

record associated with the procedures for six months after the record is made;

(i) Procedures for special nuclear material scrap control must be established, maintained, and followed to limit the accumulation and the uncertainty of measurement of these materials on inventory. The licensee shall retain a copy of the current procedures as a record until the Commission terminates each license that authorizes the activity that is subject to the retention of procedures and, if any portion of the procedures is superseded, retain the superseded portion for three years after each change. Such procedures must include:

(1) Identification and classification of special nuclear material scrap;

(2) Regular processing and recovery of scrap so that no item of such scrap generated in the licensee's plant measured with an uncertainty of greater than  $\pm 10$  percent remains on inventory longer than six months when such scrap contains plutonium, U-233, or uranium enriched 20 percent or more in the isotope U-235 or twelve months when such scrap contains uranium enriched less than 20 percent in the isotope U-235 or plutonium containing 80 percent or more by weight of the isotope Pu-238.

(j) Physical inventory procedures must be established, maintained, and followed so that special nuclear material balance and their measurement uncertainties can be determined on the basis of measurements in compliance with the material balance and inventory requirements and criteria specified in § 70.51. The licensee shall retain a copy of the current procedures as a record until the Commission terminates each license that authorizes the activity that is subject to the retention of procedures and, if any portion of the procedures is superseded, retain the superseded portion for three years after each change.

(k) A system of records and reports must be established, maintained, and followed that will provide information sufficient to locate special nuclear material and to close a measured material balance around each material balance area and the total plant, as specified in § 70.51. As required by § 70.51, the licensee shall retain the records associ-

ated with this system for three years after the records are made. This system must include:

(1) A centralized accounting system employing double-entry bookkeeping;

(2) Subsidiary accounts for each material balance area and item control area;

(3) Records pertinent to the requirements of § 70.51(e)(1);

(4) Procedures for the reconciliation of subsidiary accounts to control accounts at the end of each accounting period; and

(5) Procedures for reconciliation of control and subsidiary accounts to the results of physical inventories.

(1) Each licensee subject to the requirements of this section shall submit by January 24, 1975, a full description of his program for control of and accounting for special nuclear material in his possession under license to show how compliance with the requirements of this section, except for paragraph (f), will be accomplished. This program shall be followed by the licensee after July 24, 1975, or sixty days after the program is approved by the NRC, whichever is the later.

[39 FR 37766, Oct. 24, 1974, as amended at 40 FR 33653, Aug. 11, 1975; 49 FR 19628, May 9, 1984; 50 FR 7579, Feb. 25, 1985; 52 FR 10038, Mar. 30, 1987; 53 FR 19255, May 27, 1988]

#### § 70.59 Effluent monitoring reporting requirements.

(a) Each licensee authorized to possess and use special nuclear material for processing and fuel fabrication, scrap recovery, conversion of uranium hexafluoride, or in a uranium enrichment facility shall:

(1) Submit a report to the appropriate NRC Regional Office shown in appendix D of part 20 of this chapter, with copies to the Director, Office of Nuclear Material Safety and Safeguards, U.S. Nuclear Regulatory Commission, Washington, DC 20555, within 60 days after January 1, 1976, and July 1, 1976, and within 60 days after January 1 and July 1 of each year thereafter, specifying the quantity of each of the principal radionuclides released to unrestricted areas in liquid and gaseous effluents during the previous six

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months of operation, and such other information as the Commission may require to estimate maximum potential annual radiation doses to the public resulting from effluent releases. If quantities of radioactive materials released during the reporting periods are significantly above the licensee's design objectives previously reviewed as part of the licensing action, the report shall cover this specifically. On the basis of such reports and any additional information the Commission may obtain from the licensee or others, the Commission may from time to time require the licensee to take such action as the Commission deems appropriate.

[40 FR 53230, Nov. 17, 1975, as amended at 41 FR 21627, May 27, 1976; 42 FR 25721, May 19, 1977; 52 FR 31612, Aug. 21, 1987; 57 FR 18393, Apr. 30, 1992]

### **Subpart H—Additional Requirements for Certain Licensees Authorized To Possess a Critical Mass of Special Nuclear Material**

SOURCE: 65 FR 56226, Sept. 18, 2000, unless otherwise noted.

#### **§ 70.60 Applicability.**

The regulations in § 70.61 through § 70.76 apply, in addition to other applicable Commission regulations, to each applicant or licensee that is or plans to be authorized to possess greater than a critical mass of special nuclear material, and engaged in enriched uranium processing, fabrication of uranium fuel or fuel assemblies, uranium enrichment, enriched uranium hexafluoride conversion, plutonium processing, fabrication of mixed-oxide fuel or fuel assemblies, scrap recovery of special nuclear material, or any other activity that the Commission determines could significantly affect public health and safety. The regulations in § 70.61 through § 70.76 do not apply to decommissioning activities performed pursuant to other applicable Commission regulations including § 70.25 and § 70.38 of this part. Also, the regulations in § 70.61 through § 70.76 do not apply to activities that are certified by the Commission pursuant to part 76 of this chapter or licensed by the Commission

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pursuant to other parts of this chapter. Unless specifically addressed in § 70.61 through § 70.76, implementation by current licensees of the Subpart H requirements shall be completed no later than the time of the ISA Summary submittal required in § 70.62(c)(3)(ii).

#### **§ 70.61 Performance requirements.**

(a) Each applicant or licensee shall evaluate, in the integrated safety analysis performed in accordance with § 70.62, its compliance with the performance requirements in paragraphs (b), (c), and (d) of this section.

(b) The risk of each credible high-consequence event must be limited. Engineered controls, administrative controls, or both, shall be applied to the extent needed to reduce the likelihood of occurrence of the event so that, upon implementation of such controls, the event is highly unlikely or its consequences are less severe than those in paragraphs (b)(1)–(4) of this section. High consequence events are those internally or externally initiated events that result in:

(1) An acute worker dose of 1 Sv (100 rem) or greater total effective dose equivalent;

(2) An acute dose of 0.25 Sv (25 rem) or greater total effective dose equivalent to any individual located outside the controlled area identified pursuant to paragraph (f) of this section;

(3) An intake of 30 mg or greater of uranium in soluble form by any individual located outside the controlled area identified pursuant to paragraph (f) of this section; or

(4) An acute chemical exposure to an individual from licensed material or hazardous chemicals produced from licensed material that:

(i) Could endanger the life of a worker, or

(ii) Could lead to irreversible or other serious, long-lasting health effects to any individual located outside the controlled area identified pursuant to paragraph (f) of this section. If an applicant possesses or plans to possess quantities of material capable of such chemical exposures, then the applicant shall propose appropriate quantitative standards for these health effects, as part of the information submitted pursuant to § 70.65 of this subpart.