mills per kWh charge shall be applied to each kWh made available to the Arizona, California, and Nevada Contractors. The Lower Basin Development Fund Contribution Charge shall be applied to energy overruns. The Lower Basin Development Fund Contribution Charge shall be applied each billing period for each Contractor.

# § 904.9 Excess capacity.

- (a) If the Uprating Program results in Excess Capacity, Western shall be entitled to such Excess Capacity to integrate the operation of the Boulder City Area Projects and other Federal Projects on the Colorado River. Specific criteria for the use of Excess Capacity by Western will be provided by Contract. All Excess Capacity not required by Western for the purposes specified by Contract will be available to all Contractors at no additional cost on a pro rata basis based on the ratio of each Contractor's Capacity allocation to the total Capacity allocation.
- (b) Credits for benefits resulting from project integration shall be determined by Western and such benefits shall be apportioned in accordance with paragraph (9) of § 904.5 of these General Regulations.

#### § 904.10 Excess energy.

- (a) If excess Energy is determined by the United States to be available, it shall be made available to the Contractors, in accordance with the priority entitlement of section 105(a)(1)(C) of the Hoover Power Plant Act (43 U.S.C. 619(a)(1)(c)). After the annual first- and second-priority entitlement to excess energy has been obligated for delivery, Western will make available one-third of the third-priority excess energy to the Arizona Power Authority, one-third to the Colorado River Commission of Nevada, and one-third to the California Contractors.
- (b) Western will make available third-priority excess energy to the California Contractors based on the following formula:

F=½ (A/B+C/D) (E); Where:
A=Contractor's allocated Capacity
B=Total California allocated Capacity
C=Contractor's allocated Firm Energy
D=Total California allocated Firm Energy

E=Third-priority Excess Energy available to California

F=Contractor's third-priority Excess Energy

(c) The charge for all Excess Energy shall be the charge for Boulder Canyon Project Firm Energy existing at the time the Excess Energy is made available to the Contractor, including the appropriate Lower Basin Development Fund Contribution Charge.

## § 904.11 Lay off of energy.

- (a) If any Contractor determines that it is temporarily unable to utilize Firm Energy or Excess Energy, Western will, at the Contractor's request, attempt to lay off the Firm Energy or Excess Energy the Contractor declares to be available for lay off, pursuant to the provisions for lay off of energy specified in the Contract.
- (b) If Western is unable to lay off such energy, or if the Contractor fails to request Western to attempt to lay off the energy, the Contractor will be billed for the Firm Energy or Excess Energy that was available to the Contractor but could not be delivered to the Contractor or sold to another customer.

(c) In the event that Western must lay off the Firm Energy or Excess Energy at a rate lower than the effective Firm Energy rate, the Contractor will be billed for the difference between the amount that Western would have received at the then existing Firm Energy rate, including the appropriate Lower Basin Development Fund Contribution Charge, and the amount actually received.

# § 904.12 Payments to contractors.

- (a) Funds advanced to the Secretary of the Interior for the Uprating Program and costs reasonably incurred by the Contractor in advancing such funds, as approved by Western, shall be returned to the Contractor advancing the funds during the Contract period through credits on that Contractor's power bills. Appropriate credits will be developed and applied pursuant to terms and conditions agreed to by contract or agreement.
- (b) All other obligations of the United States to return funds to a Contractor shall be repaid to such Contractor through credits on power bills, with or without interest, pursuant to terms and conditions agreed to by contract or agreement.

# § 904.13 Disputes.

- (a) All actions by the Secretary of Energy, acting by and through the Administrator of Western, shall be binding unless or until reversed or modified in accordance with provisions contained herein.
- (b) Any disputes or disagreements as to interpretation or performance of the provisions of these General Regulations under the responsibility of Western shall first be presented to and decided by the Administrator. The Administrator shall be deemed to have denied the Contractor's contention or claim if it is not acted upon within ninety (90) days of its having been presented.
- (c) The decision of the Administrator shall be final unless, within thirty (30) days from the date of such decision, a written request for arbitration is received by the Administrator. The Administrator shall have ninety (90) days from the date of receipt of a request for arbitration either to concur in or deny

in writing the request for such arbitration. Failure by the Administrator to take any action within the ninety (90) day period shall be deemed a denial of the request for arbitration. In the event of a denial of a request for arbitration, the decision of the Administrator shall become final. Upon adecision becoming final, the disputing Contractor's remedy lies with the appropriate Federal court. Any claim that a final decision of the Administrator violates any right accorded the Contractor under the Project Act, the Adjustment Act, or Title I of the Hoover Power Plant Act is barred unless suit asserting such claim is filed in a Federal court of competent jurisdiction within one (1) year after final refusal by the Administrator to correct the action complained of, in accordance with section 105(h) of the Hoover Power Plant Act.

(d) When a timely request for arbitration is received by the Administrator and the Administrator concurs in writing, the disputing Contractor and the Administrator shall, within thirty (30) days after receipt of notice of such concurrence, each name one arbitrator to the panel of arbitrators which will decide the dispute. All arbitrators shall be skilled and experienced in the field pertaining to the dispute. In the event there is more than one disputing Contractor, the disputing Contractors shall collectively name one arbitrator to the panel of arbitrators. In the event of their failure collectively to name such an arbitrator within fifteen (15) days after their first meeting, that arbitrator shall be named as provided in the Commercial Arbitration Rules of the American Arbitration Association. The two arbitrators thus selected shall name a third arbitrator within thirty (30) days of their first meeting. In the event of their failure to so name such third arbitrator, that arbitrator shall be named as provided in the Commercial Arbitration Rules of the American Arbitration Association. The third arbitrator shall act as chairperson of the panel. The arbitration shall be governed by the Commercial Arbitration Rules of the American Arbitration Association. The arbitration shall be limited to the issue submitted. The panel arbitrators shall not rewrite,

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change, or amend these General Regulations or the Contracts of any of the parties to the dispute. The panel of arbitrators shall render a final decision in this dispute within sixty (60) days after the date of the naming of the third arbitrator. A decision of any two of the three arbitrators named to the panel shall be final and binding on all parties involved in the dispute.

### § 904.14 Future regulations.

- (a) Western may from time to time promulgate such additional or amendatory regulations as deemed necessary for the administration of the Project in accordance with applicable law; *Provided*, That no right under any Contract shall be impaired or obligation thereunder be extended thereby.
- (b) Any modification, extension, or waiver of any provision of these General Regulations granted for the benefit of any one or more Contractors shall not be denied to any other Contractor.
- (c) Western reserves the right to terminate, modify, or extend these regulations, either partially or in their entirety, to the extent permitted by law or existing contract.

# PART 905—ENERGY PLANNING AND MANAGEMENT PROGRAM

# Subpart A—General Provisions

Sec.

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# Subpart D—Energy Services

905.40 Technical assistance.

AUTHORITY: 42 U.S.C. §§7152 and 7191; 32 Stat. 388, as amended; and 42 U.S.C. §§7275–7276c.

SOURCE: 60 FR 54174, Oct. 20, 1995, unless otherwise noted.

# **Subpart A—General Provisions**

SOURCE: 65 FR 16795, Mar. 30, 2000, unless otherwise noted.

# § 905.1 What are the purposes of the Energy Planning and Management Program?

The purposes of the Energy Planning and Management Program (EPAMP) are to meet the objectives of Section 114 of the Energy Policy Act of 1992 (EPAct) and to extend long-term firm power resource commitments while supporting customer integrated resource planning (IRP); demand-side management (DSM), including energy efficiency, conservation, and load management; and the use of renewable energy. Subpart B, Integrated Resource Planning, allows customers of the Western Area Power Administration (Western) to meet the objectives of section 114 of EPAct through integrated resource planning or by other means, such as attaining a minimum level of investment in energy efficiency and/or renewable energy, collecting a charge to support defined public benefits, or complying with a mandated energy efficiency and/or renewable energy reporting requirement.

# § 905.2 What are the key definitions of this part?

Administrator means Western's Administrator.

Customer means any entity that purchases firm capacity, with or without energy, from Western under a long-term firm power contract. The term also includes a member-based association (MBA) and its distribution or user members that receive direct benefit from Western's power, regardless of which holds the contract with Western.

Energy efficiency and/or renewable energy (EE/RE) report means the report documenting energy efficiency and/or renewable energy activities imposed by a State, Tribal, or the Federal Government upon a State, Tribal, or Federal end-use customer within its jurisdiction.

Integrated resource planning means a planning process for new energy resources that evaluates the full range of alternatives, including new generating capacity, power purchases, energy conservation and efficiency, cogeneration and district heating and cooling applications, and renewable energy resources, to provide adequate and reliable service to a customer's electric consumers.

Integrated resource planning cooperative (IRP cooperative) means a group of Western's customers and/or their distribution or user members with geographic, resource supply, or other similarities that have joined together, with Western's approval, to complete an IRP.

Member-based association (MBA) means:

- (1) An entity composed of member utilities or user members, or
- (2) An entity that acts as an agent for, or subcontracts with, but does not assume power supply responsibility for its principals or subcontractors, who are its members.

Minimum investment report means the report documenting a mandatory min-

imum level of financial or resource investment in demand-side management (DSM) initiatives, including energy efficiency and load management, and/or renewable energy activities, such as investment of a set minimum percentage of the utility's gross revenues in renewable energy, which is imposed by State, Tribal, or Federal law upon a customer under its jurisdiction. For the purposes of this part, the minimum investment report includes reports about public benefits charges, as well.

Public benefits charge means a mandatory financial charge imposed by State, Tribal, or Federal law upon a customer under its jurisdiction to support one or more of the following: energy efficiency, conservation, or demand-side management; renewable energy; efficiency or alternative energy-related research and development; low-income energy assistance; and/or other similar programs defined by applicable State, Tribal, or Federal law. This term is also known as a public goods or system benefit charge in the utility industry.

Region means a Western regional office or management center, and the geographic territory served by that regional office or management center: the Desert Southwest Customer Service Region, the Rocky Mountain Customer Service Region, the Sierra Nevada Customer Service Region, the Upper Great Plains Customer Service Region, or the Colorado River Storage Project Management Center.

Renewable energy means any source of electricity that is self-renewing, including plant-based biomass, wastebased biomass, geothermal, hydropower, ocean thermal, solar (active and passive), and wind.

Small customer means a utility customer with total annual sales and usage of 25 gigawatthours (GWh) or less, as averaged over the previous 5 years, which is not a member of a joint-action agency or generation and transmission cooperative with power supply responsibility; or any end-use customer.

Western means the Western Area Power Administration.

# § 905.10

# Subpart B—Integrated Resource Planning

SOURCE: 65 FR 16796, Mar. 30, 2000, unless otherwise noted.

#### § 905.10 Who must comply with the integrated resource planning and reporting regulations in this subpart?

(a) Integrated resource plans (IRP) and alternatives. Each Western customer must address its power resource needs in an IRP prepared and submitted to Western as described in this subpart. Alternatively, Western customers may submit a small customer plan, minimum investment report or EE/RE report as provided in this subpart.

(b) Rural Utility Service and state utility commission reports. For customers subject to IRP filings or other electrical resource use reports from the Rural Utilities Service or a state utility commission, nothing in this part requires a customer to take any action inconsistent with those requirements.

# § 905.11 What must an IRP include?

(a) General. Integrated resource planning is a planning process for new energy resources that evaluates the full range of alternatives, including new generating capacity, power purchases, energy conservation and efficiency, cogeneration and district heating and cooling applications, and renewable energy resources, to provide adequate and reliable service to a customer's electric consumers. An IRP supports customerdeveloped goals and schedules. The plan must take into account necessary features for system operation, such as diversity, reliability, dispatchability, and other risk factors: must take into account the ability to verify energy savings achieved through energy efficiency and the projected durability of such savings measured over time; and must treat demand and supply resources on a consistent and integrated basis.

(b) IRP criteria. IRPs must consider electrical energy resource needs and may consider, at the customer's option, water, natural gas, and other energy resources. Each IRP submitted to Western must include:

(1) Identification of resource options. Identification and comparison of re-

source options is an assessment and comparison of existing and future supply-and demand-side resource options available to a customer based upon its size, type, resource needs, geographic area, and competitive situation. Resource options evaluated by the specific customer must be identified. The options evaluated should relate to the resource situation unique to each Western customer as determined by profile data (such as service area, geographical characteristics, customer mix, historical loads, projected growth, existing system data, rates, and financial information) and load forecasts. Specific details of the customer's resource comparison need not be provided in the IRP itself. They must, however, be made available to Western upon request.

- (i) Supply-side options include, but are not limited to, purchased power contracts and conventional and renewable generation options.
- (ii) Demand-side options alter the customer's use pattern to provide for an improved combination of energy services to the customer and the ultimate consumer.
- (iii) Considerations that may be used to develop potential options include cost, market potential, consumer preferences, environmental impacts, demand or energy impacts, implementation issues, revenue impacts, and commercial availability.
- (iv) The IRP discussion of resource options must describe the options chosen by the customer, clearly demonstrating that decisions were based on a reasonable analysis of the options. The IRP may strike a balance among the applicable resource evaluation factors
- (2) Action plan. IRPs must include an action plan describing specific actions the customer will take to implement its IRP.
- (i) The IRP must state the time period that the action plan covers, and the action plan must be updated and resubmitted to Western when this time period expires. The customer may submit a revised action plan with the annual IRP progress report discussed in \$905.14.
- (ii) For those customers not experiencing or anticipating load growth, the

action plan requirement for the IRP may be satisfied by a discussion of current actions and procedures in place to periodically reevaluate the possible future need for new resources. The action plan must include a summary of:

- (A) Actions the customer expects to take in accomplishing the goals identified in the IRP;
- (B) Milestones to evaluate accomplishment of those actions during implementation; and
- (C) Estimated energy and capacity benefits for each action planned.
- (3) Environmental effects. To the extent practical, the customer must minimize adverse environmental effects of new resource acquisitions and document these efforts in the IRP. Customers are neither precluded from nor required to include a quantitative analysis of environmental externalities as part of the IRP process. IRPs must include a qualitative analysis of environmental effects in summary format.
- (4) Public participation. The customer must provide ample opportunity for full public participation in preparing and developing an IRP (or any IRP revision or amendment). The IRP must include a brief description of public involvement activities, including how the customer gathered information from the public, identified public concerns, shared information with the public, and responded to public comments. Customers must make additional documentation identifying or supporting the full public process available to Western upon request.
- (i) As part of the public participation process, the governing body of an MBA and each MBA member (such as a board of directors or city council) must approve the IRP, confirming that all requirements have been met. To indicate approval, a responsible official must sign the IRP submitted to Western or the customer must document passage of an approval resolution by the appropriate governing body included or referred to in the IRP.
- (ii) For Western customers that do not purchase electricity for resale, such as some State, Tribal, and Federal agencies, the customer can satisfy the public participation requirement by having a top management official with resource acquisition responsibility re-

view and concur on the IRP. The customer must note this concurrence in the IRP.

- (5) Load forecasting. An IRP must include a statement that the customer conducted load forecasting. Load forecasting should include data that reflects the size, type, resource conditions, and demographic nature of the customer using an accepted load forecasting method, including but not limited to the time series, end-use, and econometric methods. The customer must make the load forecasting data available to Western upon request.
- (6) Measurement strategies. The IRP must include a brief description of measurement strategies for options identified in the IRP to determine whether the IRP's objectives are being met. These validation methods must include identification of the baseline from which a customer will measure the benefits of its IRP implementation. A reasonable balance may be struck between the cost of data collection and the benefits resulting from obtaining exact information. Customers must make performance validation and evaluation data available to Western upon request.
- (c) IRP criteria for certain customers not qualifying for "small customer" status. Customers with limited economic, managerial, and resource capability and total annual sales and usage of 25 gigawatthours (GWh) or less who are members of joint-action agencies and generation and transmission cooperatives with power supply responsibility are eligible for the criteria specified in paragraphs (c)(1) and (c)(2) of this section.
- (1) Each IRP submitted by a customer under paragraph (c) of this section must:
- (i) Consider all reasonable opportunities to meet future energy service requirements using DSM techniques, renewable energy resources, and other programs; and
- (ii) Minimize, to the extent practical, adverse environmental effects.
- (2) Each IRP submitted by a customer under paragraph (c) of this section must include, in summary form:
- (i) Customer name, address, phone number, email and Website if applicable, and contact person;

#### § 905.12

- (ii) Customer type;
- (iii) Current energy and demand profiles, and data on total annual energy sales and usage for the past 5 years, which Western will use to verify that customers qualify for these criteria;
- (iv) Future energy services projections:
- (v) How items in paragraphs (c)(1)(i) and (c)(1)(ii) of this section were considered; and
- (vi) Actions to be implemented over the customer's planning timeframe.

#### § 905.12 How must IRPs be submitted?

- (a) Number of IRPs submitted. Except as provided in paragraph (c) of this section, one IRP is required per customer, regardless of the number of long-term firm power contracts between the customer and Western.
- (b) Method of submitting IRPs. Customers must submit IRPs to Western under one of the following options:
- (1) Customers may submit IRPs individually.
- (2) MBAs may submit IRPs for each of their members or submit one IRP on behalf of all or some of their members. An IRP submitted by an MBA must specify the responsibilities and participation levels of individual members and the MBA. Any member of an MBA may submit an individual IRP to Western instead of being included in an MBA IRP.
- (3) Customers may submit IRPs as IRP cooperatives when previously approved by Western. IRP cooperatives may also submit small customer plans, minimum investment reports and EE/RE reports on behalf of eligible IRP cooperative members.
- (c) Alternatives to submitting individual IRPs. Customers with Western approval to submit small customer plans, minimum investment or EE/RE reports may substitute the applicable plan or report instead of an IRP. Each customer that intends to seek approval for IRP cooperative, small customer, minimum investment report or EE/RE report status must provide advance written notification to Western. A new customer must provide this notification to the Western Regional Manager of the Region in which the customer is located within 30 days from the time it becomes a customer. Any customer

may resubmit an IRP or notify Western of its plan to change its compliance method at any time so long as there is no period of noncompliance.

# § 905.13 When must IRPs be submitted?

- (a) Submitting the initial IRP. Except as provided in paragraph (c) of this section, customers that have not previously had an IRP approved by Western must submit the initial IRP to the appropriate Regional Manager no later than 1 year after May 1, 2000, or after becoming a customer, whichever is later.
- (b) Updates and amendments to IRPs. Customers must submit updated IRPs to the appropriate Regional Manager every 5 years after Western's approval of the initial IRP. Customers that complied with Western's IRP regulations in effect before May 1, 2000 must maintain their submission and resubmission schedules previously in effect. Customers may submit amendments and revisions to IRPs at any time.
- (c) IRP cooperatives. Customers with geographic, resource supply, and other similarities may join together and request, in writing, Western's approval to become an IRP cooperative. Western will respond to IRP cooperative status requests within 30 days of receiving a request. If Western disapproves a request for IRP cooperative status, the requesting participants must maintain their currently applicable integrated resource or small customer plans, or submit the initial IRPs no later than 1 year after the date of the disapproval letter. Western's approval of IRP cooperative status will not be based on any potential participant's contractual status with Western. Each IRP cooperative must submit an IRP for its participants within 18 months after Western approves IRP cooperative status.

# § 905.14 Does Western require annual IRP progress reports?

Yes, customers must submit IRP progress reports each year within 30 days of the anniversary date of the approval of the currently applicable IRP. The reports must describe the customer's accomplishments achieved

under the action plan, including projected goals and implementation schedules, and energy and capacity benefits and renewable energy developments achieved as compared to those anticipated. Western prefers measured values, but will accept reasonable estimates if measurement is infeasible or not cost-effective. Instead of a separate progress report, the customer may use any other annual report that the customer submits to Western or another entity, at the customer's discretion, if that report contains all required data for the previous full year and is submitted within 30 days of the approval anniversary date of the currently applicable IRP. With Western's approval, customers may submit reports outside of the 30-day anniversary date window.

# § 905.15 What are the requirements for the small customer plan alternative?

- (a) Requesting small customer status. Small customers may submit a request to prepare a small customer plan instead of an IRP. Requests for small customer status from electric utilities must include data on total annual energy sales and usage for the 5 years prior to the request. Western will average this data to determine overall annual energy sales and usage so that uncontrollable events, such as extreme weather, do not distort levelized energy sales and usage. Requests from end-use customers must only document that the customer does not purchase electricity for resale. Western will respond to small customer status requests within 30 days of receiving the request. If Western disapproves a request, the customer must maintain its currently applicable IRP, or submit the initial IRP no later than 1 year after the date of the disapproval letter. Alternatively, the customer may submit a request for minimum investment report or EE/RE report status, as appropriate.
- (b) Small customer plan contents. Small customer plans must:
- (1) Consider all reasonable opportunities to meet future energy service requirements using demand-side management techniques, renewable energy resources, and other programs that pro-

vide retail consumers with electricity at reasonable cost;

- (2) Minimize, to the extent practical, adverse environmental effects; and
- (3) Present in summary form the following information:
- (i) Customer name, address, phone number, email and Website if applicable, and contact person;
  - (ii) Type of customer;
- (iii) Current energy and demand profiles and data on total annual energy sales and usage for the previous 5 years for utility customers, or current energy and demand use for end-use customers;
- (iv) Future energy services projections:
- (v) How items in paragraphs (b)(1) and (b)(2) of this section were considered; and
- (vi) Actions to be implemented over the customer's planning timeframe.
- (c) When to submit small customer plans. Small customers must submit the first small customer plan to the appropriate Western Regional Manager within 1 year after Western approves the request for small customer status. Small customers must submit, in writing, a small customer plan every 5 years.
- (d) Maintaining small customer status.

  (1) Every year on the anniversary of Western's approval of the plan, small customers must submit a letter to Western verifying that either their annual energy sales and usage is 25 GWh or less averaged over the previous 5 years, or they continue to be end-use customers. The letter must also identify their achievements against targeted action plans, as well as the revised summary of actions if the previous summary of actions has expired.
- (2) Western will use the letter for overall program evaluation and comparison with the customer's plan, and for verification of continued small customer status. Customers may submit annual update letters outside of the anniversary date if previously agreed to by Western so long as the letter contains all required data for the previous full year.
- (e) Losing eligibility for small customer status. (1) A customer ceases to be a small customer if it:

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- (i) Is a utility customer and exceeds total annual energy sales and usage of 25 GWh, as averaged over the previous 5 years; or
  - (ii) Is no longer an end-use customer.
- (2) Western will work with a customer that loses small customer status to develop an appropriate schedule for submitting an IRP or other report required under this subpart.

# § 905.16 What are the requirements for the minimum investment report alternative?

- (a) Request to submit the minimum investment report. Customers may submit a request to prepare a minimum investment report instead of an IRP. Minimum investment reports may be submitted by MBAs on behalf of the MBA or its members, and by IRP cooperatives on behalf of its participants. Requests to submit minimum investment reports must include data on:
- (1) The source of the minimum investment requirement (number, title, date, and jurisdiction of law):
- (2) The initial, annual, and other reporting requirement(s) of the mandate, if any; and
- (3) The mandated minimum level of investment or public benefits charge for DSM and/or renewable energy.
- (b) Minimum investment requirement. The minimum investment must be either:
- (1) A mandatory set percentage of customer gross revenues or other specific minimum investment in DSM and/or renewable energy mandated by a State, Tribal, or Federal Government with jurisdictional authority; or
- (2) A required public benefits charge, including charges to be collected for and spent on DSM; renewable energy; efficiency and alternative energy-related research and development; lowincome energy assistance; and any other applicable public benefits category, mandated by a State, Tribal, or Federal Government with jurisdictional authority. Participation in a public benefits program requires either a mandatory set percentage of customer gross revenues or other specific charges to be applied toward the programs as determined by the applicable State, Tribal, or Federal authority. The revenues from the public benefits

- charge may be expended directly by the customer, or by another entity on behalf of the customer as determined by the applicable State, Tribal, or Federal authority.
- (c) Multi-state entities. For those customers with service territories lying in more than one State or Tribal jurisdiction, and where at least one of the States or Tribal jurisdictions has a mandated minimum investment requirement, to meet this alternative customers must use the highest requirement from the State or Tribe within the customer's service territory and additionally apply it to all members in those States or Tribal jurisdictions in which there is no requirement. Alternatively, if each State or Tribe has a requirement, customers may satisfy Western's requirement by reporting on compliance with each applicable minimum investment requirement. Western will work with multi-state entities to ensure the most effective, and least burdensome, compliance mecha-
- (d) Western's response to minimum investment report requests. Western will respond to requests to accept minimum investment reports within 30 days of receiving the request. If Western disapproves a request to allow use of the minimum investment report, the customer must maintain its currently applicable IRP or small customer plan, or submit its initial IRP no later than 1 year after the date of the disapproval letter. Alternatively, the customer may submit a request for small customer plan or EE/RE report status, as appropriate.
- (e) Minimum investment report contents. Reports documenting compliance with a minimum level of investment in DSM and/or renewable energy must include:
- (1) Customer name, address, phone number, email and Website if applicable, and contact person;
- (2) Authority or requirement to undertake a minimum investment, including the source of the minimum investment requirement (number, title, date, and jurisdiction of law or regulation); and
- (3) A description of the minimum investment, including:

- (i) Minimum percentage or other minimum requirement for DSM and/or renewable energy, including any charges to be collected for and spent on DSM, renewable energy, efficiency or alternative energy-related research and development, low-income energy assistance, and any other applicable public benefits categories;
- (ii) Actual or estimated energy and/ or capacity savings resulting from minimum investments in DSM, if known;
- (iii) Actual or estimated energy and/ or capacity resulting from minimum investments in renewable energy, if known: and
- (iv) A description of the DSM and/or renewable energy activities to be undertaken over the next 2 years as a result of the requirement for minimum investment, if known.
- (f) Minimum investment report approval. Western will approve the minimum investment report when it meets the requirements in paragraph (e) of this section.
- (g) When to submit the minimum investment report. The customer must submit the first minimum investment report to the appropriate Western Regional Manager within 1 year after Western approves the request to accept the minimum investment report. Customers choosing this option must maintain IRP or small customer plan compliance with Western's IRP regulations in effect before May 1, 2000, including submitting annual progress reports or update letters, until submitting the first minimum investment report, to ensure there is no gap in complying with section 114 of EPAct. Customers must submit, in writing, a minimum investment report every 5 years.
- (h) Maintaining minimum investment reports. (1) Every year on the anniversary of Western's approval of the first minimum investment report, customers choosing this option must submit a letter to Western verifying that they remain in compliance with the minimum investment requirement. The letter must also contain summary information identifying annual energy and capacity savings associated with minimum investments in DSM, if known, and energy and capacity associated with minimum investments in renewable energy, if known. The letter

- must also include a revised description of customer DSM and/or renewable energy activities if the description from the minimum investment report has changed or expired.
- (2) Western will use the letter for overall program evaluation and to ensure customers remain in compliance. Customers may submit letters outside of the anniversary date if previously agreed to by Western, and if the letter contains all required data for the previous full year. Instead of a separate letter, a customer choosing this option may submit the State, Tribal, or Federal required annual report documenting the minimum investment and associated DSM and/or renewable energy savings and/or use, if known.
- (i) Loss of eligibility to submit the minimum investment report. (1) A customer ceases to be eligible to submit a minimum investment report if:
- (i) A State, Tribal, or Federal mandate no longer applies to the customer, or
- (ii) The customer does not comply with the minimum level of investment in applicable State, Tribal, or Federal law.
- (2) Western will work with a customer no longer eligible to submit a minimum investment report to develop an appropriate schedule to submit an IRP or other plan or report required under this subpart.

