

TEXAS AGRILIFE RESEARCH AND TEXAS AGRILIFE EXTENSION

HAZARD COMMUNICATION PROGRAM

Revised August 2010

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TEXAS AGRILIFE RESEARCH AND TEXAS AGRILIFE EXTENSION HAZARD COMMUNICATION PROGRAM

INTRODUCTION:

The Texas Hazard Communication Act (THCA), Revised 1993, Chapter 502 of the Health and Safety Code (HSC), and the THCA Rules, Title 25 of the Texas Administration Code (TAC), §295.1-295.12, require public employers to provide information to employees regarding hazardous chemicals they may be exposed to in the workplace. The Public Employer Community Right-to-Know Act, Chapter 506 of the HSC, and 25 TAC §295.181-183, requires public employers to make information regarding hazardous chemicals accessible to local fire departments, local emergency planning committees, and, through the Texas Department of State Health Services (TDSHS), the general public.

The Texas AgriLife Research and Texas AgriLife Extension Hazardous Communication (HazCom) Program is administered through the Texas AgriLife Research and Extension Safety Coordinator (Safety Coordinator) with responsibility for compliance delegated throughout administrative channels to every supervisor. The HazCom Program applies to all employees at Texas AgriLife Research and Extension Centers and other designated Texas AgriLife Research or Texas AgriLife Extension facilities. Student employees that have occupational exposure to hazardous chemicals are also covered by this program.

Texas AgriLife Research and Texas AgriLife Extension will comply with the THCA by providing training, appropriate personal protective equipment, and information regarding hazardous chemicals. In addition, written plans that describe how the HazCom Program will be implemented will be maintained within each workplace.

PROGRAM EXEMPTIONS AND EXCEPTIONS - HSC 502.004; 506.005:

The provisions of this Program do not apply to chemicals in the following categories:

- 1) hazardous waste regulated under the Federal Resource Conservation and Recovery Act;
- 2) tobacco or tobacco products;
- 3) wood or wood products;
- 4) any article that is formed to a specific shape or design during manufacture, that has end-use functions dependent in whole or in part of its shape or design during end use, and that does not release or otherwise result in exposure to a hazardous chemical under normal conditions of use (e.g., tires, PVC piping);
- 5) food, drugs, cosmetics, or alcoholic beverages in a retail food sale establishment that are packaged for sale to consumers;
- 6) food, drugs, or cosmetics intended for personal consumption by an employee while in the workplace;
- 7) any consumer product or hazardous substance if the product is used in the workplace in the same manner as normal consumer use and if the use results in a duration and frequency of exposure that is not greater than exposures experienced by consumers;
- 8) any drug, as defined in the Federal Food, Drug, and Cosmetic Act;
- 9) radioactive waste;
- 10) a hazardous chemical in a sealed and labeled package that is received and subsequently sold or transferred in that package if:
 - a) the seal and label remain intact while in the workplace;
 - b) the chemical does not remain in the workplace more than five working days;
 - c) personnel training requirements are met;
 - d) the chemical is not an extremely hazardous substance at or above the threshold planning quantity or 500 pounds, whichever is less.

RESEARCH LABORATORY EXEMPTIONS

Chemicals in a research laboratory are exempt from secondary labeling requirements and inventory requirements if:

- 1) the lab is under the direct supervision or guidance of a technically qualified individual
- 2) labels on primary containers of chemicals are not removed or defaced;
- 3) personnel training requirements are fulfilled;
- 4) MSDS access requirements are satisfied;
- 5) the laboratory is not used primarily to produce hazardous chemicals in bulk for commercial purposes

.NOTE: Labels for small containers, such as test tubes or vials, may be attached to the rack or container in which they are held.

DUTIES AND RESPONSIBILITIES:

The Safety Coordinator administers and coordinates the HazCom Program for Texas AgriLife Research and Texas AgriLife Extension and designated facilities. Duties of the Safety Coordinator include:

- 1) assist Centers with the implementation of, and compliance with this Program;
- 2) maintain liaison with the Texas Department of State Health Services (1-800-452-2791):
 - a) submit required annual Texas Tier Two report and fee to the Commissioner of Health by March 1 of the following year;
 - b) report orally or in writing, within 48 hours, the occurrence of a chemical accident that results in one or more fatalities or the hospitalization of five or more employees (this is to include circumstances of the accident, the number of fatalities, and the extent of injuries) in accordance with **HSC 502.012**.
- 3) retain Workplace Chemical Inventory (WPCI) lists and Tier Two Reports for Texas AgriLife Research and Extension Centers and designated facilities for a period of 30 years.

