

**Environmental Protection Agency**

**§ 302.6**

**APPENDIX B TO § 302.4—RADIONUCLIDES—  
Continued**

Radionuclide	Atomic Number	Final RQ Ci (Bq)
Ytterbium-175 .....	70	100 (3.7E 12)
Ytterbium-177 .....	70	1000 (3.7E 13)
Ytterbium-178 .....	70	1000 (3.7E 13)
Yttrium-86m .....	39	1000 (3.7E 13)
Yttrium-86 .....	39	10 (3.7E 11)
Yttrium-87 .....	39	10 (3.7E 11)
Yttrium-88 .....	39	10 (3.7E 11)
Yttrium-90m .....	39	100 (3.7E 12)
Yttrium-90 .....	39	10 (3.7E 11)
Yttrium-91m .....	39	1000 (3.7E 13)
Yttrium-91 .....	39	10 (3.7E 11)
Yttrium-92 .....	39	100 (3.7E 12)
Yttrium-93 .....	39	100 (3.7E 12)
Yttrium-94 .....	39	1000 (3.7E 13)
Yttrium-95 .....	39	1000 (3.7E 13)
Zinc-62 .....	30	100 (3.7E 12)
Zinc-63 .....	30	1000 (3.7E 13)
Zinc-65 .....	30	10 (3.7E 11)
Zinc-69m .....	30	100 (3.7E 12)
Zinc-69 .....	30	1000 (3.7E 13)
Zinc-71m .....	30	100 (3.7E 12)
Zinc-72 .....	30	100 (3.7E 12)
Zirconium-86 .....	40	100 (3.7E 12)
Zirconium-88 .....	40	10 (3.7E 11)
Zirconium-89 .....	40	100 (3.7E 12)
Zirconium-93 .....	40	1 (3.7E 10)
Zirconium-95 .....	40	10 (3.7E 11)
Zirconium-97 .....	40	10 (3.7E 11)

CI—Curie. The curie represents a rate of radioactive decay. One curie is the quantity of any radioactive nuclide which undergoes 3.7E 10 disintegrations per second.

Bq—Becquerel. The becquerel represents a rate of radioactive decay. One becquerel is the quantity of any radioactive nuclide which undergoes one disintegration per second. One curie is equal to 3.7E 10 becquerel.

@—Final RQs for all radionuclides apply to chemical compounds containing the radionuclides and elemental forms regardless of the diameter of pieces of solid material.

&—The adjusted RQ of one curie applies to all radionuclides not otherwise listed. Whenever the RQs in table 302.4 and this appendix to the table are in conflict, the lowest RQ shall apply. For example, uranyl acetate and uranyl nitrate have adjusted RQs shown in table 302.4 of 100 pounds, equivalent to about one-tenth the RQ level for uranium-238 listed in this appendix.

E—Exponent to the base 10. For example, 1.3E 2 is equal to 130 while 1.3E 3 is equal to 1300.

m—Signifies a nuclear isomer which is a radionuclide in a higher energy metastable state relative to the parent isotope.

φ—Notification requirements for releases of mixtures or solutions of radionuclides can be found in § 302.6(b) of this rule. Final RQs for the following four common radionuclide mixtures are provided: radium-226 in secular equilibrium with its daughters (0.053 curie); natural uranium (0.1 curie); natural uranium in secular equilibrium with its daughters (0.052 curie); and natural thorium in secular equilibrium with its daughters (0.011 curie).

[54 FR 33449, Aug. 14, 1989]

EDITORIAL NOTE: For FEDERAL REGISTER citations affecting § 302.4, see the List of CFR Sections Affected, which appears in the Finding Aids section of the printed volume and at [www.fdsys.gov](http://www.fdsys.gov).

**§ 302.5 Determination of reportable quantities.**

(a) *Listed hazardous substances.* The quantity listed in the column “Final RQ” for each substance in table 302.4,

or in appendix B to table 302.4, is the reportable quantity (RQ) for that substance. The RQs in table 302.4 are in units of pounds based on chemical toxicity, while the RQs in appendix B to table 302.4 are in units of curies based on radiation hazard. Whenever the RQs in table 302.4 and appendix B to the table are in conflict, the lowest RQ shall apply.