### § 905.17 What are the requirements for the energy efficiency and/or renewable energy report (EE/RE report) alternative?

- (a) Requests to submit an EE/RE report. End-use customers may submit a request to prepare an EE/RE report instead of an IRP. Requests to submit EE/RE reports must include data on:
- (1) The source of the EE/RE reporting requirement (number, title, date, and jurisdiction of law or regulation);
- (2) The initial, annual, and other reporting requirement(s) of the report; and
- (3) A summary outline of the EE/RE report's required data or components, including any requirements for documenting customer energy efficiency and renewable energy activities.
- (b) *EE/RE report requirement*. The EE/RE report is based on a mandate by a

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State, Tribal, or Federal Government to implement energy efficiency and/or renewable energy activities within a specified timeframe, for which there is also an associated reporting requirement. The EE/RE report may include only electrical resource use and energy efficiency and/or renewable energy activities, or may additionally include other resource information, such as water and natural gas data. At a minimum, the EE/RE report must annually document energy efficiency and/or renewable energy activities undertaken by the end-use customer.

- (c) Western's response to EE/RE report requests. Western will respond to requests to accept EE/RE reports within 30 days of receiving the request. If Western disapproves a request to allow use of the EE/RE report, the customer must maintain its currently applicable IRP or small customer plan, or submit its initial IRP no later than 1 year after the date of the disapproval letter. Alternatively, the customer may submit a request for small customer plan or minimum investment report, as appropriate, within 30 days after the date of the disapproval letter.
- (d) *EE/RE report contents*. EE/RE reports must include:
- (1) Customer name, address, phone number, email and Website if applicable, and contact person;
- (2) Authority or requirement to complete the EE/RE report, including the source of the requirement (number, title, date, and jurisdiction of law); and
- (3) A description of the customer's required energy efficiency and/or renewable energy activities, including:
- (i) Level of investment or expenditure in energy efficiency and/or renewable energy, and quantifiable energy savings or use goals, if defined by the EE/RE reporting requirement;
- (ii) Annual actual or estimated energy and/or capacity savings, if any, associated with energy efficiency and resulting from the EE/RE reporting requirement;
- (iii) Actual or estimated energy and/ or capacity, if any, associated with renewable energy and resulting from the EE/RE reporting requirement:
- (iv) A description of the energy efficiency and/or renewable energy activities to be undertaken over the next 2

years as a result of the EE/RE reporting requirement.

- (e) *EE/RE report approval*. Western will approve the EE/RE report when the report meets the requirements in paragraph (d) of this section.
- (f) When to submit the EE/RE report. The customer must submit the first EE/RE report to the appropriate Western Regional Manager within 1 year after Western approves the request to accept the EE/RE report. Customers choosing this option must maintain IRP or small customer plan compliance with Western's IRP regulations in effect before May 1, 2000, including submitting annual progress reports or update letters, until submitting the first EE/RE report to ensure there is no gap in complying with section 114 of EPAct. Customers must submit, in writing, an EE/RE report every 5 years.
- (g) Maintaining EE/RE reports. (1) Every year on the anniversary of Western's approval of the first EE/RE report, customers choosing this option must submit an annual EE/RE letter to Western. The letter must contain summary information identifying customer annual energy and capacity savings associated with energy efficiency, if any, and annual customer energy and capacity associated with renewable energy, if any. The letter must also verify that the customer remains in compliance with the EE/RE reporting requirement. Additionally, the letter must include a revised description of customer DSM and/or renewable energy activities if the description from the EE/RE report has changed or expired. If this information is contained in an EE/RE report sent to another authority, the customer may submit that report instead of a separate letter.
- (2) Customers may submit annual EE/RE letters outside of the anniversary date if previously agreed to by Western if the letter contains all required data for the previous full year.
- (h) Loss of eligibility to submit the EE/RE report. (1) A customer ceases to be eligible to submit a EE/RE report if:
- (i) The EE/RE reporting requirement no longer applies to the customer, or
- (ii) The customer does not comply with the EE/RE reporting requirements in applicable State, Tribal, or Federal law.

(2) Western will work with a customer no longer eligible to submit an EE/RE report to develop an appropriate schedule to submit a small customer plan or other plan or report required under this subpart.

# § 905.18 What are the criteria for Western's approval of submittals?

(a) Approval criteria. Western will approve all plans and reports based upon:
(1) Whether the plan or report satisfactorily addresses the criteria in the

regulations in this subpart; and

- (2) The reasonableness of the plan or report given the size, type, resource needs, geographic area, and competitive situation of the customer.
- (b) Review of resource choices. Western will review resource choices using section 114 of EPAct and this subpart. Western will disapprove plans and reports if Western deems that they do not meet the reasonableness criteria in paragraph (a)(2) of this section or the provisions of section 114 of EPAct.
- (c) Accepting plans and reports under other initiatives. If a customer or group of customers implements integrated resource planning under a program responding to other Federal, Tribal, or State initiatives, Western will accept and approve the plan or report as long as it substantially complies with the requirements of this subpart.
- (d) Water-based plans and reports. In evaluating a plan or report, Western will consider water planning, efficiency improvements, and conservation in the same manner it considers energy planning and efficiencies. Customers that provide water utility services and customers that service irrigation load as part of their overall load may include water conservation activities in their plans or reports. To the extent practical, customers should convert reported water savings to energy values.

# § 905.19 How are plans and reports reviewed and approved?

Western will review all plans and reports submitted under this subpart and notify the submitting entity of the plan's or report's acceptability within 120 days after receiving it. If a plan or report submittal is insufficient, Western will provide a notice of deficiencies to the entity that submitted the plan

or report. Western, working together with the entity, will determine the time allowable for resubmitting the plan or report. However, the time allowed for resubmittal will not be greater than 9 months after the disapproval date, unless otherwise provided by applicable contract language.

#### § 905.20 When are customers in noncompliance with the regulations in this subpart, and how does Western ensure compliance?

- (a) Good faith effort to comply. If it appears that a customer's activities may be inconsistent with the applicable IRP, small customer plan, minimum investment report or EE/RE report, Western will notify the customer and offer the customer 30 days to provide evidence of its good faith effort to comply. If the customer does not correct the specified deficiency or submit such evidence, or if Western finds, after receiving information from the customer, that a good faith effort has not been made, Western will impose a penalty.
- (b) Penalties for noncompliance. Western will impose a penalty on long-term firm power customers for failing to submit or resubmit an acceptable IRP and action plan, small customer plan, minimum investment report or EE/RE report as required by this subpart. Western will also impose a penalty when the customer's activities are not consistent with the applicable plan or report unless Western finds that a good faith effort has been made to comply with the approved plan or report.
- (c) Written notification of penalty. Western will provide written notice of a penalty to the customer, and to the MBA or IRP cooperative when applicable. The notice will specify the reasons for the penalty.
- (d) Penalty options. (1) Beginning with the first full billing period following the notice specified in paragraph (c) of this section, Western will impose a surcharge of 10 percent of the monthly power charges until the deficiency specified in the notice is cured, or until 12 months pass. However, Western will not immediately impose a penalty if the customer or its MBA or IRP cooperative requests reconsideration by filing a written appeal under §905.21.

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- (2) The surcharge increases to 20 percent for the second 12 months and to 30 percent per year thereafter until the deficiency is cured.
- (3) After the first 12 months of the surcharge and instead of imposing any further surcharge, Western may impose a penalty that would reduce the resource delivered under a customer's long-term firm power contract(s) by 10 percent. Western may impose this resource reduction either:
- (i) When it appears to be more effective to ensure customer compliance, or (ii) When such reduction may be
- more cost-effective for Western.
- (4) The penalty provisions in existing contracts will continue to be in effect and administered and enforced according to applicable contract provisions.
- (e) Assessing and ceasing penalties. Western will assess the surcharge on the total charges for all power obtained by a customer from Western and will not be limited to surcharges on only firm power sales. When a customer resolves the deficiencies, Western will cease imposing the penalty, beginning with the first full billing period after compliance is achieved.
- (f) Penalties on MBAs and IRP cooperatives. In situations involving a plan or report submitted by an MBA on behalf of its members where a single member does not comply, Western will impose a penalty upon the MBA on a pro rata basis in proportion to that member's share of the total MBA's power received from Western. In situations involving noncompliance by a participant of an IRP cooperative, Western will impose any applicable penalty directly upon that participant if it has a firm power contract with Western. If the IRP cooperative participant does not have a firm power contract with Western, then Western will impose a penalty upon the participant's MBA on a pro rata basis in proportion to that participant's share of the total MBA's power received from Western.

# § 905.21 What is the administrative appeal process?

(a) Filing written appeals with Western. If a customer disagrees with Western's decision on the acceptability of its IRP, small customer plan, minimum investment report or EE/RE report sub-

- mittal, its compliance with an approved plan or report, or any other compliance issue, the customer may request reconsideration by filing a written appeal with the appropriate Regional Manager. Customers may submit appeals any time such disagreements occur and should be specific as to the nature of the issue, the reasons for the disagreement, and any other pertinent facts the customer believes should be brought to Western's attention. The Regional Manager will respond within 45 days of receiving the appeal. If resolution is not achieved at the Regional Office level, the customer may appeal to the Administrator, who will respond within 30 days of receiving the appeal.
- (b) Alternative dispute resolution. Upon request, Western will agree to use mutually agreeable alternative dispute resolution procedures, to the extent allowed by law, to resolve issues or disputes relating to compliance with the regulations in this subpart.
- (c) Penalties during appeal. Western will not impose a penalty while an appeal process is pending. However, if the appeal is unsuccessful for the customer, Western will impose the penalty retroactively from the date the penalty would have been assessed if an appeal had not been filed
- (d) Meeting other requirements during appeal process. A written appeal or use of alternative dispute resolution procedures does not suspend other reporting and compliance requirements.

# § 905.22 How does Western periodically evaluate customer actions?

- (a) Periodic review of customer actions. Western will periodically evaluate customer actions to determine whether they are consistent with the approved IRP or minimum investment report. Small customer plans and EE/RE reports are not subject to this periodic review.
- (b) Reviewing representative samples of plans and reports. Western will periodically review a representative sample of IRPs and minimum investment reports, and the customer's implementation of the applicable plan or report from each of Western's Regions. The

samples will reflect the diverse characteristics and circumstances of the customers that purchase power from Western. These reviews will be in addition to, and separate and apart from, the review of initial and updated IRPs and minimum investment reports to ensure compliance with this subpart.

(c) Scope of periodic reviews. Periodic reviews may consist of any combination of review of the customer's annual IRP progress reports, minimum investment letters, telephone interviews, or on-site visits. Western will document these periodic reviews and may report on the results of the reviews in Western's annual report.

# § 905.23 What are the opportunities for using the Freedom of Information Act to request plan and report data?

IRPs, small customer plans, minimum investment reports and EE/RE reports and associated data submitted to Western are subject to the Freedom of Information Act (FOIA) and may be made available to the public upon request. Customers may request confidential treatment of all or part of a submitted document under applicable FOIA exemptions. Western will make its own determination whether particular information is exempt from public access. Western will not disclose to the public information it has determined to be exempt, recognizing that certain competition-related customer information may be proprietary.

# § 905.24 Will Western conduct reviews of this program?

Yes, Western may periodically initiate a public process to review the regulations in this subpart to determine whether they should be revised to reflect changes in technology, needs, or other developments.

# Subpart C—Power Marketing Initiative

### § 905.30 Purpose and applicability.

(a) The Power Marketing Initiative (PMI) provides a framework for marketing Western's long-term firm hydroelectric resources. For covered projects, Western will make a major portion of the resources currently

under contract available to existing long-term firm power customers for a period of time beyond the expiration date of their current contracts.

(b) The Western projects covered by this subpart are the Pick-Sloan Missouri Basin Program—Eastern Division and the Loveland Area Projects (LAP). The PMI applies to covered projects to the extent it is consistent with other contractual and legal rights, and subject to any applicable project-specific environmental requirements.

#### § 905.31 Term.

Western will extend resource commitments for 20 years from the date existing contracts expire to existing customers with long-term firm power contracts from projects identified in section 905.30(b).

# § 905.32 Resource extensions and resource pool size.

- (a) Western will extend a project-specific percentage of the marketable resource, determined to be available at the time future resource extensions begin, to existing customers with long-term firm power contracts. The remaining unextended power will be used to establish project-specific resource pools. An initial level of 96 percent of the marketable resource will be extended for the Pick-Sloan Missouri Basin Program—Eastern Division and the Loveland Area Projects.
- (b) At two 5-year intervals after the effective date of the extension to existing customers, Western shall create a project-specific resource pool increment of up to an additional 1 percent of the long-term marketable resource under contract at the time. The size of the additional resource pool increment shall be determined by Western based on consideration of the actual fair-share needs of eligible new customers and other appropriate purposes.
- (c) The initial pool percentages shall be applied to the marketable resource determined to be available at the time future resource extensions begin. Subsequent percentages shall be applied to the resource under contract at the time.
- (d) The additional resource pool increments shall be established by pro rata withdrawals, on 2 years' notice,

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from then-existing customers. Withdrawals could be mitigated or delayed if good water conditions exist.

- (e) Once the extensions for existing customers and allocations to new customers from the resource pool have been made, additional power resources may become available for various reasons. Any additional available resources will be used as follows:
- (1) If power is reserved for new customers but not allocated, or resources are offered but not placed under contract, this power will be offered on a pro rata basis to customers that contributed to the resource pool through application of the extension formula in § 905.33.
- (2) If power resources become available as a result of the enhancement of existing generation, project-use load efficiency upgrades, the development of new resources, or resources turned back to Western, Western may elect to use this power to reduce the need to acquire firming resources, retain the power for operational flexibility, sell these resources on a short-term basis, or allocate the power.
- (3) If resources become available due to imposition of penalties pursuant to §905.17, Western may make such resources available within the marketing area to existing customers that are in compliance with subpart B, subject to withdrawal.

#### § 905.33 Extension formula.

(a) The amount of power to be extended to an existing customer shall be determined according to this formula:

Customer Contract Rate of Delivery (CROD) today/total project CROD under contract today x project-specific percentage x marketable resource determined to be available at the time future resource extensions begin = CROD extended.

- (b) Where contract rates of delivery vary by season, the formula shall be used on a seasonal basis to determine the extended power resource. A similar pro rata approach shall be used for energy extensions.
- (c) Determination of the amount of resource available after existing contracts expire, if significantly different from existing resource commitments,

shall take place only after an appropriate public process.

(d) The formula set forth in paragraph (a) of this section also should be used to determine the amounts of firm power subject to withdrawal at 5-year intervals after the effective date of the extension to existing customers, except that the percentage used would be up to 1 percent for each of the two withdrawal opportunities, and the formula would use the customer CROD, project CROD and the resource under contract at the time.

### § 905.34 Adjustment provisions.

Western reserves the right to adjust marketable resources committed to all customers with long-term firm power contracts only as required to respond to changes in hydrology and river operations, except as otherwise expressly provided in these regulations. Under contracts that extend resources under this PMI, existing customers shall be given at least 5 years' notice before adjustments are made. New customers may receive less notice. The earliest that any notice under this section shall become effective is the date that existing contractual commitments expire. Any adjustment shall only take place after an appropriate public process. Withdrawals to serve project use and other purposes provided for by contract shall continue to take place based on existing contract/marketing criteria principles.

#### § 905.35 New customer eligibility.

- (a) Allocations to new customers from the project-specific resource pools established under \$905.32 shall be determined through separate public processes in each project's marketing area. New customers receiving an allocation must execute a long-term firm power contract to receive the allocated power and are required to comply with the IRP requirements in this part. Contracts with new customers shall expire on the same date as firm power contracts with all other customers of a project.
- (b) To be eligible for an allocation, a potential new customer must be a preference entity, as defined in Reclamation law, within the currently established marketing area for a project.

(c) Entities that desire to purchase power from Western for resale to consumers, including municipalities, cooperatives, public utility districts and public power districts, must have utility status. Native American tribes are not subject to this requirement. Utility status means that the entity has responsibility to meet load growth, has a distribution system, and is ready, willing, and able to purchase power from Western on a wholesale basis for resale to retail consumers. To be eligible to apply for power available from a project's initial resource pool, those entities that desire to purchase Western power for resale to consumers must have attained utility status by December 31, 1996, for the Pick-Sloan Missouri Basin Program—Eastern Division, and by September 30, 2000, for the Loveland Area Projects. To be eligible to apply for power from subsequent resource pool increments, these entities must have attained utility status no later than 3 years prior to availability of the incremental addition to the resource pool. Deadlines for attaining utility status for other projects will be established at a later date.

# § 905.36 Marketing criteria.

Western shall retain applicable provisions of existing marketing criteria for projects where resource commitments are extended beyond the current expiration date of long-term firm power sales contracts. Western must retain important marketing plan provisions such as classes of service, marketing area, and points of delivery, to the extent that these provisions are consistent with the PMI. The PMI, eligibility and allocation criteria for potential new customers, retained or amended provisions of existing marketing criteria, the project-specific resource definition, and the size of a project-specific resource pool shall constitute the future marketing plan for each project.

## § 905.37 Process.

Modified contractual language shall be required to place resource extensions under contract. Resource extensions and allocations to new customers from the initial resource pool will take effect when existing contracts expire. These dates are December 31, 2000, for the Pick-Sloan Missouri Basin Program—Eastern Division and September 30, 2004, for the Loveland Area Projects. For the Pick-Sloan Missouri Basin Program—Eastern Division. Western will offer contracts to existing customers for resource extensions no sooner than the effective date of the final regulations. For the Loveland Area Projects, existing contracts provide for potential adjustments to marketable resources in 1999. No contracts will be offered to existing customers for post-2004 Loveland Area Projects resources until the analysis of potential resource adjustments in 1999 has been completed and any adjustments are implemented. Existing power sales contracts require that this analysis be completed by 1996.

# **Subpart D—Energy Services**

# § 905.40 Technical assistance.

Western shall establish a program that provides technical assistance to customers to conduct integrated resource planning, implement applicable IRPs and small customer plans, and otherwise comply with the requirements of these regulations.

# PART 960—GENERAL GUIDELINES FOR THE RECOMMENDATION OF SITES FOR NUCLEAR WASTE RE-POSITORIES

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APPENDIX III TO PART 960—APPLICATION OF THE SYSTEM AND TECHNICAL GUIDELINES DURING THE SITING PROCESS

APPENDIX IV TO PART 960-TYPES OF INFOR-MATION FOR THE NOMINATION OF SITES AS SUITABLE FOR CHARACTERIZATION

AUTHORITY: The Atomic Energy Act of 1954, as amended (42 U.S.C. 2011 et seq.); Energy Reorganization Act of 1974 (42 U.S.C. 5801 et seq.); Department of Energy Organization Act of 1977 (42 U.S.C. 7101 et seq.); Nuclear Waste Policy Act of 1982 (Pub. L. 97-425, 96 Stat. 2201)

SOURCE: 49 FR 47752, Dec. 6, 1984, unless otherwise noted.

# Subpart A—General Provisions

# § 960.1 Applicability.

These guidelines were developed in accordance with the requirements of Section 112(a) of the Nuclear Waste Policy Act of 1982 for use by the Secretary of Energy in evaluating the suitability of sites for the development of repositories. The guidelines will be used for suitability evaluations and determinations made pursuant to Section 112(b) and any preliminary suitability determinations required by Section 114(f). The guidelines set forth in this part are intended to complement the requirements set forth in the Act, 10 CFR part 60, and 40 CFR part 191. The DOE recognizes NRC jurisdiction for the resolution of differences between the guidelines and 10 CFR part 60. The guidelines have received the concurrence of the NRC. The DOE contemplates revising the guidelines from time to time, as permitted by the Act, to take into account revisions made to the above regulations and to otherwise update the guidelines as necessary. The DOE will submit the revisions to the NRC and obtain its concurrence before issuance.

## § 960.2 Definitions.

As used in this part:

Accessible environment means the atmosphere, the land surface, surface water, oceans, and the portion of the lithosphere that is outside the controlled area.

Act means the Nuclear Waste Policy Act of 1982.

Active fault means a fault along which there is recurrent movement, which is usually indicated by small, periodic displacements or seismic activity.

Affected area means either the area of socioeconomic impact or the area of environmental impact, each of which will vary in size among potential repository sites.

Affected Indian tribe means any Indian tribe (1) within whose reservation boundaries a repository for radioactive waste is proposed to be located or (2) whose federally defined possessory or usage rights to other lands outside the reservation's boundaries arising out of congressionally ratified treaties may be substantially and adversely affected by the locating of such a facility: Provided, That the Secretary of the Interior finds, upon the petition of the appropriate governmental officials of the tribe, that such effects are both substantial and adverse to the tribe.

Affected State means any State that (1) has been notified by the DOE in accordance with Section 116(a) of the Act as containing a potentially acceptable site; (2) contains a candidate site for site characterization or repository development; or (3) contains a site selected for repository development.

Application means the act of making a finding of compliance or noncompliance with the qualifying or disqualifying conditions specified in the guidelines of subparts C and D, in accordance with the types of findings specified in appendix III.

Aquifer means a formation, a group of formations, or a part of a formation that contains sufficient saturated permeable material to yield significant quantities of water to wells and springs.

Barrier means any material or structure that prevents or substantially delays the movement of water or radionuclides.

Candidate site means an area, within a geohydrologic setting, that is recommended by the Secretary of Energy under section 112 of the Act for site characterization, approved by the President under section 112 of the Act for characterization, or undergoing site characterization under section 113 of the Act.

Closure means final backfilling of the remaining open operational areas of the underground facility and boreholes

after the termination of waste emplacement, culminating in the sealing of shafts.

Confining unit means a body of impermeable or distinctly less permeable material stratigraphically adjacent to one or more aquifers.

Containment means the confinement of radioactive waste within a designated boundary.

Controlled area means a surface location, to be marked by suitable monuments, extending horizontally no more than 10 kilometers in any direction from the outer boundary of the underlying round facility, and the underlying subsurface, which area has been committed to use as a geologic repository and from which incompatible activities would be prohibited before and after permanent closure.

Cumulative releases of radionuclides means the total number of curies of radionuclides entering the accessible environment in any 10,000-year period, normalized on the basis of radiotoxicity in accordance with 40 CFR part 191. The peak cumulative release of radionuclides refers to the 10,000-year period during which any such release attains its maximum predicted value.

Decommissioning means the permanent removal from service of surface facilities and components necessary for preclosure operations only, after repository closure, in accordance with regulatory requirements and environmental policies.

Determination means a decision by the Secretary that a site is suitable for site characterization for the selection of a repository site or that a site is suitable for the development of a repository, consistent with applications of the guidelines of subparts C and D in accordance with the provisions set forth in subpart B.

Disposal means the emplacement in a repository of high-level radioactive waste, spent nuclear fuel, or other highly radioactive material with no foreseeable intent of recovery, whether or not such emplacement permits the recovery of such waste, and the isolation of such waste from the accessible environment.

Disqualifying condition means a condition that, if present at a site, would

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eliminate that site from further consideration.

Disturbed zone means that portion of the controlled area, excluding shafts, whose physical or chemical properties are predicted to change as a result of underground facility construction or heat generated by the emplaced radioactive waste such that the resultant change of properties could have a significant effect on the preformance of the geologic repository.

DOE means the U.S. Department of Energy or its duly authorized representatives.

Effective porosity means the amount of interconnected pore space and fracture openings available for the transmission of fluids, expressed as the ratio of the volume of interconnected pores and openings to the volume of rock.

Engineered-barrier system means the manmade components of a disposal system designed to prevent the release of radionuclides from the underground facility or into the geohydrologic setting. Such term includes the radioactive-waste form, radioactive-waste canisters, materials placed over and around such canisters, any other components of the waste package, and barriers used to seal penetrations in and into the underground facility.

Environmental assessment means the document required by section 112(b)(1)(E) of the Nuclear Waste Policy Act of 1982.

Environmental impact statement means the document required by section 102(2)(C) of the National Environmental Policy Act of 1969. Sections 114(a) and 114(f) of the Nuclear Waste Policy Act of 1982 include certain limitations on the National Environmental Policy Act requirements as they apply to the preparation of an environmental impact statement for the development of a repository at a characterized site.

*EPA* means the U.S. Environmental Protection Agency or its duly authorized representatives.

Evaluation means the act of carefully examining the characteristics of a site in relation to the requirements of the qualifying or disqualifying conditions specified in the guidelines of subparts C and D. Evaluation includes the consideration of favorable and potentially adverse conditions.

Excepted means assumed to be probable or certain on the basis of existing evidence and in the absence of significant evidence to the contrary.

Expected repository performance means the manner in which the repository is predicted to function, consideration those conditions, processes, and events that are likely to prevail or may occur during the time period of interest.

Facility means any structure, system, or system component, including engineered barriers, created by the DOE to meet repository-performance or functional objectives.

Fault means a fracture or a zone of fractures along which there has been displacement of the side relative to one another parallel to the fracture or zone of fractures.

Faulting means the process of fracturing and displacement that produces a fault.

Favorable condition means a condition that, though not necessary to qualify a site, is presumed, if present, to enhance confidence that the qualifying condition of a particular guideline can be met.

Finding means a conclusion that is reached after evaluation.

Geohydrologic setting means the system of geohydrologic units that is located within a given geologic setting.

Geohydrologic system means the geohydrologic units within a geologic setting, including any recharge, discharge, interconnections between units, and any natural or man-induced processes or events that could affect ground-water flow within or among those units.

Geohydrologic unit means an aquifer, a confining unit, or a combination of aquifers and confining units comprising a framework for a reasonably distinct geohydrologic system.

Geologic repository means a system, requiring licensing by the NRC, that is intended to be used, or may be used, for the disposal of radioactive waste in excavated geologic media. A geologic repository includes (1) the geologic-repository operations area and (2) the portion of the geologic setting that provides isolation of the radioactive waste and is located within the controlled area.

Geologic-repository operations area means a radioactive-waste facility that is part of the geologic repository, including both surface and subsurface areas and facilities where waste-handling activities are conducted.

Geologic setting means the geologic, hydrologic, and geochemical systems of the region in which a geologic-repository operations area is or may be located.

Geomorphic processes means geologic processes that are responsible for the general configuration of the Earth's surface, including the development of present landforms and their relationships to underlying structures, and are responsible for the geologic changes recorded by these surface features.

Ground water means all subsurface water as distinct from surface water.

Ground-water flux means the rate of ground-water flow per unit area of porous or fractured media measured perpendicular to the direction of flow.

Ground-water sources means aquifers that have been or could be economically and technologically developed as sources of water in the foreseeable future.

Ground-water travel time means the time required for a unit volume of ground water to travel between two locations. The travel time is the length of the flow path divided by the velocity, where velocity is the average ground-water flux passing through the cross-sectional area of the geologic medium through which flow occurs, perpendicular to the flow direction, divided by the effective porosity along the flow path. If discrete segments of the flow path have different hydrologic properties, the total travel time will be the sum of the travel times for each discrete segment.

Guideline means a statement of policy or procedure that may include, when appropriate, qualifying, disqualifying, favorable, or potentially adverse conditions as specified in the "guidelines."

Guidelines means part 960 of title 10 of the Code of Federal Regulations—General Guidelines for the Recommendation of Sites for Nuclear Waste Repositories.