The Center Director will assure implementation and compliance with the HazCom Program at their Centers as follows:

- 1) develop a written procedure that describes the method of implementing the HazCom Program within the Center. Outline for the Center Implementation Plan is provided in **Appendix II**;
- 2) report any incident requiring outside medical assistance to the Safety Coordinator;
- 3) designate work areas within each workplace (see definitions for work area);
- 4) post official "Notice to Employees" (see Appendix III) at locations in each work area
- 5) provide to the Safety Coordinator by December 31 of each year:
 - a) annual Workplace Chemical Inventory (WPCI) list;
 - b) WPCI updates to the Safety Coordinator, whenever a new chemical or additional quantity above normal restocking amounts of chemical is purchased;
 - c) names and telephone numbers of emergency contacts.
- 6) retain WPCI lists for 30 years
- 7) provide a copy of the annual Texas Tier Two report to the Local Emergency Planning Committee and to the local fire department(s);
- 8) provide the names and telephone numbers of emergency contacts to the local fire department(s), and provide WPCI lists and Material Safety Data Sheets (MSDSs) upon request;
- 9) allow for inspections by the local fire department.
- 10) provide employees with appropriate personal protective equipment and ensure the equipment fits the individual;
- 11) inform employees of any non-routine chemical exposure;

- 12) provide to the Safety Coordinator, the name, Center address, e-mail address and phone number of the person with primary responsibility for HazCom coordination and compliance at the Center.

The Safety Officer will assist the Center Director in the implementation and compliance with the HazCom Program at their Centers as follows:

- 1) report any incident requiring outside medical assistance to the Center Director and Safety Coordinator;
- 2) assist in the designation work areas within each workplace (see definitions for work area);
- 3) post official "Notice to Employees" (see Appendix III) at locations in each work area;
- 4) compile, maintain, and provide designated Workplace Chemical Inventory (WPCI) lists;
- 5) provide to the Center Director on or before December 01 of each year:
 - a) annual Workplace Chemical Inventory (WPCI) list;
 - b) WPCI updates to the Center Director, whenever a new chemical or additional quantity above normal restocking amounts of chemical is purchased;
 - c) annual notice of training completion (e.g., memo);
 - d) names and telephone numbers of emergency contacts.
- 6) maintain training records for a minimum of 5 years;
- 7) assure that MSDSs on hazardous chemicals purchased are available, as required;
- 8) provide employees with appropriate personal protective equipment and ensure the equipment fits the individual;
- 9) inform employees of any non-routine chemical exposure.

Supervisors will ensure that the requirements of the HazCom Program and Center Implementation Plan are fulfilled within their work areas. Their duties include:

- 1) ensure that all employees have received appropriate training before working with or in an area containing hazardous chemicals;
- 2) provide to the Safety Officer, all HazCom training records;
- 3) compile and maintain the Work Area Chemical Inventory (WACI) lists, as appropriate;
- 4) inform employees regarding the location of the work area inventory and procedures for accessing MSDSs and obtaining workplace chemical inventory lists;
- 5) provide to the Safety Officer on or before November 01 of each year:
 - a) annual Work Area Chemical Inventory (WACI) for each area other than a research laboratory;
 - b) WACI updates to the Center Director, whenever a new chemical or additional quantity above normal restocking amounts of chemical is purchased;
 - c) annual notice of training completion (e.g., memo);
 - d) names and telephone numbers of emergency contacts.

Employees will:

- 1) attend training;
- 2) use prudent practices and good judgment when using hazardous chemicals or hazardous procedures;
- 3) notify other individuals who might be affected by the chemicals they use.

*Personnel who work with hazardous materials are expected to assume reasonable responsibility for the safety and health of themselves, others around them, and the environment.

Contracted Construction, Repair and Maintenance: Contractors will comply with Texas and Federal Hazard Communication Acts and the HazCom Program regarding hazardous or nuisance materials used during projects at or within Texas AgriLife Research and Extension Center facilities and property.

- 1) The Contractor will provide to the AgriLife Project Coordinator and/or Safety Officer, a list of any hazardous or nuisance materials to be used on the project and will provide appropriate hazard

- information, including MSDSs;
- 2) The Contractor will provide prior notification of intended use of hazardous or nuisance materials to the AgriLife Project Coordinator and/or Safety Officer, Safety Coordinator, and the Center Director of any affected AgriLife workplace;
 - 3) The AgriLife Project Coordinator and/or Safety Officer will provide to the Center Director and Safety Coordinator pertinent information, including MSDSs for the chemicals involved;
 - 4) The Center Director will ensure that individuals in the affected workplace be provided information on the hazards of the chemicals, measures that they can take to protect themselves from those hazards, and access to MSDSs.

