




UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, D.C. 20460

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OFFICE OF  
SOLID WASTE AND EMERGENCY RESPONSE

**MEMORANDUM**

**SUBJECT:** Interim Strategy for Enforcement of Title III and CERCLA §103 Notification Requirements

**FROM:** Bruce M. Diamond, Director   
Office of Waste Programs Enforcement

**TO:** Director, Waste Management Division  
Regions IV, V, and VIII

Director, Emergency & Remedial Response Division  
Region II

Director, Environmental Services Division  
Regions I and VI

Director, Hazardous Waste Management Division  
Region III

Director, Toxics and Waste Management Division  
Region IX

Director, Hazardous Waste Division  
Region X

Director, Congressional & Intergovernmental Liaison  
Region VII

**PURPOSE**

The purpose of this memorandum is to provide interim guidance concerning enforcement of §§302, 303, 304, 311, 312, and 322 of the Emergency Planning and Community Right-To-Know Act (Title III of the Superfund Amendments and Reauthorization Act - SARA) and the §103 notification requirements of the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA). The interim strategy will discuss the following subjects:

- o Enforcement provisions under Title III (§§325 and 326), and CERCLA §109;
- o General priorities for EPA enforcement;

- o Enforcement of CERCLA §103 and Title III §304;
  - Relationship between CERCLA §103 and Title III §304;
  - The substance of §304 reports;
  - Identifying §103/§304 violations;
  - Priorities;
  - Enforcement response;
- o Enforcement of §§302, 303, 311, and 312;
  - Identifying violators;
  - Enforcement response;
- o Enforcement of §322;
- o Coordination; and
- o Delegations.

Central to the enforcement of Title III is the development of working relationships with the Regional Preparedness Coordinator, the §313 enforcement contact, the Office of Regional Counsel, enforcement personnel from other media offices, and most importantly, with the State Emergency Response Commissions (SERCs) for each State in the Region. This guidance provides a framework for implementing the enforcement program in the Regions.

#### STATUTORY STRUCTURE AND ENFORCEMENT PROVISIONS

Title III establishes requirements for emergency planning at the State and local level, and provides residents and local governments with information concerning potential chemical hazards present in their communities. The Act is divided into three subtitles. Subtitle A, Emergency Planning and Notification, establishes a framework for local emergency planning. Subtitle B, Reporting Requirements, promotes community awareness of hazardous chemicals present in the locality. Subtitle C, General Provisions, relates to enforcement, trade secret protection, and public availability of information.

The enforcement sections of Subtitle C (§325 and §326) authorize EPA, State and local governments, and citizens to take legal action against owners or operators of facilities who fail to comply with Title III. EPA has administrative and civil judicial authority to enforce Title III. The United States may also seek imprisonment and fines for violations of the §304 emergency notification requirements and violations of the §322 trade secret provisions. States, local governments and citizens

can take civil judicial actions to enforce against violators of various sections of the Act.

For each requirement in Title III, the enforcement authorities vary. In some instances, Federal authority is primarily administrative, in other instances it is judicial. For some, but not all, requirements there is express authority for State and local suits. For some, but not all, requirements there are citizen suits. Also, §109 of SARA amended CERCLA by providing civil administrative penalties for violations of specified provisions of CERCLA, including violations of §103 (relating to failure to report releases of CERCLA hazardous substances). Section 109 authorizes Class I and Class II administrative and judicial penalties for violations of §103.

Title III enforcement authorities are summarized in Table I (next page). Appendix A provides further details on facility reporting requirements and CERCLA §103/Title III enforcement authorities.

#### GENERAL PRIORITIES FOR EPA ENFORCEMENT

The Office of Solid Waste and Emergency Response (OSWER) and the Office of Pesticides and Toxic Substances (OPTS) share responsibility for developing the strategy for Title III enforcement. Within OSWER, the Office of Waste Programs Enforcement (OWPE) is responsible for developing the enforcement strategy for §§302 and 303 (Emergency Planning), §304 (Emergency Notification), §311 (Material Safety Data Sheet (MSDS) Submissions), and §312 (Emergency and Hazardous Inventory Submissions). OPTS issued a compliance monitoring strategy for §313 on July 15, 1988. Section 313 enforcement will not be discussed in detail in this interim strategy.

With the notable exception of §313, Congress intended that implementation of Title III be mainly a State and local function. The Title III enforcement strategy acknowledges that EPA, States, local governments and citizens share responsibility for enforcing Title III. Two approaches are planned for enforcing §§302-312. First, EPA will initiate enforcement actions against owners and operators who fail to provide emergency notice after a release as required under §304. In developing these cases, EPA will coordinate with the SERCs and Local Emergency Planning Committees (LEPCs) to ascertain the facilities' compliance with other sections of the Act. Second, Regional enforcement personnel will develop enforcement contacts in all the SERCs to coordinate activities for enforcement of violations of the planning provisions (§§302-303) and the community right-to-know reporting

Table I. TITLE III ENFORCEMENT AUTHORITIES

A. SUBTITLE A EMERGENCY PLANNING AND NOTIFICATION

REQUIREMENT	FEDERAL	STATE & LOCAL	CITIZEN
§302(c) o/o with EHS/TPD notify SERC by 5/17/87 that facility is subject to Act.	§325(a) Adminstr may order o/o to comply. USDC has authority to enforce - penalty ≤ \$25k/day.	§326(a)(2)(A)(i) State & Local Gov. may file civil action for failure of o/o to notify SERC. Venue USDC.	No authority.
§303(d) o/o must appoint fac. rep. to participate in planning 9/17/87 & provide info for planning as needed.	§325(a) Adminstr may order o/o to comply. USDC has authority to enforce - penalty ≤ \$25k/day.	§326(a)(2)(B) SERC or LEPC may file civil action against o/o for failure to give information. Venue USDC.	No authority.
§304 o/o must notify SERC & LEPC immediately after release of EHS or CERCLA HS ≥ 20.	§325(b)(1), (b)(2) Class I ≤ \$25k/vio & Class II ≤ \$25k/day penalties by AO or in USDC. Criminal penalty ≤ \$25k/day and/or 2 years.	No authority under §326(a)(2). See §326(a)(1).	§326(a)(1)(A)(i) any person can start civil action against o/o for failure to submit follow up report. Venue USDC.

B. SUBTITLE B REPORTING REQUIREMENTS

REQUIREMENT	FEDERAL	STATE & LOCAL	CITIZEN
§311 o/o who must prepare MSDS for OSHA must submit MSDS/list to SERC, LEPC & fire dept. by 10/17/87	§325(c)(2), (4) Adminstr can assess penalty ≤ \$10k/viol/day by AO or in USDC.	§326(a)(2)(A)(ii) & (iii) State & Local Gov. can file civil actions in USDC against o/o for failure to submit MSDS.	§326(a)(1)(A)(i) any person can start civil action against o/o for failure to submit MSDS. Venue USDC.
§312(a) o/o that must prepare MSDS under OSHA must also submit Tier 1 information 3/1/88, then annually.	§325(c)(1), (4) Adminstr can assess penalty ≤ \$25k/viol/day by AO or in USDC.	§326(a)(2)(A)(iv) State & Local Gov. can file civil action in USDC against o/o for failure to submit Tier 1 info.	§326(a)(1)(A)(i) any person can start civil action in USDC against o/o for failure to submit Tier 1 info.
§313 o/o of facil. that manuf., process or used a toxic chemical in previous year must submit TRI form annually starting 7/1/88.	§325(c)(1), (4) Adminstr can assess penalty ≤ \$25k/viol/day by AO or in USDC.	No authority under §326(a)(2). See §326(a)(1).	§326(a)(1)(A)(iv) any person can file an action in USDC against an o/o for failure to submit a TRI form.

C. SUBTITLE C GENERAL PROVISIONS

REQUIREMENT	FEDERAL	STATE & LOCAL	CITIZEN
§322(a)(2) o/o must submit info to support trade secret claim	§325(c)(2) Adminstr may assess penalty ≤ \$10k/viol/day by AO or in USDC.	No authority.	No authority.
§325(d) claim must not be frivolous.	§325(d)(1) Adminstr may assess penalty of \$25k/claim for claim that is unsubstantiated or not a T.S. and frivolous by AO or in USDC.	No authority.	No authority.
§323(b) o/o must submit a MSDS, inventory form, and a TRI form to physician who requests info for emergency case.	§325(c)(2) Adminstr may assess penalty ≤ \$10k/violation by AO or in USDC.	No authority.	§325(e) Health professional may file action in USDC to compel o/o to comply. USDC may issue order and enforce.

requirements (§§311-312). EPA regional personnel will also monitor §313 submissions for chemicals required to be reported under §302.

#### ENFORCEMENT OF CERCLA §103 AND TITLE III §304

Because the notice provisions of CERCLA and Title III overlap, EPA will combine enforcement of CERCLA §103 and Title III §304 where possible.

#### Relationship Between CERCLA §103 and Title III §304

CERCLA §103 and Title III §304 serve similar purposes. CERCLA §103 requires the person in charge of a vessel or facility to notify the National Response Center (NRC) immediately after a release of a CERCLA hazardous substance in an amount greater than or equal to its reportable quantity (RQ). In addition, Title III requires the owner or operator of a facility to notify the SERC and the LEPC for all releases that require CERCLA notification and for releases of extremely hazardous substances (EHSs) in amounts greater than or equal to their reportable quantities. Title III thereby expands upon the reporting system established under CERCLA and coordinates emergency response between Federal, State and local governments.

Currently, 134 of the 366 Title III EHSs are also CERCLA hazardous substances with established reportable quantities. EPA plans to propose a rule designating the remainder of the EHSs as CERCLA hazardous substances in the future.

Designation of EHSs as CERCLA hazardous substances will expand EPA's ability to use its authority under CERCLA §104 to access facilities, gather information, and respond consistent with the National Contingency Plan (NCP), to releases. CERCLA §106(a) gives EPA the authority to require any action necessary, including the issuance of enforcement orders, to abate any imminent and substantial endangerment resulting from the actual or threatened release of a CERCLA hazardous substance. Section 107 of CERCLA establishes the liability of responsible parties for the cost of a response action taken under §104.

#### Substance of CERCLA §103 and Title III §304 Reports

CERCLA §103(a) requires the person in charge of a vessel or facility to notify the NRC immediately when there is a release of a designated hazardous substance in an amount greater than or equal to its reportable quantity. For CERCLA hazardous substances without a designated RQ, a release of one pound or more triggers the notice requirement. The CERCLA hazardous substances are listed in Table 302.4, 40 CFR Part 302.

Title III §304(b) specifically indicates to whom and what types of information should be provided. Notice is to be given immediately after a release by the owner or operator of a facility to the community emergency coordinator for any affected LEPCs and to the SERCs for all States likely to be affected by the release. Verbal notice to the LEPC and SERC must include the following information (to the extent it does not delay the response):

- o Chemical name or identity of any substance involved in the release;
- o Indication of whether the substance is on the §302(a) list;
- o Estimate of the quantity released;
- o Time and duration of the release;
- o Medium or media into which the release occurred;
- o Any known or anticipated acute or chronic health risks associated with the emergency;
- o Proper precautions to take as a result of the release, including evacuation; and
- o Name and telephone number of the person to contact for further information.

Title III §304(c) requires the owner or operator of a facility that had a release which required immediate notice under §304(a) to provide a written followup emergency notice setting forth and updating the information required under subsection (b) as soon as practicable after the release. This written report should update the verbal notice and include additional information with respect to:

- o Actions taken to respond to and contain the release;
- o Any known or anticipated acute or chronic health risks associated with the release; and
- o Where appropriate, advice regarding medical attention necessary for exposed individuals.