(b) *Unlisted hazardous substances.* Unlisted hazardous substances designated by 40 CFR 302.4(b) have the reportable quantity of 100 pounds, except for those unlisted hazardous wastes which exhibit toxicity identified in 40 CFR 261.24. Unlisted hazardous wastes which exhibit toxicity have the reportable quantities listed in Table 302.4 for the contaminant on which the characteristic of toxicity is based. The reportable quantity applies to the waste itself, not merely to the toxic contaminant. If an unlisted hazardous waste exhibits toxicity on the basis of more than one contaminant, the reportable quantity for that waste shall be the lowest of the reportable quantities listed in Table 302.4 for those contaminants. If an unlisted hazardous waste exhibits the characteristic of toxicity and one or more of the other characteristics referenced in 40 CFR 302.4(b), the reportable quantity for that waste shall be the lowest of the applicable reportable quantities.

[51 FR 34547, Sept. 29, 1986, as amended at 54 FR 22538, May 24, 1989; 67 FR 45356, July 9, 2002]

**§ 302.6 Notification requirements.**

(a) Any person in charge of a vessel or an offshore or an onshore facility shall, as soon as he or she has knowledge of any release (other than a federally permitted release or application of a pesticide) of a hazardous substance from such vessel or facility in a quantity equal to or exceeding the reportable quantity determined by this part in any 24-hour period, immediately notify the National Response Center (1-800-424-8802; in Washington, DC 202-267-2675; the facsimile number is 202-267-1322).

(b) Releases of mixtures or solutions (including hazardous waste streams) of

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40 CFR Ch. I (7-1-18 Edition)

(1) Hazardous substances, except for radionuclides, are subject to the following notification requirements:

(i) If the quantity of all of the hazardous constituent(s) of the mixture or solution is known, notification is required where an RQ or more of any hazardous constituent is released;

(ii) If the quantity of one or more of the hazardous constituent(s) of the mixture or solution is unknown, notification is required where the total amount of the mixture or solution released equals or exceeds the RQ for the hazardous constituent with the lowest RQ; or

(iii) For waste streams K169, K170, K171, K172, K174, and K175, knowledge of the quantity of all of the hazardous constituent(s) may be assumed, based on the following maximum observed constituent concentrations identified by EPA:

Waste	Constituent	max ppm
K169 .....	Benzene .....	220.0
K170 .....	Benzene .....	1.2
	Benzo (a) pyrene .....	230.0
	Dibenz (a,h) anthracene .....	49.0
	Benzo (a) anthracene .....	390.0
	Benzo (b) fluoranthene .....	110.0
	Benzo (k) fluoranthene .....	110.0
	3-Methylcholanthrene .....	27.0
	7, 12-Dimethylbenz (a) anthracene .....	1,200.0
K171 .....	Benzene .....	500.0
	Arsenic .....	1,600.0
K172 .....	Benzene .....	100.0
	Arsenic .....	730.0
K174 .....	2,3,7,8-TCDD .....	0.000039
	1,2,3,7,8-PeCDD .....	0.0000108
	1,2,3,4,7,8-HxCDD .....	0.0000241
	1,2,3,6,7,8-HxCDD .....	0.000083
	1,2,3,7,8,9-HxCDD .....	0.000062
	1,2,3,4,6,7,8-HpCDD .....	0.00123
	OCDD .....	0.0129
	2,3,7,8-TCDF .....	0.000145
	1,2,3,7,8-PeCDF .....	0.0000777
	2,3,4,7,8-PeCDF .....	0.000127
	1,2,3,4,7,8-HxCDF .....	0.001425
	1,2,3,6,7,8-HxCDF .....	0.000281
	1,2,3,7,8,9-HxCDF .....	0.00014
	2,3,4,6,7,8-HxCDF .....	0.000648
	1,2,3,4,6,7,8-HpCDF .....	0.0207
	1,2,3,4,7,8,9-HpCDF .....	0.0135
	OCDF .....	0.212
K175 .....	Mercury .....	9200

(2) Radionuclides are subject to this section's notification requirements only in the following circumstances:

(i) If the identity and quantity (in curies) of each radionuclide in a released mixture or solution is known, the ratio between the quantity released (in curies) and the RQ for the radionuclide

must be determined for each radionuclide. The only such releases subject to this section's notification requirements are those in which the sum of the ratios for the radionuclides in the mixture or solution released is equal to or greater than one.

(ii) If the identity of each radionuclide in a released mixture or solution is known but the quantity released (in curies) of one or more of the radionuclides is unknown, the only such releases subject to this section's notification requirements are those in which the total quantity (in curies) of the mixture or solution released is equal to or greater than the lowest RQ of any individual radionuclide in the mixture or solution.

