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Title 40: Protection of Environment

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PART 355—EMERGENCY PLANNING AND NOTIFICATION

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Authority: Sections 302, 303, 304, 325, 327, 328, and 329 of the Emergency Planning and Community Right-to-Know Act of 1986 (EPCRA) (42 U.S.C. 11002, 11003, 11004, 11045, 11047, 11048, and 11049).

Source: 73 FR 65462, Nov. 3, 2008, unless otherwise noted.

Subpart A—General Information[!\[\]\(f1c5da15572e3e09d343161be98f508d_img.jpg\) top](#)**§ 355.1 What is the purpose of this part?**[!\[\]\(eabd9f9ababee93effadc3b380fe65fd_img.jpg\) top](#)

(a) This part (40 CFR part 355) establishes requirements for a facility to provide information necessary for developing and implementing State and local chemical emergency response plans, and requirements for emergency notification of chemical releases. This part also lists Extremely Hazardous Substances (EHSs) and Threshold Planning Quantities (TPQs) in Appendices A and B, which are used in determining if you are subject to these requirements.

(b) This part is written in a special format to make it easier to understand the regulatory requirements. Like other Environmental Protection Agency (EPA) regulations, this part establishes enforceable legal requirements. Information considered non-binding guidance under EPCRA is indicated in this regulation by the word “note” and a smaller typeface. Such notes are provided for information purposes only and are not considered legally binding under this part.

§ 355.2 Who do “you,” “I,” and “your” refer to in this part?[!\[\]\(a73c1962d20a39dd8fd6a060ae69693f_img.jpg\) top](#)

Throughout this part, “you,” “I,” and “your” refer to the owner or operator of a facility.

§ 355.3 Which section contains the definitions of the key words used in this part?

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The definitions of key words used in this part are in §355.61. It is important to read the definitions for these key words because the definition explains the word's specific meaning associated with the regulations in this part.

Subpart B—Emergency Planning

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Who Must Comply

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§ 355.10 Must my facility comply with the emergency planning requirements of this subpart?

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You must comply with the emergency planning requirements in this subpart if your facility meets either of the following two conditions:

- (a) Any extremely hazardous substance (EHS) is present at your facility in an amount equal to or greater than its threshold planning quantity (TPQ), or
- (b) Your facility has been designated for emergency planning purposes, after public notice and opportunity for comment, by one of the following three entities:
 - (1) The State Emergency Response Commission (SERC).
 - (2) The Governor of the State in which your facility is located.
 - (3) The Chief Executive Officer of the Tribe for the Indian Tribe under whose jurisdiction your facility is located.

§ 355.11 To what substances do the emergency planning requirements of this subpart apply?

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The emergency planning requirements of this subpart apply to any EHS listed in Appendices A and B of this part. Additionally, if a facility is designated for emergency planning purposes, as provided in §355.10(b), substances that are not EHSs at this facility may become subject to the emergency planning requirements.

§ 355.12 What quantities of extremely hazardous substances trigger emergency planning requirements?

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Any EHS present at your facility in an amount equal to or greater than its TPQ triggers the emergency planning requirements of this subpart. The TPQs are listed in Appendices A and B of this part in the column labeled “threshold planning quantity.”

§ 355.13 How do I calculate the quantity of an extremely hazardous substance present in mixtures?

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If an EHS is present in a mixture in a particular container, determine the quantity (in pounds) of the EHS in that container by multiplying the concentration of the EHS (in weight percent) by the weight (in pounds) of the mixture in the container. If the concentration of an EHS is less than or equal to one percent in the mixture, you do not have to count that EHS. Here is an example calculation:

Example: You have 150 pounds of a mixture that contains 20 weight percent of a certain EHS. The quantity of EHS present in the mixture is:

EHS (in pounds)

= (weight percent of EHS) × (weight of mixture) = (20 percent) × (150 pound mixture) = (0.20) × (150)

EHS (in pounds)

= 30 pounds

§ 355.14 Do I have to aggregate extremely hazardous substances to determine the total quantity present?

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You must aggregate (*i.e.* , add together) the amounts of each EHS at your facility to determine if a TPQ is present. This means that, for a particular EHS, you must determine the total amount present at any one time at your facility by adding together the quantity of pure EHS and the quantity contained in all mixtures, regardless of location, number of containers, or method of storage. You do not have to count an EHS in a mixture if the concentration of that EHS is less than or equal to one percent.

§ 355.15 Which threshold planning quantity do I use for an extremely hazardous substance present at my facility in solid form?

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EHSs that are in solid form are subject to one of two different TPQs (for example, TPQs may be listed as 500/10,000 pounds), both of which are listed in Appendices A and B of this part. Here is how to determine which of the two listed TPQs you must use for an EHS present at your facility in solid form:

(a) Use the lower TPQ from Appendices A and B of this part if the solid:

(1) Is in powdered form and has a particle size less than 100 microns;

(2) Is in solution;

- (3) Is in molten form; or
- (4) Meets the criteria for a National Fire Protection Association (NFPA) rating of 2, 3 or 4 for reactivity.

Note to paragraph (a): Use the instructions in §355.16 to calculate the quantity present for the categories of solids listed in paragraphs (a)(1), (2) and (3) of this section.

(b) If the solid does not meet one of the criteria in paragraph (a) of this section, then the TPQ is 10,000 pounds.

§ 355.16 How do I determine the quantity of extremely hazardous substances present for certain forms of solids?

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For the three forms of solids that are listed in §355.15(a)(1) through (3), use these instructions to determine the quantity of extremely hazardous substance present:

- (a) *Solid in powdered form with a particle size less than 100 microns.* Multiply the weight percent of solid with a particle size less than 100 microns in a particular container by the total weight of solid in the container.
- (b) *Solid in solution.* Multiply the weight percent of solid in solution in a particular container by the total weight of solution in the container.
- (c) *Solid in molten form.* Multiply the weight of solid in molten form by 0.3.

How to Comply

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§ 355.20 If this subpart applies to my facility, what information must I provide, who must I submit it to, and when is it due?

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Use this table to determine the information you must provide, who to provide it to, and when:

What types of emergency planning notification are required?	What information must I provide?	To whom must I provide the information?	When must I provide the information?
(a) Emergency planning	You must provide notice that your facility is subject to the emergency planning	To the SERC and the LEPC	Within 60 days after your facility first becomes subject to the requirements of this subpart. If no LEPC exists for your facility at the time you are

notification	requirements of this subpart		required to provide emergency planning notification, then you should report to the LEPC within 30 days after an LEPC is established for the emergency planning district in which your facility is located.
(b) Facility emergency coordinator	You must designate a facility representative who will participate in the local emergency planning process as a facility emergency response coordinator. You must provide notice of this facility representative	To the LEPC (or the SERC if there is no LEPC, or the Governor if there is no SERC)	Within 60 days after your facility first becomes subject to the requirements of this subpart. If no LEPC exists when you first report, then provide an additional report to the LEPC within 30 days after such LEPC is established for the emergency planning district in which your facility is located.
(c) Changes relevant to emergency planning	You must provide notice of any changes occurring at your facility that may be relevant to emergency planning	To the LEPC	Within 30 days after the changes have occurred.
(d) Requested information	You must provide any information necessary for developing or implementing the local emergency plan if the LEPC requests it	To the LEPC	Promptly. Note: The LEPC may specify a time frame for this information.

§ 355.21 In what format should the information be submitted?

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EPA does not require any specific format. EPA recommends that you submit the information described in §355.20 in writing in order to insure appropriate documentation. The SERC or LEPC may request that this information be submitted in a specific format.

Subpart C—Emergency Release Notification

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Who Must Comply

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§ 355.30 What facilities must comply with the emergency release notification requirements of this subpart?

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You must comply with the emergency release notification requirements in this subpart if both of these two

conditions are met:

- (a) You produce, use, or store a hazardous chemical at your facility; and
- (b) You release a reportable quantity (RQ) of any EHS or of a hazardous substance as defined by the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA Hazardous Substance) at your facility. Certain releases are exempted from these requirements. Exempted releases are listed in §355.31.

Note to paragraph (b): In addition to the emergency release notification requirements of this subpart, releases of CERCLA hazardous substances are subject to the notification requirements under CERCLA. This is explained further in subpart D of this part.

§ 355.31 What types of releases are exempt from the emergency release notification requirements of this subpart?

