WAC 246-231-094 General license—Fissile material. (1) A general license is issued to any licensee of the department, NRC, or an agreement state, to transport fissile material, or to deliver fissile material to a carrier for transport, if the material is shipped in accordance with this section. The fissile material need not be contained in a package which meets the standards of 10 C.F.R. 71 Subparts E and F; however, the material must be contained in a Type A package. The Type A package must also meet the DOT requirements of 49 C.F.R. 173.417(a).

(2) The general license applies only to a licensee who has a quality assurance program approved by NRC as satisfying the provisions of 10 C.F.R. 71 Subpart H.

(3) The general license applies only when a package's contents:

(a) Contain no more than a Type A quantity of radioactive material; and

(b) Contain less than 500 total grams of beryllium, graphite, or hydrogenous material enriched in deuterium.

(4) The general license applies only to packages containing fissile material that are labeled with a CSI which:

(a) Has been determined in accordance with subsection (5) of this section;

(b) Has a value less than or equal to 10; and

(c) For a shipment of multiple packages containing fissile material, the sum of the CSIs must be less than or equal to 50 (for shipment on a nonexclusive use conveyance) and less than or equal to 100 (for shipment on an exclusive use conveyance).

(5) (a) The value for the CSI must be greater than or equal to the number calculated by the following equation:

$$CSI = 10 \left[\frac{\text{grams of }^{235}U}{X} + \frac{\text{grams of }^{233}U}{Y} + \frac{\text{grams of }Pu}{Z} \right];$$

(b) The calculated CSI must be rounded up to the first decimal place;

(c) The values of X, Y, and Z used in the CSI equation must be taken from WAC 246-231-200 Table-1 or Table-2, as appropriate;

(d) If Table-2 is used to obtain the value of X, then the values for the terms in the equation for uranium-233 and plutonium must be assumed to be zero; and

(e) Values from Table-1 for X, Y, and Z must be used to determine the CSI if:

(i) Uranium-233 is present in the package;

(ii) The mass of plutonium exceeds one percent of the mass of uranium-235;

(iii) The uranium is of unknown uranium-235 enrichment or greater than 24 weight percent enrichment; or

(iv) Substances having a moderating effectiveness (i.e., an average hydrogen density greater than H_2O) (e.g., certain hydrocarbon oils or plastics) are present in any form, except as polyethylene used for packing or wrapping.

Table-1. Mass Limits for General License Packages Containing Mixed Quantities of Fissile Material or Uranium-235 of Unknown Enrichment per WAC 246-231-094(5)

Fissile material	Fissile material mass mixed with moderating substances having an average hydrogen density less than or equal to H ₂ O (grams)	Fissile material mass mixed with moderating substances having an average hydrogen density greater than H ₂ O ^a (grams)
²³⁵ U (X)	60	38
²³³ U (Y)	43	27
²³⁹ Pu or ²⁴¹ Pu (Z)	37	24

^a When mixtures of moderating substances are present, the lower mass limits shall be used if more than 15 percent of the moderating substance has an average hydrogen density greater than H_2O .

Table-2. Mass Limits for General License Packages Containing Uranium-235 of Known Enrichment per WAC 246-231-094(5)

Uranium enrichment in weight percent of ²³⁵ U not exceeding	Fissile material mass of ²³⁵ U (X) (grams)
24	60
20	63
15	67
11	72
10	76
9.5	78
9	81
8.5	82
8	85
7.5	88
7	90
6.5	93
6	97
5.5	102
5	108
4.5	114
4	120
3.5	132
3	150
2.5	180
2	246
1.5	408
1.35	480
1	1,020
0.92	1,800

[Statutory Authority: RCW 70A.388.040 and 70A.388.110. WSR 23-21-056, \$ 246-231-094, filed 10/11/23, effective 11/11/23. Statutory Authority: RCW 70.98.050. WSR 14-09-017, \$ 246-231-094, filed 4/7/14, effective 5/8/14; WSR 08-09-093, \$ 246-231-094, filed 4/18/08, effective 5/19/08.]

Reviser's note: The brackets and enclosed material in the text of the above section occurred in the copy filed by the agency.