HAZARDOUS CHEMICAL INVENTORY - HSC 502.005 and 25 TAC §295.4:

Work Area Chemical Inventory (WACI) [Excluding Research Laboratories]: Each work area (e.g., mechanical shop, chemical stock room, paint shop, pesticide storage shed, print center; but not research labs.) will maintain an inventory list of all hazardous chemicals or chemical products present in the work area, regardless of quantity. The hazardous chemicals or products will be listed using the same name found on the label and MSDS. The WACI will include, as appropriate:

- 1) name and telephone number of the person responsible for the work area and the name and signature of the person responsible for compiling the inventory;
- 2) Center identifier (e.g. name);
- 3) location of the hazardous chemicals (building and room);
- 4) chemical name or the common name of a product and its hazardous ingredients;
- 5) CAS number;
- 6) container type;
- 7) hazard associated with the chemical;
- 8) quantity of product in pounds.

The supervisor of each work area will update, and provide the inventory to the Safety Officer annually, upon request, and when necessary. A WACI will be updated when a new chemical or additional quantity above normal restocking amounts of chemical is purchased. The Center will maintain a copy of each WACI for the current year and these will be readily accessible to employees. A Work Area Chemical Inventory Form is provided in **Appendix III**.

The Safety Officer will use the WACIs to compile a Workplace Chemical Inventory (WPCI) to submit to the Center Director. The WPCI includes only those hazardous chemicals in a designated workplace that are equal to or greater than the “workplace reporting threshold”. The Safety Officer will sign and date the WPCI and it will be retained on file for 30 years. A new WPCI for each designated workplace will be compiled by December 31 of each year, or as needed. The Center Director will provide the WPCI to the Safety Coordinator by December 31 of each year and as necessary. Employees may obtain a copy of the WPCI from the Safety Coordinator, upon request.

Tier Two Report - HSC 506.006 and 25 TAC §295.182:

The Safety Coordinator will compile a Texas Tier Two Report for Texas AgriLife Research and Texas AgriLife Extension and other designated facilities. The Texas Tier Two Report includes all hazardous chemicals and chemical products exceeding 10,000 pounds and all Extremely Hazardous Substances (EHSs) exceeding 500 pounds or the Threshold Planning Quantity (TPQ), whichever is less. The Safety Coordinator will submit a Tier Two Report for each Center required to report by March 1 each year, for the preceding calendar year, to the TDSHS with the appropriate filing fees. Each Center will submit a copy of their Texas Tier Two Report to the Local Emergency Planning Committee and to the local fire department(s). The Tier Two Report will be revised and reported to TDSHS and local agencies, as appropriate. The Safety Coordinator will retain a copy of all Tier Two Reports for a period of 30 years.

A list of EHSs and their applicable TPQ is provided in **Appendix IV**.

MATERIAL SAFETY DATA SHEETS - HSC 502.006 and 25 TAC §295.5:

Material Safety Data Sheets (MSDSs) are legal documents that provide hazard information on chemicals or chemical products produced or distributed in the United States. Federal and State laws require employers to provide employee's access to MSDSs on hazardous chemicals or chemical products in the work environment. Each Center will:

- 1) maintain a file of current MSDSs for all hazardous chemicals purchased. The file may be electronic or printed and must be readily available, on request, for review by employees at their workplace. It is recommended that MSDSs be maintained within each work area (e.g., lab, shop) for those hazardous chemicals being used;
- 2) provide a copy of MSDSs to the Safety Coordinator upon request.
- 3) submit a request for a current MSDS to any manufacturer who fails to supply this information with a hazardous chemical purchased within 30 days of the date received;

CONTAINER LABELS - HSC 502.007 and 25 TAC §295.6:

Containers of hazardous chemicals will be properly labeled.

- 1) Labels on primary containers must:
 - a) identify the material as it is on the MSDS;
 - b) include appropriate hazard warnings (An appropriate hazard warning includes the key word(s) of the chemical hazard such as, poison, flammable, corrosive, carcinogen, etc.);
 - c) include the manufacturer's name and address.
- 2) Labels on an existing container of a hazardous chemical may not be removed or defaced unless they are illegible, inaccurate, or do not conform to the OSHA Hazard Communication Standard or other labeling requirement. If a primary container label is removed or missing, the container must be relabeled with at least the information in 1 (above).
- 3) Labels on secondary containers of non-research laboratory chemicals will include the chemical identity, as it appears on the MSDS, and appropriate hazard warnings. Although research laboratories are exempt from THCA secondary container labeling requirements, Texas AgriLife Research and Texas AgriLife Extension requires secondary containers to be labeled with a chemical identifier (e.g. common name or International Union of Pure and Applied Chemistry [IUPAC] nomenclature, etc.).

Complete labels are not required on portable container(s) intended for the immediate (within a work shift) use by the employee who performs the transfer. However, the contents should be readily identifiable.