The original Title III §302 EHS list can be found in 40 CFR Part 355, Appendices A and B. These appendices were recently amended (40 substances were deleted). The delisted chemicals

were published in the Federal Register on February 25, 1988. The current list of EHSS and the list of deleted chemicals can be seen in Appendix B.

#### Identifying §103/§304 Violators

Each Region should develop a simple information gathering system to identify potential violations. This information gathering effort should not be resource intensive. In many instances, State or local agencies will be able to provide the necessary information. EPA's information gathering efforts for identifying §103/§304 violations should include reviewing:

- o Information from SERCs and LEPCs;
- o NRC reports for third party notifications;
- o News reports, including wire and clipping services; and
- o Cases being developed by other media offices for violations that could include violations of the Title III and CERCLA §103 emergency notification provisions.

Additionally, Regions should use information requests under CERCLA §104(e)(2)(B) to determine whether or not there has been a violation of §103<sup>1</sup>. CERCLA §104(e)(2)(B) authorizes EPA, or any designated representative of a State under a contract or cooperative agreement, to require any person who has, or may have, information relevant to a release of a CERCLA hazardous substance, pollutant or contaminant to furnish information to EPA so that the Agency can determine the need for a response, choose or take a response action and enforce the provisions of CERCLA.

CERCLA §104(e) also provides authority for EPA to access and inspect facilities if there has been a release, a threat of a release, or if there is a reasonable basis to believe there may have been a release of a CERCLA hazardous substance, pollutant or contaminant. Section 104(e) authorizes inspections to determine the need for a response, to choose or take a response action and to enforce the provisions of CERCLA. Information gathered during the CERCLA inspection, if gathered for the CERCLA purposes mentioned above, can be used as evidence in prosecuting Title III violations. However, the Agency does not intend to enter a

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<sup>1</sup> Final guidance on use and enforcement of CERCLA §104 information requests and administrative subpoenas was issued by the Office of Enforcement and Compliance Monitoring (OECM) on August 25, 1988. The information sought should be tailored to CERCLA §103.

facility under CERCLA §104(e) with the sole purpose of enforcing Title III.

### Priorities

In developing enforcement actions for violations of §103/§304, Regional enforcement personnel should try to target a cross section of the regulated community. Reporting of EPA enforcement actions in relevant publications, should help increase awareness of Title III and provide a deterrence.

The Regions should consider the following circumstances in assessing the priority to be given an enforcement action against a given violator:

- o The volume and substance released;
- o The nature, if any, of environmental or health threats resulting from the release;
- o The efforts made by the facility to comply with the notification requirements;
- o Aggravating or mitigating circumstances, such as the facility's compliance with other Title III requirements;
- o The significance of the violation to the SERC and LEPC; and
- o The effect on the overall enforcement program.

Enforcement personnel should communicate with the appropriate SERC during the development of any notification related enforcement action to check the violating facility's compliance with all other sections of Title III. If the SERC provides evidence that the facility in question has violated other sections of Title III, those violations should be included in the enforcement action.

### Enforcement Response

Under CERCLA §109 and Title III §325(b), EPA can assess administratively either Class I or Class II civil penalties. EPA can also refer civil judicial or criminal actions to address violations. Administrative penalties can be assessed after the person accused of the violation has been notified and given the opportunity for a hearing. Procedures for assessing administrative penalties under CERCLA §109 and Title III §325 are



being developed by OECM. In the interim, Regions should follow the administrative procedures codified at 40 CFR Part 22.

Under CERCLA §109 and Title III §325, Class I penalties for §103/§304 violations are assessed per violation; Class II penalties for §103/§304 violations are assessed per violation per day. Penalties for violations of Title III §§311, 312, 313, 322(d) and 323(b) also can be assessed each day a violation continues.

For all unreported releases, possible criminal proceedings must be considered. Regional enforcement personnel should coordinate with Regional Counsel and the Special or Resident Agent in Charge (SAC or RAC) soon after discovery of the violation to decide whether criminal proceedings are in order. Except for criminal violations, Regional enforcement personnel should invoke the least resource consuming enforcement option that will adequately address the situation. Typically, administrative procedures should be effective.

During case development, the appropriate SERC should be contacted to determine the alleged violator's compliance with other sections of the statute and to find out if proceedings are already underway at the State level (under a provision of State law).

#### ENFORCEMENT OF §§302, 303, 311, AND 312

Title III §302(c) requires the owner or operator of a facility at which an EHS is present in an amount exceeding a threshold planning quantity (TPQ) to notify the SERC that the facility is subject to Title III. Section 303(d) requires owner/operators of facilities regulated under §302 to notify the LEPC of a facility representative who will participate in the planning process. EPA is authorized under Title III §325(a) to issue compliance orders for violations of §§302 and 303 and may seek judicial enforcement of the order and penalties for failure to comply with it.

Sections 311 and 312 require owners and operators of facilities that have EHSs or hazardous chemicals in excess of certain thresholds to submit MSDSs and chemical inventories to the SERC, LEPC and local fire department. Under §325(c), EPA has civil judicial and administrative penalty authority for violations of §§311 and 312.

Because the compliance information is maintained at the State and local level, enforcement personnel will need to coordinate with a SERC enforcement contact to prepare each case.

Regions should be in regular contact with SERCs to identify cases that they are interested in having EPA pursue. EPA enforcement personnel should establish a contact in each of the SERCs in their Region and coordinate with these contacts on the general approach of the SERC to enforcement, as well as their successes, concerns and needs for Federal enforcement assistance. At the very least, the Regional enforcement personnel need to keep abreast of State enforcement activities and consult with SERCs when initiating an enforcement action.

#### Identifying Violators

The ideal way to figure out who has violated §302 would be to compare reports submitted to the States with a master list of everyone who has those chemicals above threshold levels. Obviously no such list exists. However, there are some sources of information that can be used to help identify facilities required to report under §302.

OWPE is currently undertaking two projects to help the Regions, States and LEPCs identify producers and users of §302 chemicals. The first project will provide a list, by State, of the facilities that are producing §302 chemicals, which chemicals they produce, and production volumes for those chemicals. The list was developed using the Chemical Update System (CUS) and contains information submitted between 1984-86.

The second project is intended to provide LEPCs with a targeting tool to identify facilities that are potentially using §302 chemicals. Using the National Air Toxics Inventory Clearing House (NATICH) database, OWPE is developing Standard Industrial Classification (SIC) code/chemical crosswalks. The first crosswalk will list all the 4-digit SIC codes with the §302 chemicals that are typically used in them. The second crosswalk will list all the §302 chemicals with all the SIC codes in which they are found. These crosswalks are intended to be generic targeting tools that can be used in conjunction with data available through the State Commerce Departments. The Commerce Departments should be able to provide LEPCs with information on facilities that are active in their counties/localities, the SIC codes the facilities operate under and the number of employees or other business information. Together, the Commerce data and the chemical crosswalks should provide an indication of some of the facilities that are potentially required to report under Title III.

The list of facilities that reported under §313 can also be used to identify facilities that are required to comply with §302. There is a substantial overlap between the §302 EHS list and the §313 toxic chemical list (See Appendix C). Some Toxic

Release Inventory submissions are likely to include reports for one or more of these EHSSs. Therefore, this information would link the facility to the §§302-312 reporting requirements.

Past accidental spill data in the Emergency Release Notification System (ERNS) may lead to the identification of §302-303 violators. Spills of EHSSs above their reportable quantities may indicate that a facility should have notified the State under §302 of Title III.

As for identifying violators of §§311 and 312, cross checking information in CUS with §§311-312 reports submitted to States should be productive. Although CUS contains a lot of Confidential Business Information (CBI) data, lists of facilities and the chemicals they manufacture or import can be generated without using the CBI data. Because the OSHA definition of hazardous chemical is so expansive (any chemical that presents a physical or health hazard), most if not all chemicals reported in CUS would be reportable under §§311 and 312<sup>2</sup>.

Past accidental release information also will be useful in identifying §§311-312 violators. Releases of hazardous chemicals in excess of 10,000 pounds would indicate that the facility owner or operator should have submitted MSDSs or a list of MSDSs and a §312 inventory form.

The enforcement person may also want to establish contacts in the regional OSHA office to share information on potential §§311 and 312 violators. These relationships also should be helpful when you need interpretations of the OSHA MSDS requirement under their Hazard Communication Standard.

Finally, in the release incidents investigated thus far SERCs and LEPCs have identified violators of §§302-312 as a result of the release. SERCs and LEPCs will continue to be major sources of information for §§302-312 enforcement.

#### Enforcement Response

Enforcement response for violations of §§302 and 303 should be discussed with the SERC and LEPC. If the respondent cooperates and supplies the requested information, an enforcement action may not be warranted. There may be instances however,

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<sup>2</sup> For a complete definition of what constitutes a hazardous chemical see the Department of Labor Hazard Communication Final Rule, 29 CFR Parts 1910, 1915, 1917, 1918, 1926, and 1928. See also the Federal Register, Vol. 52, No. 163, August 24, 1987.

where the owner or operator's recalcitrance justifies a civil judicial enforcement action.

Violations of §§311 and 312 can be addressed through administrative procedures or judicial referrals. Regional enforcement personnel should consult with OWPE and OECM-Waste before deciding to refer cases to the Department of Justice. Again, enforcement personnel should discuss any potential enforcement action with the SERC and LEPC involved.

#### ENFORCEMENT OF SECTION 322

Title III §322 establishes the procedures for claims that information submitted under §§303, 311, 312, and 313 is trade secret. Claims will be processed and reviewed by OSWER and OPTS for completeness, sufficiency, and to make final determinations of validity. If errors and/or omissions are found during initial processing and review, OWPE will send the trade secret claimant a Notice of Noncompliance. The Notice will advise the claimant of the errors or omissions that were found and require the claimant to either amend or withdraw the claim within 30 days.

Penalties of up to \$10,000/day can be assessed for failure to comply with the Notice. If the claimant fails to comply with the Notice, OWPE will forward the case to OECM for enforcement.

A penalty of \$25,000/claim can be assessed for frivolous claims under §325(d). Section 325(d) authorizes the Administrator to assess this penalty if he determines that the trade secret claim is frivolous and the claim meets either of the following criteria: the claim is not sufficient (i.e., the claimant presents insufficient assertions to support a finding that a specific chemical is a trade secret), or that the claim is not a trade secret. Enforcement of frivolous claims will be done through EPA headquarters.

#### COORDINATION

Violations of other statutes resulting from a release may also be violations of the Title III/CERCLA notification requirements. Title III/CERCLA §103 enforcement personnel are urged to coordinate with other offices (Air, Water, RCRA, TSCA, etc.) to identify cases where violations of Title III/CERCLA notification could be consolidated with other enforcement actions. Release-related violations under other statutes will help identify facilities that have failed to comply with Title III reporting requirements.

During preparation for TSCA §§5, 6, and 8 inspections, OPTS Regional enforcement personnel will screen the applicability of §313 to targeted facilities. If the facility is subject to §313, subsequent inspections will monitor compliance. OPTS enforcement personnel will check for compliance with the remainder of the Title III reporting requirements during these inspections and will refer possible violations to OSWER for enforcement action. OSWER enforcement personnel should cross check the alleged violation with the appropriate SERC to verify the violation and then take appropriate enforcement action.