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You do not have to provide emergency release notification under this subpart for any of the following six types of releases of EHSs or CERCLA hazardous substances that occur at your facility:

- (a) Any release that results in exposure to persons solely within the boundaries of your facility.
- (b) Any release that is a federally permitted release as defined in section 101(10) of CERCLA.
- (c) Any release of a pesticide product that is exempt from reporting under section 103(e) of CERCLA.
- (d) Any release that does not meet the definition of release under section 101(22) of CERCLA and is therefore exempt from CERCLA section 103(a) reporting.
- (e) Any radionuclide release that occurs:
 - (1) Naturally in soil from land holdings such as parks, golf courses, or other large tracts of land.
 - (2) Naturally 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) From the dumping and transportation of coal 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) From piles of coal and coal ash, including fly ash, bottom ash, and boiler slags.
- (f) Any release less than 1,000 pounds per 24 hours of nitrogen oxide or nitrogen dioxide to the air which is the result of combustion and combustion related activities.

(g) Any release to the air of a hazardous substance from animal waste at farms that stable or confine fewer than the numbers of animal specified in any of the following categories.

(1) 700 mature dairy cows, whether milked or dry.

(2) 1,000 veal calves.

(3) 1,000 cattle other than mature dairy cows or veal calves. Cattle includes but is not limited to heifers, steers, bulls and cow/calf pairs.

(4) 2,500 swine each weighing 55 pounds or more.

(5) 10,000 swine each weighing less than 55 pounds.

(6) 500 horses.

(7) 10,000 sheep or lambs.

(8) 55,000 turkeys.

(9) 30,000 laying hens or broilers, if the farm uses a liquid manure handling system.

(10) 125,000 chickens (other than laying hens), if the farm uses other than liquid manure handling system.

(11) 82,000 laying hens, if the farm uses other than a liquid manure handling system.

(12) 30,000 ducks (if the farm uses other than a liquid manure handling system).

(13) 5,000 ducks (if the farm uses a liquid manure handling system).

(h) Any release to the air of a hazardous substance from animal waste at farms from animals that are not stabled or otherwise confined.

[73 FR 65462, Nov. 3, 2008, as amended at 73 FR 76960, Dec. 18, 2008]

§ 355.32 Which emergency release notification requirements apply to continuous releases?

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If the release of an EHS or CERCLA hazardous substance is continuous and stable in quantity and rate at your facility as defined in 40 CFR 302.8(b), then the release qualifies for reduced reporting requirements under this subpart. Under these reduced reporting requirements, you do not need to provide the notifications required under §355.40. However, in addition to the notifications required under 40 CFR 302.8, you must make all of the following notifications to the community emergency coordinator for the LEPC for any area likely to be affected by the release and to the SERC of any State likely to be affected by the release:

(a) Initial notifications as specified in 40 CFR 302.8 (d) and (e).

(b) Notification of a “statistically significant increase,” defined in 40 CFR 302.8(b) as any increase above the upper bound of the reported normal range.

(c) Notification of a “new release” as specified in 40 CFR 302.8(g)(1).

(d) Notification of a change in the normal range of the release as specified under 40 CFR 302.8(g)(2).

§ 355.33 What release quantities of EHSs and CERCLA hazardous substances trigger the emergency release notification requirements of this subpart?

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The release of a reportable quantity (RQ) of an EHS or CERCLA hazardous substance within any 24-hour period triggers the emergency release notification requirements. RQs for EHSs are listed in Appendices A and B of this part in the column labeled “reportable quantity.” RQs for CERCLA hazardous substances are listed in Table 302.4 of 40 CFR 302.4 in the column labeled “final RQ.”

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§ 355.40 What information must I provide?

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You must make two separate notifications to comply with the emergency release notification requirements of this subpart: an immediate notification, and as soon as practicable thereafter a written follow-up emergency notification (or notifications, as more information becomes available).

(a) *Immediate notification.* The notice required under this section shall include as much of the following information known at the time. However, the retrieval of this information should not cause a delay in the notification on the emergency response.

(1) The chemical name or identity of any substance involved in the release.

(2) Indicate whether the substance is an EHS.

(3) Provide an estimate of the quantity of any such substance that was released into the environment.

(4) State the time and duration of the release.

(5) The medium or media into which the release occurred.

(6) Any known or anticipated acute or chronic health risks associated with the emergency and, where appropriate, advice regarding medical attention necessary for exposed individuals.

(7) Proper precautions to take as a result of the release, including evacuation (unless such information is

readily available to the community emergency coordinator pursuant to the emergency plan).

(8) The name and telephone number of the individual (or individuals) to be contacted for further information.

(b) *Written follow-up emergency notification.* Except for releases that occur during transportation or from storage incident to transportation, you must provide a written follow-up emergency notice (or notices, as more information becomes available), as soon as practicable after the release. In the written follow-up emergency notice, you must provide and update the information required in the immediate notification and include additional information with respect to all of the following:

(1) Actions taken to respond and contain the release.

(2) Any known or anticipated acute or chronic health risks associated with the release.

(3) Where appropriate, advice regarding medical attention necessary for exposed individuals.

(c) You are not required to submit a written follow-up notification for a release that occurred during transportation or from storage incident to transportation. See §355.42(b) for requirements for reporting such releases.

§ 355.41 In what format should the information be submitted?

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The immediate notification, described in §355.40(a), should be oral. The follow-up emergency notification, described in §355.40(b), shall be in writing. EPA does not specify a particular format for the written follow-up emergency notification.

Note: The LEPC may request a specific format for this information.

§ 355.42 To whom must I submit the information?

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(a) You must provide the immediate emergency release notification information and the written follow-up notification to:

(1) The community emergency coordinator for the LEPC of any area likely to be affected by the release (if there is no LEPC, notify the relevant local emergency response personnel); and

(2) The SERC of any State likely to be affected by the release.

(b) For a release that occurs during transportation or from storage incident to transportation, you may meet the requirements of this subpart by notifying the 911 operator (or in the absence of a 911 emergency telephone number, the operator) of the immediate notification information listed in §355.40(a). You are not required under this subpart to submit a written follow-up notification, as described in §355.40(b), for such a release.

§ 355.43 When must I submit the information?[↑ top](#)

(a) You must provide the required emergency release notification information described under §355.40(a), immediately.

(b) You must provide the written follow-up emergency notice (or notices, as more information becomes available) described under §355.40(b), as soon as practicable after the release.

Subpart D—Additional Provisions[↑ top](#)**§ 355.60 What is the relationship between the emergency release notification requirements of this part and the release notification requirements of CERCLA?**[↑ top](#)

The emergency release notification requirements of this part are in addition to the release notification requirements of CERCLA. If you have a release of a CERCLA hazardous substance, you must comply with the emergency release notification requirements of this part and the release notification requirements of CERCLA section 103, codified at 40 CFR part 302. Use this table to determine which emergency release notification requirements apply to your release:

If a reportable quantity of a substance is released within a 24-hour period at your facility	And if the release is reportable under EPCRA Section 304, you must	And if the release is reportable under CERCLA Section 103, you must
(a) And the substance is on BOTH the list of EHSs (Appendices A and B of this part) AND the list of CERCLA Hazardous Substances (40 CFR 302.4)	Notify the LEPC and the SERC in accordance with §§355.40 through 355.43 of this part (except for a release during transportation or from storage incident to transportation; see §355.42(b))	Comply with the release notification requirements of CERCLA section 103 and its implementing regulations (40 CFR part 302). Call the NRC at 800–424–8802.
(b) And the substance is on the list of CERCLA Hazardous Substances (40 CFR 302.4) and not on the list of EHSs (Appendices A and B of this part)	Notify the LEPC and the SERC, in accordance with §§355.40 through 355.43 of this part (except for a release during transportation or from storage incident to transportation; see in §355.42(b))	Comply with the release notification requirements of CERCLA section 103 and its implementing regulations (40 CFR part 302). Call the NRC at 800–424–8802.
(c) And the substance is on the list of EHSs (Appendices A and B of this part) and not the list of CERCLA Hazardous	Notify the LEPC and the SERC in accordance with §§355.40 through 355.43 of this part (except for a release during transportation or from storage	

Substances (40 CFR 302.4)	incident to transportation; see §355.42(b))	
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Note: This table only applies to reportable releases, not to exempt releases.

§ 355.61 How are key words in this part defined?

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Animal waste means manure (feces, urine, and other excrement produced by livestock), digestive emissions, and urea. The definition includes animal waste when mixed or commingled with bedding, compost, feed, soil and other typical materials found with animal waste.

CERCLA means the Comprehensive Environmental Response, Compensation and Liability Act of 1980, as amended.

CERCLA hazardous substance means a substance defined in section 101(14) of CERCLA and listed in Table 302.4 of 40 CFR 302.4.

Chief Executive Officer of the Tribe means the person who is recognized by the Bureau of Indian Affairs as the chief elected administrative officer of the Tribe.