CHEMICAL SAFETY INFORMATION AND TRAINING - HSC 502.009 and 25 TAC §295.7:

Employee education and training are essential components of the HazCom Program. Appropriate training will be provided to employees who use or handle hazardous chemicals as a part of their normal work assignments. Training of a new or newly assigned employee will be given before the employee works with or handles hazardous chemicals. Employees will receive additional training when the potential for exposure to hazardous chemicals in the employee's work area increases significantly or when the employer receives new and significant information concerning the hazards of a chemical in the employee's work area.

Training topics will include:

- 1) interpreting MSDSs and labels, and the relationship between the two methods of hazard

- communication;
- 2) location of MSDSs and methods for obtaining MSDSs;
 - 3) hazards associated with applicable categories of hazardous chemicals (e.g., flammable, corrosive, toxic, and reactive) including acute and chronic effects;
 - 4) methods for identifying specific chemicals within each chemical hazard group (e.g., DOT labels, NFPA 704 system, chemical container labels);
 - 5) identity and location of hazardous chemicals the employee will handle;
 - 6) safe handling procedures, including proper storage and separation of incompatibles;
 - 7) location, selection, use and care of appropriate protective clothing and equipment to minimize exposure to hazardous chemicals;
 - 8) first aid treatment to be used with respect to the hazardous chemicals the employee will handle;
 - 9) instructions on spill cleanup procedures and proper disposal of hazardous chemicals.

Lab Personnel/Students: All personnel including student employees who work in laboratories and laboratory support facilities will receive appropriate training.

Training Records: Each Center will maintain, for at least five years, a record of each employee training session, including:

- 1) the date of training;
- 2) an attendance roster;
- 3) specific topics covered;
- 4) names of the instructor(s).

Documentation of HazCom training shall be maintained in the employee's personnel file or designated training folder and/or the Laserfiche Document Management System. The HazCom Program Training Record Form is provided in **Appendix V**.

Access to HazCom Training Records: Centers will provide access to employee HazCom training records to both the Safety Coordinator and TDSHS, upon request.

EMPLOYEE NOTICE AND RIGHTS OF THE EMPLOYEES - HSC 502.017 and 25 TAC §295.12:

An official TDSHS "Notice to Employees" will be posted at the location(s) within each workplace where notices are normally posted to inform employees of their rights provided by the THCA. The workplace notice shall be unobstructed and clearly posted in at least one location within the each workplace. The official TDSHS "Notice to Employees" is provided in **Appendix VI**.

The Safety Coordinator and the Center Director will ensure that employees who may be exposed to hazardous chemicals (including products with which they do not work with directly) are informed of the exposure and are provided access to the pertinent workplace chemical lists and MSDSs for those hazardous chemicals as well as appropriate training and personal protective equipment.

An employee shall not be disciplined, harassed, or discriminated against by an employer for filing complaints, assisting inspectors of the TDSHS, participating in proceedings related to the THCA, or exercising any rights under the THCA. Employees cannot waive their rights provided by the THCA.

APPENDIX I

DEFINITIONS

DEFINITIONS

"CHEMICAL NAME" means the scientific designation of a chemical in accordance with the nomenclature system developed by the International Union of Pure and Applied Chemistry (IUPAC) of the Chemical Abstracts Service (CAS) rules of nomenclature or a name that clearly identifies the chemical for the purpose of conducting a hazard evaluation.

"COMMON NAME" means a designation of identification, such as a code name, code number, trade name, or generic name, used to identify a chemical other than by its chemical name.

"EMPLOYEE" means a person who is on the payroll of AgriLife and who may be or may have been exposed to hazardous chemicals in the person's workplace under normal operating conditions or foreseeable emergencies.

"EXPOSE" or "EXPOSURE" means that an employee is subjected to a hazardous chemical in the course of employment through any route of entry, including inhalation, ingestion, skin contact, or absorption. The term includes potential, possible, or accidental exposure under normal conditions of use or in a reasonably foreseeable emergency.

"EXTREMELY HAZARDOUS SUBSTANCE" means any substance as defined in EPCRA, Section 302, or listed by the United States Environmental Protection Agency in 40 CFR Part 355. The list of Extremely Hazardous Substances and Threshold Reporting Quantities can be accessed through the TDSHS website (<http://www.dshs.state.tx.us/tiertwo/default.shtm>).

"HAZARDOUS CHEMICAL" means any element, compound or mixture of elements or compounds that is a physical or health hazard. Relatively innocuous materials such as NaCl, sugars, enzymes, etc. are exempt. A hazard determination may be made by employers who choose not to rely on the evaluations made by their suppliers if there are relevant qualitative or quantitative differences. A hazard determination shall involve best professional judgment: factors such as quantity, concentration, physical properties (i.e., volatility) and use may be considered.