High-level radioactive waste means (1) the highly radioactive material result-

ing from the reprocessing of spent nuclear fuel, including liquid waste produced directly in reprocessing and any solid material derived from such liquid waste that contains fission products in sufficient concentrations and (2) other highly radioactive material that the NRC, consistent with existing law, determines by rule requires permanent isolation.

Highly populated area means any incoporated place (recognized by the decennial reports of the U.S. Bureau of the Census) of 2,500 or more persons, or any census designated place (as defined and delineated by the Bureau) of 2,500 or more persons, unless it can be demonstrated that any such place has a lower population density than the mean value for the continental United States. Counties or county equivalents, whether incorporated or not, are specifically excluded form the definition of "place" as used herein.

Host rock means the geologic medium in which the waste is emplaced, specifically the geologic materials that directly encompass and are in close proximity to the underground facility.

Hydraulic conductivity means the volume of water that will move through a medium in a unit of time under a unit hydraulic gradient through a unit area measured perpendicular to the direction of flow.

Hydraulic gradient means a change in the static pressure of ground water, expressed in terms of the height of water above a datum, per unit of distance in a given direction.

Hydrologic process means any hydrologic phenomenon that exhibits a continuous change in time, whether slow or rapid.

Hydrologic properties means those properties of a rock that govern the entrance of water and the capacity to hold, transmit, and deliver water, such as porosity, effective porosity, specific retention, permeability, and the directions of maximum and minimum permeabilities.

Igneous activity means the emplacement (intrusion) of molten rock material (magma) into material in the Earth's crust or the expulsion (extrusion) of such material onto the Earth's surface or into its atmosphere or surface water.

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Isolation means inhibiting the transport of radioactive material so that the amounts and concentrations of this material entering the accessible environment will be kept within prescribed limits.

Likely means processing or displaying the qualities, characteristics, or attributes that provide a reasonable basis for confidence that what is expected indeed exists or will occur.

Lithosphere means the solid part of the Earth, including any ground water contained within it.

Member of the public means any individual who is not engaged in operations involving the management, storage, and disposal of radioactive waste. A worker so engaged is a member of the public except when on duty at the geologic-repository operations area.

Mitigation means: (1) Avoiding the impact altogether by not taking a certain action or parts of an action; (2) minimizing impacts by limiting the degree or magnitude of the action and its implementation; (3) rectifying the impact by repairing, rehabilitating, or restoring the affected environment; (4) reducing or eliminating the impact over time by preservation and maintenance operations during the life of the action; or (5) compensating for the impact by replacing or providing substitute resources or environments.

Model means a conceptual description and the associated mathematical representation of a system, subsystem, component, or condition that is used to predict changes from a baseline state as a function of internal and/or external stimuli and as a function of time and space.

NRC means the U.S. Nuclear Regulatory Commission or its duly authorized representatives.

Perched ground water means unconfined ground water separated from an underlying body of ground water by an unsaturated zone. Its water table is a perched water table. Perched ground water is held up by a perching bed whose permeability is so low that water percolating downward through it is not able to bring water in the underlying unsaturated zone above atmospheric pressure.

Performance assessment means any analysis that predicts the behavior of a

system or system component under a given set of constant and/or transient conditions. Performance assessments will include estimates of the effects of uncertainties in data and modeling.

Permanent closure is synonymous with "closure."

*Postclosure* means the period of time after the closure of the geologic repository.

Potentially acceptable site means any site at which, after geologic studies and field mapping but before detailed geologic data gathering, the DOE undertakes preliminary drilling and geophysical testing for the definition of site location.

Potentially adverse condition means a condition that is presumed to detract from expected system performance, but further evaluation, additional data, or the identification of compensating or mitigating factors may indicate that its effect on the expected system performance is acceptable.

*Preclosure* means the period of time before and during the closure of the geologic repository.

Pre-waste-emplacement means before the authorization of repository construction by the NRC.

Qualifying condition means a condition that must be satisfied for a site to be considered acceptable with respect to a specific guideline.

Quaternary Period means the second period of the Cenozoic Era, following the Tertiary, beginning 2 to 3 million years ago and extending to the present.

Radioactive waste or "waste" means high-level radioactive waste and other radioactive materials, including spent nuclear fuel, that are received for emplacement in a geologic repository.

Radioactive-waste facility means a facility subject to the licensing and related regulatory authority of the NRC pursuant to Sections 202(3) and 202(4) of the Energy Reorganization Act of 1974 (88 Stat. 1244).

Radionuclide retardation means the process or processes that cause the time required for a given radionuclide to move between two locations to be greater than the ground-water travel time, because of physical and chemical interactions between the radionuclide and the geohydrologic unit through which the radionuclide travels.

Reasonably available technology means technology which exists and has been demonstrated or for which the results of any requisite development, demonstration, or confirmatory testing efforts before application will be available within the required time period.

Repository is synonymous with "geologic repository."

Repository closure is synonymous with "closure."

Repository construction means all excavation and mining activities associated with the construction of shafts, shaft stations, rooms, and necessary openings in the underground facility, preparatory to radioactive-waste emplacement, as well as the construction of necessary surface facilities, but excluding site-characterization activities.

Repository operation means all of the functions at the site leading to and involving radioactive-waste emplacement in the underground facility, including receiving, transportation, handling, emplacement, and, if necessary, retrieval.

Repository support facilities means all permanent facilities constructed in support of site-characterization activities and repository construction, operation, and closure activities, including surface structures, utility lines, roads, railroads, and similar facilities, but excluding the underground facility.

Restricted area means any area access to which is controlled by the DOE for purposes of protecting individuals from exposure to radiation and radioactive materials before repository closure, but not including any areas used as residential quarters, although a separate room or rooms in a residential building may be set apart as a restricted area.

Retrieval means the act of intentionally removing radioactive waste before repository closure from the underground location at which the waste had been previously emplaced for disposal.

Saturated zone means that part of the Earth's crust beneath the water table in which all voids, large and small, are ideally filled with water under pressure greater than atmospheric.

Secretary means the Secretary of Energy.

Site means a potentially acceptable site or a candidate site, as appropriate, until such time as the controlled area has been established, at which time the site and the controlled area are the same

Site characterization means activities, whether in the laboratory or in the field, undertaken to establish the geologic conditions and the ranges of the parameters of a candidate site relevant to the location of a repository, including borings, surface excavations, excavations of exploratory shafts, limited subsurface lateral excavations and borings, and in situ testing needed to evaluate the suitability of a candidate site for the location of a repository, but not including preliminary borings and geophysical testing needed to assess whether site characterization should be undertaken.

Siting means the collection of exploration, testing, evaluation, and decision-making activities associated with the process of site screening, site nomination, site recommendation, and site approval for characterization or repository development.

Source term means the kinds and amounts of radionuclides that make up the source of a potential release of radioactivity.

Spent nuclear fuel means fuel that has been withdrawn from a nuclear reactor following irradiation, the constituent elements of which have not been separated by reprocessing.

Surface facilities means repository support facilities within the restricted area.

Surface water means any waters on the surface of the Earth, including fresh and salt water, ice, and snow.

System means the geologic setting at the site, the waste package, and the repository, all acting together to contain and isolate the waste.

System performance means the complete behavior of a repository system in response to the conditions, processes, and events that may affect it.

Tectonic means of, or pertaining to, the forces involved in, or the resulting structures or features of, tectonics.

Tectonics means the branch of geology dealing with the broad architecture of the outer part of the Earth, that is, the regional assembling of

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structural or deformational features and the study of their mutual relations, origin, and historical evolution.

To the extent practicable means the degree to which an intended course of action is capable of being effected in a manner that is reasonable and feasible within a framework of constraints.

Underground facility means the underground structure and the rock required for support, including mined openings and backfill materials, but excluding shafts, boreholes, and their seals.

Unsaturated zone means the zone between the land surface and the water table. Generally, water in this zone is under less than atmospheric pressure, and some of the voids may contain air or other gases at atmospheric pressure. Beneath flooded areas or in perched water bodies, the water pressure locally may be greater than atmospheric.

Waste form means the radioactive waste materials and any encapsulating or stabilizing matrix.

Waste package means the waste form and any containers, shielding, packing, and other sorbent materials immediately surrounding an individual waste container.

Water table means that surface in a body of ground water at which the water pressure is atmospheric.

# Subpart B—Implementation Guidelines

# § 960.3 Implementation guidelines.

The guidelines of this subpart establish the procedure and basis for applying the postclosure and the preclosure guidelines of subparts C and D, respectively, to evaluations of the suitability of sites for the development of repositories. As may be appropriate during the siting process, this procedure requires consideration of a variety of geohydrologic settings and rock types, regionality, and environmental impacts and consultation with affected States, affected Indian tribes, and Federal agencies.

# § 960.3-1 Siting provisions.

The siting provisions establish the framework for the implementation of the siting process specified in §960.3–2. Sections 960.3–1–1 and 960.3–1–2 require that consideration be given to sites sit-

uated in different geohydrologic settings and different types of host rock, respectively. These diversity guidelines are intended to balance the process of site selection by requiring consideration of a variety of geologic conditions and media, and thereby enhance confidence in the technical suitability of sites selected for the development of repositories. As required by the Act, §960.3-1-3 specifies consideration of a regional distribution of repositories after recommendation of a site for development of the first repository. Section 960.3-1-4 describes the evidence that is required to support siting decisions. Section 960.3-1-5 establishes the basis for site evaluations against the postclosure and the preclosure guidelines of subparts C and D during the various phases of the siting process.

# § 960.3-1-1 Diversity of geohydrologic settings.

Consideration shall be given to a variety of geohydrologic settings in which sites for the development of repositories may be located. To the extent practicable, sites recommended as candidate sites for characterization shall be located in different geohydrologic settings.

#### § 960.3-1-2 Diversity of rock types.

Consideration shall be given to a variety of geologic media in which sites for the development of repositories may be located. To the extent practicable, and with due consideration of candidate sites characterized previously or approved for such characterization if the circumstances apply, sites recommended as candidate sites for characterization shall have different types of host rock.

#### § 960.3-1-3 Regionality.

In making site recommendations for repository development after the site for the first repository has been recommended, the Secretary shall give due consideration to the need for, and the advantages of, a regional distribution in the siting of subsequent repositories. Such consideration shall take into account the proximity of sites to locations at which waste is generated or temporarily stored and at which

other repositories have been or are being developed.

# $\S 960.3-1-4$ Evidence for siting decisions.

The siting process involves a sequence of four decisions: The identification of potentially acceptable sites; the nomination of sites as suitable for characterization; the recommendation of sites as candidate sites for site characterization; and after the completion of site characterization and nongeologic data gathering, the recommendation of a candidate site for the development of a repository. Each of these decisions will be supported by the evidence specified below.

# § 960.3-1-4-1 Site identification as potentially acceptable.

The evidence for the identification of a potentially acceptable site shall be the types of information specified in appendix IV of this part. Such evidence will be relatively general and less detailed than that required for the nomination of a site as suitable for characterization. Because the gathering of detailed geologic data will not take place until after the recommendation of a site for characterization, the levels of information may be relatively greater for the evaluation of those guidelines in subparts C and D that pertain to surface-identifiable factors for such site. The sources of information shall include the literature in the public domain and the private sector, when available, and will be supplemented in some instances by surface investigations and conceptual engineering design studies conducted by the DOE. Geologic surface investigations may include the mapping of identifiable rock masses, fracture and joint characteristics, and fault zones. Other surface investigations will consider the aquatic and terrestrial ecology; water rights and uses; topography; potential offsite hazards; natural resource concentrations; national or State protected resources; existing transportation systems; meteorology and climatology; population densities, centers, and distributions; and general socioeconomic characteristics.

# § 960.3-1-4-2 Site nomination for characterization.

The evidence required to support the nomination of a site as suitable for characterization shall include the types of information specified in appendix IV of this part and shall be contained or referenced in the environmental assessments to be prepared in accordance with the requirements of the Act. The source of this information shall include the literature and related studies in the public domain and the private sector, when available, and various meteorological, environmental, socioeconomic. and transportation studies conducted by the DOE in the affected area; exploratory boreholes in the region of such site, including lithologic logging and hydrologic and geophysical testing of such boreholes, laboratory testing of core samples for the evaluation of geochemical and engineering rock properties, and chemical analyses of water samples from such boreholes; surface investigations, including geologic mapping and geophysical surveys, and compilations of satellite imagery data; in situ or laboratory testing of similar rock types under expected repository conditions; evaluations of natural and man-made analogs of the repository and its subsystems, such as geothermally active areas, underground excavations, and case histories of socioeconomic cycles in areas that have experienced intermittent large-scale construction and industrial activities; and extrapolations of regional data to estimate site-specific characteristics and conditions. The exact types and amounts of information to be collected within the above categories, including such details as the specific types of hydrologic tests, combinations of geophysical tests. or number of exploratory boreholes, are dependent on the sitespecific needs for the application of the guidelines of subparts C and D, in accordance with the provisions of this subpart and the application requirements set forth in appendix III of this part. The evidence shall also include those technical evaluations that use the information specified above and that provide additional bases for evaluating the ability of a site to meet the qualifying conditions of the guidelines

### § 960.3-1-4-3

of subparts C and D. In developing the above-mentioned bases for evaluation, as may be necessary, assumptions that approximate the characteristics or conditions considered to exist at a site, or expected to exist or occur in the future, may be used. These assumptions will be realistic but conservative enough to underestimate the potential for a site to meet the qualifying condition of a guideline; that is, the use of such assumptions should not lead to an exaggeration of the ability of a site to meet the qualifying condition.

# $\S 960.3-1-4-3$ Site recommendation for characterization.

The evidence required to support the recommendation of a site as a candidate site for characterization shall consist of the evaluations and data contained or referenced in the environmental assessment for such site, unless the Secretary certifies that such information, in the absence of additional preliminary borings or excavations, will not be adequate to satisfy applicable requirements of the Act.

# § 960.3-1-4-4 Site recommendation for repository development.

The evidence required to support the recommendation of a candidate site for the development of a repository, after the completion of characterization activities at such site, shall consist of the information specified in section 114(a) of the Act for the comprehensive statement of the basis for such recommendation and section 114(f) of the Act for the environmental impact statement. This evidence shall be obtained by the characterization of such site, according to the requirements specified in section 113(b) of the Act and in 10 CFR 60.11, and by nongeologic data gathering.

#### § 960.3-1-5 Basis for site evaluations.

Evaluations of individual sites and comparisons between and among sites shall be based on the postclosure and preclosure guidelines specified in subparts C and D, respectively. Except for screening for potentially acceptable sites as specified in §960.3-2-1, such evaluations shall place primary significance on the postclosure guidelines and secondary significance on the preclosure

guidelines, with each set of guidelines considered collectively for such purposes. Both the postclosure and the preclosure guidelines consist of a system guideline or guidelines and corresponding groups of technical guidelines. The postclosure guidelines of  $\mathbf{C}$ contain subpart eight technicalguidelines in one group. The preclosure guidelines of subpart D contain eleven technical guidelines separated into three groups that represent, in decreasing order of importance, preclosure radiological safety; environment, socioeconomics, and transportation; and ease and cost of siting, construction, operation, and closure. The relative significance of any technical guideline to its corresponding system guideline is site specific. Therefore, for each technical guideline, an evaluation of compliance with the qualifying condition shall be made in the context of the collection of system elements and the evidence related to that guideline, considering on balance the favorable conditions and the potentially adverse conditions identified at a site. Similarly, for each system guideline, such evaluation shall be made in the context of the group of technical guidelines and the evidence related to that system guideline. For purposes of recommending sites for development as respositories, such evidence shall include analyses of expected respository performance to assess the likelihood of demonstrating compliance with 40 CFR part 191 and 10 CFR part 60, in accordance with §960.4-1. A site shall be disqualified at any time during the siting process if the evidence supports a finding by the DOE that a disqualifying condition exists or the qualifying condition of any system or technical guideline cannot be met. Comparisons between and among sites shall be based on the system guidelines, to the extent practicable and in accordance with the levels of relative significance specified above for the postclosure and the preclosure guidelines. Such comparisons are intended to allow comparative evaluations of sites in terms of the capabilities of the natural barriers for waste isolation and to identify innate deficiencies that could jeopardize compliance with such requirements. If the evidence for the sites is not adequate

to substantiate such comparisons, then the comparisons shall be based on the groups of technical guidelines under the postclosure and the preclosure guidelines, considering the levels of relative significance appropriate to the postclosure and the preclosure guidelines and the order of importance appropriate to the subordinate groups within the preclosure guidelines. Comparative site evaluations shall place primary importance on the natural barriers of the site. In such evaluations for the postclosure guidelines of subpart C, engineered barriers shall be considered only to the extent necessary to obtain realistic source terms for comparative site evaluations based on the sensitivity of the natural barriers to such realistic engineered barriers. For a better understanding of the potential effects of engineered barriers on the overall performance of the repository system, these comparative evaluations shall consider a range of levels in the performance of the engineered barriers. That range of performance levels shall vary by at least a factor of 10 above and below the engineered-barrier performance requirements set forth in 10 CFR 60.113, and the range considered shall be identical for all sites compared. The comparisons shall assume equivalentengineered-barrier performance for all sites compared and shall be structured so that engineered barriers are not relied upon to compensate for deficiencies in the geologic media. Furthermore, engineered barriers shall not be used to compensate for an inadequate site; mask the innate deficiencies of a site; disguise the strengths and weaknesses of a site and the overall system; and mask differences between sites when they are compared. Site comparisons performed to support the recommendation of sites for the development of repositories in \$960.3-2-4 shall evaluate predicted releases of radionuclides to the accessible environment. For the purposes of such comparison, the accessible environment shall consist of the atmosphere, the land surface, any nearby surface water, and those portions of the lithosphere that are situated more than 10 kilometers in a horizontal direction from the outer boundary of the original location of the waste emplace-

ment in the geologic repository. Releases of different radionuclides shall be combined by the methods specified in appendix A of 40 CFR part 191. The comparisons specified above shall consist of two comparative evaluations that predict radionuclide releases for 100,000 years after repository closure and shall be conducted as follows. First, the sites shall be compared by means of evaluations that emphasize the performance of the natural barriers at the site. Second, the sites shall be compared by means of evaluations that emphasize the performance of the total repository system. These second evaluations shall consider the expected performance of the repository system; be based on the expected performance of waste packages and waste forms, in compliance with the requirements of 10 CFR 60.113, and on the expected hydrologic and geochemical conditions at each site; and take credit for the expected performance of all other engineered components of the repository system. The comparison of isolation capability shall be one of the significant considerations in the recommendation of sites for the development of repositories. The first of the two comparative evaluations specified in the preceding paragraph shall take precedence unless the second comparative evaluation would lead to substantially different recommendations. In the latter case, the two comparative evaluations shall receive comparable consideration. Sites with predicted isolation capabilities that differ by less than a factor of 10, with similar uncertainties, may be assumed to provide equivalent isolation.

# § 960.3-2 Siting process.

The siting process begins with site screening for the identification of potentially acceptable sites. This process was completed for purposes of the first repository before the enactment of the Act, and the identification of such sites was made after enactment in accordance with the provisions of section 116(a) of the Act. The screening process for the identification of potentially acceptable sites for the second and subsequent repositories shall be conducted in accordance with the requirements specified in §960.3–2–1 of this subpart.

### § 960.3-2-1

The nomination of any site as suitable for characterization shall follow the process specified in §960.3–2–2, and such nomination shall be accompanied by an environmental assessment as specified in section 112(b)(1)(E) of the Act. The recommendation of sites as candidate sites for characterization and the recommendation of a characterized site for the development of a repository shall be accomplished in accordance with the requirements specified in §§960.3–2–3 and 960.3–2–4, respectively.

# § 960.3-2-1 Site screening for potentially acceptable sites.

To identify potentially acceptable sites for the development of other than the first repository, the process shall begin with site-screening activities that consider large land masses that contain rock formations of suitable depth, thickness, and lateral extent and have structural, hydrologic, and tectonic features favorable for waste containment and isolation. Within those large land masses, subsequent site-screening activities shall focus on successively smaller and increasingly more suitable land units. This process shall be developed in consultation with the States that contain land units under consideration. It shall be implemented in a sequence of steps that first applies the applicable disqualifying conditions to eliminate land units on the basis of the evidence specified in §960.3-1-4-1 and in accordance with the application requirements set forth in appendix III of this part. After the disqualifying conditions have been applied, the favorable and potentially adverse conditions, as identified for each remaining land unit, shall be evaluated. The presence of favorable conditions shall favor a given land unit, while the presence of potentially adverse conditions shall penalize that land unit. Recognizing that favorable conditions and potentially adverse conditions for different technical guidelines can exist in the same land unit, the DOE shall seek to evaluate the composite favorability of each land unit. Land units that, in aggregrate, exhibit potentially adverse conditions shall be deferred in favor of land units that exhibit favorable conditions. The siting provisions that re-

quire diversity of geohydrologic settings and rock types and consideration of regionality, as specified in §§ 960.3-1-1, 960.3-1-2, and 960.3-1-3, respectively, may be used to discriminate between land units and to establish the range of options in site screening. To identify a site as potentially acceptable, the evidence shall support a finding that the site is not disqualified in accordance with the application requirements set forth in appendix III of this part and shall support the decision by the DOE to proceed the continued investigation of the site on the basis of the favorable and potentially adverse conditions identified to date. In continuation of the screening process after such identification and before site nomination. the DOE may defer from further consideration land units or potentially acceptable sites or portions thereof on the basis of additional information or by the application of the siting provisions for diversity of geohydrologic settings, diversity of rock types, and regionality (§§ 960.3-1-1, 960.3-1-2, and 960.3-1-3, respectively). The deferral of potentially acceptable sites will be described in the environmental assessments that accompany the nomination of at least five sites as suitable for characterization. In order to identify potentially acceptable sites for the second and subsequent repositories, the Secretary shall first identify the State within which the site is located in a decision-basis document that describes the process and the considerations that led to the identification of such site and that has been issued previously in draft for review and comment by such State. Second, when such document is final, the Secretary shall notify the Governor and the legislature of that State and the tribal council of any affected Indian tribe of the potentially acceptable site.

# § 960.3-2-2 Nomination of sites as suitable for characterization.

From the sites identified as potentially acceptable, the Secretary shall nominate at least five sites determined suitable for site characterization for the selection of each repository site. For the second repository, at least three of the sites shall not have been

nominated previously. Any site nominated as suitable for characterization for the first repository, but not recommended as a candidate site for characterization, may not be nominated as suitable for characterization for the second repository. The nomination of a site as suitable for characterization shall be accompanied by an environmental assessment as specified in section 112(b)(1)(E) of the Act. Such nomination shall be based on evaluations in accordance with the guidelines of this part, and the bases and relevant details of those evaluations and of the decision processes involved therein shall be contained in the environmental assessment for the site in the manner specified in this subpart. The evidence required to support such evaluations and siting decisions is specified in §960.3-1-

# § 960.3-2-2-1 Evaluation of all potentially acceptable sites.

First, in considering sites for nomination, each of the potentially acceptable sites shall be evaluated on the basis of the disqualifying conditions specified in the technical guidelines of subparts C and D, in accordance with the application requirements set forth in appendix III of this part. This evaluation shall support a finding by the DOE that such sites is not disqualified.

# § 960.3-2-2-2 Selection of sites within geohydrologic settings.

Second, the siting provision requiring diversity of geohydrologic settings, as specified in §960.3-1-1, shall be applied to group all potentially acceptable sites according to their geohydrologic settings. Third, for those geohydrologic settings that contain more than one potentially acceptable site, the preferred site shall be selected on the basis of a comparative evaluation of all potentially acceptable sites in that setting. This evaluation shall consider the distinguishing characteristics played by the potentially acceptable sites within the setting and the related guidelines from subparts C and D. That is, the appropriate guidelines shall be selected primarily on the basis of the kinds of evidence among sites for which distinguishing characteristics can be identified. Such comparative

evaluation shall be made on the basis of the qualifying conditions for those guidelines, considering, on balance, the favorable conditions and potentially adverse conditions identified at each site. Due consideration shall also be given to the siting provisions specifying the basis for site evaluations in §960.3-1-5, to the extent practicable, and diversity of rock types in §960.3-1-2, if the circumstances so apply. If less than five geohydrologic settings are available for consideration, the above process shall be used to select two or more preferred sites from those settings that contain more than one potentially acceptable site, as required to obtain the number of sites to be nominated as suitable for characterization. For purposes of the second and subsequent repositories, due consideration shall also be given to the siting provision for regionality as specified in §960.3-1-3. Fourth, each preferred site within a geohydrologic setting shall be evaluated as to whether such site is suitable for the development of a repository under the qualifying condition of each guideline specified in subparts C and D that does not require site characterization as a prerequisite for the application of such guideline. The guidelines considered appropriate to this evaluation have been selected on the basis of their exclusion under the definition of site characterization as specified in §960.2. Although the final application of these guidelines, in accordance with the provisions set forth in appendix III of this part, does not require geologic data from site-characterization activities, such application will require additional data beyond those specified in appendix IV of this part, which will be obtained concurrently with site characterization. Such guidelines include those specified in §960.4-2-8-2 (Site Ownership and Control) of subpart C; §§ 960.5-1(a)(1) and 960.5-1(a)(2) of subpart D (preclosure system guidelines for radiological safeand environmental quality, socioeconomics, and transportation); and §§ 960.5-2-1 through 960.5-2-7 of subpart D (Population Density and Distribution, Site Ownership and Control, Meteorology, Offsite Installations and Operations, Environmental Quality,

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Socioeconomic Impacts, and Transportation). This evaluation shall consider on balance those favorable conditions and potentially adverse conditions identified as such at a preferred site in relation to the qualifying condition of each such guideline. For each such guideline, this evaluation shall focus on the suitability of the site for the development of a repository by considering the activities from the start of site characterization through decommissioning and shall support a finding by the DOE in accordance with the application requirements set forth in appendix III of this part. Fifth, each preferred site within a geohydrologic setting shall be evaluated as to whether such site is suitable for site characterization under the qualifying conditions of those guidelines specified in subparts C and D that require characterization (i.e., subsurface geologic, hydrologic, and geochemical data gathering). Such guidelines include those specified in §960.4-1(a) (postclosure system guideline); §§ 960.4-2-1 through 960.4-2-8-1 of subpart C (Geohydrology, Geochemistry, Rock Characteristics, Climatic Changes, Erosion, Dissolution, Tectonics, Human Interference, and Natural Resources); §960.5-1(a)(3) (preclosure system guideline for ease and cost of siting, construction, operation, and closure); and §960.5-2-8 through 960.5-2-11 of subpart D (Surface Characteristics, Rock Characteristics, Hydrology, and Tectonics). This evaluation shall consider on balance the favorable conditions and potentially adverse conditions identified as such at a preferred site in relation to the qualifying condition of each such guideline. For each such guideline, this evaluation shall focus on the suitability of the site for characterization and shall support a finding by the DOE in accordance with the application requirements set forth in appendix III of this

# § 960.3-2-2-3 Comparative evaluation of all sites proposed for nomination.

Sixth, for those potentially acceptable sites to be proposed for nomination, as determined by the process specified in §960.3–2–2, a reasonable comparative evaluation of each such site with all other such sites shall be

made. For each site and for each guideline specified in subparts C and D, the DOE shall summarize the evaluations and findings specified under §960.3–2–2–1 and under the fourth and fifth provisions of §960.3–2–2. Each such summary shall allow comparisons to be made among sites on this basis of each guideline.