Title III enforcement personnel also should coordinate with counterparts in the Regional office that handle criminal enforcement soon after the discovery of a §103/§304 notice violation. Significant violations should be reviewed for possible criminal violations by the Special or Resident Agent-in-Charge.

#### DELEGATIONS

Title III delegation 22-3 delegated the authority to take administrative penalty actions to the Assistant Administrator for OSWER (for §§302, 303, 304, 311, 312, 322, and 323) the Assistant Administrator for OPTS (§§313, 322, and 323), and to the Regional Administrators (for all sections) on September 13, 1987. OSWER Redelegation 22-3 (dated May 27, 1988) states that the Regional Administrators or their delegates must consult with the Director OWPE or his designee before exercising their authority to take administrative penalty actions unless such consultation is waived by memorandum.

CERCLA delegation 14-31 delegated the authority to the Regional Administrators under §109 to make determinations of violations, to assess penalties, to issue notices, orders or complaints, to compile the administrative record upon which the violation was found or the penalty was imposed, and to negotiate and sign consent orders memorializing settlements under §109 between the Agency and respondents. OSWER Redelegation 14-31 states that the Regional Administrators, or their delegates, must notify the Director OWPE or his designee when exercising any of these authorities.

#### USE OF THIS MEMORANDUM

This memorandum and internal office procedures adopted pursuant to this memorandum are intended solely for the guidance of employees of the Environmental Protection Agency. They do not constitute rulemaking by the Agency and may not be relied upon to

create a right or a benefit, substantive or procedural, enforceable at law or in equity, by any person. The Agency may take action at variance with this memorandum or its implementing procedures.

**APPENDIX A. Summary of Requirements and Enforcement Authorities**

**A. Sections 302 and 303.** Section 302(c) requires the owner or operator of a facility at which an extremely hazardous substance (EHS) is present in an amount exceeding its threshold planning quantity (TPQ) to notify the State Emergency Response Commission (SERC) by May 17, 1987, that the facility is subject to Title III. Section 303(d) requires owner/operators of facilities regulated under §302 to notify the Local Emergency Planning Committee (LEPC) of a facility representative to participate in the planning process. This notification should have occurred no more than 30 days after the LEPC was established (or no later than September 17, 1987). Section 303(d)(3) requires the facility to supply promptly information upon request by the LEPC.

Section 325(a) authorizes the Administrator to order owners or operators of facilities to comply with §§302 and 303. The local U.S. district court has jurisdiction to enforce the order and impose a penalty. Under §326, State and local governments can bring civil action against an owner or operator for violations of §302(c); SERCs and LEPCs can bring a civil action for violations of §303(d). For State and local suits under §326, the U.S. district court for the jurisdiction in which the alleged violation occurred has authority to impose civil penalties provided by the statute.

**Penalty:** Violations of §§302 and 303 subject the violator to civil penalties of not more than \$25,000 for each day the violation or failure to comply with the order continues.

**B. Section 304.** Section 304 requires owners or operators of a facility at which there has been a release of an EHS or CERCLA hazardous substance in an amount greater than or equal to its reportable quantity (RQ), to immediately notify the SERCs and LEPCs of all States and districts likely to be affected. For releases of EHSs or CERCLA hazardous substances without a designated reportable quantity, a release of one pound or more triggers the notification requirement. For releases of CERCLA hazardous substances, notification must also be given to the National Response Center (NRC).

**CERCLA §103.** The Act requires the person in charge of a vessel or facility to notify the NRC immediately when there is a release of a CERCLA hazardous substance in an amount greater than or equal to its RQ. For hazardous substances without a designated RQ, a release of one pound or more triggers the notice requirement.

The CERCLA §109 and Title III §325 enforcement provisions for emergency notification are very similar. Both establish administrative penalties and the authority to bring actions judicially to assess penalties for non-notification. Both CERCLA and Title III also provide criminal fines for knowingly failing to provide notice or providing false or misleading information. Section 326(a) of Title III authorizes any citizen to file a civil action in the U.S. district court for failure to submit a follow up report on a release required to be reported to State and local officials under §304(c). State and local governments may bring civil action under the citizen suit provisions for §304 violations.<sup>1</sup>

Penalties: Under Title III §325 and CERCLA §109, Class I administrative penalty of not more than \$25,000 per violation and Class II administrative penalty of not more than \$25,000 per violation per day may be assessed. Penalties also may be assessed judicially. In the case of subsequent violations, penalties of up to \$75,000 for each day a violation continues may be assessed. Any person who knowingly fails to provide notice in accordance with CERCLA §103 or Title III §304 shall, upon conviction, be fined not more than \$25,000 or imprisoned for not more than two years, or both. For second or subsequent convictions, the violator shall be subject to a fine of not more than \$50,000 or imprisoned for not more than five years, or both.

C. Sections 311, 312 and 313. Section 311 requires the owner or operator of any facility that is required to prepare or have available a Material Safety Data Sheet (MSDS) for a hazardous chemical under the Occupational Safety and Health Administration (OSHA) Hazard Communication Standard and has a certain amount of the chemicals onsite, to submit the MSDS (or a list of the MSDSs) to the SERC, LEPC, and local fire department before the later of October 17, 1987, or three months after the owner or operator is required to prepare or have available a MSDS under OSHA. As a result of the OSHA expansion, facilities in the nonmanufacturing sector are required to submit MSDSs or a list by September 24, 1988.

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<sup>1</sup> Title III §329 defines person as "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." Section 326 authorizes any person to bring a civil action against owners and operators for their failure to submit reports specified under §326(a)(1).



Under §312(a), the owner or operator of any facility that is required to prepare or have available a MSDS for hazardous chemicals above a certain threshold level must also submit an emergency inventory form containing "Tier I" information (aggregate information on the amounts and location of hazardous chemicals at the facility). The forms are due by March 1, 1988 and must be submitted annually thereafter. Section 312(e)(1) requires the owner or operator to provide "Tier II" information (chemical specific) to the SERC, LEPC, and/or the fire department with jurisdiction over the facility upon request.

Under §313, owners or operators of certain facilities that manufactured, processed, or otherwise used a statutorily defined toxic chemical in certain amounts in the previous year must submit a toxic chemical release form to EPA and the State for each such chemical beginning July 1, 1988 and then annually thereafter.

For each of these three sections, the Administrator can assess civil penalties through issuance of administrative orders or bring actions to enforce compliance and assess penalties in the U.S. district court. State and local governments can bring civil actions for violations of §§311 and 312 and they can bring an action against violators of §313 through the citizen suit provisions. Citizens have the authority to bring action against an owner or operator for violations of all three sections. In civil suits, the district court has the authority to enforce the requirement and to impose any civil penalty provided for violation of the particular requirement.

Penalties: Violation of §311 subjects the violator to a civil penalty of not more than \$10,000 for each such violation. Section 312 and 313 violations subject the violator to civil penalties of not more than \$25,000 for each such violation. Each day a violation continues constitutes a separate violation.

D. Section 322 and 323. Section 322 covers the submittal and verification of trade secret information. For violations of this section, the Administrator may assess a civil penalty by administrative order or bring action to assess and collect penalties in the U.S. district court. Criminal penalties can be levied for persons who knowingly and willfully disclose trade secret information.

Section 323 requires owners or operators of facilities subject to §§311, 312, and 313 to provide information to health professionals when requested, subject to certain restrictions. The Administrator can assess an administrative penalty or file an action to assess and collect a penalty in U.S. district court.

Health professionals may also bring an action against a facility owner or operator in the U.S. district court.

Penalties: Any person who fails to furnish information required under §322(a)(2) or requested by the Administrator under §322(d) shall be liable for a penalty of not more than \$10,000 per violation per day. For frivolous claims, the trade secret claimant is liable for a civil penalty of \$25,000 per claim. Any person who knowingly and willfully discloses trade secret information shall, upon conviction, be subject to a fine of not more than \$20,000 or to imprisonment not to exceed one year, or both. Any person who violates §323(b) shall be subject to a civil penalty not to exceed \$10,000 per violation per day.



U.S. Environmental Protection Agency

**THE EMERGENCY PLANNING  
and  
COMMUNITY RIGHT-TO-KNOW  
ACT of 1986**

**List of Extremely  
Hazardous Substances**

**40 CFR 355  
(Sections 302 and 304)**

**March 1, 1988**

The attached lists represent the complete list of Section 302 Extremely Hazardous Substances of the Emergency Planning and Community Right to Know Act (Title III). The substances are listed in alphabetical order by chemical name and numerical order by Chemical Abstract Number (CAS No.). This list was published as Appendix A and B to the final rule (40 CFR 355) in the Federal Register on April 22, 1987, (FR 13376) and revised on December 17, 1987 (FR 48072) and February 25, 1988 (FR 5574) to delete forty substances. The list of these forty substances is also provided for your information.

(Alphabetical Order)

CAS #	Chemical Name	Notes	Reportable Quantity (pounds)	Threshold Planning Quantity (pounds)
75-86-5	Acetone Cyanohydrin		10	1,000
1752-30-3	Acetone Thiosemicarbazide	e	1	1,000 /10,000
107-02-8	Acrolein		1	500
79-06-1	Acrylamide	d, l	5,000	1,000 /10,000
107-13-1	Acrylonitrile	d, l	100	10,000
814-68-6	Acrylyl Chloride	e, h	1	100
111-69-3	Adiponitrile	e, l	1	1,000
116-06-3	Aldicarb	c	1	100 /10,000
309-00-2	Aldrin	d	1	500 /10,000
107-18-6	Allyl Alcohol		100	1,000
107-11-9	Allylamine	e	1	500
20859-73-8	Aluminum Phosphide	b	100	500
54-62-6	Aminopterin	e	1	500 /10,000
78-53-5	Amiton	e	1	500
3734-97-2	Aniton Oxalate	e	1	100 /10,000
7664-41-7	Ammonia	l	100	500
300-62-9	Amphetamine	e	1	1,000
62-53-3	Aniline	d, l	5,000	1,000
88-05-1	Aniline, 2,4,6-Trimethyl-	e	1	500
7783-70-2	Antimony Pentafluoride	e	1	500
1397-94-0	Antimycin A	c, e	1	1,000 /10,000
86-88-4	ANTU		100	500 /10,000
1303-28-2	Arsenic Pentoxide	d	5000	100 /10,000
1327-53-3	Arsenous Oxide	d, h	5000	100 /10,000
7784-34-1	Arsenous Trichloride	d	5000	500
7784-42-1	Asparine	e	1	100
2642-71-9	Azinphos-Ethyl	e	1	100 /10,000
86-50-0	Azinphos-Methyl		1	10 /10,000
98-87-3	Benzal Chloride	d	5,000	500
98-16-8	Benzenamine, 3-(Trifluoromethyl)-	e	1	500
100-14-1	Benzene, 1-(Chloromethyl)-4-Nitro-	e	1	500 /10,000
98-05-5	Benzeneearsonic Acid	e	1	10 /10,000
3615-21-2	Benzimidazole, 4,5-Dichloro-2-(Trifluoromethyl)-	e, g	1	500 /10,000
98-07-7	Benzotrichloride	d	1	100
100-64-7	Benzyl Chloride	d	100	500
140-29-4	Benzyl Cyanide	e, h	1	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))-	e	1	500 /10,000
534-07-6	Bis(Chloromethyl) Ketone	e	1	10 /10,000
4044-65-9	Bitoscanate	e	1	500 /10,000
10294-34-5	Boron Trichloride	e	1	500
7637-07-2	Boron Trifluoride	e	1	500
353-42-4	Boron Trifluoride Compound With Methyl Ether (1:1)	e	1	1,000
28772-56-7	Bromadiolone	e	1	100 /10,000
7726-95-6	Bromine	e, l	1	500
1306-19-0	Cadmium Oxide	e	1	100 /10,000
2223-93-0	Cadmium Stearate	c, e	1	1,000 /10,000
7778-44-1	Calcium Arsenate	d	1000	500 /10,000
8001-35-2	Camphesbier	d	1	500 /10,000
56-25-7	Cantharidin	e	1	100 /10,000
51-83-2	Carbachol Chloride	e	1	500 /10,000
26419-73-8	Carbamic Acid, Methyl-, O-(((2,4-Dimethyl-1, 3-Dithiolan-2-yl) Methylene)Amino)-	e	1	100 /10,000
1563-66-2	Carbofuran		10	10 /10,000
75-15-0	Carbon Disulfide	l	100	10,000
786-19-6	Carbophenothion	e	1	500
57-74-9	Chlordane	d	1	1,000
470-90-6	Chlorfenvinphos	e	1	500
7782-50-5	Chlorine		10	100
24934-91-6	Chloroacphos	e	1	500
999-81-5	Chloroacquat Chloride	e, h	1	100 /10,000
79-11-8	Chloroacetic Acid	e	1	100 /10,000
107-07-3	Chloroethanol	e	1	500
627-11-2	Chloroethyl Chloroformate	e	1	1,000
67-66-3	Chloroform	d, l	5,000	10,000
542-88-1	Chloromethyl Ether	d, h	1	100
107-30-2	Chloromethyl Methyl Ether	c, d	1	100
3691-35-8	Chlorophacinone	e	1	100 /10,000
1982-47-4	Chloroxuron	e	1	500 /10,000