"HazCom" means Hazard Communication

"HEALTH HAZARD" includes chemicals which are carcinogens, toxic or highly toxic agents, reproductive toxins, irritants, corrosives, sensitizers, hepatotoxins, nephrotoxins, neurotoxins, agents which act on the hemopoietic system, and agents which damage the lungs, skin, eyes, or mucous membranes.

"HSC" means the Texas Health and Safety Code.

"LABORATORY" means any research, analytical, or clinical facility equipped for experimentation, observation, or practice in a science or for testing and analysis.

"NAME" - the chemical identity on the container label, the MSDS and inventory list.

"PERSONAL PROTECTIVE EQUIPMENT" includes clothing or devices intended to prevent exposure to hazardous chemicals (e.g., respirator, gloves, lab coat).

"PHYSICAL HAZARD" means a material for which there is scientifically valid evidence that it is a combustible liquid, explosive, flammable, compressed gas, organic peroxide, oxidizer, pyrophoric, unstable (reactive), or water reactive.

"PRIMARY CONTAINER" means the container in which the chemical arrives from the manufacturer.

"READILY AVAILABLE" to an MSDS means access during an individual's work shift.

"RESEARCH LABORATORY" means a workplace for the conduct of scientific research. NOTE: For the purposes of the Texas Hazard Communication, this DOES NOT include teaching labs or chemical stock rooms.

"TDSHS" means the Texas Department of State Health Services.

"TEXAS TIER TWO REPORT" is the report submitted annually to the Texas Department of Health that reports quantities of hazardous chemicals per the Texas Tier Two Report from TDH.

"WORK AREA" is a room, a defined space, a utility structure or an emergency response site within a workplace where hazardous chemicals are present, produced, used, or stored and where employees are present.

"WORKPLACE" is an establishment at one geographical location containing one or more work areas. A single building or a complex of buildings in close proximity with similar work activities can be designated as a workplace.

"WORKPLACE CHEMICAL INVENTORY" is the list of hazardous chemicals in a designated workplace.

"WORKPLACE REPORTING THRESHOLD" is when the quantity (at any time during the year) of a hazardous chemical exceeds 55 gallons/500 pounds or the Threshold Planning Quantity (TPQ) in pounds, or 500 pounds, whichever is less, for those chemicals on the Extremely Hazardous Substance List.

APPENDIX II

WORK PLACE IMPLEMENTATION PLAN

HAZARD COMMUNICATION PROGRAM WORK PLACE IMPLEMENTATION PLAN

LOCATION

Facility Name:
Physical Address:

ASSIGNED RESPONSIBILITIES

Safety Coordinator –
Name: Brad Urbanczyk
Phone No.: 979/ 842-4038
E-mail Address: burbanczyk@tamu.edu

Center Director –
Name:
Phone No.:
E-mail Address:

Safety Officer –
Name:
Phone No.:
E-mail Address:

HAZARDOUS CHEMICAL INVENTORY

- **Brief description of Work Area Chemical Inventory (WACI) process (include roles and responsibilities and how Center will achieve compliance with the November 01 submittal deadline):**

- **Location of WACIs:**

HAZARD COMMUNICATION PROGRAM WORK PLACE IMPLEMENTATION PLAN

MATERIAL DATA SAFETY SHEETS

- Location of Material Data Safety Sheets:

CONTAINER LABELS

- Brief description of container label process:

CHEMICAL SAFETY INFORMATION AND TRAINING

- Brief description of employee HazCom Training (include roles and responsibilities and how Center will achieve compliance with HazCom Training requirements):

- Location of Employee Training Records:

EMPLOYEE NOTICE AND RIGHTS OF THE EMPLOYEES

- Location(s) where the "NOTICE TO EMPLOYEES" is permanently posted:

APPENDIX III

WORK AREA CHEMICAL INVENTORY FORM

WACI FORM INSTRUCTIONS

All non-laboratory hazardous chemicals (**regardless of the quantity**) must be listed on the **Work Area Chemical Inventory Form**. **NOTE: chemicals in research laboratories are exempt from this inventory requirement.** The hazardous chemicals or products shall be listed by the same name that is on the label and on the MSDS. This form must be updated and available by November 01 of each year or upon request. Each designated work area Supervisor shall maintain a copy of each inventory form and these shall be readily accessible to employees. **Complete one form per work area. Duplicate forms as necessary to list all hazardous chemicals present in the work area. Place all appropriate information on the form in the space provided.**

(1) **CAS Number** - Place the Chemical Abstract Service (CAS) Number of the substance in this column. If the substance/mixture does not have a CAS Number, place the CAS Number of the primary hazardous ingredient.

(2) **Identity** - Place in this column the name of the material as it appears on the container's label and/or MSDS.

