

**Table 2**  
**Category “3.5” Thresholds**

**[Radionuclides of Concern with Category “3.5” Threshold in GBq/TBq and Curies]**  
**[for use in the Fiscal Year (FY) 2007 Interim Inventory]**

<b>Radionuclide</b>	<b>Quantity of Concern<sup>1</sup></b>	<b>Exact equivalent in Curies<sup>2</sup></b>
Actinium-227, Californium-252, Thorium-228, Thorium-229	2 GigaBecquerels	0.054 Curies
Cobalt-60	3 GigaBecquerels	0.081 Curies
Radium-226	4 GigaBecquerels	0.108 Curies
Curium-244	5 GigaBecquerels	0.135 Curies
Americium-241, Americium-241/Be, Plutonium-236, Plutonium-238, Plutonium-239, Plutonium-239/Be, Plutonium-240, Polonium-210	6 GigaBecquerels	0.162 Curies
Iridium-192	8 GigaBecquerels	0.216 Curies
Cesium-137	10 GigaBecquerels	0.270 Curies
Selenium-75	20 GigaBecquerels	0.541 Curies
Ytterbium-169	30 GigaBecquerels	0.811 Curies
Gadolinium-153, Strontium-90 (Yttrium-90)	0.10 TeraBecquerel	2.703 Curies
Thulium-170	2 TeraBecquerels	54.054 Curies
Promethium-147	4 TeraBecquerels	108.11 Curies

Use the following method to determine which sources to report to the inventory:

- Convert Curies (Ci) to Terabecquerels (TBq) as follows:  $n \text{ (TBq)} = N \text{ (Ci)} \times 0.037 \text{ TBq/Ci}$ .
- Convert TBq to Ci as follows:  $N \text{ (Ci)} = n \text{ (TBq)} / 0.037 \text{ TBq/Ci}$ .
- Convert Ci to Gigabecquerels (GBq) as follows:  $n \text{ (GBq)} = N \text{ (Ci)} \times 37 \text{ GBq/Ci}$ .
- Convert GBq to Ci as follows:  $N \text{ (Ci)} = n \text{ (GBq)} / 37 \text{ GBq/Ci}$ .
- Include any single, specifically licensed source equal to, or larger than, the quantity of concern in Table 2.

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<sup>1</sup> The International Atomic Energy Agency *Code of Conduct for the Safety and Security of Radioactive Sources* uses Becquerel-based values. The Category 4 values are defined as 1/100th of the Category 3 value. The Commission has determined it needs data to a level in between Category 3 and 4. It has chosen Category “3.5” to be one-tenth of Category 3 or 10 times Category 4. The Becquerel-based values in Table 2 are the IAEA Category 3 values divided by 10 and are the standards for the FY 2007 inventory.

<sup>2</sup> *Code of Conduct for the Safety and Security of Radioactive Sources*, when the IAEA converted the Becquerel values to Curie values, they were rounded to one significant digit after conversion. This is the proper method to convert. However, for simplicity in determining whether a given quantity exceeds the applicable threshold standard, the Curie values listed here are the exact values determined by using the formulas above, rounded to three significant digits, and not less than one-thousand of a Curie (or to the nearest milliCurie).