(Alphabetical Order)

CAS #	Chemical Name	Notes	Reportable Quantity (pounds)	Threshold Planning Quantity (pounds)
21923-23-9	Chlorthiophos	e,h	1	500
10025-73-7	Chromic Chloride	e	1	1 /10,000
62207-76-5	Cobalt, ((2,2'-(1,2-Ethanediyldis (Nitrilomethylidene)) Bis(6-Fluorophenolato))(2'-N,N',O,O'))-	e	1	100 /10,000
10210-68-1	Cobalt Carbonyl	e,h	1	10 /10,000
64-86-8	Colchicine	e,h	1	10 /10,000
56-72-4	Coumatophos		10	100 /10,000
5836-29-3	Coumatetralyl	e	1	500 /10,000
95-48-7	Cresol, o-	d	1,000	1,000 /10,000
535-89-7	Crimidine	e	1	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	e	1	1,000 /10,000
2636-26-2	Cyanophos	e	1	1,000
675-14-9	Cyanuric Fluoride	e	1	100
66-81-9	Cycloheximide	e	1	100 /10,000
108-91-8	Cyclohexylamine	e,l	1	10,000
17702-41-9	Decaborane(14)	e	1	500 /10,000
8065-48-3	Demeton	e	1	500
919-86-8	Demeton-S-Methyl	e	1	500
10311-84-9	Dialifor	e	1	100 /10,000
19287-45-7	Diborane	e	1	100
111-44-4	Dichloroethyl Ether	d	1	10,000
149-74-6	Dichloromethylphenylsilane	e	1	1,000
62-73-7	Dichlorvos		10	1,000
141-66-2	Dicrotophos	e	1	100
1464-53-5	Diepoxbutane	d	1	500
814-49-3	Diethyl Chlorophosphate	e,h	1	500
1642-54-2	Diethylcarbamazine Citrate	e	1	100 /10,000
71-63-6	Digitoxin	e,e	1	100 /10,000
2238-07-5	Diglycidyl Ether	e	1	1,000
20830-75-5	Digoxin	e,h	1	10 /10,000
115-26-4	Dimetox	e	1	500
60-51-5	Dimethoate		10	500 /10,000
2524-03-0	Dimethyl Phosphorochloridothioate	e	1	500
77-78-1	Dimethyl Sulfate	d	1	500
75-18-3	Dimethyl Sulfide	e	1	100
75-78-5	Dimethyldichlorosilane	e,h	1	500
57-14-7	Dimethylhydrazine	d	1	1,000
99-98-9	Dimethyl-p-Phenylenediamine	e	1	10 /10,000
644-64-4	Dimetilan	e	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	e	1	500 /10,000
78-34-2	Dioxathion	e	1	500
82-66-6	Diphacinone	e	1	10 /10,000
152-16-9	Diphosphoramide, Octamethyl-		100	100
298-04-4	Disulfoton		1	500
514-73-8	Dithiazamine Iodide	e	1	500 /10,000
541-53-7	Dithiobupret		100	100 /10,000
316-42-7	Emetine, Dihydrochloride	e,h	1	1 /10,000
115-29-7	Endosulfan		1	10 /10,000
2778-04-3	Endothion	e	1	500 /10,000
72-20-8	Endrin	e	1	500 /10,000
106-89-8	Epichlorohydrin	d,l	1,000	1,000
2104-64-5	EPH	e	1	100 /10,000
50-14-6	Ergocalciferol	e,e	1	1,000 /10,000
379-79-3	Ergotamine Tartrate	e	1	500 /10,000
1622-32-8	Ethanesulfonyl Chloride, 2-Chloro-	e	1	500
10140-87-1	Ethanol, 1,2-Dichloro-, Acetate	e	1	1,000
563-12-2	Ethion		10	1,000
13194-48-4	Ethoprophos	e	1	1,000
538-07-8	Ethylbis(2-Chloroethyl)Amine	e,h	1	500
371-62-0	Ethylene Fluorohydrin	e,e,h	1	10
75-21-8	Ethylene Oxide	d,l	1	1,000
107-15-3	Ethylenediamine		5,000	10,000
151-56-4	Ethyleneimine	d	1	500
542-90-5	Ethylthiocyanate	e	1	10,000

(Alphabetical Order)

CAS #	Chemical Name	Notes	Reportable Quantity * (pounds)	Threshold Planning Quantity (pounds)
22224-92-6	Fenamiphos	e	1	10 /10,000
122-14-5	Fenitrothion	e	1	500
115-90-2	Fenulfosfion	e,h	1	500
4301-50-2	Flumetol	e	1	100 /10,000
7782-61-4	Fluorine	k	10	500
640-19-7	Fluoroacetamide	j	100	100 /10,000
144-49-0	Fluoroacetic Acid	e	1	10 /10,000
359-06-8	Fluoroacetyl Chloride	c,e	1	10
51-21-8	Fluorouracil	e	1	500 /10,000
944-22-9	Fonofos	e	1	500
50-00-0	Formaldehyde	d,l	1,000	500
107-16-4	Formaldehyde Cyanohydrin	e,h	1	1,000
23422-53-9	Formate Hydrochloride	e,h	1	500 /10,000
2540-82-1	Formothion	e	1	100
17702-57-7	Formoponate	e	1	100 /10,000
21548-32-3	Fosthietan	e	1	500
3878-19-1	Fuberidazole	e	1	100 /10,000
110-00-9	Furan		100	500
13450-90-3	Gallium Trichloride	e	1	500 /10,000
77-47-4	Hexachlorocyclopentadiene	d,h	1	100
6835-11-4	Hexamethylenediamine, N,N'-Dibutyl-	e	1	500
302-01-2	Hydrazine	d	1	1,000
76-90-8	Hydrocyanic Acid		10	100
7647-01-0	Hydrogen Chloride (Gas Only)	e,l	1	500
7664-39-3	Hydrogen Fluoride		100	100
7722-84-1	Hydrogen Peroxide (Conc > 52%)	e,l	1	1,000
7783-07-5	Hydrogen Selenide	e	1	10
7783-06-4	Hydrogen Sulfide	l	100	500
123-31-9	Hydroquinone	e	1	500 /10,000
13463-40-6	Iron, Pentacarbonyl-	e	1	100
297-78-9	Isobenzene	e	1	100 /10,000
78-82-0	Isobutyronitrile	e,h	1	1,000
102-36-3	Isocyanic Acid, 3,4-Dichlorophenyl Ester	e	1	500 /10,000
445-73-6	Isodrin		1	100 /10,000
55-91-6	Isopluorophate	c	100	100
4098-71-9	Isophorone Diisocyanate	b,e	1	100
108-23-6	Isopropyl Chloroformate	e	1	1,000
625-55-8	Isopropyl Formate	e	1	500
119-38-0	Isopropylmethylpyrazolyl Dimethylcarbamate	e	1	500
78-97-7	Lactonitrile	e	1	1,000
21609-90-5	Leptophos	e	1	500 /10,000
541-25-3	Levitate	c,e,h	1	10
58-89-9	Lindane	d	1	1,000 /10,000
7580-67-8	Lithium Hydride	b,e	1	100
109-77-3	Malononitrile		1,000	500 /10,000
12108-13-3	Manganese, Tricarbonyl Methylcyclopentadienyl	e,h	1	100
51-75-2	Machereusamine	c,e	1	10
950-10-7	Mephastolan	e	1	500
1600-27-7	Mercuric Acetate	e	1	500 /10,000
7487-94-7	Mercuric Chloride	e	1	500 /10,000
21908-53-2	Mercuric Oxide	e	1	500 /10,000
10476-95-6	Methacrolein Diacetate	e	1	1,000
760-93-0	Methacrylic Anhydride	e	1	500
126-98-7	Methacrylonitrile	h	1	500
920-46-7	Methacryloyl Chloride	e	1	100
30674-80-7	Methacryloyloxyethyl Isocyanate	e,h	1	100
10265-92-6	Methamidophos	e	1	100 /10,000
558-25-8	Methanesulfonyl Fluoride	e	1	1,000
950-37-8	Methidathion	e	1	500 /10,000
2032-65-7	Methiocarb		10	500 /10,000
16752-77-5	Methomyl	h	100	500 /10,000
151-38-2	Methoxyethylmercuric Acetate	e	1	500 /10,000
80-63-7	Methyl 2-Chloroacrylate	e	1	500
74-83-9	Methyl Bromide	l	1,000	1,000
79-22-1	Methyl Chloroformate	d,h	1,000	500
624-92-0	Methyl Disulfide	e	1	100
60-34-4	Methyl Hydrazine		10	500
624-83-9	Methyl Isocyanate	f	1	500
556-61-6	Methyl Isothiocyanate	b,e	1	500

(Alphabetical Order)