Environment includes water, air, and land and the interrelationship that exists among and between water, air, and land and all living things.

EPCRA means the Emergency Planning and Community Right-To-Know Act of 1986.

Extremely hazardous substance (EHS) means a substance listed in Appendices A and B of this part.

Facility means all buildings, equipment, structures, and other stationary items that are located on a single site or on contiguous or adjacent sites and that are owned or operated by the same person (or by any person that controls, is controlled by, or under common control with, such person). *Facility* includes manmade structures, as well as all natural structures in which chemicals are purposefully placed or removed through human means such that it functions as a containment structure for human use. For purposes of emergency release notification, the term includes motor vehicles, rolling stock, and aircraft.

Farm means a facility on a tract of land devoted to the production of crops or raising of animals, including fish, which produced and sold, or normally would have produced and sold, \$1,000 or more of agricultural products during a year.

Hazardous chemical means any hazardous chemical as defined under 29 CFR 1910.1200(c), except that this term does not include:

- (1) Any food, food additive, color additive, drug, or cosmetic regulated by the Food and Drug Administration.
- (2) Any substance present as a solid in any manufactured item to the extent exposure to the substance does not occur under normal conditions of use.

(3) Any substance to the extent it is used:

- (i) For personal, family, or household purposes, or is present in the same form and concentration as a product packaged for distribution and use by the general public. Present in the same form and concentration as a product packaged for distribution and use by the general public means a substance packaged in a similar manner and present in the same concentration as the substance when packaged for use by the general public, whether or not it is intended for distribution to the general public or used for the same purpose as when it is packaged for use by the general public;
- (ii) In a research laboratory or hospital or other medical facility under the direct supervision of a technically qualified individual; or
- (iii) In routine agricultural operations or is a fertilizer held for sale by a retailer to the ultimate customer.

Indian Country means Indian country defined in 18 U.S.C. 1151 as:

- (1) All land within the limits of any Indian reservation under the jurisdiction of the United States government, notwithstanding the issuance of any patent, and, including rights-of-way running through the reservation;
- (2) All dependent Indian communities within the borders of the United States whether within the original or subsequently acquired territory thereof, and whether within or without the limits of a State; and
- (3) All Indian allotments, the Indian titles to which have not been extinguished, including rights-of-way running through the same.

Indian Tribe or Tribe means those Tribes federally recognized by the Secretary of the Interior.

LEPC means the Local Emergency Planning Committee appointed by the State Emergency Response Commission.

Medium or media means the environment (*i.e.* , air, water, land).

Mixture means, for the purposes of 40 CFR part 355, a heterogeneous association of substances where the various individual substances retain their identities and can usually be separated by mechanical means. This definition includes, for the purposes of 40 CFR part 355, solutions but does not include alloys or amalgams.

Person means any individual, trust, firm, joint stock company, corporation (including a government corporation), partnership, association, State, municipality, commission, political subdivision of a State, or interstate body.

Release means any spilling, leaking, pumping, pouring, emitting, emptying, discharging, injecting, escaping, leaching, dumping, or disposing into the environment (including the abandonment or discarding of barrels, containers, and other closed receptacles) of any hazardous chemical, EHS, or CERCLA hazardous substance.

Reportable quantity means, for any CERCLA hazardous substance, the quantity established in Table 302.4

of 40 CFR 302.4, for such substance. For any EHS, reportable quantity means the quantity established in Appendices A and B of this part for such substance. Unless and until superseded by regulations establishing a reportable quantity for newly listed EHSs or CERCLA hazardous substances, a weight of 1 pound shall be the reportable quantity.

SERC means the State Emergency Response Commission for the State in which the facility is located except where the facility is located in Indian Country, in which case, SERC means the Emergency Response Commission for the Tribe under whose jurisdiction the facility is located. In the absence of a SERC for a State or Indian Tribe, the Governor or the chief executive officer of the tribe, respectively, shall be the SERC. Where there is a cooperative agreement between a State and a Tribe, the SERC shall be the entity identified in the agreement.

State means any State of the United States, the District of Columbia, the Commonwealth of Puerto Rico, Guam, American Samoa, the United States Virgin Islands, the Northern Mariana Islands, any other territory or possession over which the United States has jurisdiction and Indian Country.

Threshold planning quantity means, for a substance listed in Appendices A and B of this part, the quantity listed in the column “threshold planning quantity” for that substance.

[73 FR 65462, Nov. 3, 2008, as amended at 73 FR 76960, Dec. 18, 2008]

Appendix A to Part 355—The List of Extremely Hazardous Substances and Their Threshold Planning Quantities

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[Alphabetical Order]

CAS No.	Chemical name	Notes	Reportable quantity* (pounds)	Threshold planning quantity (pounds)
75–86–5	Acetone Cyanohydrin	10	1,000	
1752–30–3	Acetone Thiosemicarbazide	1,000	1,000/10,000	
107–02–8	Acrolein	1	500	
79–06–1	Acrylamide	f	5,000	1,000/10,000
107–13–1	Acrylonitrile	f	100	10,000
814–68–6	Acrylyl Chloride	d	100	100
111–69–3	Adiponitrile	f	1,000	1,000
116–06–3	Aldicarb	b	1	100/10,000
309–00–2	Aldrin	1	500/10,000	
107–18–6	Allyl Alcohol	100	1,000	
107–11–9	Allylamine	500	500	
20859–73–8	Aluminum Phosphide	a	100	500
54–62–6	Aminopterin		500	500/10,000
78–53–5	Amiton		500	500

3734-97-2	Amiton Oxalate		100	100/10,000
7664-41-7	Ammonia	f	100	500
300-62-9	Amphetamine		1,000	1,000
62-53-3	Aniline	f	5,000	1,000
88-05-1	Aniline, 2,4,6-Trimethyl-		500	500
7783-70-2	Antimony Pentafluoride		500	500
1397-94-0	Antimycin A	b	1,000	1,000/10,000
86-88-4	ANTU		100	500/10,000
1303-28-2	Arsenic Pentoxide		1	100/10,000
1327-53-3	Arsenous Oxide	d	1	100/10,000
7784-34-1	Arsenous Trichloride		1	500
7784-42-1	Arsine		100	100
2642-71-9	Azinphos-Ethyl		100	100/10,000
86-50-0	Azinphos-Methyl		1	10/10,000
98-87-3	Benzal Chloride		5,000	500
98-16-8	Benzenamine, 3-(Trifluoromethyl)-		500	500
100-14-1	Benzene, 1-(Chloromethyl)-4-Nitro-		500	500/10,000
98-05-5	Benzenearsonic Acid		10	10/10,000
3615-21-2	Benzimidazole, 4,5-Dichloro-2-(Trifluoromethyl)-	c	500	500/10,000
98-07-7	Benzotrichloride		10	100
100-44-7	Benzyl Chloride		100	500
140-29-4	Benzyl Cyanide	d	500	500
15271-41-7	Bicyclo[2.2.1]Heptane-2-Carbonitrile, 5-Chloro-6-(((Methylamino)Carbonyl)Oxy)Imino)-, (1s-(1-alpha,2-beta,4-alpha,5-alpha,6E))-		500	500/10,000
534-07-6	Bis(Chloromethyl) Ketone		10	10/10,000
4044-65-9	Bitoscanate		500	500/10,000
10294-34-5	Boron Trichloride		500	500
7637-07-2	Boron Trifluoride		500	500
353-42-4	Boron Trifluoride Compound With Methyl Ether (1:1)		1,000	1,000
28772-56-7	Bromadiolone		100	100/10,000
7726-95-6	Bromine	f	500	500
1306-19-0	Cadmium Oxide		100	100/10,000
2223-93-0	Cadmium Stearate	b	1,000	1,000/10,000
7778-44-1	Calcium Arsenate		1	500/10,000
8001-35-2	Campechlor		1	500/10,000
56-25-7	Cantharidin		100	100/10,000
51-83-2	Carbachol Chloride		500	500/10,000
26419-73-8	Carbamic Acid, Methyl-, O-(((2,4-Dimethyl-1,3-		100	100/10,000