(3) **Chemical Contents** - If you are reporting a mixture of chemicals, place as many of the chemical names (shown on the MSDS) as you can in the space provided. When reporting a mixture with a generic name, such as gasoline, diesel, kerosene, etc., the individual ingredients do not have to be listed. If the product you are reporting has a trade secret formula, the generic name (provided on the MSDS) may be used, such as "petroleum distillates". If the MSDS does not provide a generic chemical name, the words "Trade Secret" may be used.

(4) **Container Type** - Use one or more of the following letters in this column to describe the storage container for the hazardous chemical:

A. Above Ground Tank	G. Carboy	M. Glass Bottles/Jugs
B. Below Ground Tank	H. Silo	N. Plastic Bottles/Jugs
C. Tank Inside Building	I. Fiber Drum	O. Tote Bin
D. Steel Drum	J. Bag	P. Tank Wagon
E. Plastic/non-metallic drum	K. Box	Q. Rail Car
F. Can	L. Cylinder	R. OTHER

(5) **Chemical Hazards** - Use one of the following Roman numerals in this column to describe the **primary hazard category** for the hazardous chemical. These categories are defined using key words (*italicized*) found on either the product label or the MSDS.

I - Fire Hazard- includes products which are *flammable, combustible liquid, pyrophoric*, and/or an *oxidizer*.

II - Pressure Hazard- includes products which are *explosive* or *compressed gases*.

III - Reactivity Hazard- includes products which are *unstable reactives, organic peroxides*, and/or *water reactive*.

IV - Acute(immediate) Health Hazards- includes products which are *highly toxic, corrosive, toxic, irritants, sensitizers*, and other hazardous chemicals which cause an *adverse effect to a target organ within a short period of time*.

V - Chronic(delayed) Health Hazard- Includes products which are *carcinogens, mutagens, or teratogens*, and other hazardous chemicals which cause an *adverse effect on target organ after a long period of time*.

(6) **Quantity or Amount** - Place in this column the maximum amount of each hazardous chemical stored on any one day during the year.

(7) **Units of measurement** – Only display maximum amount of each hazardous chemical in pounds or gallons. Use pounds (lbs) for solids or gases and gallons (gals) for liquids. To convert liquid measure to pounds: **number of gallons times Specific Gravity of chemical times 8.3 pounds/gallon** (the density of water). To convert gas measurements to pounds, you will need to obtain the conversion factor (for cubic feet to pounds) for the individual chemical.

APPENDIX IV

EXTREMELY HAZARDOUS SUBSTANCES THRESHOLD PLANNING QUANTITIES (TPQ)

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.

APPENDIX A TO PART 355—THE LIST OF EXTREMELY HAZARDOUS SUBSTANCES AND THEIR THRESHOLD PLANNING QUANTITIES
[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	Benzotrchloride		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)lmino-, (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

APPENDIX A TO PART 355—THE LIST OF EXTREMELY HAZARDOUS SUBSTANCES AND THEIR THRESHOLD PLANNING
QUANTITIES—Continued
[Alphabetical Order]

CAS No.	Chemical name	Notes	Reportable quantity * (pounds)	Threshold planning quantity (pounds)
2223-93-0	Cadmium Stearate	b	1,000	1,000/10,000
7778-44-1	Calcium Arsenate		1	500/10,000
8001-35-2	Camphechlor		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-Dithiolan-2-yl)Methylene)Amino)-		100	100/10,000
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-Ethanediylobis (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

APPENDIX A TO PART 355—THE LIST OF EXTREMELY HAZARDOUS SUBSTANCES AND THEIR THRESHOLD PLANNING
QUANTITIES—Continued
[Alphabetical Order]

CAS No.	Chemical name	Notes	Reportable quantity * (pounds)	Threshold planning quantity (pounds)
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	Isopropylphosphate	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

APPENDIX A TO PART 355—THE LIST OF EXTREMELY HAZARDOUS SUBSTANCES AND THEIR THRESHOLD PLANNING QUANTITIES—Continued
 [Alphabetical Order]

CAS No.	Chemical name	Notes	Reportable quantity * (pounds)	Threshold planning quantity (pounds)
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
0	Organorhodium 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

APPENDIX A TO PART 355—THE LIST OF EXTREMELY HAZARDOUS SUBSTANCES AND THEIR THRESHOLD PLANNING
QUANTITIES—Continued
[Alphabetical Order]

CAS No.	Chemical name	Notes	Reportable quantity * (pounds)	Threshold planning quantity (pounds)
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 1,00	0
7631-89-2	Sodium Arsenate		1	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

APPENDIX A TO PART 355—THE LIST OF EXTREMELY HAZARDOUS SUBSTANCES AND THEIR THRESHOLD PLANNING QUANTITIES—Continued
[Alphabetical Order]