(iii) If the identity of one or more radionuclides in a released mixture or solution is unknown (or if the identity of a radionuclide released by itself is unknown), the only such releases subject to this section's notification requirements are those in which the total quantity (in curies) released is equal to or greater than either one curie or the lowest RQ of any known individual radionuclide in the mixture or solution, whichever is lower.

(c) The following categories of releases are exempt from the notification requirements of this section:

(1) Releases of those radionuclides that occur naturally in the soil from land holdings such as parks, golf courses, or other large tracts of land.

(2) Releases of naturally occurring radionuclides from land disturbance activities, including farming, construction, and land disturbance incidental to extraction during mining activities, except that which occurs at uranium, phosphate, tin, zircon, hafnium, vanadium, monazite, and rare earth mines. Land disturbance incidental to extraction includes: land clearing; overburden removal and stockpiling; excavating, handling, transporting, and storing ores and other raw (not beneficiated or processed) materials; and replacing in mined-out areas coal ash, earthen materials from farming or construction, or overburden or other raw materials generated from the exempted mining activities.

(3) Releases of radionuclides from the dumping and transportation of coal

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and coal ash (including fly ash, bottom ash, and boiler slags), including the dumping and land spreading operations that occur during coal ash uses.

(4) Releases of radionuclides from piles of coal and coal ash, including fly ash, bottom ash, and boiler slags.

(d) Except for releases of radionuclides, notification of the release of an RQ of solid particles of antimony, arsenic, beryllium, cadmium, chromium, copper, lead, nickel, selenium, silver, thallium, or zinc is not required if the mean diameter of the particles released is larger than 100 micrometers (0.004 inches).

(e) The following releases are exempt from the notification requirements of this section:

(1) Releases in amounts less than 1,000 pounds per 24 hours of nitrogen oxide to the air which are the result of combustion and combustion-related activities.

(2) Releases in amounts less than 1,000 pounds per 24 hours of nitrogen dioxide to the air which are the result of combustion and combustion-related activities.

(3) Releases to the air of any hazardous substance from animal waste at farms.

[50 FR 13474, Apr. 4, 1985, as amended at 54 FR 22538, May 24, 1989; 54 FR 33481, Aug. 14, 1989; 63 FR 13475, Mar. 19, 1998; 63 FR 42189, Aug. 6, 1998; 64 FR 13114, Mar. 17, 1999; 65 FR 67132, Nov. 8, 2000; 67 FR 45356, July 9, 2002; 71 FR 58533, Oct. 4, 2006; 73 FR 76959, Dec. 18, 2008; 76 FR 9666, Feb. 22, 2011; 77 FR 10390, Feb. 22, 2012]

### § 302.7 Penalties.

(a) Any person—

(1) In charge of a vessel from which a hazardous substance is released, other than a federally permitted release, into or upon the navigable waters of the United States, adjoining shorelines, or into or upon the waters of the contiguous zone,

(2) In charge of a vessel from which a hazardous substance is released, other than a federally permitted release, which may affect natural resources belonging to, appertaining to, or under the exclusive management authority of the United States (including resources under the Fishery Conservation and Management Act of 1976), and who is

otherwise subject to the jurisdiction of the United States at the time of the release, or

(3) In charge of a facility from which a hazardous substance is released, other than a federally permitted release, in a quantity equal to or greater than that reportable quantity determined under this part who fails to notify immediately the National Response Center as soon as he or she has knowledge of such release or who submits in such a notification any information which he knows to be false or misleading shall be subject to all of the sanctions, including criminal penalties, set forth in section 103(b) of the Act.

(b) Notification received pursuant to this section or information obtained by the exploitation of such notification shall not be used against any such person in any criminal case, except a prosecution for perjury or for giving a false statement.

(c) This section shall not apply to the application of a pesticide product registered under the Federal Insecticide, Fungicide, and Rodenticide Act or to the handling and storage of such a pesticide product by an agricultural producer.

[50 FR 13474, Apr. 4, 1985, as amended at 67 FR 45356, July 9, 2002]

### § 302.8 Continuous releases.

(a) Except as provided in paragraph (c) of this section, no notification is required for any release of a hazardous substance that is, pursuant to the definitions in paragraph (b) of this section, continuous and stable in quantity and rate.

(b) *Definitions.* The following definitions apply to notification of continuous releases:

*Continuous.* A continuous release is a release that occurs without interruption or abatement or that is routine, anticipated, and intermittent and incidental to normal operations or treatment processes.

*Normal range.* The normal range of a release is all releases (in pounds or kilograms) of a hazardous substance reported or occurring over any 24-hour period under normal operating conditions during the preceding year. Only releases that are both continuous and