CAS #	Chemical Name	Notes	Reportable Quantity (pounds)	Threshold Planning Quantity (pounds)
74-93-1	Methyl Mercaptan		100	500
3735-23-7	Methyl Phenylcapton	e	1	500
676-97-1	Methyl Phosphonic Dichloride	b,e	1	100
556-64-9	Methyl Thiocyanate	e	1	10,000
78-94-4	Methyl Vinyl Ketone	e	1	10
502-39-6	Methylmercuric Dicyanamide	e	1	500 /10,000
75-79-6	Methyltrichlorosilane	e,h	1	500
1129-61-5	Metalcarb	e	1	100 /10,000
7786-34-7	Mevinphos		10	500
315-18-4	Mexacarbate		1,000	500 /10,000
50-07-7	Mitomycin C	d	1	500 /10,000
6923-22-4	Monocrotophos	e	1	10 /10,000
2763-96-4	Muscimol	e,h	1,000	10,000
505-60-2	Mustard Gas	e,h	1	500
13463-39-3	Nickel Carbonyl	d	1	1
54-11-5	Nicotine	c	100	100
65-30-5	Nicotine Sulfate	e	1	100 /10,000
7697-37-2	Nitric Acid		1,000	1,000
10102-43-9	Nitric Oxide	c	10	100
98-95-3	Nitrobenzene	l	1,000	10,000
1122-60-7	Nitrocyclohexane	e	1	500
10102-44-0	Nitrogen Dioxide		10	100
62-75-9	Nitrosodimethylamine	d,h	1	1,000
991-62-4	Norbornide	e	1	100 /10,000
0	Organorhodium Complex (PMN-82-147)	e	1	10 /10,000
630-60-4	Oxazepam	c,e	1	100 /10,000
23135-22-0	Oxamyl	e	1	100 /10,000
78-71-7	Oxetane, 3,3-Bis(Chloromethyl)-	e	1	500
2497-07-6	Oxysulfoton	e,h	1	500
10028-15-6	Ozone	e	1	100
1910-62-5	Paraquat	e	1	10 /10,000
2074-50-2	Paraquat Methosulfate	e	1	10 /10,000
56-38-2	Parathion	c,d	1	100
298-00-0	Parathion-Methyl	c	100	100 /10,000
12002-03-8	Paris Green	d	100	500 /10,000
19624-22-7	Pentaborane	e	1	500
2570-26-5	Pentadecylamine	e	1	100 /10,000
79-21-0	Peracetic Acid	e	1	500
594-42-3	Perchloromethylmercaptan		100	500
108-95-2	Phenol		1,000	500 /10,000
97-18-7	Phenol, 2,2'-Thiobis(4,6-Dichloro)-	e	1	100 /10,000
4418-66-0	Phenol, 2,2'-Thiobis(4-Chloro-6-Methyl)-	e	1	100 /10,000
64-00-6	Phenol, 3-(1-Methylethyl)-, Methylcarbamate	e	1	500 /10,000
58-36-6	Phenoarsine, 10,10'-Oxydi-	e	1	500 /10,000
696-28-6	Phenyl Dichloroarsine	d,h	1	500
59-88-1	Phenylhydrazine Hydrochloride	e	1	1,000 /10,000
62-38-4	Phenylmercury Acetate		100	500 /10,000
2097-19-0	Phenylsilatrane	e,h	1	100 /10,000
103-85-5	Phenylthiourea		100	100 /10,000
298-02-2	Phorate		10	10
4104-14-7	Phosacetin	e	1	100 /10,000
947-02-4	Phosfolan	e	1	100 /10,000
75-44-5	Phosgene	l	10	10
732-11-6	Phosmet	e	1	10 /10,000
13171-21-6	Phosphamidon	e	1	100
7803-51-2	Phosphine		100	500
2703-13-1	Phosphonothioic Acid, Methyl-, O-Ethyl O-(4-(Methylthio)Phenyl)Ester	e	1	500
50782-69-9	Phosphonothioic Acid, Methyl-, S-(2-(Bis(1-Methylethyl)Amino)Ethyl)Ester	e	1	100
2665-30-7	Phosphonothioic Acid, Methyl-, O-(4-Nitrophenyl) O-Phenyl Ester	e	1	500
3254-63-5	Phosphoric Acid, Dimethyl 4-(Methylthio) Phenyl Ester	e	1	500
2587-90-8	Phosphorothioic Acid, O,O-Dimethyl-S-(2-Methylthio) Ethyl Ester	c,e,g	1	500
7723-14-0	Phosphorus	b,h	1	100
10025-87-3	Phosphorus Oxychloride	d	1,000	500
10026-13-8	Phosphorus Pentachloride	b,e	1	500
1314-56-3	Phosphorus Pentoxide	b,e	1	10
7719-12-2	Phosphorus Trichloride		1,000	1,000
57-47-6	Physostigmine	e	1	100 /10,000
57-64-7	Physostigmine, Salicylate (1:1)	e	1	100 /10,000
124-87-8	Picrotoxin	e	1	500 /10,000



(Alphabetical Order)

CAS #	Chemical Name	Notes	Reportable Quantity * (pounds)	Threshold Planning Quantity (pounds)
110-89-4	Piperidine	e	1	1,000
5281-13-0	Piprotal	e	1	100 /10,000
23505-41-1	Pirimifos-Ethyl	e	1	1,000
10124-50-2	Potassium Arsenite	d	1,000	500 /10,000
151-50-8	Potassium Cyanide	b	10	100
506-61-6	Potassium Silver Cyanide	b	1	500
2631-37-0	Procarb	e,h	1	500 /10,000
106-96-7	Propargyl Bromide	e	1	10
57-57-8	Propiolactone, Beta-	e	1	500
107-12-0	Propionitrile		10	500
542-76-7	Propionitrile, 3-Chloro-		1,000	1,000
70-69-9	Propiophenone, 4-Amino-	e,g	1	100 /10,000
109-61-5	Propyl Chloroformate	e	1	500
75-56-9	Propylene Oxide	l	100	10,000
75-55-8	Propyleneimine	d	1	10,000
2275-18-5	Prothoate	e	1	100 /10,000
129-00-0	Pyrene	c	5,000	1,000 /10,000
140-76-1	Pyridine, 2-Methyl-5-Vinyl-	e	1	500
504-24-5	Pyridine, 4-Amino-	h	1,000	500 /10,000
1124-33-0	Pyridine, 4-Nitro-, 1-Oxide	e	1	500 /10,000
53558-25-1	Pyriminil	e,h	1	100 /10,000
14167-18-1	Salcamine	e	1	500 /10,000
107-44-8	Serin	e,h	1	10
7783-00-8	Selenious Acid		10	1,000 /10,000
7791-23-3	Selenium Oxychloride	e	1	500
563-41-7	Semicarbazide Hydrochloride	e	1	1,000 /10,000
3037-72-7	Silane, (4-Aminobutyl)Diethoxymethyl-	e	1	1,000
7631-89-2	Sodium Arsenate	d	1,000	1,000 /10,000
7784-46-5	Sodium Arsenite	d	1,000	500 /10,000
26628-22-8	Sodium Azide (Na(N3))	b	1,000	500
124-65-2	Sodium Cecodylate	e	1	100 /10,000
143-33-9	Sodium Cyanide (Na(CN))	b	10	100
62-74-8	Sodium Fluoroacetate		10	10 /10,000
131-52-2	Sodium Pentachlorophenate	e	1	100 /10,000
13410-01-0	Sodium Selenate	e	1	100 /10,000
10102-18-8	Sodium Selenite	h	100	100 /10,000
10102-20-2	Sodium Tellurite	e	1	500 /10,000
900-95-8	Stannane, Acetoxytriphenyl-	e,g	1	500 /10,000
57-24-9	Strychnine	c	10	100 /10,000
60-41-3	Strychnine, Sulfate	e	1	100 /10,000
3689-24-5	Sulfatep		100	500
3569-57-1	Sulfoxide, 3-Chloropropyl Octyl	e	1	500
7446-09-5	Sulfur Dioxide	e,l	1	500
7783-60-0	Sulfur Tetrafluoride	e	1	100
7446-11-9	Sulfur Trioxide	b,e	1	100
7664-93-9	Sulfuric Acid		1,000	1,000
77-81-6	Taban	c,e,h	1	10
13494-80-9	Tellurium	e	1	500 /10,000
7783-80-4	Tellurium Hexafluoride	e,k	1	100
107-49-3	TEPP		10	100
13071-79-9	Tertbutes	e,h	1	100
78-00-2	Tetraethyllead	c,d	10	100
597-64-8	Tetraethyltin	c,e	1	100
75-76-1	Tetramethyllead	c,e,l	1	100
509-14-8	Tetranitromethane		10	500
10031-59-1	Thallium Sulfate	h	100	100 /10,000
6533-73-9	Thallous Carbonate	c,h	100	100 /10,000
7791-12-0	Thallous Chloride	c,h	100	100 /10,000
2757-18-8	Thallous Malonate	c,e,h	1	100 /10,000
7446-18-6	Thallous Sulfate		100	100 /10,000
2231-57-4	Thiocarbazide	e	1	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)-	e	1	500 /10,000
7550-45-0	Titanium Tetrachloride	e	1	100
584-84-9	Toluene 2,4-Diisocyanate		100	500

(Alphabetical Order)

CAS #	Chemical Name	Notes	Reportable Quantity * (pounds)	Threshold Planning Quantity (pounds)
91-08-7	Toluene 2,6-Diisocyanate		100	100
110-57-6	Trans-1,4-Dichlorobutene	e	1	500
1031-47-6	Triamphos	e	1	500 /10,000
24017-47-8	Triazofos	e	1	500
76-02-8	Trichloroacetyl Chloride	e	1	500
115-21-9	Trichloroethylsilane	e,h	1	500
327-98-0	Trichloronate	e,k	1	500
98-13-5	Trichlorophenylsilane	e,h	1	500
1558-25-4	Trichloro(Chloromethyl)Silane	e	1	100
27137-85-5	Trichloro(Dichlorophenyl)Silane	e	1	500
998-30-1	Triethoxysilane	e	1	500
75-77-4	Trimethylchlorosilane	e	1	1,000
824-11-3	Trimethylolpropane Phosphite	e,h	1	100 /10,000
1066-45-1	Trimethyltin Chloride	e	1	500 /10,000
639-58-7	Triphenyltin Chloride	e	1	500 /10,000
555-77-1	Tris(2-Chloroethyl)Amine	e,h	1	100
2001-95-8	Valinomycin	c,e	1	1,000 /10,000
1314-62-1	Vanadium Pentoxide		1,000	100 /10,000
108-05-4	Vinyl Acetate Monomer	d,l	5,000	1,000
81-81-2	Warfarin		100	500 /10,000
129-06-6	Warfarin Sodium	e,h	1	100 /10,000
28347-13-9	Xylylene Dichloride	e	1	100 /10,000
58270-08-9	Zinc, Dichloro(4,4-Dimethyl-5((((Methylamino)Carbonyl)Oxy)imino)Pentanenitrile)-(7-4)	e	1	100 /10,000
1314-84-7	Zinc Phosphide	b	100	500

\* Only the statutory or final RQ is shown. For more information, see 40CFR Table 302.4

## Notes:

- b This material is a reactive solid. The TPO does not default to 10,000 pounds for non-powder, non-molten, non-solution form.
- c The calculated TPO changed after technical review as described in the technical support document.
- d Indicates that the RQ is subject to change when the assessment of potential carcinogenicity and/or other toxicity is completed.
- e Statutory reportable quantity for purposes of notification under SARA sect 304(a)(2).
- f The statutory 1 pound reportable quantity for methyl isocyanate may be adjusted in a future rulemaking action.
- g New chemicals added that were not part of the original list of 402 substances.
- h Revised TPO based on new or re-evaluated toxicity data.
- j TPO is revised to its calculated value and does not change due to technical review as in proposed rule.
- k The TPO was revised after proposal due to calculation error.
- l Chemicals on the original list that do not meet the toxicity criteria but because of their high production volume and recognized toxicity are considered chemicals of concern ("Other chemicals")

(Alphabetical Order)