	Dithiolan-2-yl)Methylene)Amino)-			
1563-66-2	Carbofuran		10	10/10,000
75-15-0	Carbon Disulfide	f	100	10,000
786-19-6	Carbophenothion		500	500
57-74-9	Chlordane		1	1,000
470-90-6	Chlorfenvinfos		500	500
7782-50-5	Chlorine		10	100
24934-91-6	Chlormephos		500	500
999-81-5	Chlormequat Chloride	d	100	100/10,000
79-11-8	Chloroacetic Acid		100	100/10,000
107-07-3	Chloroethanol		500	500
627-11-2	Chloroethyl Chloroformate		1,000	1,000
67-66-3	Chloroform	f	10	10,000
542-88-1	Chloromethyl Ether	d	10	100
107-30-2	Chloromethyl Methyl Ether	b	10	100
3691-35-8	Chlorophacinone		100	100/10,000
1982-47-4	Chloroxuron		500	500/10,000
21923-23-9	Chlorthiophos	d	500	500
10025-73-7	Chromic Chloride		1	1/10,000
62207-76-5	Cobalt, ((2,2'-(1,2-Ethanediy)bis (Nitrilomethylidyne)) Bis(6-Fluorophenolato))(2-)-N,N',O,O')-		100	100/10,000
10210-68-1	Cobalt Carbonyl	d	10	10/10,000
64-86-8	Colchicine	d	10	10/10,000
56-72-4	Coumaphos		10	100/10,000
5836-29-3	Coumatetralyl		500	500/10,000
95-48-7	Cresol, o-		100	1,000/10,000
535-89-7	Crimidine	100	100/10,000	
4170-30-3	Crotonaldehyde		100	1,000
123-73-9	Crotonaldehyde, (E)-		100	1,000
506-68-3	Cyanogen Bromide		1,000	500/10,000
506-78-5	Cyanogen Iodide		1,000	1,000/10,000
2636-26-2	Cyanophos		1,000	1,000
675-14-9	Cyanuric Fluoride		100	100
66-81-9	Cycloheximide		100	100/10,000
108-91-8	Cyclohexylamine	f	10,000	10,000
17702-41-9	Decaborane(14)		500	500/10,000
8065-48-3	Demeton		500	500
919-86-8	Demeton-S-Methyl		500	500
10311-84-9	Dialifor		100	100/10,000
19287-45-7	Diborane		100	100

111-44-4	Dichloroethyl ether		10	10,000
149-74-6	Dichloromethylphenylsilane		1,000	1,000
62-73-7	Dichlorvos		10	1,000
141-66-2	Dicrotophos		100	100
1464-53-5	Diepoxybutane		10	500
814-49-3	Diethyl Chlorophosphate	d	500	500
71-63-6	Digitoxin	b	100	100/10,000
2238-07-5	Diglycidyl Ether		1,000	1,000
20830-75-5	Digoxin	d	10	10/10,000
115-26-4	Dimefox		500	500
60-51-5	Dimethoate		10	500/10,000
2524-03-0	Dimethyl Phosphorochloridothioate		500	500
77-78-1	Dimethyl sulfate		100	500
75-78-5	Dimethyldichlorosilane	d	500	500
57-14-7	Dimethylhydrazine		10	1,000
99-98-9	Dimethyl-p-Phenylenediamine		10	10/10,000
644-64-4	Dimetilan		1	500/10,000
534-52-1	Dinitrocresol		10	10/10,000
88-85-7	Dinoseb		1,000	100/10,000
1420-07-1	Dinoterb		500	500/10,000
78-34-2	Dioxathion		500	500
82-66-6	Diphacinone		10	10/10,000
152-16-9	Diphosphoramidate, Octamethyl-		100	100
298-04-4	Disulfoton		1	500
514-73-8	Dithiazanine Iodide		500	500/10,000
541-53-7	Dithiobiuret		100	100/10,000
316-42-7	Emetine, Dihydrochloride	d	1	1/10,000
115-29-7	Endosulfan		1	10/10,000
2778-04-3	Endothion		500	500/10,000
72-20-8	Endrin		1	500/10,000
106-89-8	Epichlorohydrin	f	100	1,000
2104-64-5	EPN		100	100/10,000
50-14-6	Ergocalciferol	b	1,000	1,000/10,000
379-79-3	Ergotamine Tartrate		500	500/10,000
1622-32-8	Ethanesulfonyl Chloride, 2-Chloro-		500	500
10140-87-1	Ethanol, 1,2-Dichloro-, Acetate		1,000	1,000
563-12-2	Ethion		10	1,000
13194-48-4	Ethoprophos		1,000	1,000
538-07-8	Ethylbis(2-Chloroethyl)Amine	d	500	500
371-62-0	Ethylene Fluorohydrin	b, d	10	10

75-21-8	Ethylene Oxide	f	10	1,000
107-15-3	Ethylenediamine		5,000	10,000
151-56-4	Ethyleneimine		1	500
542-90-5	Ethylthiocyanate		10,000	10,000
22224-92-6	Fenamiphos		10	10/10,000
115-90-2	Fensulfothion	d	500	500
4301-50-2	Fluenetil		100	100/10,000
7782-41-4	Fluorine	e	10	500
640-19-7	Fluoroacetamide		100	100/10,000
144-49-0	Fluoroacetic Acid		10	10/10,000
359-06-8	Fluoroacetyl Chloride	b	10	10
51-21-8	Fluorouracil		500	500/10,000
944-22-9	Fonofos		500	500
50-00-0	Formaldehyde	f	100	500
107-16-4	Formaldehyde Cyanohydrin	d	1,000	1,000
23422-53-9	Formetanate Hydrochloride	d	100	500/10,000
2540-82-1	Formothion		100	100
17702-57-7	Formparanate		100	100/10,000
21548-32-3	Fosthietan		500	500
3878-19-1	Fuberidazole		100	100/10,000
110-00-9	Furan		100	500
13450-90-3	Gallium Trichloride		500	500/10,000
77-47-4	Hexachlorocyclopentadiene	d	10	100
4835-11-4	Hexamethylenediamine, N,N'-Dibutyl-		500	500
302-01-2	Hydrazine		1	1,000
74-90-8	Hydrocyanic Acid		10	100
7647-01-0	Hydrogen Chloride (gas only)	f	5,000	500
7664-39-3	Hydrogen Fluoride		100	100
7722-84-1	Hydrogen Peroxide (Conc > 52%)	f	1,000	1,000
7783-07-5	Hydrogen Selenide		10	10
7783-06-4	Hydrogen Sulfide	f	100	500
123-31-9	Hydroquinone	f	100	500/10,000
13463-40-6	Iron, Pentacarbonyl-		100	100
297-78-9	Isobenzan		100	100/10,000
78-82-0	Isobutyronitrile	d	1,000	1,000
102-36-3	Isocyanic Acid, 3,4-Dichlorophenyl Ester		500	500/10,000
465-73-6	Isodrin		1	100/10,000
55-91-4	Isofluorphate	b	100	100
4098-71-9	Isophorone Diisocyanate	g	500	500
108-23-6	Isopropyl Chloroformate		1,000	1,000

119-38-0	Isopropylmethyl-pyrazolyl Dimethylcarbamate		100	500
78-97-7	Lactonitrile		1,000	1,000
21609-90-5	Leptophos		500	500/10,000
541-25-3	Lewisite	b, d	10	10
58-89-9	Lindane		1	1,000/10,000
7580-67-8	Lithium Hydride	a	100	100
109-77-3	Malononitrile		1,000	500/10,000
12108-13-3	Manganese, Tricarbonyl Methylcyclopentadienyl	d	100	100
51-75-2	Mechlorethamine	b	10	10
950-10-7	Mephosfolan		500	500
1600-27-7	Mercuric Acetate		500	500/10,000
7487-94-7	Mercuric Chloride		500	500/10,000
21908-53-2	Mercuric Oxide		500	500/10,000
10476-95-6	Methacrolein Diacetate		1,000	1,000
760-93-0	Methacrylic Anhydride		500	500
126-98-7	Methacrylonitrile	d	1,000	500
920-46-7	Methacryloyl Chloride		100	100
30674-80-7	Methacryloyloxyethyl Isocyanate	d	100	100
10265-92-6	Methamidophos		100	100/10,000
558-25-8	Methanesulfonyl Fluoride		1,000	1,000
950-37-8	Methidathion		500	500/10,000
2032-65-7	Methiocarb		10	500/10,000
16752-77-5	Methomyl	d	100	500/10,000
151-38-2	Methoxyethylmercuric Acetate		500	500/10,000
80-63-7	Methyl 2-Chloroacrylate		500	500
74-83-9	Methyl Bromide	f	1,000	1,000
79-22-1	Methyl Chloroformate	d	1,000	500
60-34-4	Methyl Hydrazine		10	500
624-83-9	Methyl Isocyanate		10	500
556-61-6	Methyl Isothiocyanate	a	500	500
74-93-1	Methyl Mercaptan	f	100	500
3735-23-7	Methyl Phenkapton		500	500
676-97-1	Methyl Phosphonic Dichloride	a	100	100
556-64-9	Methyl Thiocyanate		10,000	10,000
78-94-4	Methyl Vinyl Ketone		10	10
502-39-6	Methylmercuric Dicyanamide		500	500/10,000
75-79-6	Methyltrichlorosilane	d	500	500
1129-41-5	Metolcarb		1,000	100/10,000
7786-34-7	Mevinphos		10	500
315-18-4	Mexacarbate	d	1,000	500/10,000