# $\S$ 960.3–2–2–4 The environmental assessment.

To document the process specified above, and in compliance with section 112(b)(1)(E) of the Act, an environmental assessment shall be prepared for each site proposed for nomination as suitable for characterization. Each such environmental assessment shall describe the decision process by which such site was proposed for nomination as described in the preceding six steps and shall contain or reference the evidence that supports such process according to the requirements of §960.3-1-4-2 and appendix IV of this part. As specified in the Act, each environmental assessment shall include an evaluation of the effects of the sitecharacterization activities at the site on public health and safety and the environment; a discussion of alternative activities related to site characterization that may be taken to avoid such impact; and an assessment of the regional and local impacts of locating a repository at the site. The draft environmental assessment for each site proposed for nomination as suitable for characterization shall be made available by the DOE for public comment after the Secretary has notified the Governor and legislature of the State in which the site is located, and the governing body of the affected Indian tribe where such site is located, of such impending availability.

# § 960.3-2-2-5 Formal site nomination.

After the final environmental assessments have been prepared, the Secretary shall nominate at least five sites that he determines suitable for site characterization for the selection of a repository site, and, in so doing, he shall cause to have published in the FEDERAL REGISTER a notice specifying the sites so nominated and announcing

the availability of the final environmental assessments for such sites. This determination by the Secretary shall be based on the final environmental assessments for such sites, including, in particular, consideration of the available evidence, evaluations, and the resultant findings for the guidelines of subparts C and D so specified under the fourth and fifth provisions of §960.3-2-2-2. Before nominating a site, the Secretary shall notify the Governor and legislature of the State in which the site is located, and the governing body of the affected Indian tribe where such site is located, of such nomination and the basis for such nomination.

# § 960.3-2-3 Recommendation of sites for characterization.

After the nomination of at least five sites as suitable for site characterization for the selection of the first repository, the Secretary shall recommend in writing to the President not less than three candidate sites for such characterization. The recommendation decision shall be based on the available geophysical, geologic, geochemical, and hydrologic data; other information; associated evaluations and findings reported in the environmental assessments accompanying the nominations; and the considerations specified below, unless the Secretary certifies that such available data will not be adequate to satisfy applicable requirements of the Act in the absence of further preliminary borings or excavations. On the basis of the evidence and in accordance with the siting provision specifying the basis for site evaluations in §960.3-1-5, the sites nominated as suitable for characterization shall be considered as to their order of preference as candidate sites for characterization. Subsequently, the siting provisions specifying diversity of geohydrologic settings, diversity of rock types, and, after the first repository, consideration of regionality in §§ 960.3–1–1, 960.3–1–2, and 960.3–1–3, respectively, shall be considered to determine a final order of preference for the characterization of such sites. Considering this order of preference together with the available siting alternatives specified in the Act, the sites recommended as candidate sites for characterization shall offer, on balance, the most advantageous combination of characteristics and conditions for the successful development of repositories at such sites. The process for the recommendation of sites as candidate sites for characterization for the selection of any subsequent repository shall be the same as that specified above for the first repository.

# § 960.3-2-4 Recommendation of sites for the development of repositories.

After completion of site characterization and nongeologic data gathering activities at the candidate sites for the development of the first repository, or from all of the characterized sites for the development of subsequent repositories, the candidate sites shall be compared with each other on the basis of the guidelines specified in subparts C and D according to the siting provision specifying the basis for site evaluations in §960.3-1-5. This comparison shall lead to a recommendation by the Secretary to the President of a site for the development of a repository. Together with any recommendation to the President to approve a site for the development of a repository, the Secretary shall make available to the public, and submit to the President, a comprehensive statement of the basis of such recommendation pursuant to the requirements specified in section 114(a)(1) of the Act, including an environmental impact statement prepared in accordance with the provisions of sections 114(a)(1)(D) and 114(f) of the Act. The environmental impact statement shall include the results of the comparative evaluation specified above and a description of the decision process that resulted in the selection of the candidate site recommended for the development of such repository.

#### § 960.3-3 Consultation.

The DOE shall provide to designated officials of the affected States and to the governing bodies of any affected Indian tribe timely and complete information regarding determinations or plans made with respect to the siting, site characterization, design, development, construction, operation, closure, decommissioning, licensing, or regulation of a repository. Written responses

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to written requests for information from the designated officials of affected States or affected Indian tribes will be provided within 30 days after receipt of the written requests. In performing any study of an area for the purpose of determining the suitability of such area for the development of a repository, the DOE shall consult and cooperate with the Governor and the legislature of an affected State and the governing body of an affected Indian tribe in an effort to resolve concerns regarding public health and safety, environmental impacts, socioeconomic impacts, and technical aspects of the siting process. After notifying affected States and affected Indian tribes that potentially acceptable sites have been identified, or that a site has been approved for characterization, the DOE shall seek to enter into binding written agreements with such affected States or affected Indian tribes in accordance with the requirements of the Act. The DOE shall also consult, as appropriate, with other Federal agencies.

# § 960.3-4 Environmental impacts.

Environmental impacts shall be considered by the DOE throughout the site characterization, site selection, and repository development process. The DOE shall mitigate significant adverse environmental impacts, to the extent practicable, during site characterization and repository construction, operation, closure, and decommissioning.

# **Subpart C—Postclosure Guidelines**

### § 960.4 Postclosure guidelines.

The guidelines in this subpart specify the factors to be considered in evaluating and comparing sites on the basis of expected repository performance after closure. The postclosure guidelines are separated into a system guideline and eight technical guidelines. The system guideline establishes waste containment and isolation requirements that are based on NRC and EPA regulations. These requirements must be met by the repository system, which contains natural barriers and engineered barriers. The engineered barriers will be designed to complement the natural barriers, which provide the primary means for waste isolation.

#### § 960.4-1 System guideline.

(a) Qualifying Condition. The geologic setting at the site shall allow for the physical separation of radioactive waste from the accessible environment after closure in accordance with the requirements of 40 CFR part 191, subpart B, as implemented by the provisions of 10 CFR part 60. The geologic setting at the site will allow for the use of engineered barriers to ensure compliance with the requirements of 40 CFR part 191 and 10 CFR part 60 (see appendix I of this part).

### § 960.4-2 Technical guidelines.

The technical guidelines in this subpart set forth qualifying, favorable, potentially adverse, and, in five guidelines, disqualifying conditions on the characteristics, processes, and events that may influence the performance of a repository system after closure. The favorable conditions and the potentially adverse conditions under each guideline are not listed in any assumed order of importance. Potentially adverse conditions will be considered if they affect waste isolation within the controlled area even though such conditions may occur outside the controlled area. The technical guidelines that follow establish conditions that shall be considered in determining compliance with the qualifying condition of the postclosure system guideline. For each technical guideline, an evaluation of qualification or disqualification shall be made in accordance with the requirements specified in subpart B.

# § 960.4-2-1 Geohydrology.

(a) Qualifying condition. The present and expected geohydrologic setting of a site shall be compatible with waste containment and isolation. The geohydrologic setting, considering the characteristics of and the processes operating within the geologic setting, shall permit compliance with (1) the requirements specified in §960.4-1 for radionuclide releases to the accessible environment and (2) the requirements specified in 10 CFR 60.113 for radionuclide releases from the engineered-barrier system using reasonably available technology.

- (b) Favorable conditions. (1) Site conditions such that the pre-waste-emplacement ground-water travel time along any path of likely radionuclide travel from the disturbed zone to the accessible environment would be more than 10,000 years.
- (2) The nature and rates of hydrologic processes operating within the geologic setting during the Quaternary Period would, if continued into the future, not affect or would favorably affect the ability of the geologic repository to isolate the waste during the next 100,000 years.
- (3) Sites that have stratigraphic, structural, and hydrologic features such that the geohydrologic system can be readily characterized and modeled with reasonable certainty.
- (4) For disposal in the saturated zone, at least one of the following pre-waste-emplacement conditions exists:
- (i) A host rock and immediately surrounding geohydrologic units with low hydraulic conductivities.
- (ii) A downward or predominantly horizontal hydraulic gradient in the host rock and in the immediately surrounding geohydrologic units.
- (iii) A low hydraulic gradient in and between the host rock and the immediately surrounding geohydrologic units.
- (iv) High effective porosity together with low hydraulic conductivity in rock units along paths of likely radionuclide travel between the host rock and the accessible environment.
- (5) For disposal in the unsaturated zone, at least one of the following prewaste-emplacement conditions exists:
- (i) A low and nearly constant degree of saturation in the host rock and in the immediately surrounding geohydrologic units.
- (ii) A water table sufficiently below the underground facility such that the fully saturated voids continuous with the water table do not encounter the host rock.
- (iii) A geohydrologic unit above the host rock that would divert the downward infiltration of water beyond the limits of the emplaced waste.
- (iv) A host rock that provides for free drainage.
- (v) A climatic regime in which the average annual historical precipitation

is a small fraction of the average annual potential evapotranspiration.

NOTE: The DOE will, in accordance with the general principles set forth in §960.1 of these regulations, revise the guidelines as necessary, to ensure consistency with the final NRC regulations on the unsaturated zone, which were published as a proposed rule on February 16, 1984, in 49 FR 5934.

- (c) Potentially adverse conditions. (1) Expected changes in geohydrologic conditions—such as changes in the hydraulic gradient, the hydraulic conductivity, the effective porosity, and the ground-water flux through the host rock and the surrounding geohydrologic units—sufficient to significantly increase the transport of radionuclides to the accessible environment as compared with pre-waste-emplacement conditions.
- (2) The presence of ground-water sources, suitable for crop irrigation or human consumption without treatment, along ground-water flow paths from the host rock to the accessible environment.
- (3) The presence in the geologic setting of stratigraphic or structural features—such as dikes, sills, faults, shear zones, folds, dissolution effects, or brine pockets—if their presence could significantly contribute to the difficulty of characterizing or modeling the geohydrologic system.
- (d) Disqualifying condition. A site shall be disqualified if the pre-waste-emplacement ground-water travel time from the disturbed zone to the accessible environment is expected to be less than 1,000 years along any pathway of likely and significant radionuclide travel.

# $\S 960.4-2-2$ Geochemistry.

(a) Qualifying condition. The present and expected geochemical characteristics of a site shall be compatible with waste containment and isolation. Considering the likely chemical interactions among radionuclides, the host rock, and the ground water, the characteristics of and the processes operating within the geologic setting shall permit compliance with (1) the requirements specified in §960.4-1 for radionuclide releases to the accessible environment and (2) the requirements specified in 10 CFR 60.113 for radionuclide

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releases from the engineered-barrier system using reasonably available technology.

- (b) Favorable conditions. (1) The nature and rates of the geochemical processes operating within the geologic setting during the Quaternary Period would, if continued into the future, not affect or would favorably affect the ability of the geologic repository to isolate the waste during the next 100,000 years.
- (2) Geochemical conditions that promote the precipitation, diffusion into the rock matrix, or sorption of radionuclides; inhibit the formation of particulates, colloids, inorganic complexes, or organic complexes that increase the mobility of radionuclides; or inhibit the transport of radionuclides by particulates, colloids, or complexes.
- (3) Mineral assemblages that, when subjected to expected repository conditions, would remain unaltered or would alter to mineral assemblages with equal or increased capability to retard radionuclide transport.
- (4) A combination of expected geochemical conditions and a volumetric flow rate of water in the host rock that would allow less than 0.001 percent per year of the total radionuclide inventory in the repository at 1,000 years to be dissolved.
- (5) Any combination of geochemical and physical retardation processes that would decrease the predicted peak cumulative releases of radionuclides to the accessible environment by a factor of 10 as compared to those predicted on the basis of ground-water travel time without such retardation.
- (c) Potentially adverse conditions. (1) Ground-water conditions in the host rock that could affect the solubility or the chemical reactivity of the engineered-barrier system to the extent that the expected repository performance could be compromised.
- (2) Geochemical processes or conditions that could reduce the sorption of radionuclides or degrade the rock strength.
- (3) Pre-waste-emplacement ground-water conditions in the host rock that are chemically oxidizing.

#### § 960.4-2-3 Rock characteristics.

- (a) Qualifying condition. The present and expected characteristics of the host rock and surrounding units shall be capable of accommodating the thermal, chemical, mechanical, and radiation stresses expected to be induced by repository construction, operation, and closure and by expected interactions among the waste, host rock, ground water, and engineered components. The characteristics of and the processes operating within the geologic setting shall permit compliance with (1) the requirements specified in §960.4-1 for radionuclide releases to the accessible environment and (2) the requirements set forth in 10 CFR 60.113 for radionuclide releases from the engineered-barrier system using reasonably available technology.
- (b) Favorable Conditions. (1) A host rock that is sufficiently thick and laterally extensive to allow significant flexibility in selecting the depth, configuration, and location of the underground facility to ensure isolation.
- (2) A host rock with a high thermal conductivity, a low coefficient of thermal expansion, or sufficient ductility to seal fractures induced by repository construction, operation, or closure or by interactions among the waste, host rock, ground water, and engineered components.
- (c) Potentially adverse conditions. (1) Rock conditions that could require engineering measures beyond reasonably available technology for the construction, operation, and closure of the repository, if such measures are necessary to ensure waste containment or isolation.
- (2) Potential for such phenomena as thermally induced fractures, the hydration or dehydration of mineral components, brine migration, or other physical, chemical, or radiation-related phenomena that could be expected to affect waste containment or isolation.
- (3) A combination of geologic structure, geochemical and thermal properties, and hydrologic conditions in the host rock and surrounding units such that the heat generated by the waste

could significantly decrease the isolation provided by the host rock as compared with pre-waste-emplacement conditions.

#### § 960.4-2-4 Climatic changes.

- (a) Qualifying condition. The site shall be located where future climatic conditions will not be likely to lead to radionuclide releases greater than those allowable under the requirements specified in §960.4–1. In predicting the likely future climatic conditions at a site, the DOE will consider the global, regional, and site climatic patterns during the Quaternary Period, considering the geomorphic evidence of the climatic conditions in the geologic setting.
- (b) Favorable conditions. (1) A surfacewater system such that expected climatic cycles over the next 100,000 years would not adversely affect waste isolation.
- (2) A geologic setting in which climatic changes have had little effect on the hydrologic system throughout the Quaternary Period.
- (c) Potentially adverse conditions. (1) Evidence that the water table could rise sufficiently over the next 10,000 years to saturate the underground facility in a previously unsaturated host rock
- (2) Evidence that climatic changes over the next 10,000 years could cause perturbations in the hydraulic gradient, the hydraulic conductivity, the effective porosity, or the ground-water flux through the host rock and the surrounding geohydrologic units, sufficient to significantly increase the transport of radionuclides to the accessible environment.

# § 960.4-2-5 Erosion.

(a) Qualifying condition. The site shall allow the underground facility to be placed at a depth such that erosional processes acting upon the surface will not be likely to lead to radionuclide releases greater than those allowable under the requirements specified in §960.4–1. In predicting the likelihood of potentially disruptive erosional processes, the DOE will consider the climatic, tectonic, and geomorphic evidence of rates and patterns of erosion in the geologic setting during the Quaternary Period.

- (b) Favorable conditions. (1) Site conditions that permit the emplacement of waste at a depth of at least 300 meters below the directly overlying ground surface.
- (2) A geologic setting where the nature and rates of the erosional processes that have been operating during the Quaternary Period are predicted to have less than one chance in 10,000 over the next 10,000 years of leading to releases of radionuclides to the accessible environment.
- (3) Site conditions such that waste exhumation would not be expected to occur during the first one million years after repository closure.
- (c) Potentially adverse conditions. (1) A geologic setting that shows evidence of extreme erosion during the Quaternary Period.
- (2) A geologic setting where the nature and rates of geomorphic processes that have been operating during the Quaternary Period could, during the first 10,000 years after closure, adversely affect the ability of the geologic repository to isolate the waste.
- (d) Disqualifying condition. The site shall be disqualified if site conditions do not allow all portions of the underground facility to be situated at least 200 meters below the directly overlying ground surface.

### § 960.4-2-6 Dissolution.

- (a) Qualifying condition. The site shall be located such that any subsurface rock dissolution will not be likely to lead to radionuclide releases greater than those allowable under the requirements specified in §960.4-1. In predicting the likelihood of dissolution within the geologic setting at a site, the DOE will consider the evidence of dissolution within that setting during the Quaternary Period, including the locations and characteristics of dissolution fronts or other dissolution features, if identified.
- (b) Favorable condition. No evidence that the host rock within the site was subject to significant dissolution during the Quaternary Period.
- (c) Potentially adverse condition. Evidence of dissolution within the geologic setting—such as breccia pipes, dissolution cavities, significant volumetric reduction of the host rock or

### § 960.4-2-7

surrounding strata, or any structural collapse—such that a hydraulic interconnection leading to a loss of waste isolation could occur.

(d) Disqualifying condition. The site shall be disqualified if it is likely that, during the first 10,000 years after closure, active dissolution, as predicted on the basis of the geologic record, would result in a loss of waste isolation.

#### § 960.4-2-7 Tectonics.

- (a) Qualifying condition. The site shall be located in a geologic setting where future tectonic processes or events will not be likely to lead to radionuclide releases greater than those allowable under the requirements specified in §960.4–1. In predicting the likelihood of potentially disruptive tectonic processes or events, the DOE will consider the structural, stratigraphic, geophysical, and seismic evidence for the nature and rates of tectonic processes and events in the geologic setting during the Quaternary Period.
- (b) Favorable condition. The nature and rates of igneous activity and tectonic processes (such as uplift, subsidence, faulting, or folding), if any, operating within the geologic setting during the Quaternary Period would, if continued into the future, have less than one chance in 10,000 over the first 10,000 years after closure of leading to releases of radionuclides to the accessible environment.
- (c) Potentially adverse conditions. (1) Evidence of active folding, faulting, diapirism, uplift, subsidence, or other tectonic processes or igneous activity within the geologic setting during the Quaternary Period.
- (2) Historical earthquakes within the geologic setting of such magnitude and intensity that, if they recurred, could affect waste containment or isolation.
- (3) Indications, based on correlations of earthquakes with tectonic processes and features, that either the frequency of occurrence or the magnitude of earthquakes within the geologic setting may increase.
- (4) More-frequent occurrences of earthquakes or earthquakes of higher magnitude than are representative of the region in which the geologic setting is located.

- (5) Potential for natural phenomena such as landslides, subsidence, or volcanic activity of such magnitudes that they could create large-scale surfacewater impoundments that could change the regional ground-water flow system.
- (6) Potential for tectonic deformations—such as uplift, subsidence, folding, or faulting—that could adversely affect the regional ground-water flow system.
- (d) Disqualifying condition. A site shall be disqualified if, based on the geologic record during the Quaternary Period, the nature and rates of fault movement or other ground motion are expected to be such that a loss of waste isolation is likely to occur.

# § 960.4-2-8 Human interference.

The site shall be located such that activities by future generations at or near the site will not be likely to affect waste containment and isolation. In assessing the likelihood of such activities, the DOE will consider the estimated effectiveness of the permanent markers and records required by 10 CFR part 60, taking into account sitespecific factors, as stated in §§960.4-2-8-1 and 960.4-2-8-2, that could compromise their continued effectiveness.

#### § 960.4-2-8-1 Natural resources.

- (a) Qualifying condition. This site shall be located such that—considering permanent markers and records and reasonable projections of value, scarcity, and technology—the natural resources, including ground water suitable for crop irrigation or human consumption without treatment, present at or near the site will not be likely to give rise to interference activities that would lead to radionuclide releases greater than those allowable under the requirements specified in §960.4–1.
- (b) Favorable conditions. (1) No known natural resources that have or are projected to have in the foreseeable future a value great enough to be considered a commercially extractable resource.
- (2) Ground water with 10,000 parts per million or more of total dissolved solids along any path of likely radionuclide travel from the host rock to the accessible environment.

- (c) Potentially adverse conditions. (1) Indications that the site contains naturally occurring materials, whether or not actually identified in such form that (i) economic extraction is potentially feasible during the foreseeable future or (ii) such materials have a greater gross value, net value, or commercial potential than the average for other areas of similar size that are representative of, and located in, the geologic setting.
- (2) Evidence of subsurface mining or extraction for resources within the site if it could affect waste containment or isolation.
- (3) Evidence of drilling within the site for any purpose other than repository-site evaluation to a depth sufficient to affect waste containment and isolation.
- (4) Evidence of a significant concentration of any naturally occurring material that is not widely available from other sources.
- (5) Potential for foreseeable human activities—such as ground-water withdrawal, extensive irrigation, subsurface injection of fluids, underground pumped storage, military activities, or the construction of large-scale surfacewater impoundments—that could adversely change portions of the groundwater flow system important to waste isolation.
- (d) Disqualifying conditions. A site shall be disqualified if—
- (1) Previous exploration, mining, or extraction activities for resources of commercial importance at the site have created significant pathways between the projected underground facility and the accessible environment; or
- (2) Ongoing or likely future activities to recover presently valuable natural mineral resources outside the controlled area would be expected to lead to an inadvertent loss of waste isolation.

# \$960.4-2-8-2 Site ownership and control.

(a) Qualifying condition. The site shall be located on land for which the DOE can obtain, in accordance with the requirements of 10 CFR part 60, ownership, surface and subsurface rights, and control of access that are required in order that potential surface and sub-

surface activities as the site will not be likely to lead to radionuclide releases greater than those allowable under the requirements specified in §960.4–1.

- (b) Favorable condition. Present ownership and control of land and all surface and subsurface rights by the DOE.
- (c) Potentially adverse condition. Projected land-ownership conflicts that cannot be successfully resolved through voluntary purchase-sell agreements, nondisputed agency-to-agency transfers of title, or Federal condemnation proceedings.

# **Subpart D—Preclosure Guidelines**

# § 960.5 Preclosure guidelines.

The guidelines in this subpart specify the factors to be considered in evaluating and comparing sites on the basis of expected repository performance before closure. The preclosure guidelines are separated into three system guidelines and eleven technical guidelines.

#### § 960.5-1 System guidelines.

- (a) Qualifying conditions—(1) Preclosure radiological safety. Any projected radiological exposures of the general public and any projected releases of radioactive materials to restricted and unrestricted areas during repository operation and closure shall meet the applicable safety requirements set forth in 10 CFR part 20, 10 CFR part 60, and 40 CFR 191, subpart A (see appendix II of this part).
- (2) Environment, socioeconomics, and transportation. During repository siting, construction, operation, closure, and decommissioning the public and the environment shall be adequately protected from the hazards posed by the disposal of radioactive waste.
- (3) Ease and cost of siting, construction, operation, and closure. Repository siting, construction, operation, and closure shall be demonstrated to be technically feasible on the basis of reasonably available technology, and the associated costs shall be demonstrated to be reasonable relative to other available and comparable siting options.

#### § 960.5-2

#### § 960.5-2 Technical guidelines.

The technical guidelines in this subpart set forth qualifying, favorable, potentially adverse, and, in seven guidelines, disqualifying conditions for the characteristics, processes, and events that influence the suitability of a site relative to the preclosure system guidelines. These conditions are sepathree rated into main groups: Preclosure radiological safety; environment, socioeconomics, and transportation; and ease and cost of siting, construction, operation, and closure. The first group includes conditions on population density and distribution, site ownership and control, meteorology, and offsite installations and operations. The second group includes conditions related to environmental quality and socioeconomic impacts in areas potentially affected by a repository and to the transportation of waste to a repository site. The third group includes conditions on the surface characteristics of the site, the characteristics of the host rock and surrounding strata, hydrology, and tectonics. The individual technical guidelines within each group, as well asthe favorable conditions and the potentially adverse conditions under each guideline, are not listed in any assumed order of importance. The technical guidelines that follow establish conditions that shall be considered in determining compliance with the qualifying conditions of the preclosure system guidelines. For each technical guideline, an evaluation of qualification or disqualification shall be made in accordance with the requirements specified in subpart B.

PRECLOSURE RADIOLOGICAL SAFETY

# \$960.5-2-1 Population density and distribution.

(a) Qualifying condition. The site shall be located such that, during repository operation and closure, (1) the expected average radiation dose to members of the public within any highly populated area will not be likely to exceed a small fraction of the limits allowable under the requirements specified in §960.5–1(a)(1), and (2) the expected radiation dose to any member of the public in an unrestricted area will not be likely to exceed the limit allowable under

the requirements specified in §960.5–1(a)(1).

- (b) Favorable conditions. (1) A low population density in the general region of the site.
- (2) Remoteness of site from highly populated areas.
- (c) Potentially adverse conditions. (1) High residential, seasonal, or daytime population density within the projected site boundaries.
- (2) Proximity of the site to highly populated areas, or to areas having at least 1,000 individuals in an area 1 mile by 1 mile as defined by the most recent decennial count of the U.S. census.
- (d) Disqualifying conditions. A site shall be disqualified if—
- (1) Any surface facility of a repository would be located in a highly populated area; or
- (2) Any surface facility of a repository would be located adjacent to an area 1 mile by 1 mile having a population of not less than 1,000 individuals as enumerated by the most recent U.S. census: or
- (3) The DOE could not develop an emergency preparedness program which meets the requirements specified in DOE Order 5500.3 (Reactor and Non-Reactor Facility Emergency Planning, Preparedness, and Response Program for Department of Energy Operations) and related guides or, when issued by the NRC, in 10 CFR part 60, subpart I, "Emergency Planning Criteria."

# $\S 960.5-2-2$ Site ownership and control.

- (a) Qualifying condition. The site shall be located on land for which the DOE can obtain, in accordance with the requirements of 10 CFR 60.121, ownership, surface and subsurface rights, and control of access that are required in order that surface and subsurface activities during repository operation and closure will not be likely to lead to radionuclide releases to an unrestricted area greater than those allowable under the requirements specified in §960.5–1(a)(1).
- (b) Favorable condition. Present ownership and control of land and all surface and subsurface mineral and water rights by the DOE.
- (c) Potentially adverse condition. Projected land-ownership conflicts that cannot be successfully resolved

through voluntary purchase-sell agreements, nondisputed agency-to-agency transfers of title, or Federal condemnation proceedings.

# $\S 960.5-2-3$ Meteorology.

- (a) Qualifying condition. The site shall be located such that expected meteorological conditions during repository operation and closure will not be likely to lead to radionuclide releases to an unrestricted area greater than those allowable under the requirements specified in §960.5–1(a)(1).
- (b) Favorable condition. Prevailing meteorological conditions such that any radioactive releases to the atmosphere during repository operation and closure would be effectively dispersed, thereby reducing significantly the likelihood of unacceptable exposure to any member of the public in the vicinity of the repository.
- (c) Potentially adverse conditions. (1) Prevailing meteorological conditions such that radioactive emissions from repository operation of closure could be preferentially transported toward localities in the vicinity of the repository with higher population densities than are the average for the region.
- (2) History of extreme weather phenomena—such as hurricanes, tornadoes, severe floods, or severe and frequent winter storms—that could significantly affect repository operation or closure.