CAS #	Chemical Name	Notes	Reportable Quantity * (pounds)	Threshold Planning Quantity (pounds)
91-08-7	Toluene 2,6-Diisocyanate		100	100
110-57-6	Trans-1,4-Dichlorobutene	e	1	500
1031-67-6	Triamphos	e	1	500 /10,000
24017-67-8	Triazofos	e	1	500
76-02-8	Trichloroacetyl Chloride	e	1	500
115-21-9	Trichloroethylsilane	e,h	1	500
327-98-0	Trichloronate	e,k	1	500
98-13-5	Trichlorophenylsilane	e,h	1	500
1558-25-4	Trichloro(Chloromethyl)Silane	e	1	100
27137-85-5	Trichloro(Dichlorophenyl)Silane	e	1	500
998-30-1	Triethoxysilane	e	1	500
75-77-4	Trimethylchlorosilane	e	1	1,000
824-11-3	Trimethylolpropene Phosphite	e,h	1	100 /10,000
1066-45-1	Trimethyltin Chloride	e	1	500 /10,000
639-58-7	Triphenyltin Chloride	e	1	500 /10,000
555-77-1	Tris(2-Chloroethyl)Amine	e,h	1	100
2001-95-8	Valinomycin	c,e	1	1,000 /10,000
1314-62-1	Vanadium Pentoxide		1,000	100 /10,000
108-05-4	Vinyl Acetate Monomer	d,l	5,000	1,000
81-81-2	Warfarin		100	500 /10,000
129-06-6	Warfarin Sodium	e,h	1	100 /10,000
28347-13-9	Xylylene Dichloride	e	1	100 /10,000
58270-08-9	Zinc, Dichloro(6,6-Dimethyl-5((((Methylamino)Carbonyl)Oxy)imino)Pentanenitrile)-, (7-4)-	e	1	100 /10,000
1314-84-7	Zinc Phosphide	b	100	500

\* Only the statutory or final RQ is shown. For more information, see 40CFR Table 302.4

## Notes:

- b This material is a reactive solid. The TPQ does not default to 10,000 pounds for non-powder, non-molten, non-solution form.
- c The calculated TPQ changed after technical review as described in the technical support document.
- d Indicates that the RQ is subject to change when the assessment of potential carcinogenicity and/or other toxicity is completed.
- e Statutory reportable quantity for purposes of notification under SARA sect 304(a)(2).
- f The statutory 1 pound reportable quantity for methyl isocyanate may be adjusted in a future rulemaking action.
- g New chemicals added that were not part of the original list of 402 substances.
- h Revised TPQ based on new or re-evaluated toxicity data.
- j TPQ is revised to its calculated value and does not change due to technical review as in proposed rule.
- k The TPQ was revised after proposal due to calculation error.
- l Chemicals on the original list that do not meet the toxicity criteria but because of their high production volume and recognized toxicity are considered chemicals of concern ("other chemicals")

(CAS Number Order)

CAS #	Chemical Name	Notes	Reportable Quantity (pounds)	Threshold Planning Quantity (pounds)
0	Organorhodium Complex (PMN-82-167)	e	1	10 /10,000
50-00-0	Formaldehyde	d,l	1,000	500
50-07-7	Mitomycin C	d,h	1	500 /10,000
50-14-6	Ergocalciferol	c,e	1	1,000 /10,000
51-21-8	Fluorouracil	e	1	500 /10,000
51-75-2	Nechlorethamine	c,e	1	10
51-83-2	Carbachol Chloride	e	1	500 /10,000
54-11-5	Nicotine	c,d	100	100
54-62-6	Aminopterin	e	1	500 /10,000
53-91-4	Isofluorophate	c	100	100
56-25-7	Cantharidin	e	1	100 /10,000
56-38-2	Parathion	c,d	1	100
56-72-4	Coumaphos		10	100 /10,000
57-14-7	Dimethylhydrazine	d	1	1,000
57-24-9	Strychnine	c	10	100 /10,000
57-47-6	Physostigmine	e	1	100 /10,000
57-57-8	Propiolactone, Beta-	e	1	500
57-64-7	Physostigmine, Salicylate (1:1)	e	1	100 /10,000
57-74-9	Chlordane	d	1	1,000
58-36-6	Phenoxarsine, 10,10'-Oxydi-	e	1	500 /10,000
58-89-9	Lindane	d	1	1,000 /10,000
59-68-1	Phenylhydrazine Hydrochloride	e	1	1,000 /10,000
60-34-4	Methyl Hydrazine		10	500
60-61-3	Strychnine, Sulfate	e	1	100 /10,000
60-51-5	Dimethoate		10	500 /10,000
62-38-4	Phenylmercury Acetate		100	500 /10,000
62-53-3	Aniline	d,l	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,h	1	1,000
64-00-6	Phenol, 3-(1-Methylethyl)-, Methylcarbamate	e	1	500 /10,000
64-86-8	Colchicine	e,h	1	10 /10,000
65-30-5	Nicotine Sulfate	e	1	100 /10,000
66-81-9	Cycloheximide	e	1	100 /10,000
67-66-3	Chloroform	d,l	5,000	10,000
70-69-9	Propiophenone, 4-Amino-	e,g	1	100 /10,000
71-63-6	Digitoxin	c,e	1	100 /10,000
72-20-8	Endrin		1	500 /10,000
74-83-9	Methyl Bromide		1,000	1,000
74-90-8	Hydrocyanic Acid		10	100
74-93-1	Methyl Mercaptan		100	500
75-15-0	Carbon Disulfide		100	10,000
75-18-3	Dimethyl Sulfide	e	1	100
75-21-8	Ethylene Oxide	d,l	1	1,000
75-44-5	Phosgene		10	10
75-55-8	Propyleneimine	d	1	10,000
75-56-9	Propylene Oxide		100	10,000
75-74-1	Tetraethyllead	c,e,l	1	100
75-77-4	Trimethylchlorosilane	e	1	1,000
75-78-5	Diethylchlorosilane	e,h	1	500
75-79-6	Methyltrichlorosilane	e,h	1	500
75-86-5	Acetone Cyanohydrin		10	1,000
76-02-8	Trichloroacetyl Chloride	e	1	500
77-47-4	Hexachlorocyclopentadiene	d,h	1	100
77-78-1	Dimethyl Sulfate	d	1	500
77-81-6	Tabun	c,e,h	1	10
78-00-2	Tetraethyllead	c,d	10	100
78-34-2	Dioxathion	e	1	500
78-53-5	Anitron	e	1	500
78-71-7	Oxetane, 3,3-Bis(Chloromethyl)-	e	1	500
78-82-0	Isobutyronitrile	e,h	1	1,000
78-94-4	Methyl Vinyl Ketone	e	1	10
78-97-7	Lactonitrile	e	1	1,000
79-06-1	Acrylamide	d,l	5,000	1,000 /10,000
79-11-8	Chloroacetic Acid	e	1	100 /10,000
79-19-6	Thiosemicarbazide		100	100 /10,000
79-21-0	Peracetic Acid	e	1	500
79-22-1	Methyl Chloroformate	d,h	1,000	500
80-63-7	Methyl 2-Chloroacrylate	e	1	500

(CAS Number Order)

CAS #	Chemical Name	Notes	Reportable Quantity * (pounds)	Threshold Planning Quantity (pounds)
81-81-2	Warfarin		100	500 /10,000
82-66-6	Diphacinone	e	1	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-	e	1	500
88-85-7	Dinoseb		1,000	100 /10,000
91-08-7	Toluene 2,6-Diisocyanate		100	100
95-48-7	Cresol, o-	d	1,000	1,000 /10,000
97-18-7	Phenol, 2,2'-Thiobis(4,6-Dichloro)-	e	1	100 /10,000
98-05-5	Benzenearsonic Acid	e	1	10 /10,000
98-07-7	Benzotrithloride	d	1	100
98-13-5	Trichlorophenylsilane	e,h	1	500
98-16-6	Benzenamine, 3-(Trifluoromethyl)-	e	1	500
98-87-3	Benzal Chloride	d	5,000	500
98-95-3	Nitrobenzene	l	1,000	10,000
99-98-9	Dimethyl-p-Phenylenediamine	e	1	10 /10,000
100-14-1	Benzene, 1-(Chloromethyl)-4-Nitro-	e	1	500 /10,000
100-44-7	Benzyl Chloride	d	100	500
102-36-3	Isocyanic Acid, 3,4-Dichlorophenyl Ester	e	1	500 /10,000
103-85-5	Phenylthiourea		100	100 /10,000
106-89-8	Epichlorohydrin	d,l	1,000	1,000
106-96-7	Propargyl Bromide	e	1	10
107-02-8	Acrolein		1	500
107-07-3	Chloroethanol	e	1	500
107-11-9	Allylamine	e	1	500
107-12-0	Propionitrile		10	500
107-13-1	Acrylonitrile	d,l	100	10,000
107-15-3	Ethylenediamine		5,000	10,000
107-16-4	Formaldehyde Cyanohydrin	e,h	1	1,000
107-18-6	Allyl Alcohol		100	1,000
107-30-2	Chloromethyl Methyl Ether	c,d	1	100
107-44-8	Sarin	e,h	1	10
107-49-3	TEPP		10	100
108-05-4	Vinyl Acetate Monomer	d,l	5,000	1,000
108-23-6	Isopropyl Chloroformate	e	1	1,000
108-91-8	Cyclohexylamine	e,l	1	10,000
108-95-2	Phenol		1,000	500 /10,000
108-98-5	Thiophenol		100	500
109-61-5	Propyl Chloroformate	e	1	500
109-77-3	Malononitrile		1,000	500 /10,000
110-00-9	Furan		100	500
110-57-6	Trans-1,4-Dichlorobutene	e	1	500
110-89-4	Piperidine	e	1	1,000
111-44-4	Dichloroethyl Ether	d	1	10,000
111-69-3	Adiponitrile	e,l	1	1,000
115-21-9	Trichloroethylsilane	e,h	1	500
115-26-4	Dimefox	e	1	500
115-29-7	Endosulfan		1	10 /10,000
115-90-2	Fensulfathion	e,h	1	500
116-06-3	Aldicarb	c	1	100 /10,000
119-38-0	Isopropylmethylpyrazolyl Dimethylcarbamate	e	1	500
122-14-5	Fenitrothion	e	1	500
123-31-9	Hydroquinone	a	1	500 /10,000
123-73-9	Crotonaldehyde, (E)-		100	1,000
124-65-2	Sodium Cacodylate	e	1	100 /10,000
124-87-8	Picrotoxin	e	1	500 /10,000
126-98-7	Methacrylonitrile	h	1	500
129-00-0	Pyrene	c	5,000	1,000 /10,000
129-06-6	Warfarin Sodium	e,h	1	100 /10,000
131-52-2	Sodium Pentachlorophenate	e	1	100 /10,000
140-29-4	Benzyl Cyanide		1	500
140-76-1	Pyridine, 2-Methyl-5-Vinyl-	e	1	500
141-66-2	Dicrotophos	e	1	100
143-33-9	Sodium Cyanide (Na(CN))	b	10	100
144-49-0	Fluoroacetic Acid	e	1	10 /10,000
149-74-6	Dichloromethylphenylsilane	e	1	1,000
151-38-2	Methoxyethylmercuric Acetate	e	1	500 /10,000
151-50-8	Potassium Cyanide	c	10	100
151-56-4	Ethyleneimine	c	1	500

(CAS Number Order)