50-07-7	Mitomycin C		10	500/10,000
6923-22-4	Monocrotophos		10	10/10,000
2763-96-4	Muscimol		1,000	500/10,000
505-60-2	Mustard Gas	d	500	500
13463-39-3	Nickel Carbonyl		10	1
54-11-5	Nicotine	b	100	100
65-30-5	Nicotine Sulfate		100	100/10,000
7697-37-2	Nitric Acid		1,000	1,000
10102-43-9	Nitric Oxide	b	10	100
98-95-3	Nitrobenzene	f	1,000	10,000
1122-60-7	Nitrocyclohexane		500	500
10102-44-0	Nitrogen Dioxide		10	100
62-75-9	Nitrosodimethylamine	d	10	1,000
991-42-4	Norbormide	100	100/10,000	
00Organorhodium Complex (PMN-82-147)	10	10/10,000		
630-60-4	Ouabain	b	100	100/10,000
23135-22-0	Oxamyl		100	100/10,000
78-71-7	Oxetane, 3,3-Bis(Chloromethyl)-		500	500
2497-07-6	Oxydisulfoton	d	500	500
10028-15-6	Ozone		100	100
1910-42-5	Paraquat Dichloride		10	10/10,000
2074-50-2	Paraquat Methosulfate		10	10/10,000
56-38-2	Parathion	b	10	100
298-00-0	Parathion-Methyl	b	100	100/10,000
12002-03-8	Paris Green		1	500/10,000
19624-22-7	Pentaborane		500	500
2570-26-5	Pentadecylamine		100	100/10,000
79-21-0	Peracetic Acid		500	500
594-42-3	Perchloromethylmercaptan		100	500
108-95-2	Phenol		1,000	500/10,000
4418-66-0	Phenol, 2,2'-Thiobis(4-Chloro-6-Methyl)-		100	100/10,000
64-00-6	Phenol, 3-(1-Methylethyl)-, Methylcarbamate		10	500/10,000
58-36-6	Phenoxarsine, 10,10'-Oxydi-		500	500/10,000
696-28-6	Phenyl Dichloroarsine	d	1	500
59-88-1	Phenylhydrazine Hydrochloride		1,000	1,000/10,000
62-38-4	Phenylmercury Acetate		100	500/10,000
2097-19-0	Phenylsilatrane	d	100	100/10,000
103-85-5	Phenylthiourea		100	100/10,000
298-02-2	Phorate		10	10

4104-14-7	Phosacetim		100	100/10,000
947-02-4	Phosfolan		100	100/10,000
75-44-5	Phosgene	f	10	10
13171-21-6	Phosphamidon		100	100
7803-51-2	Phosphine		100	500
2703-13-1	Phosphonothioic Acid, Methyl-, O-Ethyl O-(4-(Methylthio) Phenyl) Ester		500	500
50782-69-9	Phosphonothioic Acid, Methyl-, S-(2-(Bis(1Methylethyl)Amino)Ethyl) O-Ethyl Ester		100	100
2665-30-7	Phosphonothioic Acid, Methyl-, O-(4-Nitrophenyl) O-Phenyl Ester		500	500
3254-63-5	Phosphoric Acid, Dimethyl 4-(Methylthio)Phenyl Ester		500	500
2587-90-8	Phosphorothioic Acid, O,O-Dimethyl-S-(2-Methylthio) Ethyl Ester	b, c	500	500
7723-14-0	Phosphorus	a, d	1	100
10025-87-3	Phosphorus Oxychloride		1,000	500
10026-13-8	Phosphorus Pentachloride	a	500	500
7719-12-2	Phosphorus Trichloride		1,000	1,000
57-47-6	Physostigmine		100	100/10,000
57-64-7	Physostigmine, Salicylate (1:1)		100	100/10,000
124-87-8	Picrotoxin		500	500/10,000
110-89-4	Piperidine		1,000	1,000
23505-41-1	Pirimifos-Ethyl		1,000	1,000
10124-50-2	Potassium Arsenite		1	500/10,000
151-50-8	Potassium Cyanide	a	10	100
506-61-6	Potassium Silver Cyanide	a	1	500
2631-37-0	Promecarb	d	1,000	500/10,000
106-96-7	Propargyl Bromide		10	10
57-57-8	Propiolactone, Beta-		10	500
107-12-0	Propionitrile		10	500
542-76-7	Propionitrile, 3-Chloro-		1,000	1,000
70-69-9	Propiophenone, 4-Amino-	c	100	100/10,000
109-61-5	Propyl Chloroformate		500	500
75-56-9	Propylene Oxide	f	100	10,000
75-55-8	Propyleneimine		1	10,000
2275-18-5	Prothoate		100	100/10,000
129-00-0	Pyrene	b	5,000	1,000/10,000
140-76-1	Pyridine, 2-Methyl-5-Vinyl-		500	500
504-24-5	Pyridine, 4-Amino-	d	1,000	500/10,000
1124-33-0	Pyridine, 4-Nitro-,l-Oxide		500	500/10,000

53558-25-1	Pyriminil	d	100	100/10,000
14167-18-1	Salcomine		500	500/10,000
107-44-8	Sarin	d	10	10
7783-00-8	Selenious Acid		10	1,000/10,000
7791-23-3	Selenium Oxychloride		500	500
563-41-7	Semicarbazide Hydrochloride		1,000	1,000/10,000
3037-72-7	Silane, (4-Aminobutyl)Diethoxymethyl-		1,000	1,000
7631-89-2	Sodium Arsenate	l	1,000/10,000	
7784-46-5	Sodium Arsenite		1	500/10,000
26628-22-8	Sodium Azide (Na(N ₃))	a	1,000	500
124-65-2	Sodium Cacodylate		100	100/10,000
143-33-9	Sodium Cyanide (Na(CN))	a	10	100
62-74-8	Sodium Fluoroacetate		10	10/10,000
13410-01-0	Sodium Selenate		100	100/10,000
10102-18-8	Sodium Selenite	d	100	100/10,000
10102-20-2	Sodium Tellurite		500	500/10,000
900-95-8	Stannane, Acetoxytriphenyl-	c	500	500/10,000
57-24-9	Strychnine	b	10	100/10,000
60-41-3	Strychnine Sulfate		10	100/10,000
3689-24-5	Sulfotep		100	500
3569-57-1	Sulfoxide, 3-Chloropropyl Octyl		500	500
7446-09-5	Sulfur Dioxide	f	500	500
7783-60-0	Sulfur Tetrafluoride		100	100
7446-11-9	Sulfur Trioxide	a	100	100
7664-93-9	Sulfuric Acid		1,000	1,000
77-81-6	Tabun	b, d	10	10
7783-80-4	Tellurium Hexafluoride	e	100	100
107-49-3	TEPP		10	100
13071-79-9	Terbufos	d	100	100
78-00-2	Tetraethyllead	b	10	100
597-64-8	Tetraethyltin	b	100	100
75-74-1	Tetramethyllead	b, f	100	100
509-14-8	Tetranitromethane		10	500
10031-59-1	Thallium Sulfate	d	100	100/10,000
6533-73-9	Thallous Carbonate	b, d	100	100/10,000
7791-12-0	Thallous Chloride	b, d	100	100/10,000
2757-18-8	Thallous Malonate	b, d	100	100/10,000
7446-18-6	Thallous Sulfate		100	100/10,000
2231-57-4	Thiocarbazide		1,000	1,000/10,000
39196-18-4	Thiofanox		100	100/10,000