# $\S\,960.5\text{--}2\text{--}4$ Offsite installations and operations.

- (a) Qualifying condition. The site shall be located such that present projected effects from nearby industrial, transportation, and military installations and operations, including atomic energy defense activities, (1) will not significantly affect repository siting, construction, operation, closure, or decommissioning or can be accommodated by engineering measures and (2), when considered together with emissions from repository operation and closure, will not be likely to lead to radionuclide releases to an unrestricted area greater than those allowable under the requirements specified in §960.5-1(a)(1).
- (b) Favorable condition. Absence of contributing radioactive releases from other nuclear installations and oper-

ations that must be considered under the requirements of 40 CFR 191, subpart  $_{\rm A}$ 

- (c) Potentially adverse conditions. (1) The presence of nearby potentially hazardous installations or operations that could adversely affect repository operation or closure.
- (2) Presence of other nuclear installations and operations, subject to the requirements of 40 CFR part 190 or 40 CFR part 191, subpart A, with actual or projected releases near the maximum value permissible under those standards.
- (d) Disqualifying condition. A site shall be disqualified if atomic energy defense activities in proximity to the site are expected to conflict irreconcilably with repository siting, construction, operation, closure, or decommissioning.

ENVIRONMENT, SOCIOECONOMICS, AND TRANSPORTATION

# $\S 960.5-2-5$ Environmental quality.

- (a) Qualifying condition. The site shall be located such that (1) the quality of the environment in the affected area during this and future generations will be adequately protected during repository siting, construction, operation, closure, and decommissioning, and projected environmental impacts in the affected area can be mitigated to an acceptable degree, taking into account programmatic, technical, social, economic, and environmental factors; and (2) the requirements specified in §960.5–1(a)(2) can be met.
- (b) Favorable conditions. (1) Projected ability to meet, within time constraints, all Federal, State, and local procedural and substantive environmental requirements applicable to the site and the activities proposed to take place thereon.
- (2) Potential significant adverse environmental impacts to present and future generations can be mitigated to an insignificant level through the application of reasonable measures, taking into account programmatic, technical, social, economic, and environmental factors.

### § 960.5-2-6

- (c) Potentially adverse conditions. (1) Projected major conflict with applicable Federal, State, or local environmental requirements.
- (2) Projected significant adverse environmental impacts that cannot be avoided or mitigated.
- (3) Proximity to, or projected significant adverse environmental impacts of the repository or its support facilities on, a component of the National Park System, the National Wildlife Refuge System, the National Wild and Scenic Rivers System, the National Wilderness Preservation System, or National Forest Land.
- (4) Proximity to, and projected significant adverse environmental impacts of the repository or its support facilities on, a significant State or regional protected resource area, such as a State park, a wildlife area, or a historical area.
- (5) Proximity to, and projected significant adverse environmental impacts of the repository and its support facilities on, a significant Native American resource, such as a major Indian religious site, or other sites of unique cultural interest.
- (6) Presence of critical habitats for threatened or endangered species that may be compromised by the repository or its support facilities.
- (d) Disqualifying conditions. Any of the following conditions shall disqualify a site:
- (1) During repository siting, construction, operation, closure, or decommissioning the quality of the environment in the affected area could not be adequately protected or projected environmental impacts in the affected area could not be mitigated to an acceptable degree, taking into account programmatic, technical, social, economic, and environmental factors.
- (2) Any part of the restricted area or repository support facilities would be located within the boundaries of a component of the National Park System, the National Wildlife Refuge System, the National Wilderness Preservation System, or the National Wild and Scenic Rivers System.
- (3) The presence of the restricted area or the repository support facilities would conflict irreconcilably with the previously designated resource-preser-

vation use of a component of the National Park System, the National Wildlife Refuge System, the National Wilderness Preservation System, the National Wild and Scenic Rivers System, or National Forest Lands, or any comparably significant State protected resource that was dedicated to resource preservation at the time of the enactment of the Act.

### § 960.5-2-6 Socioeconomic impacts.

- (a) Qualifying condition. The site shall be located such that (1) any significant adverse social and/or economic impacts induced in communities and surrounding regions by repository siting, construction, operation, closure, and decommissioning can be offset by reasonable mitigation or compensation, as determined by a process of analysis, planning, and consultation among the DOE, affected State and local government jurisdictions, and affected Indian tribes; and (2) the requirements specified in §960.5–1(a)(2) can be met.
- (b) Favorable conditions. (1) Ability of an affected area to absorb the project-related population changes without significant disruptions of community services and without significant impacts on housing supply and demand.
- (2) Availability of an adequate labor force in the affected area.
- (3) Projected net increases in employment and business sales, improved community services, and increased government revenues in the affected area.
- (4) No projected substantial disruption of primary sectors of the economy of the affected area.
- (c) Potentially adverse conditions. (1) Potential for significant repository-related impacts on community services, housing supply and demand, and the finances of State and local government agencies in the affected area.
- (2) Lack of an adequate labor force in the affected area.
- (3) Need for repository-related purchase or acquisition of water rights, if such rights could have significant adverse impacts on the present or future development of the affected area.
- (4) Potential for major disruptions of primary sectors of the economy of the affected area.

(d) Disqualifying condition. A site shall be disqualified if repository construction, operation, or closure would significantly degrade the quality, or significantly reduce the quantity, of water from major sources of offsite supplies presently suitable for human consumption or crop irrigation and such impacts cannot be compensated for, or mitigated by, reasonable measures

### § 960.5-2-7 Transportation.

- (a) Qualifying condition. The site shall be located such that (1) the access routes constructed from existing local highways and railroads to the site (i) will not conflict irreconcilably with the previously designated use of any resource listed in §960.5-2-5(d) (2) and (3); (ii) can be designed and constructed using reasonably available technology; (iii) will not require transportation system components to meet performance standards more stringent than those specified in the applicable DOT and NRC regulations, nor require the development of new packaging containment technology; (iv) will allow transportation operations to be conducted without causing an unacceptable risk to the public or unacceptable environmental impacts, taking into account programmatic, technical, social, economic, and environmental factors; and (2) the requirements of  $\S 960.5-1(a)(2)$ can be met.
- (b) Favorable conditions. (1) Availability of access routes from local existing highways and railroads to the site which have any of the following characteristics:
- (i) Such routes are relatively short and economical to construct as compared to access routes for other comparable siting options.
- (ii) Federal condemnation is not required to acquire rights-of-way for the access routes
- (iii) Cuts, fills, tunnels, or bridges are not required.
- (iv) Such routes are free of sharp curves or steep grades and are not likely to be affected by landslides or rock slides.
- (v) Such routes bypass local cities and towns.
- (2) Proximity to local highways and railroads that provide access to re-

- gional highways and railroads and are adequate to serve the repository without significant upgrading or reconstruction.
- (3) Proximity to regional highways, mainline railroads, or inland waterways that provide access to the national transportation system.
- (4) Availability of a regional railroad system with a minimum number of interchange points at which train crew and equipment changes would be required.
- (5) Total projected life-cycle cost and risk for transportation of all wastes designated for the repository site which are significantly lower than those for comparable siting options, considering locations of present and potential sources of waste, interim storage facilities, and other repositories.
- (6) Availability of regional and local carriers—truck, rail, and water—which have the capability and are willing to handle waste shipments to the repository.
- (7) Absence of legal impediment with regard to compliance with Federal regulations for the transportation of waste in or through the affected State and adjoining States.
- (8) Plans, procedures, and capabilities for response to radioactive waste transportation accidents in the affected State that are completed or being developed.
- (9) A regional meteorological history indicating that significant transportation disruptions would not be routine seasonal occurrences.
- (c) Potentially adverse conditions. (1) Access routes to existing local highways and railroads that are expensive to construct relative to comparable siting options.
- (2) Terrain between the site and existing local highways and railroads such that steep grades, sharp switchbacks, rivers, lakes, landslides, rock slides, or potential sources of hazard to incoming waste shipments will be encountered along access routes to the site.
- (3) Existing local highways and railroads that could require significant reconstruction or upgrading to provide adequate routes to the regional and national transportation system.

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(4) Any local condition that could cause the transportation-related costs, environmental impacts, or risk to public health and safety from waste transportation operations to be significantly greater than those projected for other comparable siting options.

EASE AND COST OF SITING, CONSTRUCTION, OPERATION, AND CLOSURE

### § 960.5-2-8 Surface characteristics.

- (a) Qualifying condition. The site shall be located such that, considering the surface characteristics and conditions of the site and surrounding area, including surface-water systems and the terrain, the requirements specified in §960.5–1(a)(3) can be met during repository siting, construction, operation, and closure.
- (b) Favorable conditions. (1) Generally flat terrain
- (2) Generally well-drained terrain.
- (c) Potentially adverse condition. Surface characteristics that could lead to the flooding of surface or underground facilities by the occupancy and modification of flood plains, the failure of existing or planned man-made surface-water impoundments, or the failure of engineered components of the repository.

## § 960.5-2-9 Rock characteristics.

- (a) Qualifying condition. The site shall be located such that (1) the thickness and lateral extent and the characteristics and composition of the host rock will be suitable for accommodation of the underground facility; (2) repository construction, operation, and closure will not cause undue hazard to personnel; and (3) the requirements specified in §960.5–1(a)(3) can be met.
- (b) Favorable conditions. (1) A host rock that is sufficiently thick and laterally extensive to allow significant flexibility in selecting the depth, configuration, and location of the underground facility.
- (2) A host rock with characteristics that would require minimal or no artificial support for underground openings to ensure safe repository construction, operation, and closure.
- (c) Potentially adverse conditions. (1) A host rock that is suitable for repository construction, operation, and clo-

- sure, but is so thin or laterally restricted that little flexibility is available for selecting the depth, configuration, or location of an underground facility.
- (2) In situ characteristics and conditions that could require engineering measures beyond reasonably available technology in the construction of the shafts and underground facility.
- (3) Geomechanical properties that could necessitate extensive maintenance of the underground openings during repository operation and closure.
- (4) Potential for such phenomena as thermally induced fracturing, the hydration and dehydration of mineral components, or other physical, chemical, or radiation-related phenomena that could lead to safety hazards or difficulty in retrieval during repository operation.
- (5) Existing faults, shear zones, pressurized brine pockets, dissolution effects, or other stratigraphic or structural features that could compromise the safety of repository personnel because of water inflow or construction problems.
- (d) Disqualifying condition. The site shall be disqualified if the rock characteristics are such that the activities associated with repository construction, operation, or closure are predicted to cause significant risk to the health and safety of personnel, taking into account mitigating measures that use reasonably available technology.

#### § 960.5-2-10 Hydrology.

- (a) Qualifying condition. The site shall be located such that the geohydrologic setting of the site will (1) be compatible with the activities required for repository construction, operation, and closure; (2) not compromise the intended functions of the shaft liners and seals; and (3) permit the requirements specified in §960.5–1(a)(3) to be met.
- (b) Favorable conditions. (1) Absence of aquifers between the host rock and the land surface.
- (2) Absence of surface-water systems that could potentially cause flooding of the repository.
- (3) Availability of the water required for repository construction, operation, and closure.

- (c) Potentially adverse condition. Ground-water conditions that could require complex engineering measures that are beyond reasonably available technology for repository construction, operation, and closure.
- (d) Disqualifying condition. A site shall be disqualified if, based on expected ground-water conditions, it is likely that engineering measures that are beyond reasonably available technology will be required for exploratory-shaft construction or for repository construction, operation, or closure.

#### § 960.5-2-11 Tectonics.

- (a) Qualifying Conditions. The site shall be located in a geologic setting in which any projected effects of expected tectonic phenomena or igneous activity on repository construction, operation, or closure will be such that the requirements specified in §960.5–1(a)(3) can be met.
- (b) Favorable Condition. The nature and rates of faulting, if any, within the geologic setting are such that the magnitude and intensity of the associated seismicity are significantly less than those generally allowable for the construction and operation of nuclear facilities.
- (c) Potentially Adverse Conditions. (1) Evidence of active faulting within the geologic setting.
- (2) Historical earthquakes or past man-induced seismicity that, if either were to recur, could produce ground motion at the site in excess of reasonable design limits.
- (3) Evidence, based on correlations of earthquakes with tectonic processes and features, (e.g., faults) within the geologic setting, that the magnitude of earthquakes at the site during repository construction, operation, and closure may be larger then predicted from historical seismicity.
- (d) Disqualifying Condition. A site shall be disqualified if, based on the expected nature and rates of fault movement or other ground motion, it is likely that engineering measures that are beyond reasonably available technology will be required for exploratory-shaft construction or for repository construction, operation, or closure.

APPENDIX I TO PART 960—NRC AND EPA REQUIREMENTS FOR POSTCLOSURE REPOSITORY PERFORMANCE

Under proposed 40 CFR part 191, subpart B—Environmental Standards for Disposal, §191.13, "Containment Requirements", specifies that for 10,000 years after disposal (a) releases of radioactive materials to the accessible environment that are estimated to have more than one chance in 100 of occurring over a 10,000 year period ("reasonably foreseeable releases") shall be projected to be less than the quantities permitted by Table 2 of that regulation's appendix; and (b) for "very unlikely releases" (i.e., those estimated to have between one chance in 100 and one chance in 10,000 of occurring over a 10,000 year period), the limits specified in Table 2 would be multiplied by 10. The basis for Table 2 is an upper limit on long term risks of 1,000 health effects over 10,000 years for a repository containing wastes generated from 100,000 metric tons of heavy metal of reactor fuel. For releases involving more than one radionuclide, the allowed release for each radionuclide is reduced to the fraction of its limit that insures that the overall limit on harm is not exceeded. Additionally, to provide confidence needed for compliance with the containment requirements specified above, §191.14, "Assurance Requirements" specifies the disposal of radioactive waste in accordance with seven requirements, relating to prompt disposal of waste; selection and design of disposal systems to keep releases to the accessible environment as small as reasonably achievable; engineered and natural barriers; nonreliance on active institutional controls after closure; passive controls after closure; natural resource areas: and design of disposal systems to allow future recovery of wastes.

The guidelines will be revised as necessary after the adoption of final regulations by the EPA.

The implementation of 40 CFR part 191. subpart B is required by 10 CFR 60.112. 10 CFR 60.113 establishes minimum conditions to be met for engineered components and ground-water flow: specifically: (1) Containment of radioactive waste within the waste packages will be substantially complete for a period to be determined by the NRC taking into account the factors specified in 10 CFR 60.113(b) provided that such period shall be not less than 300 years nor more than 1.000 years after permanent closure of the geologic repository: (2) the release rate of any radionuclide from the engineered barrier system following the containment period shall not exceed one part in 100,000 per year of the inventory of that radionuclide calculated to be present at 1,000 years following permanent closure, or such other fraction of the inventory as may be approved or specified by the NRC, provided that this requirement does

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not apply to any radionuclide which is released at a rate less than 0.1% of the calculated total release rate limit. The calculated total release rate limit shall be taken to be one part in 100,000 per year of the inventory of radioactive waste originally emplaced in the underground facility that remains after 1,000 years of radioactive decay; and (3) the geologic repository shall be located so that pre-waste-emplacement ground-water travel time along the fastest path of likely radionuclide travel from the disturbed zone to the accessible environment shall be at least 1,000 years or such other travel time as may be approved or specified by the NRC.

The guidelines will be revised as necessary to ensure consistency with 10 CFR part 60.

APPENDIX II TO PART 960—NRC AND EPA REQUIREMENTS FOR PRECLOSURE REPOSITORY PERFORMANCE

Under proposed 40 CFR part 191, subpart A—Environmental Standards for Management and Storage, Section 191.03, "Standards for Normal Operations", specifies: (1) That operations should be conducted so as to reduce exposure to members of the public to the extent reasonably achievable, taking into account technical, social, and economic considerations; and (2) that, except for variances permitted for unusual operations under Section 191.04 as an upper limit, normal operations shall be conducted in such a manner as to provide reasonable assurance that the combined annual dose equivalent to any member of the public due to: (i) operations covered by 40 CFR part 190, (ii) planned discharges of radioactive material to the general environment from operations covered by this subpart, and (iii) direct radiation from these operations; shall not exceed 25 millirems to the whole body, 75 millirems to the thyroid, or 25 millirems to any other organ.

The guidelines will be revised as necessary after the adoption of final regulations by the EPA.

The implementation of 40 CFR part 191, subpart A and 10 CFR part 20 is required by 10 CFR 60.111. 10 CFR 60.111 also specifies requirements for waste retrieval, if necessary, including considerations of design, backfilling, and schedule. 10 CFR part 20 establishes (a) exposure limits for operating personnel and (b) permissible concentrations of radionuclides in uncontrolled areas for air and water. The latter are generally less restrictive than 40 CFR 191, subpart A, but may be limiting under certain conditions (i.e., if used as a maximum for short durations rather than annual averages).

The guidelines will be revised as necessary to ensure consistency with 10 CFR part 60.

APPENDIX III TO PART 960—APPLICATION OF THE SYSTEM AND TECHNICAL GUIDELINES DURING THE SITING PROCESS

1. This appendix presents a table that specifies how the guidelines of subparts C and D are to be applied at the principal decision points of the siting process. The decision points, as referenced in the table, are defined as follows:

"Potentially acceptable" means the decision point at which a site is identified as potentially acceptable.

"Nomination and recommendation" means the decision point at which a site is nominated as suitable for characterization or recommended as a candidate site for characterization.

"Repository site selection" means the decision point at which a site is recommended for the development of a repository.

- 2. The findings resulting from the application of a disqualifying condition for any particular guideline at a given decision point are denoted in the table by the numeral 1 or 2. The numerals 1 and 2 signify the types of findings that are required and are defined as follows:
- "1" means either of the following:
- (a) The evidence does not support a finding that the site is disqualified.

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- (b) The evidence supports a finding that the site is disqualified.
  - "2" means either of the following:
- (a) The evidence supports a finding that the site is not disqualified on the basis of that evidence and is not likely to be disqualified

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- (b) The evidence supports a finding that the site is disqualified or is likely to be disqualified.
- 3. The findings resulting from the application of a qualifying condition for any particular guideline at a given decision point are denoted in the table by the numeral 3 or 4. The numerals 3 and 4 signify the types of findings that are required and are defined as follows:
  - "3" means either of the following:
- (a) The evidence does *not* support a finding that the site is *not* likely to meet the qualifying condition.

or

- (b) The evidence supports a finding that the site is *not* likely to meet the qualifying condition, and therefore the site is disqualified.
- "4" means either of the following:
- (a) The evidence supports a finding that the site meets the qualifying condition and is likely to continue to meet the qualifying condition.

or

- (b) The evidence supports a finding that the site cannot meet the qualifying condition or is unlikely to be able to meet the qualifying condition, and therefore the site is disqualified.
- 4.  $\overline{\text{If}}$  performance assessments are used to substantiate any of the above findings, those

assessments shall include estimates of the effects of uncertainties in data and modeling.

5. For both the disqualifying and qualifying conditions of any guideline, a higher finding (e.g., a "2" finding rather than "1") shall be made if there is sufficient evidence to support such a finding.

FINDINGS RESULTING FROM THE APPLICATION OF THE QUALIFYING AND DISQUALIFYING CONDITIONS OF THE TECHNICAL GUIDELINES AT MAJOR SITING DECISIONS

			Siting decision		
Section 960	Guideline	Condition	Poten- tially ac- ceptable	Nomina- tion and rec- ommen- dation	Reposi- tory site selection
4–1(a)	System	Qualifying		3	4
4–2–1(a)	Geohydrology	do		3	4
4–2–1(d)	do	Disqualifying		1	2
4–2–2(a)	Geochemistry	Qualifying		3	4
4-2-3(a)	Rock Characteristics	do		3	4
4-2-4(a)	Climatic Changes	do		3	4
4-2-5(a)	Erosion	do		3	4
4-2-5(d) 4-2-5(d)	do		1	1	2
4-2-6(a)	Dissolution	Disqualifying		3	4
		Qualifying	1	-	2
4-2-6(d)	do	Disqualifying		1	4
4–2–7(a)	Tectonics	Qualifying		3	
4–2–7(d)	do	Disqualifying	1	1	2
4-2-8-1(a)	Natural Resources	Qualifying		3	4
4-2-8-1(d)(1)	do	Disqualifying	1	1	2
4-2-8-1(d)(2)	do	do		1	2
4-2-8-2(a)	Site Ownership and Control	Qualifying		3	4
5–1(a)(1)	System	do		3	4
5-1(a)(2)	do	do		3	4
5-1(a)(3)	do	do		3	4
5-2-1(a)	Population Density and Distribution	do		3	4
5-2-1(d)(1)	do	Disqualifying	1	1	2
5-2-1(d)(2)	do	do	1	1	2
5-2-1(d)(3)	do	do		1	2
5-2-2(a)	Site Ownership and Control	Qualifying		3	4
5-2-3(a)	Meteorology	do		3	4
5–2–4(a)	Offsite Installations and Operations	do		3	4
5-2-4(d)	do	Disqualifying	1	1	2
5–2–5(a)	Environmental Quality	Qualifying		3	4
5-2-5(d)(1)	do	Disqualifying		1	2
5-2-5(d)(2)	do	do	1	1	2
5-2-5(d)(3)	do	do	1	1	2
5-2-6(a)	Socioeconomic Impacts	Qualifying	l	3	4
5-2-6(d)	do	Disqualifying		1	2
5-2-7(a)	Transportation	Qualifying		3	4
5-2-8(a)	Surface Characteristics	do		3	4
5-2-9(a)	Rock Characteristics	do		3	4
` '				1	2
5–2–9(d)	do	Disqualifying		3	4
5-2-10(a)	Hydrology	Qualifying			2
5–2–10(d)	do	Disqualifying		1	_
5–2–11(a)	Tectonics	Qualifying		3	4
5–2–11(d)	do	Disqualifying	1	1	2

APPENDIX IV TO PART 960—TYPES OF INFORMATION FOR THE NOMINATION OF SITES AS SUITABLE FOR CHARACTERIZATION

The types of information specified below are those that the DOE expects will be included in the evidence used for evaluations and applications of the guidelines of subparts

C and D at the time of nomination of a site as suitable for characterization. The types of information listed under each guideline are considered to be the most significant for the evaluation of that guideline. However, the types of information listed under any particular guideline will be used, as necessary, for the evaluation of any other guideline. As

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stated in §960.3–1–4–2, the DOE will use technically conservative assumptions or extrapolations of regional data, where necessary, to supplement this information. The information specified below will be supplemented with conceptual models, as appropriate, and analyses of uncertainties in the data.

Before site-characterization studies and related nongeologic data gathering activities, the evidence is not expected to provide precise information, but, rather, to provide a reasonable basis for assessing the merits or shortcomings of the site against the guidelines of subparts C and D. Consequently, the types of information described below should be interpreted so as to accommodate diferences among sites and differences in the information acquired before detailed studies.

The specific information required for the guideline applications set forth in appendix III of this part is expected to differ from site to site because of site-specific factors, both with regard to favorable and potentially adverse conditions and with regard to the sources and reliability of the information. The types of information specified in this appendix will be used except where the findings set forth in appendix III of this part can be arrived at by reasonable alternative means or the information is not required for the particular site.

## Section 960.4-2-1 Geohydrology.

Description of the geohydrologic setting of the site, in context with its geologic setting, in order to estimate the pre-waste-emplacement ground-water flow conditions. The types of information to support this description should include—

- Location and estimated hydraulic properties of aquifers, confining units, and aquitards.
- Potential areas and modes of recharge and discharge for aquifers.
- Regional potentiometric surfaces of aquifers.
- Likely flow paths from the repository to locations in the expected accessible environment, as based on regional data.
- Preliminary estimates of ground-water travel times along the likely flow paths from the repository to locations in the expected accessible environment.
- Current use of principal aquifers and State or local management plans for such use.

# Section 960.4-2-2 Geochemistry.

Description of the geochemical and hydrochemical conditions of the host rock, of the surrounding geohydrologic units, and along likely ground-water paths to locations in the expected accessible environment, in order to estimate the potential for the migration of radionuclides. The types of infor-

mation to support this description should include—

- Petrology of the rocks.
- Mineralogy of the rocks and general characteristics of fracture fillings.
- Geochemical and mechanical stability of the minerals under expected repository conditions.
- General characteristics of the groundwater chemistry (e.g., reducing/oxidizing conditions and the principal ions that may affect the waste package or radionuclide behavior).
- Geochemical properties of minerals as related to radionuclide transport.

#### Section 960.4-2-3 Rock characteristics.

Description of the geologic geomechanical characteristics of the site, in context with the geologic setting, in order to estimate the capability of the host rock and surrounding rock units to accommodate the thermal, mechanical, chemical, and radiation stresses expected to be induced by repository construction, operation, and closure and by expected interactions among the waste, host rock, ground-water, and engineered components of the repository system. The types of information to support this description should include-

- Approximate geology and stratigraphy of the site, including the depth, thickness, and lateral extent of the host rock and surrounding rock units.
- Approximate structural framework of the rock units and any major discontinuities identified from core samples.
- Approximate thermal, mechanical, and thermomechanical properties of the rocks, with consideration of the effects of time, stress, temperature, dimensional scale, and any major identified structural discontinuities.
- Estimates of the magnitude and direction of in situ stress and of temperature in the host rock and surrounding rock units.

# Section 960.4-2-4 Climatic changes.

Description of the climatic conditions of the site region, in context with global and regional patterns of climatic changes during the Quaternary Period, in order to project likely future changes in climate such that potential impacts on the repository can be estimated. The types of information to support this description should include—

- Expected climatic conditions and cycles, based on extrapolation of climates during the Quaternary Period.
- Geomorphology of the site region and evidence of changes due to climatic changes.
- Estimated effects of expected climatic cycles on the surface-water and the ground-water systems.

Section 960 4-2-5 Erosion

Description of the structure, stratigraphy, and geomorphology of the site, in context with the geologic setting, in order to estimate the depth of waste emplacement and the likelihood for erosional processes to uncover the waste in less than one million years. The types of information to support this description should include—

- Depth, thickness, and lateral extent of the host rock and the overlying rock units.
- Lithology of the stratigraphic units above the host rock.
- Nature and rates of geomorphic processes during the Quaternary Period.

Section 960.4-2-6 Dissolution.

Description of the stratigraphy, structure, hydrology, and geochemistry of the site, in context with the geologic setting, to delineate the approximate limits of subsurface rock dissolution, if any. This description should include such information as the following:

- The stratigraphy of the site, including rock units largely comprised of water-soluble minerals.
- The approximate extent and configuration of features indicative of dissolution within the geologic setting.

Section 960.4-2-7 Tectonics.

Description of the tectonic setting of the site, in context with its geologic setting, in order to project the tectonic stability of the site over the next 10,000 years and to identify tectonic features and processes that could be reasonably expected to have a potentially adverse effect on the performance of the repository. The types of information to support this description should include—

- The tectonic history and framework of the geologic setting and the site.
- Quaternary faults in the geologic setting, including their length, displacement, and any information regarding the age of latest movement.
- Active tectonic processes, such as uplift, diapirism, tilting, subsidence, faulting, and volcanism.
  - Estimate of the geothermal gradient.
- Estimate of the regional in situ stress field.
- $\bullet$  The historical seismicity of the geologic setting.

Section 960.4–2–8 Human interference.

Section 960.4–2–8–1 Natural resources.

Description of the mineral and energy resources of the site, in order to project whether past or future exploration and recovery could have a potentially adverse effect on the performance of the repository. The types of information to support this description should include—

- Known occurrences of energy and mineral resources, including ground water.
- Estimates of the present and projected value of these resources compared with resources contained in other areas of similar size in the geologic setting.
- Past and present drilling and mining operations in the vicinity of the site.

Section 960.4-2-8-2 Site ownership and control.

Description of the ownership of land for the geologic-repository operations area and the controlled area, in order to evaluate whether the DOE can obtain ownership of, and control access to, the site. The types of information to support this description should include—

· Present land ownership.

Section 960.5–2–1 Population density and distribution.

