

**WAC 246-235-150 Schedule C—Quantities of radioactive materials requiring consideration of the need for an emergency plan for responding to a release.**

| Radioactive material <sup>1</sup> | Release fraction | Possession limit (curies) |
|-----------------------------------|------------------|---------------------------|
| Actinium-228                      | 0.001            | 4,000                     |
| Americium-241                     | .001             | 2                         |
| Americium-242                     | .001             | 2                         |
| Americium-243                     | .001             | 2                         |
| Antimony-124                      | .01              | 4,000                     |
| Antimony-126                      | .01              | 6,000                     |
| Barium-133                        | .01              | 10,000                    |
| Barium-140                        | .01              | 30,000                    |
| Bismuth-207                       | .01              | 5,000                     |
| Bismuth-210                       | .01              | 600                       |
| Cadmium-109                       | .01              | 1,000                     |
| Cadmium-113                       | .01              | 80                        |
| Calcium-45                        | .01              | 20,000                    |
| Californium-252 <sup>2</sup>      | .001             | 9                         |
| Carbon-14 <sup>3</sup>            | .01              | 50,000                    |
| Cerium-141                        | .01              | 10,000                    |
| Cerium-144                        | .01              | 300                       |
| Cesium-134                        | .01              | 2,000                     |
| Cesium-137                        | .01              | 3,000                     |
| Chlorine-36                       | .5               | 100                       |
| Chromium-51                       | .01              | 300,000                   |
| Cobalt-60                         | .001             | 5,000                     |
| Copper-64                         | .01              | 200,000                   |
| Curium-242                        | .001             | 60                        |
| Curium-243                        | .001             | 3                         |
| Curium-244                        | .001             | 4                         |
| Curium-245                        | .001             | 2                         |
| Europium-152                      | .01              | 500                       |
| Europium-154                      | .01              | 400                       |
| Europium-155                      | .01              | 3,000                     |
| Germanium-68                      | .01              | 2,000                     |
| Gadolinium-153                    | .01              | 5,000                     |
| Gold-198                          | .01              | 30,000                    |
| Hafnium-172                       | .01              | 400                       |
| Hafnium-181                       | .01              | 7,000                     |
| Holmium-166m                      | .01              | 100                       |
| Hydrogen-3                        | .5               | 20,000                    |
| Iodine-125                        | .5               | 10                        |
| Iodine-131                        | .5               | 10                        |
| Indium-114m                       | .01              | 1,000                     |
| Iridium-192                       | .001             | 40,000                    |
| Iron-55                           | .01              | 40,000                    |
| Iron-59                           | .01              | 7,000                     |

| Radioactive material <sup>1</sup> | Release fraction | Possession limit (curies) |
|-----------------------------------|------------------|---------------------------|
| Krypton-85                        | 1.0              | 6,000,000                 |
| Lead-210                          | .01              | 8                         |
| Manganese-56                      | .01              | 60,000                    |
| Mercury-203                       | .01              | 10,000                    |
| Molybdenum-99                     | .01              | 30,000                    |
| Neptunium-237                     | .001             | 2                         |
| Nickel-63                         | .01              | 20,000                    |
| Niobium-94                        | .01              | 300                       |
| Phosphorus-32                     | .5               | 100                       |
| Phosphorus-33                     | .5               | 1,000                     |
| Polonium-210                      | .01              | 10                        |
| Potassium-42                      | .01              | 9,000                     |
| Promethium-145                    | .01              | 4,000                     |
| Promethium-147                    | .01              | 4,000                     |
| Radium-226                        | 0.001            | 100                       |
| Ruthenium-106                     | .01              | 200                       |
| Samarium-151                      | .01              | 4,000                     |
| Scandium-46                       | .01              | 3,000                     |
| Selenium-75                       | .01              | 10,000                    |
| Silver-110m                       | .01              | 1,000                     |
| Sodium-22                         | .01              | 9,000                     |
| Sodium-24                         | .01              | 10,000                    |
| Strontium-89                      | .01              | 3,000                     |
| Strontium-90                      | .01              | 90                        |
| Sulfur-35                         | .5               | 900                       |
| Technetium-99                     | .01              | 10,000                    |
| Technetium-99m                    | .01              | 400,000                   |
| Tellurium-127m                    | .01              | 5,000                     |
| Tellurium-129m                    | .01              | 5,000                     |
| Terbium-160                       | .01              | 4,000                     |
| Thulium-170                       | .01              | 4,000                     |
| Tin-113                           | .01              | 10,000                    |
| Tin-123                           | .01              | 3,000                     |
| Tin-126                           | .01              | 1,000                     |
| Titanium-44                       | .01              | 100                       |
| Uranium Hexafluoride              | .001             | Note <sup>4</sup>         |
| Vanadium-48                       | .01              | 7,000                     |
| Xenon-133                         | 1.0              | 900,000                   |
| Yttrium-91                        | .01              | 2,000                     |
| Zinc-65                           | .01              | 5,000                     |
| Zirconium-93                      | .01              | 400                       |
| Zirconium-95                      | .01              | 5,000                     |
| Any other beta-gamma emitter      | .01              | 10,000                    |
| Mixed fission products            | .01              | 1,000                     |
| Mixed corrosion products          | .01              | 10,000                    |

| Radioactive material <sup>1</sup>                               | Release fraction | Possession limit (curies) |
|-----------------------------------------------------------------|------------------|---------------------------|
| Contaminated equipment beta-gamma                               | .001             | 10,000                    |
| Irradiated material, any form other than solid noncombustible   | .01              | 1,000                     |
| Irradiated material, solid noncombustible                       | .001             | 10,000                    |
| Mixed radioactive waste, beta-gamma                             | .01              | 1,000                     |
| Packaged mixed waste, beta-gamma <sup>5</sup>                   | .001             | 10,000                    |
| Any other alpha emitter                                         | .001             | 2                         |
| Contaminated equipment, alpha                                   | .0001            | 20                        |
| Packaged waste, alpha <sup>5</sup>                              | .0001            | 20                        |
| Combinations of radioactive materials listed above <sup>1</sup> |                  |                           |

- 1 For combinations of radioactive materials, consideration of the need for an emergency plan is required if the sum of the ratios of the quantity of each radioactive material authorized to the quantity listed for that material in Schedule C exceeds one.
- 2 For Californium-252, the quantity may also be expressed as 20 milligrams.
- 3 Excludes Carbon-14 as carbon dioxide.
- 4 For uranium hexafluoride, the quantity is 50 kilograms in a single container or 1,000 kilograms total.
- 5 Waste packaged in Type B containers does not require an emergency plan.

[Statutory Authority: RCW 70.98.050 and 70.98.080. WSR 09-06-003, § 246-235-150, filed 2/18/09, effective 3/21/09. Statutory Authority: RCW 70.98.050. WSR 95-01-108, § 246-235-150, filed 12/21/94, effective 1/21/95.]