CAS #	Chemical Name	Notes	Reportable Quantity (pounds)	Threshold Planning Quantity (pounds)
152-16-9	Diphosphoramide, Octamethyl-		100	100
297-78-9	Isobenzan	e	1	100 /10,000
297-97-2	Thionazin		100	500
298-00-0	Parathion-Methyl	c	100	100 /10,000
298-02-2	Phorate		10	10
298-04-4	Disulfoton		1	500
300-62-9	Amphetamine	e	1	1,000
302-01-2	Hydrazine	d	1	1,000
309-00-2	Aldrin	d	1	500 /10,000
315-18-4	Hexacarbete		1,000	500 /10,000
316-42-7	Emetine, Dihydrochloride	e,h	1	1 /10,000
327-98-0	Trichloronate	e,k	1	500
353-42-4	Boron Trifluoride Compound With Methyl Ether (1:1)	e	1	1,000
359-06-8	Fluoroacetyl Chloride	c,e	1	10
371-62-0	Ethylene Fluorohydrin	c,e,h	1	10
379-79-3	Ergotamine Tartrate	e	1	500 /10,000
445-73-6	Isodrin		1	100 /10,000
470-90-6	Chlorfenvinfos	e	1	500
502-39-6	Methylmercuric Dicyanamide	e	1	500 /10,000
504-24-5	Pyridine, 4-Amino-	h	1,000	500 /10,000
505-60-2	Mustard Gas	e,h	1	500
506-61-6	Potassium Silver Cyanide	b	1	500
506-68-3	Cyanogen Bromide		1,000	500 /10,000
506-78-5	Cyanogen Iodide	e	1	1,000 /10,000
509-14-8	Tetranitromethane		10	500
514-73-8	Dithiazanine Iodide	e	1	500 /10,000
534-07-6	Bis(Chloromethyl) Ketone	e	1	10 /10,000
534-52-1	Dinitrocresol		10	10 /10,000
535-89-7	Crimidine	e	1	100 /10,000
538-07-8	Ethylbis(2-Chloroethyl)Amine	e,h	1	500
541-25-3	Lewisite	c,e,h	1	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,h	1	100
542-90-5	Ethylthiocyanate	e	1	10,000
555-77-1	Tris(2-Chloroethyl)Amine	e,h	1	100
556-61-6	Methyl Isothiocyanate	b,e	1	500
556-64-9	Methyl Thiocyanate	e	1	10,000
558-25-8	Methanesulfonyl Fluoride	e	1	1,000
563-12-2	Ethion		10	1,000
563-41-7	Semicarbazide Hydrochloride	e	1	1,000 /10,000
584-84-9	Toluene 2,4-Diisocyanate		100	500
594-42-3	Perchloromethylmercaptan		100	500
597-64-8	Tetraethyltin	c,e	1	100
614-78-8	Thiourea, (2-Methylphenyl)-	e	1	500 /10,000
624-83-9	Methyl Isocyanate	f	1	500
624-92-0	Methyl Disulfide	e	1	100
625-55-8	Isopropyl Formate	e	1	500
627-11-2	Chloroethyl Chloroformate	e	1	1,000
630-60-4	Oxibenzin	c,e	1	100 /10,000
639-58-7	Triphenyltin Chloride	e	1	500 /10,000
640-19-7	Fluoracetamide	j	100	100 /10,000
644-64-4	Dimeflan	e	1	500 /10,000
675-14-9	Cyanuric Fluoride	e	1	100
676-97-1	Methyl Phosphonic Dichloride	b,e	1	100
696-28-6	Phenyl Dichloroarsine	d,h	1	500
732-11-6	Phosmet	e	1	10 /10,000
760-93-0	Methacrylic Anhydride	e	1	500
786-19-6	Carbophenothion	e	1	500
814-49-3	Diethyl Chlorophosphate	e,h	1	500
814-68-6	Acrylyl Chloride	e,h	1	100
824-11-3	Triethylolpropane Phosphite	e,h	1	100 /10,000
900-95-8	Stannane, Acetoxytriphenyl-	e,q	1	500 /10,000
919-86-8	Deseton-S-Methyl	e	1	500
920-46-7	Methacryloyl Chloride	e	1	100
944-22-9	Fonofos	e	1	500
947-02-4	Phosfolan	e	1	100 /10,000
950-10-7	Mephosfolan	e	1	500
950-37-8	Methidathion	e	1	500 /10,000

(CAS Number Order)

CAS #	Chemical Name	Notes	Reportable Quantity (pounds)	Threshold Planning Quantity (pounds)
991-42-4	Norbornide	e	1	100 /10,000
998-30-1	Triethoxysilane	e	1	500
999-81-5	Chlorosquat Chloride	e,h	1	100 /10,000
1031-47-6	Triamphos	e	1	500 /10,000
1066-45-1	Trimethyltin Chloride	e	1	500 /10,000
1122-60-7	Nitrocyclohexane	e	1	500
1124-33-0	Pyridine, 4-Nitro-, 1-Oxide	e	1	500 /10,000
1129-41-5	Metolcarb	e	1	100 /10,000
1303-28-2	Arsenic Pentoxide	d	5000	100 /10,000
1306-19-0	Cadmium Oxide	e	1	100 /10,000
1314-56-3	Phosphorus Pentoxide	b,e	1	10
1314-62-1	Vanadium Pentoxide	e	1,000	100 /10,000
1314-84-7	Zinc Phosphide	b	100	500
1327-53-3	Arsenous Oxide	d,h	5000	100 /10,000
1397-94-0	Antimycin A	c,e	1	1,000 /10,000
1420-07-1	Dinoterb	e	1	500 /10,000
1464-53-5	Diepoxybutane	d	1	500
1558-25-4	Trichloro(Chloromethyl)Silane	e	1	100
1563-66-2	Carbofuran	e	10	10 /10,000
1600-27-7	Mercuric Acetate	e	1	500 /10,000
1622-32-8	Ethanesulfonyl Chloride, 2-Chloro-	e	1	500
1642-54-2	Dithyricarbazine Ditrates	e	1	100 /10,000
1752-30-3	Acetone Thiosemicarbazide	e	1	1,000 /10,000
1910-42-5	Paraquat	e	1	10 /10,000
1982-47-4	Chloroxuron	e	1	500 /10,000
2001-95-8	Valinomycin	c,e	1	1,000 /10,000
2032-65-7	Methiocarb	e	10	500 /10,000
2074-50-2	Paraquat Methosulfate	e	1	10 /10,000
2097-19-0	Phenylsilatrane	e,h	1	100 /10,000
2104-64-5	EPN	e	1	100 /10,000
2223-93-0	Cadmium Stearate	c,e	1	1,000 /10,000
2231-57-4	Thiocarbazide	e	1	1,000 /10,000
2238-07-5	Diglycidyl Ether	e	1	1,000
2275-18-5	Prothoate	e	1	100 /10,000
2497-07-6	Oxydisulfoton	e,h	1	500
2524-03-0	Dimethyl Phosphorochloridothioate	e	1	500
2540-82-1	Formothion	e	1	100
2570-26-5	Pentadecylamine	e	1	100 /10,000
2587-90-8	Phosphorothioic Acid, O,O-Dimethyl-S-(2-Methylthio) Ethyl Ester	c,e,g	1	500
2631-37-0	Promecarb	e,h	1	500 /10,000
2636-26-2	Cyanophos	e	1	1,000
2642-71-9	Azinphos-Ethyl	e	1	100 /10,000
2665-30-7	Phosphonothioic Acid, Methyl-,O-(4-Nitrophenyl) O-Phenyl Ester	e	1	500
2703-13-1	Phosphonothioic Acid, Methyl-,O-Ethyl O-(4-(Methylthio)Phenyl)Esters	e	1	500
2757-18-8	Thallous Malonate	c,e,h	1	100 /10,000
2763-96-4	Muscimol	e,h	1,000	10,000
2778-04-3	Endothion	e	1	500 /10,000
3037-72-7	Silane, (4-Aminobutyl)diethoxymethyl-	e	1	1,000
3254-63-5	Phosphoric Acid, Dimethyl 4-(Methylthio) Phenyl Ester	e	1	500
3569-57-1	Sulfoxide, 3-Chloropropyl Octyl	e	1	500
3615-21-2	Benzisidazole, 4,5-Dichloro-2-(Trifluoromethyl)-	e,g	1	500 /10,000
3689-24-5	Sulfotep	e	100	500
3691-35-8	Chlorophacinone	e	1	100 /10,000
3734-97-2	Amion Oxalate	e	1	100 /10,000
3735-23-7	Methyl Phenkapton	e	1	500
3878-19-1	Fuberidazole	e	1	100 /10,000
4044-65-9	Bitocanate	e	1	500 /10,000
4098-71-9	Isophorone Diisocyanate	b,e	1	100
4104-14-7	Phosacetin	e	1	100 /10,000
4170-30-3	Crotonaldehyde	e	100	1,000
4301-50-2	Fluonetil	e	1	100 /10,000
4418-66-0	Phenol, 2,2'-Thiobis(4-Chloro-6-Methyl)-	e	1	100 /10,000
4835-11-4	Hexamethylenediamine, N,N'-Dibutyl-	e	1	500
5281-13-0	Piprotal	e	1	100 /10,000
5344-82-1	Thiourea, (2-Chlorophenyl)-	e	100	100 /10,000
5836-29-3	Coumatetralyl	e	1	500 /10,000
6533-73-9	Thallous Carbonate	c,h	100	100 /10,000
6923-22-4	Monocrotochos	e	1	10 /10,000
7446-09-5	Sulfur Dioxide	e,l	1	500

(CAS Number Order)

CAS #	Chemical Name	Notes	Reportable Quantity * (pounds)	Threshold Planning Quantity (pounds)
7446-11-9	Sulfur Trioxide	b,e	1	100
7446-18-6	Thallous Sulfate		100	100 /10,000
7487-94-7	Mercuric Chloride	e	1	500 /10,000
7550-45-0	Titanium Tetrachloride	e	1	100
7580-67-8	Lithium Hydride	b,e	1	100
7631-89-2	Sodium Arsenate	d	1,000	1,000 /10,000
7637-07-2	Boron Trifluoride	e	1	500
7647-01-0	Hydrogen Chloride (Gas Only)	e,l	1	500
7664-39-3	Hydrogen Fluoride		100	100
7664-41-7	Ammonia	l	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%)	e,l	1	1,000
7723-14-0	Phosphorus	b,h	1	100
7726-95-6	Bromine	e,l	1	500
7778-44-1	Calcium Arsenate	d	1000	500 /10,000
7782-41-4	Fluorine	k	10	500
7782-50-5	Chlorine		10	100
7783-00-8	Selenious Acid		10	1,000 /10,000
7783-06-4	Hydrogen Sulfide	l	100	500
7783-07-4	Hydrogen Selenide	e	1	10
7783-60-0	Sulfur Tetrafluoride	e	1	100
7783-70-2	Antimony Pentafluoride	e	1	500
7783-80-4	Tellurium Hexafluoride	e,k	1	100
7784-34-1	Arsinous Trichloride	d	5000	500
7784-42-1	Arsine	e	1	100
7784-46-5	Sodium Arsenite	d	1,000	500 /10,000
7786-34-7	Neophos		10	500
7791-12-0	Thallous Chloride	c,h	100	100 /10,000
7791-23-3	Selenium Oxychloride	e	1	500
7803-51-2	Phosphine		100	500
8001-35-2	Camphchlor	d	1	500 /10,000
8065-48-3	Demeton	e	1	500
10025-73-7	Chromic Chloride	e	1	1 /10,000
10025-87-3	Phosphorus Oxychloride	d	1,000	500
10026-13-8	Phosphorus Pentachloride	b,e	1	500
10028-15-6	Ozone	e	1	100
10031-59-1	Thallium Sulfate	h	100	100 /10,000
10102-18-8	Sodium Selenite	h	100	100 /10,000
10102-20-2	Sodium Tellurite	e	1	500 /10,000
10102-43-9	Nitric Oxide	c	10	100
10102-44-0	Nitrogen Dioxide		10	100
10124-50-2	Potassium Arsenite	d	1,000	500 /10,000
10140-87-1	Ethanol, 1,2-Dichloro-, Acetate	e	1	1,000
10210-68-1	Cobalt Carbonyl	e,h	1	10 /10,000
10265-92-6	Methamidophos	e	1	100 /10,000
10294-34-5	Boron Trichloride	e	1	500
10311-84-9	Dialifer	e	1	100 /10,000
10476-95-6	Methachloralol diacetate	e	1	1,000
12002-03-8	Paris Green	d	100	500 /10,000
12108-13-3	Manganese, Tricarbonyl Methylcyclopentadienyl	e,h	1	100
13071-79-9	Terbutylas	e,h	1	100
13171-21-6	Phosphaziride	e	1	100
13194-48-4	Ethoprophos	e	1	1,000
13410-01-0	Sodium Selenate	e	1	100 /10,000
13430-90-3	Gallium Trichloride	e	1	500 /10,000
13463-39-3	Nickel Carbonyl	d	1	1
13463-40-6	Iron, Pentacarbonyl	e	1	100
13494-80-9	Tellurium	e	1	500 /10,000
14167-18-1	Salcomine	e	1	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))-	e	1	500 /10,000
16752-77-5	Methomyl	h	100	500 /10,000
17702-41-9	Decaborane(14)	e	1	500 /10,000
17702-57-7	Foraparinate	e	1	100 /10,000
19287-65-7	Diborane	e	1	100
19624-22-7	Pentaborane	e	1	500
20830-75-5	Digoxin	e,h	1	10 /10,000