297-97-2	Thionazin		100	500
108-98-5	Thiophenol		100	500
79-19-6	Thiosemicarbazide		100	100/10,000
5344-82-1	Thiourea, (2-Chlorophenyl)-		100	100/10,000
614-78-8	Thiourea, (2-Methylphenyl)-		500	500/10,000
7550-45-0	Titanium Tetrachloride		1,000	100
584-84-9	Toluene 2,4-Diisocyanate		100	500
91-08-7	Toluene 2,6-Diisocyanate		100	100
110-57-6	Trans-1,4-Dichlorobutene		500	500
1031-47-6	Triamiphos		500	500/10,000
24017-47-8	Triazofos		500	500
76-02-8	Trichloroacetyl Chloride		500	500
115-21-9	Trichloroethylsilane	d	500	500
327-98-0	Trichloronate	e	500	500
98-13-5	Trichlorophenylsilane	d	500	500
1558-25-4	Trichloro(Chloromethyl)Silane		100	100
27137-85-5	Trichloro(Dichlorophenyl) Silane		500	500
998-30-1	Triethoxysilane		500	500
75-77-4	Trimethylchlorosilane		1,000	1,000
824-11-3	Trimethylolpropane Phosphite	d	100	100/10,000
1066-45-1	Trimethyltin Chloride	500	500/10,000	
639-58-7	Triphenyltin Chloride		500	500/10,000
555-77-1	Tris(2-Chloroethyl)Amine	d	100	100
2001-95-8	Valinomycin	b	1,000	1,000/10,000
1314-62-1	Vanadium Pentoxide		1,000	100/10,000
108-05-4	Vinyl Acetate Monomer	f	5,000	1,000
81-81-2	Warfarin		100	500/10,000
129-06-6	Warfarin Sodium	d	100	100/10,000
28347-13-9	Xylylene Dichloride		100	100/10,000
58270-08-9	Zinc, Dichloro(4,4-Dimethyl-5(((Methylamino)Carbonyl)Oxy)Imino)Pentanenitrile)-, (T-4)-		100	100/10,000
1314-84-7	Zinc Phosphide	a	100	500

*Only the statutory or final RQ is shown. For more information, see 40 CFR 355.61.

Notes:

a. This material is a reactive solid. The TPQ does not default to 10,000 pounds for non-powder, non-molten, non-solution form.

b. The calculated TPQ changed after technical review as described in a technical support document for the

final rule, April 22, 1987.

c. Chemicals added by final rule, April 22, 1987.

d. Revised TPQ based on new or re-evaluated toxicity data, April 22, 1987.

e. The TPQ was revised due to calculation error, April 22, 1987.

f. Chemicals on the original list that do not meet toxicity criteria but because of their acute lethality, high production volume and known risk are considered chemicals of concern (“Other chemicals”), November 17, 1986 and February 15, 1990.

g. The TPQ was recalculated (September 8, 2003) since it was mistakenly calculated in the April 22, 1987 final rule under the wrong assumption that this chemical is a reactive solid, when in fact it is a liquid. RQ for this chemical was adjusted on September 11, 2006.

Appendix B to Part 355—The List of Extremely Hazardous Substances and Their Threshold Planning Quantities

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[CAS Number Order]

CAS No.	Chemical name	Notes	Reportable quantity* (pounds)	Threshold planning quantity (pounds)
0	Organorhodium Complex (PMN-82-147)		10	10/10,000
50-00-0	Formaldehyde	f	100	500
50-07-7	Mitomycin C		10	500/10,000
50-14-6	Ergocalciferol	b	1,000	1,000/10,000
51-21-8	Fluorouracil		500	500/10,000
51-75-2	Mechlorethamine	b	10	10
51-83-2	Carbachol Chloride		500	500/10,000
54-11-5	Nicotine	b	100	100
54-62-6	Aminopterin		500	500/10,000
55-91-4	Isofluorphate	b	100	100
56-25-	Cantharidin		100	100/10,000

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56-38-2	Parathion	b	10	100
56-72-4	Coumaphos		10	100/10,000
57-14-7	Dimethylhydrazine		10	1,000
57-24-9	Strychnine	b	10	100/10,000
57-47-6	Physostigmine		100	100/10,000
57-57-8	Propiolactone, Beta-		10	500
57-64-7	Physostigmine, Salicylate (1:1)		100	100/10,000
57-74-9	Chlordane		1	1,000
58-36-6	Phenoxarsine, 10,10'-Oxydi-		500	500/10,000
58-89-9	Lindane		1	1,000/10,000
59-88-1	Phenylhydrazine Hydrochloride		1,000	1,000/10,000
60-34-4	Methyl Hydrazine		10	500
60-41-3	Strychnine sulfate		10	100/10,000
60-51-5	Dimethoate		10	500/10,000
62-38-4	Phenylmercury Acetate		100	500/10,000
62-53-3	Aniline	f	5,000	1,000
62-73-7	Dichlorvos		10	1,000
62-74-8	Sodium Fluoroacetate		10	10/10,000
62-75-9	Nitrosodimethylamine	d	10	1,000
64-00-6	Phenol, 3-(1-Methylethyl)-, Methylcarbamate		10	500/10,000
64-86-8	Colchicine	d	10	10/10,000

65-30-5	Nicotine sulfate		100	100/10,000
66-81-9	Cycloheximide		100	100/10,000
67-66-3	Chloroform	f	10	10,000
70-69-9	Propiophenone, 4-Amino-	c	100	100/10,000
71-63-6	Digitoxin	b	100	100/10,000
72-20-8	Endrin		1	500/10,000
74-83-9	Methyl Bromide	f	1,000	1,000
74-90-8	Hydrocyanic Acid		10	100
74-93-1	Methyl Mercaptan	f	100	500
75-15-0	Carbon Disulfide	f	100	10,000
75-21-8	Ethylene Oxide	f	10	1,000
75-44-5	Phosgene	f	10	10
75-55-8	Propyleneimine		1	10,000
75-56-9	Propylene Oxide	f	100	10,000
75-74-1	Tetramethyllead	b, f	100	100
75-77-4	Trimethylchlorosilane		1,000	1,000
75-78-5	Dimethyldichlorosilane	d	500	500
75-79-6	Methyltrichlorosilane	d	500	500
75-86-5	Acetone Cyanohydrin		10	1,000
76-02-8	Trichloroacetyl Chloride		500	500
77-47-4	Hexachlorocyclopentadiene	d	10	100
77-78-1	Dimethyl Sulfate		100	500

77-81-6	Tabun	b, d	10	10
78-00-2	Tetraethyllead	b	10	100
78-34-2	Dioxathion		500	500
78-53-5	Amiton		500	500
78-71-7	Oxetane, 3,3-Bis(Chloromethyl)-		500	500
78-82-0	Isobutyronitrile	d	1,000	1,000
78-94-4	Methyl Vinyl Ketone		10	10
78-97-7	Lactonitrile		1,000	1,000
79-06-1	Acrylamide	f	5,000	1,000/10,000
79-11-8	Chloroacetic Acid		100	100/10,000
79-19-6	Thiosemicarbazide		100	100/10,000
79-21-0	Peracetic Acid		500	500
79-22-1	Methyl Chloroformate	d	1,000	500
80-63-7	Methyl 2-Chloroacrylate		500	500
81-81-2	Warfarin		100	500/10,000
82-66-6	Diphacinone		10	10/10,000
86-50-0	Azinphos-Methyl		1	10/10,000
86-88-4	ANTU		100	500/10,000
88-05-1	Aniline, 2,4,6-Trimethyl-		500	500
88-85-7	Dinoseb		1,000	100/10,000
91-08-7	Toluene 2,6-Diisocyanate		100	100
95-48-7	Cresol, o-		100	1,000/10,000

98-05-5	Benzenearsonic Acid		10	10/10,000
98-07-7	Benzotrichloride		10	100
98-13-5	Trichlorophenylsilane	d	500	500
98-16-8	Benzenamine, 3-(Trifluoromethyl)-		500	500
98-87-3	Benzal Chloride		5,000	500
98-95-3	Nitrobenzene	f	1,000	10,000
99-98-9	Dimethyl-p-Phenylenediamine		10	10/10,000
100-14-1	Benzene, 1-(Chloromethyl)-4-Nitro-		500	500/10,000
100-44-7	Benzyl Chloride		100	500
102-36-3	Isocyanic Acid, 3,4-Dichlorophenyl Ester		500	500/10,000
103-85-5	Phenylthiourea		100	100/10,000
106-89-8	Epichlorohydrin	f	100	1,000
106-96-7	Propargyl Bromide		10	10
107-02-8	Acrolein		1	500
107-07-3	Chloroethanol		500	500
107-11-9	Allylamine		500	500
107-12-0	Propionitrile		10	500
107-13-1	Acrylonitrile	f	100	10,000
107-15-3	Ethylenediamine		5,000	10,000
107-16-4	Formaldehyde Cyanohydrin	d	1,000	1,000
107-18-6	Allyl Alcohol		100	1,000
107-30-2	Chloromethyl Methyl Ether	b	10	100