CAS No.	Chemical name	Notes	Reportable quantity* (pounds)	Threshold planning quantity (pounds)
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	Thallos Carbonate	b, d	100	100/10,000
7791-12-0	Thallos Chloride	b, d	100	100/10,000
2757-18-8	Thallos Malonate	b, d	100	100/10,000
7446-18-6	Thallos Sulfate		100	100/10,000
2231-57-4	Thiocarbazine		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	Triamphos		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
[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

APPENDIX B TO PART 355—THE LIST OF EXTREMELY HAZARDOUS SUBSTANCES AND THEIR THRESHOLD PLANNING
QUANTITIES—Continued
[CAS Number Order]

CAS No.	Chemical name	Notes	Reportable quantity * (pounds)	Threshold planning quantity (pounds)
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	Isofluorophate	b	100	100
56-25-7	Cantharidin		100	100/10,000
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

APPENDIX B TO PART 355—THE LIST OF EXTREMELY HAZARDOUS SUBSTANCES AND THEIR THRESHOLD PLANNING
QUANTITIES—Continued
[CAS Number Order]

CAS No.	Chemical name	Notes	Reportable quantity * (pounds)	Threshold planning quantity (pounds)
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	Benzeneearsonic 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
123-73-9	Crotonaldehyde, (E)-		100	1,000
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

APPENDIX B TO PART 355—THE LIST OF EXTREMELY HAZARDOUS SUBSTANCES AND THEIR THRESHOLD PLANNING
QUANTITIES—Continued
[CAS Number Order]

CAS No.	Chemical name	Notes	Reportable quantity * (pounds)	Threshold planning quantity (pounds)
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

APPENDIX B TO PART 355—THE LIST OF EXTREMELY HAZARDOUS SUBSTANCES AND THEIR THRESHOLD PLANNING QUANTITIES—Continued
[CAS Number Order]

CAS No.	Chemical name	Notes	Reportable quantity* (pounds)	Threshold planning quantity (pounds)
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
2223-93-0	Cadmium Stearate	b	1,000	1,000/10,000
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	Thallos 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		500	500
4104-14-7	Phosacetim		100	100/10,000
4170-30-3	Crotonaldehyde		100	1,000
4301-50-2	Fluenetil		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	Thallos 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	Thallos 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

APPENDIX B TO PART 355—THE LIST OF EXTREMELY HAZARDOUS SUBSTANCES AND THEIR THRESHOLD PLANNING
QUANTITIES—Continued
[CAS Number Order]

CAS No.	Chemical name	Notes	Reportable quantity * (pounds)	Threshold planning quantity (pounds)
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	Thallos Chloride	b, d	100	100/10,000
7791-23-3	Selenium Oxychloride		500	500
7803-51-2	Phosphine		100	500
8001-35-2	Camphechlor		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

APPENDIX B TO PART 355—THE LIST OF EXTREMELY HAZARDOUS SUBSTANCES AND THEIR THRESHOLD PLANNING QUANTITIES—Continued
[CAS Number Order]

CAS No.	Chemical name	Notes	Reportable quantity* (pounds)	Threshold planning quantity (pounds)
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 Isocyanateh		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-Ethanediy)bis (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.

■ 2. Part 370 is revised to read as follows:

PART 370—HAZARDOUS CHEMICAL REPORTING: COMMUNITY RIGHT-TO-KNOW

Subpart A—General Information

- Sec.
- 370.1 What is the purpose of this part?
- 370.2 Who do "you," "I," and "your" refer to in this part?
- 370.3 Which section contains the definitions of the key words used in this part?

Subpart B—Who Must Comply

- 370.10 Who must comply with the hazardous chemical reporting requirements of this part?
- 370.11 [Reserved]
- 370.12 What hazardous chemicals must I report under this part?
- 370.13 What substances are exempt from these reporting requirements?
- 370.14 How do I report mixtures containing hazardous chemicals?

Subpart C—Reporting Requirements

- 370.20 What are the reporting requirements of this part?

How to Comply With MSDS Reporting

- 370.30 What information must I provide and what format must I use?
- 370.31 Do I have to update the information?

- 370.32 To whom must I submit the information?
- 370.33 When must I submit the information?

How To Comply With Inventory Reporting

- 370.40 What information must I provide and what format must I use?
- 370.41 What is Tier I inventory information?
- 370.42 What is Tier II inventory information?
- 370.43 What codes are used to report Tier I and Tier II inventory information?
- 370.44 To whom must I submit the inventory information?
- 370.45 When must I submit the inventory information?

Subpart D—Community Access to Information

- 370.60 How does a person obtain MSDS information about a specific facility?
- 370.61 How does a person obtain inventory information about a specific facility?
- 370.62 What information may a State or local official request from a facility?
- 370.63 What responsibilities do the SERC and the LEPC have to make requested information available?
- 370.64 What information can I claim as trade secret or confidential?
- 370.65 Must I allow the local fire department to inspect my facility and must I provide specific location information about hazardous chemicals at my facility?