Description of the population density and distribution of the site region, in order to identify highly populated areas and the nearest 1 mile by 1 mile area having a population greater than 1,000 persons. The types of information to support this description should include—

• The most-recent U.S. census, including population composition, distribution, and density.

Section 960.5-2-2 Site ownership and control.

Description of current ownership of land, including surface and subsurface mineral and water rights, in order to evaluate whether the DOE can obtain control of land within the projected restricted area. The types of information to support this description should include—

• Present land ownership.

Section 960.5-2-3 Meteorology.

The meteorological setting, as determined from the closest recording station, in order to project meteorological conditions during repository operation and closure and their potential effects on the transport of airborne emissions. The types of information to support this description should include—

- Wind and atmospheric-dispersion characteristics
  - Precipitation characteristics.
  - Extreme weather phenomena.

Section 960.5–2–4 Offsite installations and operations.

Description of offsite installations and operations in the vicinity of the site in order to estimate their projected effects on repository construction, operation, or closure. The types of information to support this description should include—

• Location and nature of nearby industrial, transportation, and military installations

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and operations, including atomic energy defense activities.

Section 960.5-2-5 Environmental quality.

Description of environmental conditions in order to estimate potential impacts on public health and welfare and on environmental quality. The types of information to support this description should include—

- Applicable Federal, State, and local procedural and substantive environmental requirements.
- · Existing air quality and trends.
- Existing surface-water and ground-water quality and quantity.
- Existing land resources and uses.
- Existing terrestrial and aquatic vegetation and wildlife.
- Location of any identified critical habitats for threatened or endangered species.
- Existing aesthetic characteristics.
- Location of components of the National Park System, the National Wildlife Refuge System, the National Wild and Scenic Rivers System, the National Wilderness Preservation System, or National Forest Land.
- Location of significant State or regional protected resource areas, such as State parks, wildlife areas, or historical areas.
- Location of significant Native American resources such as major Indian religious sites, or other sites of unique cultural interest.

Section 960.5-2-6 Socioeconomic impacts.

Description of the socioeconomic conditions of the site, including population density and distribution, economics, community services and facilities, social conditions, and fiscal and government structure, in order to estimate the impacts that might result from site characterization and from the development of a repository at that site. The types of information to support this description should include—

- Population composition, density, and distribution.
- Economic base and economic activity, including major sectors of local economy.
- Employment distribution and trends by economic sector.
- Resource usage.
- Community services and infrastructure, including trends in use and current capacity utilization.
- Housing supply and demand.
- Life style and indicators of the quality of life.
- Existing social problems.
- Sources of, and trends in, local government expenditures and revenues.

Section 960.5–2–7 Transportation.

Description of the transportation facilities in the vicinity of the site in order to evaluate existing or required access routes or improvements. The types of information to support this description should include—

- Estimates of the overall cost and risk of transporting waste to the site.
- Description of the road and rail network between the site and the nearest Interstate highways and major rail lines; also, description of the waterway system, if any.
- Analyses of the adequacy of the existing regional transportation network to handle waste shipments; the movement of supplies for repository construction, operation, and closure; removal of nonradioactive waste from the site; and the transportation of the labor force.
- Improvements anticipated to be required in the transportation network and their feasibility, cost, and environmental impacts.
- Compatibility of the required transportation network improvements with the local and regional transportation and land-use plans.
- Analysis of weather impacts on transportation
- Analysis of emergency response requirements and capabilities related to transportation.

Section 960.5-2-8 Surface characteristics.

Description of the surface characteristics of the site, in order to evaluate whether repository construction, operation, and closure are feasible on the basis of site characteristics that influence those activities. The types of information to support this description should include—

- Topography of the site.
- Existing and planned surface bodies of water.
- Definition of areas of landslides and other potentially unstable slopes, poorly drained material, or materials of low bearing strength or of high liquefaction potential.

Section 960.5-2-9 Rock characteristics.

Description of the geologic and geomechanical characteristics of the site, in context with the geologic setting, in order to project the capability of the host rock and the surrounding rock units to provide the space required for the underground facility and safe underground openings during repository construction, operation, and closure. The types of information to support this description should include—

- Depth, thickness, and lateral extent of the host rock.
- Stratigraphic and structural features within the host rock and adjacent rock units.
- Thermal, mechanical, and thermomechanical properties and constructibility characteristics of the rocks, with consideration of the effects of time, stress, temperature, dimensional scale, and

any major identified structural discontinuities.

- $\bullet$  Fluid inclusions and gas content in the host rock.
- Estimates of the magnitude and direction of in situ stress and of temperature in the host rock.

Section 960.5-2-10 Hydrology.

Description of the hydrology of the site, in context with its geologic setting, in order to project compatibility with repository construction, operation, and closure. The types of information to support this description should include—

- Surface-water systems, including recharge and runoff characteristics, and potential for flooding of the repository.
- Nature and location of aquifers, confining units, and aquitards.
- Potentiometric surfaces of aquifers.
- Hydraulic properties of geohydrologic units.

Section 960.5-2-11 Tectonics.

Description of the tectonic setting of the site, in context with the regional setting, in order to estimate any expected effects of tectonic activity on repository construction, operation, or closure. The types of information to support this description should include—

- · Quaternary faults.
- Active tectonic processes.
- Preliminary estimates of expected ground motion caused by the maximum potential earthquake within the geologic setting.

# PART 961—STANDARD CONTRACT FOR DISPOSAL OF SPENT NU-CLEAR FUEL AND/OR HIGH-LEVEL RADIOACTIVE WASTE

#### Subpart A—General

Sec.

961.1 Purpose.

961.2 Applicability.

961.3 Definitions.

961.4 Deviations.

961.5 Federal agencies.

### Subpart B—Standard Contract for Disposal of Spent Nuclear Fuel and/or High-Level Radioactive Waste

961.11 Text of the contract.

AUTHORITY: Sec. 644, Pub. L. 95–91, 91 Stat. 599 (42 U.S.C. 7254) and sec. 302, Pub. L. 97–425, 96 Stat. 2257 (42 U.S.C. 10222).

SOURCE: 48 FR 16599, Apr. 18, 1983, unless otherwise noted.

# Subpart A—General

#### §961.1 Purpose.

This part establishes the contractual terms and conditions under which the Department of Energy (DOE) will make available nuclear waste disposal services to the owners and generators of spent nuclear fuel (SNF) and high-level radioactive waste (HLW) as provided in section 302 of the Nuclear Waste Policy Act of 1982 (Pub. L. 97-425). Under the contract set forth in §961.11 of this part, DOE will take title to, transport, and dispose of spent nuclear fuel and/or high-level radioactive waste delivered to DOE by those owners or generators of such fuel or waste who execute the contract. In addition, the contract will specify the fees owners and generators of SNF and/or HLW will pay for these services. All receipts, proceeds, and revenues realized by DOE under the contract will be deposited in the Nuclear Waste Fund, an account established by the Act in the U.S. Treasury. This fund will pay for DOE's radioactive waste disposal activities, the full costs of which will be borne by the owners and generators under contract with DOE for disposal services.

# § 961.2 Applicability.

This part applies to the Secretary of Energy or his designee and any person who owns or generates spent nuclear fuel or high-level radioactive waste, of domestic origin, generated in a civilian nuclear power reactor. If executed in a timely manner, the contract contained in this part will commit DOE to accept title to, transport, and dispose of such spent fuel and waste. In exchange for these services, the owners or generators of such fuel or waste shall pay fees specified in the contract which are intended to recover fully the costs of the disposal services to be furnished by DOE. The contract must be signed by June 30, 1983, or by the date on which such owner or generator commences generation of, or takes title to, such spent fuel or waste, whichever occurs later.

#### § 961.3 Definitions.

For purposes of this part—

### §961.4

Act means the Nuclear Waste Policy Act of 1982, Public Law 97–425, 96 Stat. 2201 et seq., 42 U.S.C. 10101 et seq.

Contract means the agreement set forth in §961.11 of this part and any duly executed amendment or modification thereto.

Generator means any person who is licensed by the Nuclear Regulatory Commission to use a utilization or production facility under the authority of section 103 or 104 of the Atomic Energy Act of 1954 (42 U.S.C. 2133, 2134).

Owner means any person who has title to spent nuclear fuel or high-level radioactive waste.

Purchaser means any person, other than a Federal agency, who is licensed by the Nuclear Regulatory Commission to use a utilization or production facility under the authority of sections 103 or 104 of the Atomic Energy Act of 1954 (42 U.S.C. 2133, 2134) or who has title to spent nuclear fuel or high level radioactive waste and who has executed a contract with DOE.

Secretary means the Secretary of Energy of his designee.

Other definitions relating to the subject matter of this rule are set forth in Article II of the contract which is contained in §961.11, Text of the contract, of this part.

## § 961.4 Deviations.

Requests for authority to deviate from this part shall be submitted in writing to the Contracting Officer, who shall forward the request for approval to the Senior Procurement Official, Headquarters. Each request for deviation shall contain the following information:

- (a) A statement of the deviation desired, including identification of the specific paragraph number(s) of the contract:
- (b) A description of the intended effect of the deviation;
- (c) The reason why the deviation is considered necessary or would be in the best interests of the Government;
- (d) The name of the owner or generator seeking the deviation and nuclear power reactor(s) affected;
- (e) A statement as to whether the deviation has been requested previously and, if so, circumstances of the previous request;

(f) A statement of the period of time for which the deviation is needed; and (g) Any pertinent background information will contribute to a full understanding of the desired deviation.

#### § 961.5 Federal agencies.

Federal agencies or departments requiring DOE's disposal services for SNF and/or HLW will be accommodated by a suitable interagency agreement reflecting, as appropriate, the terms and conditions set forth in the contract in §961.11; *Provided*, *however*, that the fees to be paid by Federal agencies will be equivalent to the fees that would be paid under the contract.

# Subpart B—Standard Contract for Disposal of Spent Nuclear Fuel and/or High-Level Radioactive Waste

### §961.11 Text of the contract.

The text of the standard contract for disposal of spent nuclear fuel and/or high/level radioactive waste follows:

U.S. DEPARTMENT OF ENERGY CONTRACT NO.

Contract for Disposal of Spent Nuclear Fuel and/or High-Level Radioactive Waste

THIS CONTRACT, entered into this \_\_ day of \_\_ 19 \_, by and between the UNITED STATES OF AMERICA (hereinafter referred to as the "Government"), represented by the UNITED STATES DEPARTMENT OF ENERGY (hereafter referred to as "DOE") and \_\_ , (hereinafter referred to as the "Purchaser"), a corporation organized and existing under the laws of the State of \_\_ [add as applicable: "acting on behalf of itself and \_\_\_."].

 $Witnesseth\ that:$ 

Whereas, the DOE has the responsibility for the disposal of spent nuclear fuel and high-level radioactive waste of domestic origin from civilian nuclear power reactors in order to protect the public health and safety, and the environment; and

Whereas, the DOE has the responsibility, following commencement of operation of a repository, to take title to the spent nuclear fuel or high-level radioactive waste involved as expeditiously as practicable upon the request of the generator or owner of such waste or spent nuclear fuel; and

Whereas, all costs associated with the preparation, transportation, and the disposal

of spent nuclear fuel and high-level radioactive waste from civilian nuclear power reactors shall be borne by the owners and generators of such fuel and waste; and

Whereas, the DOE is required to collect a full cost recovery fee from owners and generators delivering to the DOE such spent nuclear fuel and/or high level radioactive waste; and

Whereas, the DOE is authorized to enter into contracts for the permanent disposal of spent nuclear fuel and/or high-level radioactive waste of domestic origin in DOE facilities; and

Whereas, the Purchaser desires to obtain disposal services from DOE; and

Whereas, DOE is obligated and willing to provide such disposal services, under the terms and conditions hereinafter set forth; and

Whereas, this contract is made and entered into under the authority of the DOE Organization Act (Pub. L. 95-91, 42 U.S.C. 7101 et seq.) and the Nuclear Waste Policy Act of 1982 (Pub. L. 97-425, 42 U.S.C. 10101 et seq.)

Now, therefore, the parties hereto do hereby agree as follows:

#### ARTICLE I—DEFINITIONS

As used throughout this contract, the following terms shall have the meanings set forth below:

- 1. The term assigned three-month period means the period that each Purchaser will be assigned by DOE, giving due consideration to the Purchaser's assignment preference, for purposes of reporting kilowatt hours generated by the Purchaser's nuclear power reactor and for establishing fees due and payable to DOE.
- 2. The term *cask* means a container for shipping spent nuclear fuel and/or high-level radioactive waste which meets all applicable regulatory requirements.
- 3. The term civilian nuclear power reactor means a civilian nuclear powerplant required to be licensed under sections 103 or 104(b) of the Atomic Energy Act of 1954, as amended (42 U.S.C. 2133, 2134(b)).
- 4. The term *Commission* means the United states Nuclear Regulatory Commission.
- 5. The term *contract* means this agreement and any duly executed amendment or modification thereto.
- 6. The term Contracting Officer means the person executing this contract on behalf of the Government, and any other officer or civilian employee who is a properly disignated Contracting Officer of the DOE; and the term includes, except as otherwise provided in this contract, the authorized representative of a Contracting Officer acting within the limits of his authority.
- 7. The term *delivery* means the transfer of custody, f.o.b. carrier, of spent nuclear fuel or high-level radioactive waste from Purchaser to DOE at the Purchaser's civilian

nuclear power reactor or such other domestic site as may be designated by the Purchaser and approved by DOE.

- 8. The term disposal means the emplacement in a repository of high-level radioactive waste, spent nuclear fuel, or other highly radioactive waste with no foreseeable intent of recovery, whether or not such emplacement permits recovery of such waste.
- 9. The term *DOE* means the United States Department of Energy or any duly authorized representative thereof, including the Contracting Officer.
- 10. The term *DOE facility* means a facility operated by or on behalf of DOE for the purpose of disposing of spent nuclear fuel and/or high-level radioactive waste, or such other facility(ies) to which spent nuclear fuel and/or high-level radioactive waste may be shipped by DOE prior to its transportation to a disposal facility.
- 11. The term full cost recovery, means the recoupment by DOE, through Purchaser fees and any interest earned, of all direct costs, indirect costs, and all allocable overhead, consistent with generally accepted accounting principles consistently applied, of providing disposal services and conducting activities authorized by the Nuclear Waste Policy Act of 1982 (Pub. L. 97-425). As used herein, the term cost includes the application of Nuclear Waste Fund moneys for those uses expressly set forth in section 302 (d) and (e) of the said Act and all other uses specified in the Act.
- 12. The term high-level radioactive waste (HLW) means—
- (a) the highly radioactive material resulting from the reprocessing of spent nuclear fuel, including liquid waste produced directly in reprocessing and any solid material derived from such liquid waste that contains fission products in sufficient concentrations; and
- (b) other highly radioactive material that the Commission, consistent with existing law, determines by rule requires permanent isolation.
- 13. The term electricity (kilowatt hours) generated and sold means gross electrical output produced by a civilian nuclear power reactor measured at the output terminals of the turbine generator minus the normal onsite nuclear station service loads during the time electricity is being generated multiplied by the total energy adjustment factor. For purposes of this provision, the following definition shall apply:
- a. The term *Total Energy Adjustment Factor* (*TEAF*) means the sum of individual owners' weighted energy adjustment factors.
- b. The term Weighted Energy Adjustment Factor (WEAF) means the product of an owner's energy adjustment factor times the owner's share of the plant.
- c. The term Owner's Energy Adjustment Factor (OEAF) means the sum of the individual

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owner's adjustment for sales to ultimate consumers and adjustment for sales for resale.

- d. The term Owner's Share of the plant (OS) means the owner's fraction of metered electricity sales, the owner's fraction of plant ownership, or the sponsor company's fixed entitlement percentage of the plant's output. This definition includes joint owners of generating companies or participants in a generation and transmission cooperative.
- e. The term Adjustment for Sales to ultimate Consumer (ASC) means the owner's fraction of sales to the ultimate consumer multiplied by the owner's sales to ultimate consumer adjustment factor.
- f. The term Fraction of Sales to ultimate Consumer (FSC) means the owner's fractional quantity of electricity sold to the ultimate consumer relative to the total of electricity sales (sales to ultimate consumers plus the sales for resale).
- g. The term Sales to ultimate Consumer Adjustment Factor (SCAF) means one minus the quotient of all electricity lost or otherwise not sold for each owner divided by the total electricity available for disposition to ultimate consumers. Electricity lost or otherwise not sold includes:
  - (1) Energy furnished without charge;
  - (2) Energy used by the company;
  - (3) Transmission losses;
  - (4) Distribution losses; and
- (5) Other unaccounted losses as reported to the Federal Government "Annual Report of Major Electric Utilities, Licensees and Others," Federal Energy Regulatory Commission (FERC) Form No.1; Rural Electrification Administration (REA) Forms 7 and 11 if appropriate; or the "Annual Electric Utility Report," Energy Information Administration (EIA) Form EIA-861.
- h. The term Total Electricity Available for Disposition to Ultimate Consumers means the reporting year's total of all of a utility's electricity supply which is available for disposition, expressed in kilowatt hours, and is equal to the sum of the energy sources minus the electricity sold for resale by the utility.
- i. The term Adjustment for Sales for Resale (ASR) means the owner's fraction of sales for resale multiplied by the national average adjustment factor.
- j. The term *Fraction of Sales for Resale* (*FSR*) means the owner's fractional quantity of electricity sold for resale by the utility relative to the total of electricity sales.
- k. The term National Average Adjustment Factor (NAF) means the ratio of the national total of electricity sold to the national total of electricity available for disposition, based on the most recent 3 years of national data provided to the Federal Government, and will be set by the Contracting Officer. This term will be evaluated annually and revised in increments of .005.

1. Pumped storage losses. If the proportion of nuclear generated electricity consumed by a pumped-storage hydro facility can be measured or estimated and if the electricity losses associated with pumped storage facilities can be documented (e.g. based on routine and uniform records of district power data on contributions from different electricity sources), a prorated nuclear share shall be allowed as an offset to gross electricity generation reported on the annex A of appendix G, NWPA-830G form. Specific methodologies for calculating these offsets must be approved by the Contracting Officer in advance.

Instructions to annex A of appendix G, NWPA-830G provide the necessary information to calculate the energy adjustment factors.

- 14. The term *metric tons uranium* means that measure of weight, equivalent to 2,204.6 pounds of uranium and other fissile and fertile material that are loaded into a reactor core as fresh fuel.
- 15. The term *Purchaser's site* means the location of Purchaser's civilian nuclear power reactor or such other location as the Purchaser may designate.
- 16. The term quarterly Treasury rate means the current value of funds rate as specified by the Treasury Fiscal Requirements Manual, Volume 1, Part 6, section 8020.20. This rate is published quarterly in the FEDERAL REGISTER prior to the beginning of the affected quarter.
- 17. The term *shipping lot* means a specified quantity of spent nuclear fuel or high-level radioactive waste designated by Purchaser for delivery to DOE beginning on a specified data
- 18. The term spent nuclear fuel (SNF) means fuel that has been withdrawn from a nuclear reactor following irradiation, the consistituent elements of which have not been separated by reprocessing.
- 19. The term spent nuclear fuel and high-level radioactive waste of domestic origin means irradiated fuel material used, and radioactive wastes resulting from such use, in nuclear power reactors located only in the United States.
- 20. The term *year* means the period which begins on October 1 and ends on September

#### ARTICLE II—SCOPE

This contract applies to the delivery by Purchaser to DOE of SNF and/or HLW of domestic origin from civilian nuclear power reactors, acceptance of title by DOE to such SNF and/or HLW, subsequent transportation, and disposal of such SNF and/or HLW and, with respect to such material, establishes the fees to be paid by the Purchaser for the services to be rendered hereunder by DOE. The SNF and/or HLW shall be specified in a delivery commitment schedule as provided

in Article V below. The services to be provided by DOE under this contract shall begin, after commencement of facility operations, not later than January 31, 1998 and shall continue until such time as all SNF and/or HLW from the civilian nuclear power reactors specified in appendix A, annexed hereto and made a part hereof, has been disposed of.

#### ARTICLE III—TERM

The term of this contract shall be from the date of execution until such time as DOE has accepted, transported from the Purchaser's site(s) and disposed of all SNF and/or HLW of domestic origin from the civilian nuclear power reactor(s) specified in appendix A.

# ARTICLE IV—RESPONSIBILITIES OF THE PARTIES

#### A. Purchaser's Responsibilities

#### 1. Discharge Information.

- (a) On an annual basis, commencing October 1, 1983, the Purchaser shall provide DOE with information on actual discharges to date and projected discharges for the next ten (10) years in the form and content set forth in appendix B, annexed hereto and made a part hereof. The information to be provided will include estimates and projections and will not be Purchaser's firm commitment with respect to discharges or deliveries
- (b) No later than October 1, 1983, the Purchaser shall provide DOE with specific information on:
- (1) Total spent nuclear fuel inventory as of April 7, 1983;
- (2) Total number of fuel assemblies removed from the particular reactor core prior to 12:00 a.m. April 7, 1983 for which there are plans for reinsertion in the core, indicating the current planned dates for reinsertion in the core. Estimates of the burned and unburned portion of each individual assembly are to be provided.
- (c) In the event that the Purchaser fails to provide the annual forecast in the form and content required by DOE, DOE may, in its sole discretion, require a rescheduling of any delivery commitment schedule then in effect.

# 2. Preparation for Transportation.

(a) The Purchaser shall arrange for, and provide, all preparation, packaging, required inspections, and loading activities necessary for the transportation of SNF and/or HLW to the DOE facility. The Purchaser shall notify DOE of such activities sixty (60) days prior to the commencement of such activities. The preparatory activities by the Purchaser shall be made in accordance with all applicable laws and regulations relating to the Purchaser's responsibilities hereunder. DOE may designate a representative to observe the preparatory activities conducted by the Pur-

chaser at the Purchaser's site, and the Purchaser shall afford access to such representa-

- (b) Except as otherwise agreed to by DOE, the Purchaser shall advise DOE, in writing as specified in appendix F, annexed hereto and made a part hereof, as to the description of the material in each shipping lot sixty (60) days prior to scheduled DOE transportation of that shipping lot.
- (c) The Purchaser shall be responsible for incidental maintenance, protection and preservation of any and all shipping casks furnished to the Purchaser by DOE for the performance of this contract. The Purchaser shall be liable for any loss of or damage to such DOE-furnished property, and for expenses incidental to such loss or damage while such casks are in the possession and control of the Purchaser except as otherwise provided for hereunder. Routine cask maintenance, such as scheduled overhauls, shall not be the responsibility of the Purchaser.

#### B. DOE Responsibilities

- 1. DOE shall accept title to all SNF and/or HLW, of domestic origin, generated by the civilian nuclear power reactor(s) specified in appendix A, provide subsequent transportation for such material to the DOE facility, and dispose of such material in accordance with the terms of this contract.
- 2. DOE shall arrange for, and provide, a cask(s) and all necessary transportation of the SNF and/or HLW from the Purchaser's site to the DOE facility. Such cask(s) shall be furnished sufficiently in advance to accommodate scheduled deliveries. Such cask(s) shall be suitable for use at the Purchaser's site, meet applicable regulatory requirements, and be accompanied by pertinent information including, but not limited to, the following:
- (a) Written procedures for cask handling and loading, including specifications on Purchaser-furnished cannisters for containment of failed fuel:
- (b) Training for Purchaser's personnel in cask handling and loading, as may be necessary:
- (c) Technical information, special tools, equipment, lifting trunnions, spare parts and consumables needed to use and perform incidental maintenance on the cask(s): and
- (d) Sufficient documentation on the equipment supplied by DOE.
- 3. DOE may fulfill any of its obligations, or take any action, under this contract either directly or through contractors.
- 4. DOE shall annually provide to the Purchaser pertinent information on the waste disposal program including information on cost projections, project plans and progress reports.
- 5. (a) Beginning on April 1, 1991, DOE shall issue an annual acceptance priority ranking for receipt of SNF and/or HLW at the DOE

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repository. This priority ranking shall be based on the age of SNF and/or HLW as calculated from the date of discharge of such material from the civilian nuclear power reactor. The oldest fuel or waste will have the highest priority for acceptance, except as provided in paragraphs B and D of Article V and paragraph B.3 of Article VI hereof.

(b) Beginning not later than July 1, 1987, DOE shall issue an annual capacity report for planning purposes. This report shall set forth the projected annual receiving capacity for the DOE facility(ies) and the annual acceptance ranking relating to DOE contracts for the disposal of SNF and/or HLW including, to the extent available, capacity information for ten (10) years following the projected commencement of operation of the initial DOE facility.

#### ARTICLE V-DELIVERY OF SNF AND/OR HLW

### A. Description of SNF and HLW

The Purchaser shall deliver to DOE and DOE shall, as provided in this contract, accept the SNF and/or HLW which is described in accordance with Article VI.A. of this contract, for disposal thereof.

# B. Delivery Commitment Schedule

1. Delivery commitment schedule(s), in the form set forth in appendix C annexed hereto and made a part hereof, for delivery of SNF and/or HLW shall be furnished to DOE by Purchaser. After DOE has issued its proposed acceptance priority ranking, as described in paragraph B.5 of Article IV hereof, beginning January 1, 1992 the Purchaser shall submit to DOE the delivery commitment schedule(s) which shall identify all SNF and/or HLW the Purchaser wishes to deliver to DOE beginning sixty-three (63) months thereafter. DOE shall approve or disapprove such schedules within three (3) months after receipt. In the event of disapproval. DOE shall advise the Purchaser in writing of the reasons for such disapproval and request a revised schedule from the Purchaser, to be submitted to DOE within thirty (30) days after receipt of DOE's notice of disapproval.

2. DOE shall approve or disapprove such revised schedule(s) within sixty (60) days after receipt. In the event of disapproval, DOE shall advise the Purchaser in writing of the reasons for such disapproval and shall submit its proposed schedule(s). If these are not acceptable to the Purchaser, the parties shall promptly seek to negotiate mutually acceptable schedule(s). Purchaser shall have the right to adjust the quantities of SNF and/or HLW plus or minus (±) twenty percent (20%), and the delivery schedule up to two (2) months, until the submission of the final delivery schedule.

#### C. Final Delivery Schedule

Final delivery schedule(s), in the form set forth in appendix D, annexed hereto and made a part hereof, for delivery of SNF and/ or HLW covered by an approved delivery commitment schedule(s) shall be furnished to DOE by Purchaser. The Purchaser shall submit to DOE final delivery schedules not less than twelve (12) months prior to the delivery date specified therein. DOE shall approve or disapprove a final delivery schedule within forty-five (45) days after receipt. In the event of disapproval, DOE shall advise the Purchaser in writing of the reasons for such disapproval and shall request a revised schedule from the Purchaser, to be submitted to DOE within thirty (30) days after receipt of DOE's notice of disapproval. DOE shall approve or disapprove such revised schedule(s) within sixty (60) days after receipt. In the event of disapproval, DOE shall advise the Purchaser in writing of the reasons for such disapproval and shall submit its proposed schedule(s). If these are not acceptable to the Purchaser, the parties shall promptly seek to negotiate mutually acceptable schedule(s).

# D. Emergency Deliveries

Emergency deliveries of SNF and/or HLW may be accepted by DOE before the date provided in the delivery commitment schedule upon prior written approval by DOE.

