**National Source Tracking System - Serialization Requirements**

**(Part 32 with reference to Part 20 Appendix E)**

**(71 FR 65685; November 8, 2006) RATS ID 2006-2 Effective 2/06/07**

**Date due for State adoption: February 6, 2007**

| **NRC**  **Section** | **Section Title** | **State**  **Section** | **Compatibility Category** | **Summary of Change to CFR** | **Difference**  **Yes/No** | **Significant**  **Yes/No** | **If difference, why or why not comment generated** |
| --- | --- | --- | --- | --- | --- | --- | --- |
| 20 Appendix E | Nationally tracked sources threshold |  | B | **Added Appendix:**  See table at end of document |  |  |  |
| 32.2 | Definitions-Nationally tracked sources |  | B | **Added Definition:**  Nationally tracked source means a sealed source containing a quantity equal to or greater than Category 1 or 2 levels of any radioactive material listed in Appendix E to part 20 of this Chapter. 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. |  |  |  |
| 32.201 | Serialization of nationally tracked sources |  | B | **Added Section:**  Each licensee who manufactures a nationally tracked source after February 6, 2007 shall assign a unique serial number to each nationally tracked source. Serial numbers must be composed only of alpha-numeric characters. |  |  |  |

**Appendix E Part 20-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.

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| --- | --- | --- | --- | --- |
| **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 |