107-44-8	Sarin	d	10	10
107-49-3	TEPP		10	100
108-05-4	Vinyl Acetate Monomer	f	5,000	1,000
108-23-6	Isopropyl Chloroformate		1,000	1,000
108-91-8	Cyclohexylamine	f	10,000	10,000
108-95-2	Phenol		1,000	500/10,000
108-98-5	Thiophenol		100	500
109-61-5	Propyl Chloroformate		500	500
109-77-3	Malononitrile		1,000	500/10,000
110-00-9	Furan		100	500
110-57-6	Trans-1,4-Dichlorobutene		500	500
110-89-4	Piperidine		1,000	1,000
111-44-4	Dichloroethyl Ether		10	10,000
111-69-3	Adiponitrile	f	1,000	1,000
115-21-9	Trichloroethylsilane	d	500	500
115-26-4	Dimefox		500	500
115-29-7	Endosulfan		1	10/10,000
115-90-2	Fensulfothion	d	500	500
116-06-3	Aldicarb	b	1	100/10,000
119-38-0	Isopropylmethyl-pyrazolyl Dimethylcarbamate		100	500
123-31-9	Hydroquinone	f	100	500/10,000
123-	Crotonaldehyde, (E)-		100	1,000

73-9				
124-65-2	Sodium Cacodylate		100	100/10,000
124-87-8	Picrotoxin		500	500/10,000
126-98-7	Methacrylonitrile	d	1,000	500
129-00-0	Pyrene	b	5,000	1,000/10,000
129-06-6	Warfarin Sodium	d	100	100/10,000
140-29-4	Benzyl Cyanide	d	500	500
140-76-1	Pyridine, 2-Methyl-5-Vinyl-		500	500
141-66-2	Dicrotophos		100	100
143-33-9	Sodium Cyanide (Na(CN))	a	10	100
144-49-0	Fluoroacetic Acid		10	10/10,000
149-74-6	Dichloromethylphenylsilane		1,000	1,000
151-38-2	Methoxyethylmercuric Acetate		500	500/10,000
151-50-8	Potassium Cyanide	a	10	100
151-56-4	Ethyleneimine		1	500
152-16-9	Diphosphoramidate, Octamethyl-		100	100
297-78-9	Isobenzan		100	100/10,000
297-97-2	Thionazin		100	500
298-00-0	Parathion-Methyl	b	100	100/10,000
298-02-2	Phorate		10	10
298-04-4	Disulfoton		1	500
300-62-9	Amphetamine		1,000	1,000

302–01–2	Hydrazine		1	1,000
309–00–2	Aldrin		1	500/10,000
315–18–4	Mexacarbate		1,000	500/10,000
316–42–7	Emetine, Dihydrochloride	d	1	1/10,000
327–98–0	Trichloronate	e	500	500
353–42–4	Boron Trifluoride Compound With Methyl Ether (1:1)		1,000	1,000
359–06–8	Fluoroacetyl Chloride	b	10	10
371–62–0	Ethylene Fluorohydrin	b, d	10	10
379–79–3	Ergotamine Tartrate		500	500/10,000
465–73–6	Isodrin		1	100/10,000
470–90–6	Chlorfenvinfos		500	500
502–39–6	Methylmercuric Dicyanamide		500	500/10,000
504–24–5	Pyridine, 4-Amino-	d	1,000	500/10,000
505–60–2	Mustard Gas	d	500	500
506–61–6	Potassium Silver Cyanide	a	1	500
506–68–3	Cyanogen Bromide		1,000	500/10,000
506–78–5	Cyanogen Iodide		1,000	1,000/10,000
509–14–8	Tetranitromethane		10	500
514–73–8	Dithiazanine Iodide		500	500/10,000
534–07–6	Bis(Chloromethyl) Ketone		10	10/10,000
534–52–1	Dinitrocresol		10	10/10,000
535–89–7	Crimidine		100	100/10,000

538–07–8	Ethylbis(2-Chloroethyl)Amine	d	500	500
541–25–3	Lewisite	b, d	10	10
541–53–7	Dithiobiuret		100	100/10,000
542–76–7	Propionitrile, 3-Chloro-		1,000	1,000
542–88–1	Chloromethyl Ether	d	10	100
542–90–5	Ethylthiocyanate		10,000	10,000
555–77–1	Tris(2-Chloroethyl)Amine	d	100	100
556–61–6	Methyl Isothiocyanate	a	500	500
556–64–9	Methyl Thiocyanate		10,000	10,000
558–25–8	Methanesulfonyl Fluoride		1,000	1,000
563–12–2	Ethion		10	1,000
563–41–7	Semicarbazide Hydrochloride		1,000	1,000/10,000
584–84–9	Toluene 2,4-Diisocyanate		100	500
594–42–3	Perchloromethylmercaptan		100	500
597–64–8	Tetraethyltin	b	100	100
614–78–8	Thiourea, (2-Methylphenyl)-		500	500/10,000
624–83–9	Methyl Isocyanate		10	500
627–11–2	Chloroethyl Chloroformate		1,000	1,000
630–60–4	Ouabain	b	100	100/10,000
639–58–7	Triphenyltin Chloride		500	500/10,000
640–19–7	Fluoroacetamide		100	100/10,000
644–64–4	Dimetilan		1	500/10,000

675–14–9	Cyanuric Fluoride		100	100
676–97–1	Methyl Phosphonic Dichloride	a	100	100
696–28–6	Phenyl Dichloroarsine	d	1	500
760–93–0	Methacrylic Anhydride		500	500
786–19–6	Carbophenothion		500	500
814–49–3	Diethyl Chlorophosphate	d	500	500
814–68–6	Acrylyl Chloride	d	100	100
824–11–3	Trimethylolpropane Phosphite	d	100	100/10,000
900–95–8	Stannane, Acetoxytriphenyl-	c	500	500/10,000
919–86–8	Demeton-S-Methyl		500	500
920–46–7	Methacryloyl Chloride		100	100
944–22–9	Fonofos		500	500
947–02–4	Phosfolan		100	100/10,000
950–10–7	Mephosfolan		500	500
950–37–8	Methidathion		500	500/10,000
991–42–4	Norbormide		100	100/10,000
998–30–1	Triethoxysilane		500	500
999–81–5	Chlormequat Chloride	d	100	100/10,000
1031–47–6	Triamiphos		500	500/10,000
1066–45–1	Trimethyltin Chloride		500	500/10,000
1122–60–7	Nitrocyclohexane		500	500
1124–33–0	Pyridine, 4-Nitro-,1-Oxide		500	500/10,000

1129-41-5	Metolcarb		1,000	100/10,000
1303-28-2	Arsenic Pentoxide		1	100/10,000
1306-19-0	Cadmium Oxide		100	100/10,000
1314-62-1	Vanadium Pentoxide		1,000	100/10,000
1314-84-7	Zinc Phosphide	a	100	500
1327-53-3	Arsenous Oxide	d	1	100/10,000
1397-94-0	Antimycin A	b	1,000	1,000/10,000
1420-07-1	Dinoterb		500	500/10,000
1464-53-5	Diepoxybutane		10	500
1558-25-4	Trichloro(Chloromethyl)Silane		100	100
1563-66-2	Carbofuran		10	10/10,000
1600-27-7	Mercuric Acetate		500	500/10,000
1622-32-8	Ethanesulfonyl Chloride, 2-Chloro-		500	500
1752-30-3	Acetone Thiosemicarbazide		1,000	1,000/10,000
1910-42-5	Paraquat Dichloride		10	10/10,000
1982-47-4	Chloroxuron		500	500/10,000
2001-95-8	Valinomycin	b	1,000	1,000/10,000
2032-65-7	Methiocarb		10	500/10,000
2074-50-2	Paraquat Methosulfate		10	10/10,000
2097-19-0	Phenylsilatrane	d	100	100/10,000
2104-64-5	EPN		100	100/10,000
2223-	Cadmium Stearate	b	1,000	1,000/10,000

93-0				
2231-57-4	Thiocarbazide		1,000	1,000/10,000
2238-07-5	Diglycidyl Ether		1,000	1,000
2275-18-5	Prothoate		100	100/10,000
2497-07-6	Oxydisulfoton	d	500	500
2524-03-0	Dimethyl Phosphorochloridothioate		500	500
2540-82-1	Formothion		100	100
2570-26-5	Pentadecylamine		100	100/10,000
2587-90-8	Phosphorothioic Acid, O,O-Dimethyl-S-(2-Methylthio) Ethyl Ester	b, c	500	500
2631-37-0	Promecarb	d	1,000	500/10,000
2636-26-2	Cyanophos		1,000	1,000
2642-71-9	Azinphos-Ethyl		100	100/10,000
2665-30-7	Phosphonothioic Acid, Methyl-, O-(4-Nitrophenyl) O-Phenyl Ester		500	500
2703-13-1	Phosphonothioic Acid, Methyl-, O-Ethyl O-(4-(Methylthio)Phenyl) Ester		500	500
2757-18-8	Thallous Malonate	b, d	100	100/10,000
2763-96-4	Muscimol		1,000	500/10,000
2778-04-3	Endothion		500	500/10,000
3037-72-7	Silane, (4-Aminobutyl)Diethoxymethyl-		1,000	1,000
3254-63-5	Phosphoric Acid, Dimethyl 4-(Methylthio)Phenyl Ester	500	500	
3569-57-1	Sulfoxide, 3-Chloropropyl Octyl	500	500	
3615-21-2	Benzimidazole, 4,5-Dichloro-2-(Trifluoromethyl)-	c	500	500/10,000
3689-24-5	Sulfotep		100	500