#### E. Exchanges

Purchaser shall have the right to determine which SNF and/or HLW is delivered to DOE; provided, however, that Purchaser shall comply with the requirements of this contract. Purchaser shall have the right to exchange approved delivery commitment schedules with parties to other contracts with DOE for disposal of SNF and/or HLW; provided, however, that DOE shall, in advance, have the right to approve or disapprove, in its sole discretion, any such exchanges. Not less than six (6) months prior to the delivery date specified in the Purchaser's approved delivery commitment schedule, the Purchaser shall submit to DOE an exchange request, which states the priority rankings of both the Purchaser hereunder and any other Purchaser with whom the exchange of approved delivery commitment schedules is proposed. DOE shall approve or disapprove the proposed exchange within thirty (30) days after receipt. In the event of disapproval, DOE shall advise the Purchaser in writing of the reasons for such disapproval.

#### ARTICLE VI—CRITERIA FOR DISPOSAL

# A. General Requirements

#### 1. Criteria.

(a) Except as otherwise provided in this contract, DOE shall accept hereunder only

such SNF and/or HLW which meets the General Specifications for such fuel and waste as set forth in appendix E, annexed hereto and made a part hereof.

- (b) Purchaser shall accurately classify SNF and/or HLW prior to delivery in accordance with paragraphs B and D of appendix E.
  - 2. Procedures.
- (a) Purchaser shall provide to DOE a detailed description of the SNF and/or HLW to be delivered hereunder in the form and content as set forth in appendix F, annexed hereto and made a part hereof. Purchaser shall promptly advise DOE of nay changes in said SNF and/or HLW as soon as they become known to the purchaser.
- (b) DOE's obligation for disposing of SNF under this contract also extends to other than standard fuel; however, for any SNF which has been designated by the Purchaser as other than standard fuel, as that term is defined in appendix E, the Purchaser shall obtain delivery and procedure confirmation from DOE prior to delivery. DOE shall advise Purchaser within sixty (60) days after receipt of such confirmation request as to the technical feasibility of disposing of such fuel on the currently agreed to schedule and any schedule adjustment for such services.

#### B. Acceptance Procedures

### 1. Acceptance Priority Ranking.

Delivery commitment schedules for SNF and/or HLW may require the disposal or more material than the annual capacity of the DOE disposal facility (or facilities) can accommodate. The following acceptance priority ranking will be utilized:

- (a) Except as may be provided for in subparagraph (b) below and Article V.D. of this contract, acceptance priority shall be based upon the age of the SNF and/or HLW as calculated from the date of discharge of such material from the civilian nuclear power reactor. DOE will first accept from Purchaser the oldest SNF and/or HLW for disposal in the DOE facility, except as otherwise provided for in paragraphs B and D of Article V.
- (b) Notwithstanding the age of the SNF and/or HLW, priority may be accorded any SNF and/or HLW removed from a civilian nuclear power reactor that has reached the end of its useful life or has been shut down permanently for whatever reason.

# 2. Verification of SNF and/or HLW.

During cask loading and prior to acceptance by DOE for transportation to the DOE facility, the SNF and/or HLW description of the shipping lot shall be subject to verification by DOE. To the extent the SNF and/or HLW is consistent with the description submitted and approved, in accordance with appendices E and F, DOE agrees to accept such SNF and/or HLW for disposal when DOE has verified the SNF and/or HLW description, determined the material is properly loaded, packaged, marked, labeled and

ready for transportation, and has taken custody, as evidenced in writing, of the material at the Purchaser's site, f.o.b. carrier. A properly executed off-site radioactive shipment record describing cask contents must be prepared by the Purchaser along with a signed certification which states: "This is to certify that the above-named materials are properly described, classified, packaged, marked and labeled and are in proper condition for transfer according to the applicable regulations of the U. S. Department of Transportation."

3. Improperly described SNF and/or HLW.

- (a) Prior to Acceptance— If SNF and/or HLW is determined by DOE to be improperly described prior to acceptance by DOE at the Purchaser's site, DOE shall promptly notify the Purchaser in writing of such determination. DOE reserves the right, in its sole discretion, to refuse to accept such SNF and/or HLW has been properly described. The Purchaser shall not transfer such SNF and/or HLW to DOE unless DOE agrees to accept such SNF and/or HLW under such other arrangements as may be agreed to, in writing, by the parties.
- (b) After Acceptance— If subsequent to its acceptance DOE finds that such SNF and/or HLW is improperly described, DOE shall promptly notify the Purchaser, in writing, of such finding. In the event of such notification, Purchaser shall provide DOE with a proper designation within thirty (30) days. In the event of a failure by the Purchaser to provide such proper designation, DOE may hold in abeyance any and all deliveries scheduled hereunder.

# ARTICLE VII—TITLE

Title to all SNF and/or HLW accepted by DOE for disposal shall pass to DOE at the Purchaser's site as provided for in Article VI hereof. DOE shall be solely repsonsible for control of all material upon passage of title. DOE shall have the right to dispose as it sees fit of any SNF and/or HLW to which it has taken title. The Purchaser shall have no claim against DOE or the Government with respect to such SNF or HLW nor shall DOE or the Government be obligated to compensate the Purchaser for such material.

ARTICLE VIII—FEES AND TERMS OF PAYMENT

#### A. Fees

- 1. Effective April 7, 1983, Purchaser shall be charged a fee in the amount of 1.0 mill per kilowatt hour (1M/kWh) electricity generated and sold.
- 2. For SNF, or solidified high-level radioactive waste derived from SNF, which fuel was used to generate electricity in a civilian nuclear power reactor prior to April 7, 1983, a one-time fee will be assessed by applying industry-wide average dollar per kilogram charges to four (4) distinct ranges of fuel burnup so that the integrated cost across all

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discharged (i.e. spent) fuel is equivalent to an industry-wide average charge of 1.0 mill per kilowatt-hour. For purposes of this contract, discharged nuclear fuel is that fuel removed from the reactor core with no plans for reinsertion. In the event that any such fuel withdrawn with plans for reinsertion is not reinserted, then the applicable fee for such fuel shall be calculated as set forth in this paragraph 2. The categories of spent nuclear fuel burnup and the fee schedule are listed below:

[In 1982 dollars]

Nuclear spent fuel burnup range	Dollars per kilo- gram
0 to 5,000 MWDT/MTU	\$80.00 142.00 162.00 184.00

This fee shall not be subject to adjustment, and the payment thereof by the Purchaser shall be made to DOE as specified in paragraph B of this Article VIII.

3. For in-core fuel as of April 7, 1983, that portion of the fuel burned through April 6, 1983 shall be subject to the one-time fee as calculated in accordance with the following methodology: [a] determine the total weight in kilograms of unranium loaded initially in the particular core; [b] determine the total megawatt-days (thermal) which have been generated by all of the fuel assemblies in the said core as of 12:00 A.M. April 7, 1983; [c] divide the megawatt-days (thermal) generated in the said core by the total metric tons of initially loaded uranium in that core and multiply the quotient by the conversion factor 0.0078 to obtain a value in dollars per kilogram; and [d] multiply the dollars per kilogram value by the kilograms determined in [a] above to derive the dollar charge for the one-time fee to be paid for the specified in-core fuel as of 12:00 A.M. April 7, 1983. For purposes of this contract, in-core fuel is that fuel in the reactor core as of the date specified, plus any fuel removed from the reactor with plans for reinsertion. That portion of such fuel unburned as of 12:00 A.M. April 7, 1983 shall be subject to the 1.0 mill per kilowatt-hour charge.

4. DOE will annually review the adequacy of the fees and adjust the 1M/KWH fee, if necessary, in order to assure full cost recovery by the Government. Any proposed adjustment to the said fee will be transmitted to Congress and shall be effective after a period of ninety (90) days of continuous session has elapsed following receipt of such transmittal unless either House of Congress adopts a resolution disapproving the proposed adjustment. Any adjustment to the 1M/KWH fee under paragraph A.1. of this Article VIII shall be prospective.

B. Paument

1. For electricity generated and sold by the Purchaser's civilian nuclear power reactor(s) on or after April 7, 1983, fees shall be paid quarterly by the Purchaser and must be received by DOE not later than the close of the last business day of the month following the end of each assigned 3-month period. The first payment shall be due on July 31, 1983, for the period April 7, 1983, to June 30, 1983. (Add as applicable: A one-time adjustment period payment shall be due on .) The asthe period to signed 3-month period, for purposes of payment and reporting of electricity generated and sold shall begin

2. For SNF discharged prior to April 7, 1983, and for in-core burned fuel as of 12:00 A.M. April 7, 1983, the Purchaser shall, within two (2) years of contract execution, select one of the following fee payment options:

(a) Option 1— The Purchaser's financial obligation for said fuel shall be prorated evenly over forty (40) quarters and will consist of the fee plus interest on the outstanding fee balance. The interest from April 7, 1983, to date of the first payment is to be calculated based upon the 13-week Treasury bill rate, as reported on the first such issuance following April 7, 1983, and compounded quarterly thereafter by the 13-week Treasury bill rates as reported on the first such issuance of each succeeding assigned three-month period. Beginning with the first payment, interest is to be calculated on Purchaser's financial obligation plus accrued interest, at the ten-year Treasury note rate in effect on the date of the first payment. In no event shall the end of the forty (40) quarters extend beyond the first scheduled delivery date as reflected in the DOE-approved delivery commitment schedule. All payments shall be made concurrently with the assigned three month period payments. At any time prior to the end of the forty (40) quarters, Purchaser may, without penalty, make a full or partial lump sum payment at any of the assigned three month period payment dates. Subsequent quarterly payments will be appropriately reduced to reflect the reduction in the remaining balance in the fee due and payable. The remaining financial obligation, if any, will be subject to interest at the same ten-year Treasury note rate over the remainder of the ten year period.

(b) Option 2— The Purchaser's financial obligation shall be paid in the form of a single payment anytime prior to the first delivery, as reflected in the DOE approved delivery commitment schedule, and shall consist of the fee plus interest on the outstanding fee balance. Interest is to be calculated from April 7, 1983, to the date of the payment based upon the 13-week Treasury bill rate, as reported on the first such issuance following April 7, 1983, and compounded quarterly

thereafter by the 13-week Treasury bill rates as reported on the first such issuance of each succeeding assigned three-month period until payment.

(c) Option 3— The Purchaser's financial obligation shall be paid prior to June 30, 1985, or prior to two (2) years after contract execution, whichever comes later, in the form of a single payment and shall consist of all outstanding fees for SNF and in-core fuel burned prior to April 7, 1983. Under this option, no interest shall be due to DOE from April 7, 1983, to the date of full payment on the outstanding fee balance.

#### 3. Method of Payment:

- (a) Payments shall be made by wire transfer, in accordance with instructions specified by DOE in appendix G, annexed hereto and made a part hereof, and must be received within the time periods specified in paragraph B.1. of this Article VIII.
- (b) The Purchaser will complete a Standard Remittance Advice, as set forth in appendix G, for each assigned three month period payment, and mail it postmarked no later than the last business day of the month following each assigned three month period to Department of Energy, Office of Controller, Cash Management Division, Box 500, Room D-208, Germantown, Maryland 20874.
- 4. Any fees not paid on a timely basis or underpaid because of miscalculation will be subject to interest as specified in paragraph C of this Article VIII.

# C. Interest on Late Fees

- 1. DOE will notify the Purchaser of amounts due only when unpaid or underpaid by the dates specified in paragraph B above. Interest will be levied according to the following formula:
- Interest=Unpaid balance due to DOE for assigned three month period × Quarterly Treasury rate plus six percent (6%) × Number of months late including month of payment (fractions rounded up to whole months) ÷ 12
- 2. Interest is payable at any time prior to the due date for the subsequent assigned three month period fee payment. Non-payment by the end of the subsequent assigned three month period will result in compounding of interest due. Purchaser shall complete a Standard Remittance Advice of interest payments.
- Following the assessment of a late fee by DOE, payments will be applied against accrued interest first and the principal thereafter.

### D. Effect of Payment

Upon payment of all applicable fees, interest and penalties on upaid or underpaid amounts, the Purchaser shall have no further financial obligation to DOE for the disposal of the accepted SNF and/or HLW.

#### E. Audit.

- 1. The DOE or its representative shall have the right to perform any audits or inspections necessary to determine whether Purchaser is paying the correct amount under the fee schedule and interest provisions set forth in paragraphs A, B and C above.
- 2. Nothing in this contract shall be deemed to preclude an audit by the General Accounting Office of any transaction under this contract.
- 3. The Purchaser shall furnish DOE with such records, reports and data as may be necessary for the determination of quantities delivered hereunder and for final settlement of amounts due under this contract and shall retain and make available to DOE and its authorized representative examination at all reasonable times such records, reports and data for a period of three (3) years from the completion of delivery of all material under this contract.

#### ARTICLE IX—DELAYS

#### A. Unavoidable Delays by Purchaser or DOE

Neither the Government nor the Purchaser shall be liable under this contract for damages caused by failure to perform its obligations hereunder, if such failure arises out of causes beyond the control and without the fault or negligence of the party failing to perform. In the event circumstances beyond the reasonable control of the Purchaser or DOE-such as acts of God, or of the public enemy, acts of Government in either its sovereign or contractual capacity, fires, floods, epidemics, quarantine restrictions, strikes, freight embargoes and unusually severe weather—cause delay in scheduled delivery, acceptance or transport of SNF and/or HLW, the party experiencing the delay will notify the other party as soon as possible after such delay is ascertained and the parties will readjust their schedules, as appropriate, to accommodate such delay.

### B. Avoidable Delays by Purchaser or DOE

In the event of any delay in the delivery, acceptance or transport of SNF and/or HLW to or by DOE caused by circumstances within the reasonable control of either the Purchaser or DOE or their respective contractors or suppliers, the charges and schedules specified by this contract will be equitably adjusted to reflect any estimated additional costs incurred by the party not responsible for or contributing to the delay.

### ARTICLE X—SUSPENSION

A. In addition to any other rights DOE may have hereunder, DOE reserves the right, at no cost to the Government, to suspend this contract or any portion thereof upon

written notice to the Purchaser within nine-ty (90) days of the Purchaser's failure to perform its obligations hereunder, and the Purchaser's failure to take corrective action within thirty (30) days after written notice of such failure to perform as provided above, unless such failure shall arise from causes beyond the control and without the fault or negligence of the Purchaser, its contractors or agents. However, the Purchaser's obligation to pay fees required hereunder shall continue unaffected by any suspension. Any such suspension shall be rescinded if and when DOE determines that Purchaser has completed corrective action.

B. The DOE reserves the right to suspend any scheduled deliveries in the event that a national emergency requires that priority be given to Government programs to the exclusion of the work under this contract. In the event of such a suspension by the Government, the DOE shall refund that portion of payments representing services not delivered as determined by the Contracting Officer to be an equitable adjustment. Any disagreement arising from the refund payment, if any, shall be resolved as provided in the clause of this contract, entitled "DIS-PUTES."

#### ARTICLE XI—REMEDIES

Nothing in this contract shall be construed to preclude either party from asserting its rights and remedies under the contract or at law.

#### ARTICLE XII—NOTICES

All notices and communications between the parties under this contract (except notices published in the FEDERAL REGISTER) shall be in writing and shall be sent to the following addressees:


However, the parties may change the addresses or addresses for such notices or communications without formal modification to this contract; provided, however, that notice of such changes shall be given by registered mail

# ARTICLE XIII—REPRESENTATION CONCERNING NUCLEAR HAZARDS INDEMNITY

A. DOE represents that it will include in its contract(s) for the operation of any DOE facility an indemnity agreement based upon Section 170(d) of the Atomic Energy Act of 1954, as amended, a copy of which agreement shall be furnished to the Purchaser; that under said agreement, DOE shall have agreed to indemnify the contractor and other persons indemnified against claims for public li-

ability (as defined in said Act) arising out of or in connection with contractual activities; that the indemnity shall apply to covered nuclear incidents which (1) take place at a contract location; or (2) arise out of or in the course of transportation of source, special nuclear or by-product material to or from a contract location. The obligation of DOE to indemnify shall be subject to the conditions stated in the indemnity agreement.

B. The provisions of this Article XIII shall continue beyond the term of this contract.

#### ARTICLE XIV-ASSIGNMENT

The rights and duties of the Purchaser may be assignable with transfer of title to the SNF and/or HLW involved; provided, however, that notice of any such transfer shall be made to DOE within ninety (90) days of transfer.

#### ARTICLE XV—AMENDMENTS

The provisions of this contract has been developed in the light of uncertainties necessarily attendant upon long-term contracts. Accordingly, at the request of either DOE or Purchaser, the parties will negotiate and, to the extent mutually agreed, amend this contract as the parties may deem to be necessary or proper to reflect their respective interests; provided, however, that any such amendment shall be consistent with the DOE final rule published in the FEDERAL REGISTER on April 18, 1983 entitled, "Standard Contract for Disposal or SNF and/or HLW", as the same may be amended from time to

#### ARTICLE XVI—DISPUTES

A. Except as otherwise provided in this contract, any dispute concerning a question of fact arising under this contract which is not disposed of by agreement shall be decided by the Contracting Officer, who shall reduce his decision to writing and mail or otherwise furnish a copy thereof to the Purchaser. The decision of the Contracting Officer shall be final and conclusive unless within ninety (90) days from the date of receipt of such copy, the Purchaser mails or otherwise furnishes to the Contracting Officer a written appeal addressed to the DOE Board of Contract Appeals (Board). The decision of the Board shall be final and conclusive unless determined by a court of competent jursidiction to have been fraudulent, or capricious, or arbitrary, or so grossly erroneous as necessarily to imply bad faith or not supported by substantial evidence. In connection with any appeal proceeding under this clause, the Purchaser shall proceed diligently with the performance of the contract and in accordance with the Contracting Officer's decision.

B. For Purchaser claims of more than \$50,000, the Purchaser shall submit with the

claim a certification that the claim is made in good faith; the supporting data are accurate and complete to the best of the Purchaser's knowledge and belief; and the amount requested accurately reflects the contract adjustment for which the Purchaser believes the Government is liable. The certification shall be executed by the Purchaser is not an individual. When the Purchaser is not an individual, the certification shall be executed by a senior company official in charge at the Purchaser's plant or location involved, or by an officer or general partner of the Purchaser having overall responsibility for the conduct of the Purchaser's affairs.

- C. For Purchaser claims of \$50,000 or less, the Contracting Officer must render a decision within sixty (60) days. For Purchaser claims in excess of \$50,000, the Contracting Officer must decide the claim within sixty (60) days or notify the Purchaser of the date when the decision will be made.
- D. This "Disputes" clause does not preclude consideration of law questions in connection with decisions provided for in paragraph A above; provided, however, that nothing in this contract shall be construed as making final the decision of any administrative official, representative, or board on a question of law.

#### ARTICLE XVII—OFFICIALS NOT TO BENEFIT

No member of or delegate to Congress or resident commissioner shall be admitted to any share or part of this contract, or to any benefit that may arise therefrom, but this provision shall not be construed to extend to this contract if made with a corporation for its general benefit.

#### ARTICLE XVIII—COVENANT AGAINST CONTINGENT FEES

The Purchaser warrants that no person or selling agency has been employed or retained to solicit or secure this contract upon an agreement or understanding for a commission, percentage, brokerage, or contingent fee, excepting bona fide employees or bona fide established commercial or selling agencies maintained by the Purchaser for the purpose of securing business. For breach or violation of this warranty, the Government shall have the right to annul this contract without liability or in its discretion to increase the contract price or consideration, or otherwise recover, the full amount of such commission, brokerage, or contingent fee.

#### ARTICLE XIX—EXAMINATION OF RECORDS

The Purchaser agrees that the Comptroller General of the United States or any of his duly authorized representatives shall have access to and the right to examine any directly pertinent books, documents, papers and records of the Purchaser involving transactions related to this contract until the ex-

piration of three years after final payment under this contract.

#### ARTICLE XX—PERMITS

The Government and the Purchaser shall procure all necessary permits or licenses (including any special nuclear material licenses) and comply with all applicable laws and regulations of the United States, States and municipalities necessary to execute their respective responsibilities and obligations under this contract.

ARTICLE XXI—RIGHTS IN TECHNICAL DATA

#### A. Definitions.

- 1. Technical data means recorded information regardless of form or characteristic, of a specific or technical nature. It may, for example, document research, experimental, developmental, or demonstration, or engineering work, or be usable or used to define a design or process, or to procure, produce, support, maintain or operate material. The data may be graphic or pictorial delineations in media such as drawings or photographs, text in specifications or related performance or design-type documents or computer software (including computer programs, computer software data bases, and computer software documentation). Examples of technical data include research and engineering data, engineering drawings and associated lists, specifications, standards, process sheets, manuals, technical reports, catalog item identification, and related information. Technical data as used herein do not include financial reports, cost analyses, and other information incidental to contract administration.
- 2. Proprietary data means technical data which embody trade secrets developed at private expense, such as design procedures or techniques, chemical composition of materials, or manufacturing methods, processes, or treatments, including minor modifications thereof, provided that such data:
- (a) Are not generally known or available from other sources without obligation concerning their confidentiality;
- (b) Have not been made available by the owner to others without obligation concerning its confidentiality; and
- (c) Are not already available to the Government without obligation concerning their confidentiality.
- 3. Contract data means technical data first produced in the performance of the contract, technical data which are specified to be delivered under the contract, or technical data actually delivered in connection with the contract.
- 4. Unlimited rights means rights to use, duplicate, or disclose technical data, in whole or in part, in any manner and for any purpose whatsoever, and to permit others to do so

#### B. Allocation of Rights.

- 1. The Government shall have:
- (a) Unlimited rights in contract data except as otherwise provided below with respect to proprietary data properly marked as authorized by this clause;
- (b) The right to remove, cancel, correct or ignore any marking not authorized by the terms of this contract on any technical data furnished hereunder, if in response to a written inquiry by DOE concerning the proprietary nature of the markings, the Purchaser fails to respond thereto within 60 days or fails to substantiate the proprietary nature of the markings. In either case, DOE will notify the Purchaser of the action taken;
- (c) No rights under this contract in any technical data which are not contract data.
- 2. Subject to the foregoing provisions of this rights in technical data clause, the Purchaser shall have the right to mark proprietary data it furnishes under the contract with the following legend and no other, the terms of which shall be binding on the Government:

#### LIMITED RIGHTS LEGEND

This "proprietary data," furnished under "Contract No. \_\_\_" with the U.S. Department of Energy may be duplicated and used by the Government with the express limitations that the "proprietary data" may not be disclosed outside the Government or be used for purposes of manufacture without prior permission of the Purchaser, except that further disclosure or use may be made solely for the following purposes:

- (a) This "proprietary data" may be disclosed for evaluation purposes under the restriction that the "proprietary data" be retained in confidence and not be further disclosed;
- (b) This "proprietary data" may be disclosed to contractors participating in the Government's program of which this contract is a part, for information or use in connection with the work performed under their contracts and under the restriction that the "proprietary data" be retained in confidence and not be further disclosed; or
- (c) This "proprietary data" may be used by the Government or others on its behalf for emergency work under the restriction that the "proprietary data" be retained in confidence and not be further disclosed. This legend shall be marked on any reproduction of this data in whole or in part.
- 3. In the event that proprietary data of a third party, with respect to which the Purchaser is subject to restrictions on use or disclosure, is furnished with the Limited Rights Legend above, Purchaser shall secure the agreement of such third party to the rights of the Government as set forth in the Limited Rights Legend. DOE shall upon re-

quest furnish the names of those contractors to which proprietary data has been disclosed.

#### ARTICLE XXII—ENTIRE CONTRACT

A. This contract, which consists of Articles I through XXII and appendices A through G, annexed hereto and made a part hereof, contains the entire agreement between the parties with respect to the subject matter hereof. Any representation, promise, or condition not incorporated in this contract shall not be binding on either party. No course of dealing or usage of trade or course of performance shall be relevant to explain or supplement any provision contained in this contract.

B. Nothing in this contract is intended to affect in any way the contractual obligation of any other persons with whom the Purchaser may have contracted with respect to assuming some or all disposal costs or to accept title to SNF and/or HLW.

#### C. Appendices

- A. Nuclear Power Reactor(s) or Other Facilities Covered
- B. Discharge Information (Ten Year; Annual)
- C. Delivery Commitment Schedule
- D. Final Delivery Schedule
- E. General Specifications

United States of America

By:

- F. Detailed Description of Purchaser's Fuel
- G. Standard Remittance Advice For Payment of Fees

In witness whereof, the parties hereto have executed this contract as of the day and year first above written.

United States Department of Energy

(Contracting Officer)
Witnesses as to Execution on Behalf of Purchaser
(Name)
(Address)
(Name)
(Address)
(Purchaser's Company Name)
By:
Title:

I, (Name), certify that I am the (Title) of the corporation named as Purchaser herein; that (Name) who signed this document on behalf of the Purchaser was then (Title) of said corporation; that said document was duly signed for and on behalf of said corporation by authority of its governing body and is within the scope of its corporate powers.

