

10 CFR 37

Physical Protection of Category 1
and Category 2 Quantities of
Radioactive Material

NJ must adopt by 2016

- New Subchapter 65
 - (a) Incorporation by reference
 - (b) Following sections are not incorporated
 - (c) Following sections are incorporated with changes
- Broader amendments so we don't have to keep promulgating regs to make the same changes, e.g. always delete "of this part"

Stakeholder Process

- Stakeholder meeting (today) and another one scheduled in January all IC licensees
- Rule is proposed
- Comment period, however, this rule is all compatibility category A or B, so States must adopt all requirements
- 60 day comment period
- Adoption

Table A-1. Category 1 and Category 2 Radioactive Material Thresholds*

RADIOACTIVE MATERIAL	CATEGORY 1 (TBq)**	CATEGORY 1 (Ci)	CATEGORY 2 (TBq)	CATEGORY 2 (Ci)
Americium-241	60	1,620	0.6	16.2
Americium-241/Beryllium	60	1,620	0.6	16.2
Californium-252	20	540	0.2	5.40
Cobalt-60	30	810	0.3	8.10
Curium-244	50	1,350	0.5	13.5
Cesium-137	100	2,700	1	27.0
Gadolinium-153	1,000	27,000	10	270
Iridium-192	80	2,160	0.8	21.6
Plutonium-238	60	1,620	0.6	16.2
Plutonium-239/Beryllium	60	1,620	0.6	16.2
Promethium-147	40,000	1,080,000	400	10,800
Radium-226	40	1,080	0.4	10.8
Selenium-75	200	5,400	2	54.0
Srontium-90	1,000	27,000	10	270
Thulium-170	20,000	540,000	200	5,400
Ytterbium-169	300	8,100	3	81.0

*See the discussion below under "Calculations concerning Multiple Sources or Multiple Radionuclides."

**The terabecquerel values are the regulatory standard. The curie values specified are obtained by converting from the terabecquerel values. The curie values are provided for practical usefulness only.

Requirements

- The Increased Control (IC) requirements are currently part of the conditions of the license
- The new Subchapter 65 requirements will replace these conditions.
- There are some differences between IC conditions and new rule requirements, but the NRC has not published a list of differences.

Major Differences

Background Investigations

- The Reviewing Official (T&R official) will need to be fingerprinted by law enforcement agency, State or Federal agency, or commercial agency authorized by State, and then submitted to the NRC.
- A reinvestigation is required every 10 years.
- The scope of the investigation must encompass at least 7 years preceding the date of background investigation.
- An individual has a right to correct criminal history records.

Major Differences

Physical Protection During Use

- A security plan is required rather than documented program. The plan must be approved by individual with responsibility of the security program.
- Written implementing procedures for the plan are required.
- Training and refresher training on the security plan is required.
- All Cat 1 and 2 quantities must be used and stored within a Security Zone.
- LLEA need not be notified for source exchanges.

Major Differences

Physical Protection

- Maintenance and testing of physical components used to secure or detect unauthorized access required at manufacturer's frequency or annually if no frequency is specified. Records maintained for 3 years.
- Coordinate "to the extent practicable" with the LLEA. The rule relaxes the requirement to have a pre-arranged plan and only requires annual coordination.
- No coordination with LLEA for temporary job sites

Major Differences

Physical Protection in Transit

- Includes use of License Verification System. Verification for each shipment.
- Cat 2 shipments verify No Later Than Arrival Time and expected arrival time with receiving licensee.
- Advance written notifications for Cat 1 shipments required. Notification provided to Agreement State, not the NRC. State informs NRC.
- If a shipment with advance notification is cancelled, a cancellation notice to governor of each state or the governor's designee is required.

Major Differences

Physical Protection in Transit

- Licensee must make notification to NRC Operations center when a missing Cat 1 or 2 shipment has been found.
- Notify NRC Operations center when licensee discovers an actual or attempted theft or diversion.
- No training of drivers, but access to procedures.
- Rule does not address transshipments through the US



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Implementation Guidance for 10 CFR Part 37, “Physical Protection of Category 1 and Category 2 Quantities of Radioactive Material”