3691–35–8	Chlorophacinone		100	100/10,000
3734–97–2	Amiton Oxalate		100	100/10,000
3735–23–7	Methyl Phenkapton		500	500
3878–19–1	Fuberidazole		100	100/10,000
4044–65–9	Bitoscanate		500	500/10,000
4098–71–9	Isophorone Diisocyanate	g	500	500
4104–14–7	Phosacetim		100	100/10,000
4170–30–3	Crotonaldehyde		100	1,000
4301–50–2	Flueneitil		100	100/10,000
4418–66–0	Phenol, 2,2'-Thiobis(4-Chloro-6-Methyl)-		100	100/10,000
4835–11–4	Hexamethylenediamine, N,N'-Dibutyl-		500	500
5344–82–1	Thiourea, (2-Chlorophenyl)-		100	100/10,000
5836–29–3	Coumatetralyl		500	500/10,000
6533–73–9	Thallous Carbonate	b, d	100	100/10,000
6923–22–4	Monocrotophos		10	10/10,000
7446–09–5	Sulfur Dioxide	f	500	500
7446–11–9	Sulfur Trioxide	a	100	100
7446–18–6	Thallous Sulfate		100	100/10,000
7487–94–7	Mercuric Chloride		500	500/10,000
7550–45–0	Titanium Tetrachloride		1,000	100
7580–67–8	Lithium Hydride	a	100	100
7631–89–2	Sodium Arsenate		1	1,000/10,000

7637-07-2	Boron Trifluoride		500	500
7647-01-0	Hydrogen Chloride (gas only)	f	5,000	500
7664-39-3	Hydrogen Fluoride		100	100
7664-41-7	Ammonia	f	100	500
7664-93-9	Sulfuric Acid		1,000	1,000
7697-37-2	Nitric Acid		1,000	1,000
7719-12-2	Phosphorus Trichloride		1,000	1,000
7722-84-1	Hydrogen Peroxide (Conc >52%)	f	1,000	1,000
7723-14-0	Phosphorus	a, d	1	100
7726-95-6	Bromine	f	500	500
7778-44-1	Calcium Arsenate		1	500/10,000
7782-41-4	Fluorine	e	10	500
7782-50-5	Chlorine		10	100
7783-00-8	Selenious Acid		10	1,000/10,000
7783-06-4	Hydrogen Sulfide	f	100	500
7783-07-5	Hydrogen Selenide		10	10
7783-60-0	Sulfur Tetrafluoride		100	100
7783-70-2	Antimony Pentafluoride		500	500
7783-80-4	Tellurium Hexafluoride	e	100	100
7784-34-1	Arsenous Trichloride		1	500
7784-42-1	Arsine		100	100
7784-46-5	Sodium Arsenite		1	500/10,000

7786– 34–7	Mevinphos		10	500
7791– 12–0	Thallous Chloride	b, d	100	100/10,000
7791– 23–3	Selenium Oxychloride		500	500
7803– 51–2	Phosphine		100	500
8001– 35–2	Campechlor		1	500/10,000
8065– 48–3	Demeton		500	500
10025– 73–7	Chromic Chloride		1	1/10,000
10025– 87–3	Phosphorus Oxychloride		1,000	500
10026– 13–8	Phosphorus Pentachloride	a	500	500
10028– 15–6	Ozone		100	100
10031– 59–1	Thallium Sulfate	d	100	100/10,000
10102– 18–8	Sodium Selenite	d	100	100/10,000
10102– 20–2	Sodium Tellurite		500	500/10,000
10102– 43–9	Nitric Oxide	b	10	100
10102– 44–0	Nitrogen Dioxide		10	100
10124– 50–2	Potassium Arsenite		1	500/10,000
10140– 87–1	Ethanol, 1,2-Dichloro-, Acetate		1,000	1,000
10210– 68–1	Cobalt Carbonyl	d	10	10/10,000
10265– 92–6	Methamidophos		100	100/10,000
10294– 34–5	Boron Trichloride		500	500
10311– 84–9	Dialifor		100	100/10,000
10476– 95–6	Methacrolein Diacetate		1,000	1,000

12002-03-8	Paris Green		1	500/10,000
12108-13-3	Manganese, Tricarbonyl Methylcyclopentadienyl	d	100	100
13071-79-9	Terbufosh	d	100	100
13171-21-6	Phosphamidon		100	100
13194-48-4	Ethoprophos		1,000	1,000
13410-01-0	Sodium Selenate		100	100/10,000
13450-90-3	Gallium Trichloride		500	500/10,000
13463-39-3	Nickel Carbonyl		10	1
13463-40-6	Iron, Pentacarbonyl-		100	100
14167-18-1	Salcomine		500	500/10,000
15271-41-7	Bicyclo[2.2.1]Heptane-2-Carbonitrile, 5-Chloro-6-(((Methylamino)Carbonyl)Oxy)Imino)-, (1s-(1-alpha,2-beta,4-alpha,5-alpha,6E))-		500	500/10,000
16752-77-5	Methomyl	d	100	500/10,000
17702-41-9	Decaborane(14)		500	500/10,000
17702-57-7	Formparanate		100	100/10,000
19287-45-7	Diborane		100	100
19624-22-7	Pentaborane		500	500
20830-75-5	Digoxin	d	10	10/10,000
20859-73-8	Aluminum Phosphide	a	100	500
21548-32-3	Fosthietan		500	500
21609-90-5	Leptophos		500	500/10,000
21908-53-2	Mercuric Oxide		500	500/10,000

21923-23-9	Chlorthiophos	d	500	500
22224-92-6	Fenamiphos		10	10/10,000
23135-22-0	Oxamyl		100	100/10,000
23422-53-9	Formetanate Hydrochloride	d	100	500/10,000
23505-41-1	Pirimifos-Ethyl		1,000	1,000
24017-47-8	Triazofos		500	500
24934-91-6	Chlormephos		500	500
26419-73-8	Carbamic Acid, Methyl-, O-(((2,4-Dimethyl-1,3-Dithiolan-2-yl)Methylene)Amino)-		100	100/10,000
26628-22-8	Sodium Azide (Na(N ₃))	a	1,000	500
27137-85-5	Trichloro(Dichlorophenyl)Silane		500	500
28347-13-9	Xylylene Dichloride		100	100/10,000
28772-56-7	Bromadiolone		100	100/10,000
30674-80-7	Methacryloyloxyethyl Isocyanate		100	100
39196-18-4	Thiofanox		100	100/10,000
50782-69-9	Phosphonothioic Acid, Methyl-, S-(2-(Bis(1-Methylethyl)Amino)Ethyl) O-Ethyl Ester		100	100
53558-25-1	Pyriminil	d	100	100/10,000
58270-08-9	Zinc, Dichloro(4,4-Dimethyl-5((((Methylamino) Carbonyl)Oxy)Imino)Pentanenitrile)-, (T-4)-		100	100/10,000
62207-76-5	Cobalt, ((2,2'-(1,2-Ethanediylobis (Nitrilomethylidyne)) Bis(6-Fluorophenolato)) (2-)-N,N',O,O')-		100	100/10,000

*Only the statutory or final RQ is shown. For more information, *see* 40 CFR 355.61.

Notes:

a. This material is a reactive solid. The TPQ does not default to 10,000 pounds for non-powder, non-molten, non-solution form.

b. The calculated TPQ changed after technical review as described in a technical support document for the

final rule, April 22, 1987.

c. Chemicals added by final rule, April 22, 1987.

d. Revised TPQ based on new or re-evaluated toxicity data, April 22, 1987.

e. The TPQ was revised due to calculation error, April 22, 1987.

f. Chemicals on the original list that do not meet toxicity criteria but because of their acute lethality, high production volume and known risk are considered chemicals of concern (“Other chemicals”). (November 17, 1986, and February 15, 1990.)

g. The TPQ was recalculated (September 8, 2003) since it was mistakenly calculated in the April 22, 1987, final rule under the wrong assumption that this chemical is a reactive solid, when in fact it is a liquid. RQ for this chemical was adjusted on September 11, 2006.

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