(CAS Number Order)

CAS #	Chemical Name	Notes	Reportable Quantity * (pounds)	Threshold Planning Quantity (pounds)
20859-73-8	Aluminum Phosphide	b	100	500
21548-32-3	Fosfietan	e	1	500
21609-90-5	Leptophos	e	1	500 /10,000
21908-53-2	Mercuric Oxide	e	1	500 /10,000
21923-23-9	Chlorothiophos	e,h	1	500
22224-92-6	Fenamiphos	e	1	10 /10,000
23135-22-0	Oxamyl	e	1	100 /10,000
23422-53-9	Formetanate Hydrochloride	e,h	1	500 /10,000
23505-41-1	Pyrimifos-Ethyl	e	1	1,000
24017-47-8	Triazofos	e	1	500
24934-91-6	Chlorophos	e	1	500
26419-73-8	Carbamic Acid, Methyl-, O-(((2,4-Dimethyl-1, 3-Dithiolan-2-Yl) Methylene)Amino)-	e	1	100 /10,000
26628-22-8	Sodium Azide (NaN <sub>3</sub> )	b	1,000	500
27137-85-5	Trichloro(Dichlorophenyl)Silane	e	1	500
28347-13-9	Xylylene Dichloride	e	1	100 /10,000
28772-56-7	Bromadiolone	e	1	100 /10,000
30674-80-7	Methacryloyloxyethyl Isocyanate	e,h	1	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		1	100
53558-25-1	Pyriminil	e,h	1	100 /10,000
58270-08-9	Zinc, Dichloro(4,4-Dimethyl-5((((Methylamino) Carbonyl)Oxy)Imino) Pentanenitrile)-, (T-4)-	e	1	100 /10,000
62207-76-5	Cobalt, ((2,2'-(1,2-Ethenediylbis (Nitrilomethylidene)) Bis(6-Fluorophenolato))(2--N,N',O,O'))-	e	1	100 /10,000

\* Only the statutory or final RQ is shown. For more information, see 40CFR Table 302.4

## Notes:

- b This material is a reactive solid. The TPQ does not default to 10,000 pounds for non-powder, non-molten, non-solution form.
- c The calculated TPQ changed after technical review as described in the technical support document.
- d Indicates that the RQ is subject to change when the assessment of potential carcinogenicity and/or other toxicity is completed.
- e Statutory reportable quantity for purposes of notification under SARA sect 304(a)(2).
- f The statutory 1 pound reportable quantity for methyl isocyanate may be adjusted in a future rulemaking.
- g New chemicals added that were not part of the original list of 402 substances.
- h Revised TPQ based on new or re-evaluated toxicity data.
- j TPQ is revised to its calculated value and does not change due to technical review as in proposed rule.
- k The TPQ was revised after proposal due to calculation error.
- l Chemicals on the original list that do not meet the toxicity criteria but because of their high product volume and recognized toxicity are considered chemicals of concern ("Other chemicals")

TITLE III - EXTREMELY HAZARDOUS SUBSTANCES  
CHEMICALS DELETED FROM LIST  
(As of December 17, 1987 and February 25, 1988)

(Alphabetical Listing)		(Numerical List by CAS No.)	
CAS No.	NAME	CAS No.	NAME
16919-58-7	Ammonium Chloroplatinate	52-68-6	Trichlorophenol
1405-87-4	Bacitracin	53-86-1	Indomethacin
98-09-9	Benzenesulfonyl Chloride	65-86-1	Orotic Acid
106-99-0	Butadiene	76-01-7	Pentachloroethane
109-19-3	Butyl Isovalerate	84-74-2	Dibutyl Phthalate
111-34-2	Butyl Vinyl Ether	84-80-0	Phylloquinone
2244-16-8	Carvone	87-86-5	Pentachlorophenol
107-20-0	Chloroacetaldehyde	93-05-0	Diethyl-p-Phenylenediamine
7440-48-4	Cobalt	95-63-6	Pseudocumene
117-52-2	Coumateryl	98-09-9	Benzenesulfonyl Chloride
287-92-3	Cyclopentane	106-99-0	Butadiene
633-03-4	C.I. Basic Green 1	107-20-0	Chloroacetaldehyde
84-74-2	Dibutyl Phthalate	108-67-8	Mesitylene
8023-53-8	Dichlorobenzalkonium Chloride	109-19-3	Butyl Isovalerate
93-05-0	Diethyl-p-Phenylenediamine	111-34-2	Butyl Vinyl Ether
131-11-3	Dimethyl Phthalate	117-52-2	Coumateryl
117-84-0	Diethyl Phthalate	117-84-0	Diethyl Phthalate
646-06-0	Dioxolane	128-56-3	Sodium Anthraquinone-1-Sulfonate
2235-25-8	Ethylmercuric Phosphate	131-11-3	Dimethyl Phthalate
1335-87-1	Hexachloronaphthalene	287-92-3	Cyclopentane
53-86-1	Indomethacin	633-03-4	C.I. Basic Green 1
10025-97-5	Iridium Tetrachloride	640-15-3	Thiometon
108-67-8	Mesitylene	646-06-0	Dioxolane
7440-02-0*	Nickel	1314-32-5	Thallic Oxide
65-86-1	Orotic Acid	1331-17-5	Propylene Glycol, Allyl Ether
20816-12-0	Osmium Tetroxide	1335-87-1	Hexachloronaphthalene
76-01-7	Pentachloroethane	1405-87-4	Bacitracin
87-86-5	Pentachlorophenol	2235-25-8	Ethylmercuric Phosphate
84-80-0	Phylloquinone	2244-16-8	Carvone
10025-65-7	Platinous Chloride	3048-64-4	Vinylnorbornene
13454-96-1	Platinum Tetrachloride	7440-02-0*	Nickel
1331-17-5	Propylene Glycol, Allyl Ether	7440-48-4	Cobalt
95-63-6	Pseudocumene	8023-53-8	Dichlorobenzalkonium Chloride
10049-07-7	Rhodium Trichloride	10025-65-7	Platinous Chloride
128-56-3	Sodium Anthraquinone-1-Sulfonate	10025-97-5	Iridium Tetrachloride
1314-32-5	Thallic Oxide	10049-07-7	Rhodium Trichloride
21564-17-0	Thiocyanic Acid, 2-(Benzo-thiazolythio) Methyl Ester	13454-96-1	Platinum Tetrachloride
640-15-3	Thiometon	16919-58-7	Ammonium Chloroplatinate
52-68-6	Trichlorophenol	20816-12-0	Osmium Tetroxide
3048-64-4	Vinylnorbornene	21564-17-0	Thiocyanic Acid, 2-(Benzo-thiazolythio) Methyl Ester

- \* The CAS No. for Nickel was listed incorrectly in the Federal Register on February 25, 1988 as 7440-02-2; a correction will be published in the near future.

## APPENDIX C. Section 302 Chemicals on Section 313 List

CAS #	CHEMICAL NAME	TPO
50-00-0	Formaldehyde	500
51-75-2	Mechlorethamine	10
56-38-2	Parathion	100
57-14-7	Dimethylhydrazine	1,000
57-57-8	Propiolactone, beta-	500
57-74-9	Chlordane	1,000
58-89-9	Lindane	1,000/10,000
60-34-4	Methylhydrazine	500
62-53-3	Aniline	1,000
62-73-7	Dichlorvos	1,000
62-75-9	Nitrosodimethylamine	1,000
67-66-3	Chloroform	10,000
74-83-9	Methyl bromide	1,000
74-90-8	Hydrocyanic acid	100
75-15-0	Carbon disulfide	10,000
75-21-8	Ethylene oxide	1,000
75-44-5	Phosgene	10
75-55-8	Propyleneimine	10,000
75-56-9	Propylene oxide	10,000
77-47-4	Hexachlorocyclopentadiene	100
77-78-1	Dimethyl sulfate	500
79-06-1	Acrylamide	1,000/10,000
79-11-8	Chloroacetic acid	100/10,000
79-21-0	Peracetic acid	500
91-08-7	Toluene, 2,6,-diisocyanate	100
95-48-7	Cresol, o-	1,000/10,000
98-07-7	Benzotrichloride	100
98-87-3	Benzal chloride	500
98-95-3	Nitrobenzene	10,000
100-44-7	Benzyl chloride	500
106-89-8	Epichlorohydrin	1,000
107-02-8	Acrolein	500
107-13-1	Acrylonitrile	10,000
107-30-2	Chloromethyl methyl ether	100
108-05-4	Vinyl acetate monomer	1,000
108-95-2	Phenol	500/10,000
111-44-4	Dichloroethyl ether	10,000
123-31-9	Hydroquinone	500/10,000
151-56-4	Ethyleneimine	500
302-01-2	Hydrazine	1,000
309-00-2	Aldrin	500/10,000
542-88-1	Chloromethyl ether	100
584-84-9	Toluene 2,4,-diisocyanate	500

(continued)

## APPENDIX C. (continued)

CAS #	CHEMICAL NAME	TPO
505-60-2	Mustard gas	500
534-52-1	Dinitrocresol	10/10,000
624-83-9	Methyl isocyanate	500
1464-53-5	Diepoxybutane	500
7550-45-0	Titanium tetrachloride	100
7647-01-0	Hydrochloric acid (gas only)	500
7664-39-3	Hydrogen flouride	100
7664-41-7	Ammonia	500
7664-93-9	Sulfuric acid	1,000
7697-37-2	Nitric acid	1,000
7723-14-0	Phosphorus	100
7782-50-5	Chlorine	100
8001-35-2	Toxaphene (Camphechlor)	500/10,000