

NATIONAL SOURCE TRACKING OF SEALED SOURCES

Definition: Nationally Tracked Source

Nationally tracked source means a sealed source containing a quantity equal to or greater than Category 1 or Category 2 levels of any radioactive material listed in Table 1 Nationally Tracked Source Thresholds below. In this context a sealed source is defined as radioactive material that is sealed in a capsule or closely bonded, in a solid form and which is not exempt from regulatory control. It does not mean material encapsulated solely for disposal, or nuclear material contained in any fuel assembly, subassembly, fuel rod, or fuel pellet. Category 1 nationally tracked sources are those containing radioactive material at a quantity equal to or greater than the Category 1 threshold. Category 2 nationally tracked sources are those containing radioactive material at a quantity equal to or greater than the Category 2 threshold but less than the Category 1 threshold.

Reports of Transactions Involving Nationally Tracked Sources.

Each licensee who manufactures, transfers, receives, disassembles, or disposes of a nationally tracked source shall complete and submit a National Source Tracking Transaction Report as specified in paragraphs (a) through (e) of this Appendix for each type of transaction.

- (a) Each licensee who manufactures a nationally tracked source shall complete and submit a National Source Tracking Transaction Report. The report must include the following information:
 - (1) The name, address, and license number of the reporting licensee;
 - (2) The name of the individual preparing the report;
 - (3) The manufacturer, model, and serial number of the source;
 - (4) The radioactive material in the source;
 - (5) The initial source strength in becquerels (curies) at the time of manufacture; and
 - (6) The manufacture date of the source.
- (b) Each licensee that transfers a nationally tracked source to another person shall complete and submit a National Source Tracking Transaction Report. The report must include the following information:
 - (1) The name, address, and license number of the reporting licensee;
 - (2) The name of the individual preparing the report;
 - (3) The name and license number of the recipient facility and the shipping address;
 - (4) The manufacturer, model, and serial number of the source or, if not available, other information to uniquely identify the source;
 - (5) The radioactive material in the source;
 - (6) The initial or current source strength in becquerels (curies);
 - (7) The date for which the source strength is reported;
 - (8) The shipping date;
 - (9) The estimated arrival date; and
 - (10) For nationally tracked sources transferred as waste under a Uniform Low-Level Radioactive Waste Manifest, the waste manifest number and the container identification of the container with the nationally tracked source.

- (c) Each licensee that receives a nationally tracked source shall complete and submit a National Source Tracking Transaction Report. The report must include the following information:
- (1) The name, address, and license number of the reporting licensee;
 - (2) The name of the individual preparing the report;
 - (3) The name, address, and license number of the person that provided the source;
 - (4) The manufacturer, model, and serial number of the source or, if not available, other information to uniquely identify the source;
 - (5) The radioactive material in the source;
 - (6) The initial or current source strength in becquerels (curies);
 - (7) The date for which the source strength is reported;
 - (8) The date of receipt; and
 - (9) For material received under a Uniform Low-Level Radioactive Waste Manifest, the waste manifest number and the container identification with the nationally tracked source.
- (d) Each licensee that disassembles a nationally tracked source shall complete and submit a National Source Tracking Transaction Report. The report must include the following information:
- (1) The name, address, and license number of the reporting licensee;
 - (2) The name of the individual preparing the report;
 - (3) The manufacturer, model, and serial number of the source or, if not available, other information to uniquely identify the source;
 - (4) The radioactive material in the source;
 - (5) The initial or current source strength in becquerels (curies);
 - (6) The date for which the source strength is reported;
 - (7) The disassemble date of the source.
- (e) Each Licensee who disposes of a nationally tracked source shall complete and submit a National Source Tracking Transaction Report. The report must include the following information:
- (1) The name, address, and license number of the reporting licensee;
 - (2) The name of the individual preparing the report;
 - (3) The waste manifest number;
 - (4) The container identification with the nationally tracked source;
 - (5) The date of disposal; and
 - (6) The method of disposal.

- (f) The reports discussed in paragraphs (a) through (e) above must be submitted by the close of the next business day after the transaction. A single report may be submitted for multiple sources and transactions. The reports must be submitted to the National Source Tracking System by using:
- (1) The on-line National Source Tracking System;
 - (2) Electronically using a computer-readable format;
 - (3) By facsimile;
 - (4) By mail to the address on the National Source Tracking Transaction Report Form (NRC Form 748); or
 - (5) By telephone with follow-up by facsimile or mail.
- (g) Each licensee shall correct any error in previously filed reports or file a new report for any missed transaction within 5 business days of the discovery of the error or missed transaction. Such errors may be detected by a variety of methods such as administrative reviews or by physical inventories required by regulation. In addition, each licensee shall reconcile the inventory of nationally tracked sources possessed by the licensee against that licensee's data in the National Source Tracking System. The reconciliation must be conducted during the month of January in each year. The reconciliation process must include resolving any discrepancies between the National Source Tracking System and the actual inventory by filing the reports identified by paragraphs (a) through (e) above. By January 31 of each year, each licensee must submit to the National Source Tracking System confirmation that the data in the National Source Tracking System is correct.
- (h) Each licensee that possesses Category 1 nationally tracked sources shall report its initial inventory of Category 1 nationally tracked sources to the National Source Tracking System by January 31, 2009. Each licensee that possesses Category 2 nationally tracked sources shall report its initial inventory of Category 2 nationally tracked sources to the National Source Tracking System by January 31, 2009. The information may be submitted by using any of the methods identified by paragraph (f)(1) through (f)(4) above. The initial inventory report must include the following information:
- (1) The name, address, and license number of the reporting licensee;
 - (2) The name of the individual preparing the report;
 - (3) The manufacturer, model, and serial number of each nationally tracked source or, if not available, other information to uniquely identify the source;
 - (4) The radioactive material in the sealed source;
 - (5) The initial or current source strength in becquerels (curies); and
 - (6) The date for which the source strength is reported.

TABLE 1
NATIONALLY TRACKED SOURCE THRESHOLDS

The Terabecquerel (TBq) values are the regulatory standard. The curie (Ci) values specified are obtained by converting from the TBq value. The curie values are provided for practical usefulness only and are rounded after conversion.

Radioactive Material	Category 1 (TBq)	Category 1 (Ci)	Category 2 (TBq)	Category 2 (Ci)
Actinium-227	20	540	0.2	5.4
Americium-241	60	1600	0.6	16
Americium-241/Be	60	1600	0.6	16
Californium-252	20	540	0.2	5.4
Cobalt-60	30	810	0.3	8.1
Curium-244	50	1400	0.5	14
Cesium-137	100	2700	1	27
Gadolinium-153	1000	27000	10	270
Iridium-192	80	2200	0.8	22
Plutonium-238	60	1600	0.6	16
Plutonium-239/Be	60	1600	0.6	16
Polonium-210	60	1600	0.6	16
Promethium-147	40000	1100000	400	11000
Radium-226	40	1100	0.4	11
Selenium-75	200	5400	2	54
Strontium-90	1000	27000	10	270
Thorium-228	20	540	0.2	5.4
Thorium-229	20	540	0.2	5.4
Thulium-170	20000	540000	200	5400
Ytterbium-169	300	8100	3	81