In Witr	ness Wher	eof, I	have	here	unto	af-
fixed my	hand and	the se	eal of	said	corpo	ra-
tion this	day of	f, :	1983			
(Cornor	ate Seal)					

(Signature) \_

APPENDIX A				Signatue								
Nuclear Power Reactor(s) or Othe	r Fac	ilities	7	Title Date APPENDIX B								
Covered	i ruc	ııııcs	I									
Purchaser												
Contract Number/Date/			_	Ten Year Discharge Forecast								
Reactor/Facility Name												
Location:				To k	e use	d for	DOE :	plann	ing pu	irpose	es only	
Street	a	and de	oes n	ot rep	reser	nt a f	ïrm c	omm	itment			
City	1:	_ by Purchaser. _ Purchaser										
County/State/												
Zip CodeCapacity (MWE) _Gross												
Reactor Type:						cility	Name	•				
BWR 🗆				Locat								
PWR 🗆				Street City								
Other (Identify)			_			t.e	/					
Facility Description				Zip Co								
Date of Commencement of Opera (actual or estimated)	61011 _			_	BWR							
NRC License #:			-		PWR [							
By Purchaser:			_ (		(Iden	_						
-											T 40	
	1	2	3	4	5	6	7	8	9	10	10 yr total	
Discharge date—mo/yr (or refueling shut												
down date)												
Metric tons:												
—initial												
—discharged Number of assemblies discharged (per												
cycle)												
By Purchaser:							APPEI	NDIX (				
Signature										_		
Title					Del	ivery (	Comm	itment	t Sche	dule		
Date				This	deli	very	comm	itmei	nt sch	nedule	e shall	
APPENDIX B (ENCLOSURE				e sub	mitte	ed by	Purc	haser	to Do	OE as	speci-	
APPENDIX B (ENCLOSURE	51)							this c	ontra	ct.		
Actual Discharges					aser							
Purchaser			(	Contra	act Ni	ımbeı	/Date					
Contract Number/Date			1			зииу	name	•				
Reactor/Facility Name			_ 1	Locat								
Location:			_ `	itv	·							
Street			à	Count	v/Sta	t.e						
City					ode							
County/State			7	rvpe (	Cask 1	Requi	red:					
Zip Code			_ 5	Shippi	ing Lo	ot Nui	nber					
Type:			(		ned b							
$\mathrm{BWR}\;\square$			I	Propo	sed Sl	nippin	g Mo	de:				
PWR					ck 🗆							
Other (Identify)			_									
Refueling Shutdown Date	1			Barg	ge 🗆			~				
Metric Tons Uranium (Initial/Dis	cnarg	(ea);									Date _	
Initial Discharged				_	01 D	ıscnaı	ge D	ate(s)	(Earl	iest t	o Lat-	
Number of Assemblies Discharge	4.			est) Mo	Do		Vn	to	Мо	т	Day	
Any false, fictitious or fraud		state		r Tr	_ Da,	у	11	00	MO_		Jay	
ment may be punishable by fine					Tons	s Urar	iiim.					
ment (U.S. Code, Title 18, Section				Initia		JOIAI	ulli.					
By Purchaser:		, .			arged	)						
Signature					er of			:				
Title												
Date												

Other

BWR PWR

Other

Mo

#### DOE, the Purchaser shall furnish herewith to DOE suitable proof of ownership of the SNF and/or HLW to be delivered hereunder. The Purchaser shall notify DOE in writing at the earliest practicable date of any change in said ownership. Any false, fictitious or fraudulent statement may be punishable by fine or imprisonment (U.S. Code, Title 18, Section 1001). By Purchaser: Signature Title. Date Approved by DOE: Technical Representative Title Date Contracting Officer Date APPENDIX D Final Delivery Schedule (To be submitted to DOE by Purchaser for each designated Purchaser Delivery site not later than twelve (12) months prior to estimated date of first delivery) Purchaser: Contract Number/Date Reactor/Facility Name Location: Street City County/State Zip Code Type(s) cask(s) required: No. Assembilies per cask Shipping Lot Number Shipping Mode: (Assigned by DOE) Truck Rail. Barge Metric Tons Uranium: (Initial) (Discharged) Range of Discharge Date(s) (Earliest to Lat-(From approved commitment schedule) Mo Day\_\_\_ Yr\_\_ to Mo\_\_ Day $\mathbf{Yr}$ Number of Assemblies:

Unless otherwise agreed to in writing by

Unless otherwise agreed to in writing by DOE, the Purchaser shall furnish herewith to DOE suitable proof of ownership of the SNF and/or HLW to be delivered hereunder. The Purchaser shall notify DOE in writing at the earliest practicable date of any change in said ownership.

last Mo

Purchaser's Delivery First Estimate

 ${
m Yr}$ 

Day\_\_\_

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To	confirm	acceptability	of	delivery
date(s	):			
Purch	aser Conta	act		
Phone	,			
Title				
DOE C	Contact			
Phone	,			
Title				
		etitious or frau	dule	nt state-
ment	may be pu	nishable by fine	e or	imprison-
ment	(U.S. Code	e, Title 18, Section	on 10	001).
	rchaser:			
Signa	ture			
Title				
Date				
Appro	ved by DO	E:		
Techn	ical Repre	esentative		
Title				
Date				
Contra	acting Off	icer		

#### APPENDIX E

### General Specifications

#### $A.\ Fuel\ Category\ Identification$

- 1. Categories—Purchaser shall use reasonable efforts, utilizing technology equivalent to and consistent with the commercial practice, to properly classify Spent Nuclear Fuel (SNF) prior to delivery to DOE, as follows:
- a. Standard Fuel means SNF that meets all the General Specifications therefor set forth in paragraph B below.
- b. Nonstandard Fuel means SNF that does not meet one or more of the General Specifications set forth in subparagraphs 1 through 5 of paragraph B below, and which is classified as Nonstandard Fuel Classes NS-1 through NS-5, pursuant to paragraph B below.
- c. Failed Fuel means SNF that meets the specifications set forth in subparagraphs 1 through 3 of paragraph B below, and which is classified as Failed Fuel Class F-1 through F-3 pursuant to subparagraph 6 of paragraph B below
- d. Fuel may have "Failed Fuel" and/or several "Nonstandard Fuel" classifications
  - B. Fuel Description and Subclassification— General Specifications
- 1. Maximum Nominal Physical Dimensions.

	Boiling water reac- tor (BWR)	Pressurized water reactor (PWR)
Overall Length Active Fuel Length Cross Section 1	14 feet, 11 inches 12 feet, 6 inches 6 inches × 6 inches.	14 feet, 10 inches. 12 feet, 0 inches. 9 inches × 9 inches.

<sup>&</sup>lt;sup>1</sup>The cross section of the fuel assembly shall not include the channel.

NOTE: Fuel that does not meet these specifications shall be classified as Nonstandard Fuel—Class NS-1.

2. Nonfuel Components. Nonfuel components including, but not limited to, control spiders, burnable poison rod assemblies, control rod elements, thimble plugs, fission chambers, and primary and secondary neutron sources, that are contained within the fuel assembly, or BWR channels that are an integral part of the fuel assembly, which do not require special handling, may be included as part of the spent nuclear fuel delivered for disposal pursuant to this contract.

NOTE: Fuel that does not meet these specifications shall be classified as Nonstandard Fuel—Class NS-2.

3. Cooling. The minimum cooling time for fuel is five (5) years.

NOTE: Fuel that does not meet this specification shall be classified as Nonstandard Fuel—Class NS-3.

- 4. Non-LWR Fuel. Fuel from other than LWR power facilities shall be classified as Nonstandard Fuel—Class NS-4. Such fuel may be unique and require special handling, storage, and disposal facilities.
- 5. Consolidated Fuel Rods. Fuel which has been disassembled and stored with the fuel rods in a consolidated manner shall be classified as Nonstandard Fuel Class NS-5.
  - 6. Failed Fuel.
  - a. Visual Inspection.

Assemblies shall be visually inspected for evidence of structural deformity or damage to cladding or spacers which may require special handling. Assemblies which [i] are structurally deformed or have damaged cladding to the extent that special handling may be required or [ii] for any reason cannot be handled with normal fuel handling equipment shall be classified as Failed Fuel—Class F-1.

b. Previously Encapsulated Assemblies.

Assemblies encapsulated by Purchaser prior to classification hereunder shall be classified as Failed Fuel—Class F-3. Purchaser shall advise DOE of the reason for the prior encapsulation of assemblies in sufficient detail so that DOE may plan for appropriate subsequent handling.

c. Regulatory Requirements.

Spent fuel assemblies shall be packaged and placed in casks so that all applicable regulatory requirements are met.

#### C. Summary of Fuel Classifications

- 1. Standard Fuel:
- a. Class S-1: PWR
- b. Class S-2: BWR
- 2. Nonstandard Fuel:
- a. Class NS-1: Physical Dimensions
- b. Class NS-2: Non Fuel Components
- c. Class NS-3: Short Cooled
- d. Class NS–4: Non-LWR
- e. Class NS-5: Consolidated Fuel Rods.
- 3. Failed Fuel:
- a. Class F–1: Visual Failure or Damage

- b. Class F-2: Radioactive "Leakage"
- c. Class F-3: Encapsulated

#### D. High-Level Radioactive Waste

The DOE shall accept high-level radioactive waste. Detailed acceptance criteria and general specifications for such waste will be issued by the DOE no later than the date on which DOE submits its license application to the Nuclear Regulatory Commission for the first disposal facility.

#### APPENDIX F

Detailed Description of Purchaser's Fuel

This information shall be provided by Purchaser for each distinct fuel type within a Shipping Lot not later than sixty (60) days prior to the schedule transportation date.

Purchaser
Contract Number/Date /
Reactor/Facility Name
I. Drawings included in generic dossier:
1. Fuel Assembly DWG#
2. Upper & Lower end fittings DWG#
Dossier Number:
DOE Shipping Lot #:
# Assemblies Described:
BWR
PWR
Other
II. Design Material Descriptions.
Fuel Element:
1. Element type (rod, plate, etc.)
2. Total length) /(in.)
3. Active length (in.)

Assembly Description:

1. Number of Elements \_\_\_\_\_ (cross 2. Overall dimensions (length \_\_\_\_ (cross

4. Cladding material (Zr, s.s., etc.)

- section) \_\_\_\_ (in.)
  3. Overall weight
- III. Describe any distortions, cladding damage or other damage to the spent fuel, or nonfuel components within this Shipping Lot which will require special handling procedures. (Attach additional pages if needed.)

IV. Assembly Number Shipping Lot #	,	-			
	Irrad	iation	history	cycle	No.
	1	2	3	4	5
Startup date (mo/day/yr)					
<ol> <li>Shutdown date (mo/day/yr)</li> <li>Cumulative fuel exposure</li> </ol>					
(mwd/mtu)					

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	Irradiation history cycle No.					
	1	2	3		4	5
5. Total heat output/assembly calculational method:	in watts, as of D		ng an	n ap	ppro	ved

Any false, fictitious or fradulent statement may be punishable by fine or imprisonment (U.S. Code, Title 18, Section 1001).

By Purchaser:

• GPO: 193-122

WPA-830G	<b>U.S</b> . I	DEPARTMENT ( Germantown, MD 2				OMB No.: 1901- Expires: 11/3
fection of information is estimated to everage 40	Appendix G - Standard  authorities vested in the U.S. Department of Energy  to Depote of 5 Spent Nuclear Fuel andor High Level  nous aper response, including the time for referency  shreate or any other sepect of this collection of inform  or of Internation and Regulatory Affairs, Office of Mer	Remittance Ac under Public Law 97-425. Let Redioactive Wester. For Intern Instructions, searchage states	VICE FOT P  a filing, failure to file sation concerning our g data sources, gath a reducing this burde	or to otherwise comply with to infidentiality of information se- tering and maintaining the de-	the instructions provid e Item 6 of the instruc its needed, and comp	tions. Public reporting burden leting and reviewing the colle
1.0 IDENTIFICATION INFO				andard Contract Ide	entification Nu	mber:
(a) Name						
(b) Address				riod Covered by th		
	ode		(a)	From	vDay/Year)	(Month/Day/Year)
1.2 Contact Person			(h)	) Date of this Payr		
(a) Name (b) Telephone (Includ	e Area Code)			,		(Month/Day/Year)
2.0 SPENT NUCLEAR FU	EL (SNF) FEE					
2.1 Number of Reactors C	overed					
2.2 Total Purchaser Obliga	ation as of April 7, 1983 \$		2.6 Op	otion Chosen		
2.3 Date of First Payment:	Month Day	Year	2.7 Fe			
		1		) Principal		
	m			) Interest ) Total Spent Nuc	loor Fuel Fee	
2.4 10-Year Treasury Note	Hate as of the Date of		%	Transmitted with		
2.5 Unpaid Balance Prior t			<del></del>	\$	•	
	overedated and Sold (Megawatt hours)		3.4 To	otal Fee for Electric M/kWh) Transmitt	ed with this Pa	
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3.1 Number of Reactors C 3.2 Total Electricity Gener (Sum of Line 4.2 from 3.3 Current Fee Rate 4.0 UNDERPAYMENT/LA Type of Pa (a) 4.1 SNF Underpayment	overed atted and Sold (Megawatt hours) all Annex A's) (M/kWh) TE PAYMENT (As notified by syment	DOE) Date of Notification (Month/Day/Year)	3.4 To	otal Fee for Electric M/kWh) Transmitt  Date of Payment Transmittal (Month/Day/Year)	ed with this Pa	Amount Transmitted
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#### **DEPARTMENT OF ENERGY** Germantown, MD 20875

#### APPENDIX G - STANDARD REMITTANCE ADVICE FOR PAYMENT OF FEES

General Information
1. Purpose
Standard Remittance Advice (RA) form is designed to serve as the source document for entries into the Department's accounting records to transmit data from Purchasers concerning payment of their contribution to the Nuclear Waste Fund.

Who Shall Submit The RA must be submitted by Purchasers who signed the Standard Contract for Disposal of Spent Nuclear Fuel and/or High-Level Radioactive Waste. Submit Copy 1, 2, and 3 to DOE, Office of the Controller, Special Accounts and Payroll Division and retain Copy 4.

Where to Submit Purchasers shall forward completed RA to:

Putchasers shall forward completed Ax D.
U.S. Department of Energy
Office of the Controller
Special Accounts and Payroll Division (C-216 GTN)
Box 500
Germantown, MD 20875-0500
Request for further information, additional forms, and instructions may be directed in writing to the address above or by telephone to (301) 353-4014.

When to Submit

when to Submit for electricity generated on or after 4-7-83 lees shall be paid quarterly by the Purchaser and must be received by DOE not later than the close of the last business day of the month following the end of each assigned three month pehiod. Payment is by electronic wire transfer only.

Sanctions
The timely submission of RA by a Purchaser is mandatory, Failure to file may result in late penalty fees as provided by Article VIII.C of the Contract for Disposal of Spent Nuclear Fuel and/or High-Level Radioactive Waste.

Provisions Regarding the Confidentiality of Information
The information contained in these forms may be (i) information which is exempt from disclosure to the public under the exemption for trade secrets and
confidential commercial information specified in the Freedom of Information Act of 5 USC 52/2(b)(4)(FOIA) or (ii) prohibited from public release by 18 USC 1905.
However, before a determination can be made that particular information is within the coverage of either of these statutory provisions, the person submitting the
information must make as showing satisfactory to the Department concerning its confidential nature.

Therefore, respondents should state briefly and specifically (on an element-by-element basis if possible), in a letter accompanying submission of the form why they consider the information concerned to be a trade secret or other proprietary information, whether such information is customarily treated as confidential information by their companies and the industry, and the type of competitive hardship that would result from disclosure of the information. In accordance with the provisions of 10 CFR 100-4.11 of DCE's FOIA regulations, DOE will determine whether any information submitted should be withheld from public disclosure.

If DOE receives a response and does not receive a request, with substantive justification, that the information submitted should not be released to the public, DOE may assume that the respondent does not object to disclosure to the public of any information submitted on the form.

A new written justification need not be submitted each time the NWPA-830G is submitted if:
a. views concerning information items identified as privileged or confidential have not changed and
b. a written justification setting forth respondents views in this regard was previously submitted.

In accordance with the cited statutes and other applicable authority, the information must be made available upon request, to the Congress or any committee of Congress, the General Accounting Office, and other Federal agencies authorized by law to receive such information.

# INSTRUCTIONS FOR COMPLETING STANDARD REMITTANCE ADVICE FOR PAYMENT OF FEES

- Section 1.0 Identification Information
  1.1 Name of Purchaser as it appears on the Standard Contract, the mailing address, state, and zip code.
  1.2 Name and telephone number of person responsible for the completion of this form.
  1.3 Standard-Contract identification number as assigned by ODE.
  1.4 Period covered by this advice and date of this payment. Any period different from the assigned three month period should be explained on a separate attachment.

- Section 2.0 Sport Nuclear Fuel (SNF) Foe Enter the number of reactors for which the Purchaser had irradiated fuel as of midnight between 6/7 April 1983 (equal to the number of Annex B Forms attached).

  2.2 Total amount owed to the Nuclear Waste Fund for spent fuel used to generate electricity prior to April 7, 1983 (See Annex B for calculation).

  2.3 Self explanatory.

  2.4 Ten year Treasury Note rate on the date the payment is made, to be used if payments are being made using the 40 quarter option or if lump sum payment is made after June 30, 1985.

  2.5 Unpaid balance before this payment is made.

  2.6 Enter the payment option (1, 2, or 3) chosen. The selection of payment option must be made within two years of Standard Contract execution.

  2.7 Total payment of fee which this advice represents. Show principal, interest, and total.
- Section 3.0 Fee for Electricity Generated and Sold (MAWh):

  1. Enter the number of reactors the Purchaser is reporting period.

  2. Enter the number of reactors the Purchaser is reporting period from all reactors being reported. This is the sum of Station Total figures of line 4.2 from all Annex A forms a stached, expressed in mogawath hours.

  3. Current Fee Rate as provided by DOE Initially 1.0 MAWh which is equal to 1.0 SMWh).

  3.4 Total Fee for Electricity Generated and Sold (M/KWh) represented by this advice.
- Section 4.0 Underpayment/Late payment (as notified by DOE) 4.1 4.6 Self Explanatory.

- Section 5.0 Other Credits Claimed Represents all Items for which a Purchaser may receive credit, as specified in the Standard Contract.
- Section 6.0 Total Remittance 6.1 6.6 This section is a summary of the payments made in the previously mentioned categories with this remittance.
- Section 7.0 Certification
  Enter the name and title of the individual your company has designated to certify the accuracy of the data. Sign the "Certification" block and enter the current date.

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Unit 3

\$1.00/MWh

Station Total\*

\$1.00/MWh

U.S. Department of Energy Energy Information Administration Form NWPA-830G

#### Annex A to Appendix G

OMB No. 1901-0260 (Expires 11/30/93)

Standard Remittance Advice for Payment of Fees

#### Annex A Instructions

- General Information
- Purpose: To report the calculations of fees due the Departmen ergy's Nuclear Waste Fund.

  Please read all instructions before completing this form.
- reaser read an instructions before completing this form.

  Complete a separate Annex A for each nuclear station. For a nuclear station that has different ownership arrangements for more than one reactor, a separate Annex A will be required for each reactor.

  Submit Annex A Quarterly with Appendix G.

  Where to submit:

U.S. DOE, Office of the Controller Special Accounts & Payroll Division (C-216 GTN), Box 500 Germantown, MD 20875-0500

- Section 1. Identification Information: (Self explanatory)
  Section 2. Net Electricity Generated Calculation
  2.1 Unit ID Code: Enter the Reactor Unit Identification (ID) Code
  as assigned by DOE, for each reactor in the station.
  2.2 Gross Thermal Energy Generated (MWh): Utility shall report
  the thermal output of the nuclear steam supply system during the gross
  hower of the prooffing again. hours of the reporting period.

  2.3 Gross Electricity Generated (MWh): Utility shall report this
- 23 Gross Electricity Generated (MWh): Utility shall report this amount for each unit in the appropriate column, and the total in the column labeled "Station Total." This amount is measured at the output terminals of the generator during the reporting period.

  24 Nuclear Station Use While At Lesst One Nuclear Unit is in Service (MWh): Utility shall report this amount for each unit in the appropriate column, and the total in the column called "Station Total." The utility is to report consumption of electricity by the nuclear portion of the station during days in which at least one of the station's nuclear units was on-line and producing electricity. A utility unable to meter an individual unit shall report the estimated unit use, and shall explain in item 2.7 how the unit data were estimated. Note that:
- ition 2.7 how the unit data were estimated. Note that:

  A. During days in which nuclear station use exceeds nuclea station generation, the utility shall treat all resulting negative values as
- is the calculation purposes.

  B. A utility that has multiple nuclear units at one station:

   when at least 1 nuclear unit is operating and when generation from that unit exceeds the nuclear station's use, the utility generation from that unit exceeds the nuclear station's type, the utility may assume that the operating unit is supplying electricity for nuclear station use whether or not the electricity has been metered separately or the units terminate to a common electrical busbar, and

  shall report under item 2.5 any electricity use by the nuclear portion of the station during the days in which all nuclear units at
- the station were out of service simultaneously.

  C. A utility that has a metered transmission line connecting an off-station nuclear station may treat the off-station plant as part of this station for fee calculation purposes if it is not
- D. Utility may deduct small quantities of unmetered non-nucleal city generation—included in "Gross-Electricity Generated,"
- D. Utility may doduct small quantities of unmetered non-nuclear electricity generation included in "Gross.-Electricity Generated." provided that it is identified and explained in item 2.7.

  E. A utility may deduct nuclear electricity generation which is not sold and does not pass the busbar, provided they identify and explain the deduction in item 2.7 and that the deduction is not doubte counted.

  25 Nuclear Station Use While All Nuclear Units Are Out Of Service (MWh): Utility shall report this amount for each unit in the appropriate column, and the total in the "Station Total" column. In this way the utility shall report the consumption of electricity by the nuclear appropriate column, and the local in the Saution Total Column, in this row, the utility shall report the consumption of electricity by the nuclear portion of the station during days in which total nuclear unit use exceeds nuclear generation (e.g., a day in which all nuclear units at the station were out of service at once). Note that a utility unable to meter individual unit use will report estimated unit use, and shall explain in item 2.7 how the unit data were estimated.

- Net Electricity Generated (MWh): The utility shall report this amount for each unit in the appropriate column, and the total in the "Station Total" column. This amount is the result of subtracting items mitems 23
- 2.4 from items 2.3.
  2.7 Footnote (if any): Utilities that are unable to meter individual unit use shall explain here how the unit data were estimated.
  Section 3. Total Energy Adjustment Factor Calculation: The reporting utility shall obtain necessary data from all owners to calculate the Total Energy Adjustment Factor and maintain consistent, accurate, and complete records to support these submissions. The values provided in this section must be accurate to 4 significant digits. If there are more than 12 owners, use a continuation sheet. For a nuclear existing with more than one reperture and different repressions or each there are more than 12 owners, use a continuation sheet. For a nuclear station with more than one reactor and different ownerships for each reactor, a separate Annex A will be required for each reactor.

  1. Weighted Energy Adjustment Factor Calculation:
  Name of Nuclear Station Owner(s): provide the name(s) in items 1. thru 12, of 3.1. If more than 12 rames, use a continuation sheet.

  Adjustment for Sales to utilimate Consumer (ASC): is the
- roduct of Fraction of Sales to ultimate Consumer (FSC) and the Sales to ultimate Consumer Adjustment Factor(SCAF).

  Fraction of Sales to ultimate Consumer (FSC): is
- Fraction of Sales to Ultimate consumer (rosy, determined by dividing the owner's provious year's annual sales to the ultimate consumer by the sum of the owner's provious year's annual sales to the ultimate consumer plus the owner's provious year's annual sales for rose. These figures can be found on the Energy Information Administration (EIA) Form EIA-831 or the Federal Energy Regulatory Commission (FERC) Form No. 1.

  Sales to ultimate Consumer Adjustment Factor (SCAF): is
- Sales to utilimate Consumer Adjustment Factor (SCAF): equal to one minus the quotient of all electricity lost or otherwise not sold for each owner, divided by the total electricity available for disposition to utilimate consumers. The total electricity available is the reporting year total of all of an owner's electricity supply which is available for disposition, expressed in kilowatt hours. Electricity lost or otherwise not sold includes: (a) energy furnished without charge; (b) energy used by the company; (c) transmission losses; (d) distribution losses; (e) other unaccounted losses as reported on the Form EIA-861 or the FERC
- Adjustment for Sales for Resale (ASR): Is the product of Fraction of Sales for Resale (FSR) and National average Adjustment Factor (NAF). Fraction of Sales for Resale (FSR): is determined by dividing
- the owner's previous year's annual sales for resale by the sum of the owner's previous year's annual sales to resale by the sum of the owner's previous year's annual sales to the ultimate consumer plus the owner's previous year's annual sales for resale. These figures can be found on the Form EIA-861 or the FERC Form No. 1.

  \*\*Mational everage Adjustment Factor (NAF): is the quotient of the national total of electricity sold divided by the national total of electricity sold divided by the national total of electricity sold electricity.
- Owner's Energy Adjustment Factor (OEAF): is the Owner's ction of metered electricity
- Weighted Energy Adjustment Factor (WEAF): is the roduct of an Owner's Energy Adjustment Factor (OEAF) times the
- Owner's Share (CS).

  3.2 Total Energy Adjustment Factor (TEAF): is the sum of ndividual owner's Weighted Energy Adjustment Factors (WEAF). Section 4, Fee Calculation for Electricity Generated and Sold: 4.1 Total Energy Adjustment Factor: Enter the value from item 3.2
- Electricity Generated and Sold: Multiply the values in item 4.1 by ne "Unit" values in item 2.6. Sum these values and enter in "Statio
- lotal."

  3. Current Fee Due (Dollars): Multiply the values in item 4.2 by one (1) dollar/megawatt hour (or 1.0 mill/kWh), which is the current fee. Add this station fee to the current fee due for all other reactors operated by the Purchaser, and then enter the sum on line 3.4 of the Appendix G, Remittance Advice.

#### ANNEX B TO APPENDIX G

Standard Remittance of Advice (RA) for Payment of Fees

This Annex should be completed only for SNF burned before midnight between April 6/7, 1983.

_	
Ι.	Identification

Α.	Purchaser:	

В.	Unit	ide	ntific	ation	(Only	one	unit	may
oe co	vered	l in	each	report	t.)			

l. Reactor	Facility	Name
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- 2. Location:
- 3. Type: \_\_
- 4. Capacity:
- 5. Date of Commencement of Operations:
- 6. NRC License No.:
- II. Fee Calculation
- A. Discharged nuclear fuel

1. Burnup 1 (MWDT/MTU)	0 – 5,000	5,000 – 10,000	10,000 20,000	20,000 up	
2. Initial loading (KgU) (with indicated burnup)					
3. Fee rate (\$/KgU)	80.00	142.00	162.00	184.00	
4. Fee (\$)					
5. Total fee (4)					

B. Nuclear fuel in the reactor core as of midnight of 6/7 April 1983.

Assembly identi- fication	Initial load- ing (KgU)	Burnup 1 as of midnight 6/7 April 1983 (MWDT/MTU)	Fee
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			
11			l
12			
13			
14			
15			
. •			
17			
18			
19			
20			
21			
22			
23			
24			
25			
	/		4- 4

¹ Please provide (as an attachment) a clear reference to the methodology used to derive the burnup figures (computer codes, etc.) and a clear reference to all data used in the derivation of those figures.

#### C. Total fee.

(Approved by the Office of Management and Budget under control number 1091–0260)

[48 FR 16599, Apr. 18, 1983; 48 FR 23160, May 24, 1983, as amended at 52 FR 35359, Sept. 18, 1987; 56 FR 67659, Dec. 31, 1991]

#### PART 962—BYPRODUCT MATERIAL

Sec.

962.1 Scope.

962.2 Purpose.

962.3 Byproduct material.

AUTHORITY: The Atomic Energy Act of 1954 (42 U.S.C. 2011 et seq.); Energy Reorganization Act of 1974 (42 U.S.C. 5801 et seq.); Department of Energy Organization Act (42 U.S.C. 7101 et seq.); Nuclear Waste Policy Act (Pub. L. 97-425, 96 Stat. 2201).

SOURCE: 52 FR 15940, May 1, 1987, unless otherwise noted.

### § 962.1 Scope.

This part applies only to radioactive waste substances which are owned or produced by the Department of Energy at facilities owned or operated by or for the Department of Energy under the Atomic Energy Act of 1954 (42 U.S.C. 2011 et seq). This part does not apply to substances which are not owned or produced by the Department of Energy.

## $\S 962.2$ Purpose.

The purpose of this part is to clarify the meaning of the term "byproduct material" under section 11e(1) of the Atomic Energy Act of 1954 (42 U.S.C. 2014(e)(1)) for use only in determining the Department of Energy's obligations under the Resource Conservation and Recovery Act (42 U.S.C. 6901 et seq.) with regard to radioactive waste substances owned or produced by the Department of Energy pursuant to the exercise of its responsibilities under the Atomic Energy Act of 1954. This part does not affect materials defined as byproduct material under section 11e(2) of the Atomic Energy Act of 1954 (42 U.S.C. 2014(e)(2)).

### § 962.3

#### § 962.3 Byproduct material.

- (a) For purposes of this part, the term byproduct material means any radioactive material (except special nuclear material) yielded in or made radioactive by exposure to the radiation incident to the process of producing or utilizing special nuclear material.
- (b) For purposes of determining the applicability of the Resource Conservation and Recovery Act (42 U.S.C. 6901 *et seq.*) to any radioactive waste substance owned or produced by the De-

partment of Energy pursuant to the exercise of its atomic energy research, development, testing and production responsibilities under the Atomic Energy Act of 1954 (42 U.S.C. 2011 et seq.), the words "any radioactive material," as used in paragraph (a) of this section, refer only to the actual radionuclides dispersed or suspended in the waste substance. The nonradioactive hazardous component of the waste substance will be subject to regulation under the Resource Conservation and Recovery Act.