- 370.66 How are key words in this part defined?

Authority: Sections 302, 311, 312, 322, 324, 325, 327, 328, and 329 of the Emergency Planning and Community Right-To-Know Act of 1986 (EPCRA) (Pub. L. 99-499, 100 Stat. 1613, 42 U.S.C. 11002, 11021, 11022, 11042, 11044, 11045, 11047, 11048, and 11049).

Subpart A—General Information

§ 370.1 What is the purpose of this part?

(a) This part (40 CFR part 370) establishes reporting requirements for providing the public with important information on the hazardous chemicals in their communities. Reporting raises community awareness of chemical hazards and aids in the development of State and local emergency response plans. The reporting requirements established under this part consist of Material Safety Data Sheet (MSDS) reporting and inventory reporting.

(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

APPENDIX V

HAZARD COMMUNICATION TRAINING FORM

Hazard Communication Training Record

I hereby acknowledge receipt of the Texas AgriLife Research and/or Texas AgriLife Extension Hazard Communication Program Training, which includes:

General and Chemical Safety Training

1. Information on interpreting MSDSs and labels, and the relationship between the two methods of hazard communication;
2. General methods of obtaining MSDSs at AgriLife facilities;
3. Generic information on hazardous chemicals;
 - a) hazards associated with chemical hazard groups including acute and chronic effects;
 - flammables
 - corrosives
 - toxics
 - reactives
 - b) methods for identifying specific chemicals within each chemical hazard group (e.g., DOT labels, NFPA 704 System, chemical container labels);
 - c) safe handling procedures, including proper storage and separation of incompatibles;
4. Proper use of appropriate protective equipment to minimize exposure to hazardous chemicals and first aid treatment to be used with respect to the hazardous chemicals;
5. General instructions on spill cleanup procedures and proper disposal of hazardous chemicals.

Texas A&M System Online Training TrainTraq Course 11020	Date:
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Work Area Specific Training

6. _____ Information on hazardous chemicals known to be present in the employees work area and to which the employees may be exposed, including:
 - a) location within the work area,
 - b) specific hazards, including acute and chronic effects,
 - c) safe handling procedures;
7. _____ Work area location of MSDSs, or procedures for obtaining MSDSs;
8. _____ How to obtain and use appropriate personal protective equipment and first aid treatment to be used with respect to the hazardous chemicals;
9. _____ Instructions on spill cleanup procedures, and proper disposal of hazardous chemical specific to that work area.

Instructor Name(s)(Print)	Date
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Employee Name(Print)	Employee Department
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*Employee Signature	Date
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***The employee is responsible for ensuring that this completed form is given to the person within their department/unit who is responsible for maintaining personnel records or is responsible for sending the form to the centralized personnel files.**

APPENDIX VI

NOTICE TO EMPLOYEES

NOTICE TO EMPLOYEES

The Texas Hazard Communication Act (revised 1993), codified as Chapter 502 of the Texas Health and Safety Code, requires public employers to provide employees with specific information on the hazards of chemicals to which employees may be exposed in the workplace. As required by law, your employer must provide you with certain information and training. A brief summary of the law follows.

HAZARDOUS CHEMICALS

Hazardous chemicals are any products or materials that present any physical or health hazards when used, unless they are exempted under the law. Some examples of more commonly used hazardous chemicals are fuels, cleaning products, solvents, many types of oils, compressed gases, many types of paints, pesticides, herbicides, refrigerants, laboratory chemicals, cement, welding rods, etc.

WORKPLACE CHEMICAL LIST

Employers must develop a list of hazardous chemicals used or stored in the workplace in excess of 55 gallons or 500 pounds. This list shall be updated by the employer as necessary, but at least annually, and be made readily available for employees and their representatives on request.

EMPLOYEE EDUCATION PROGRAM

Employers shall provide training to newly assigned employees before the employees work in a work area containing a hazardous chemical. Covered employees shall receive training from the employer on the hazards of the chemicals and on measures they can take to protect themselves from those hazards. This training shall be repeated as needed, but at least whenever new hazards are introduced into the workplace or new information is received on the chemicals which are already present.

MATERIAL SAFETY DATA SHEETS

Employees who may be exposed to hazardous chemicals shall be informed of the exposure by the employer and shall have ready access to the most current material safety data sheets (MSDSs), which detail physical and health hazards and other pertinent information on those chemicals.

LABELS

Employees shall not be required to work with hazardous chemicals from unlabeled containers, except portable containers for immediate use, the contents of which are known to the user.

EMPLOYEE RIGHTS

Employees have rights to:

- X access copies of MSDSs
- X information on their chemical exposures
- X receive training on chemical hazards
- X receive appropriate protective equipment
- X file complaints, assist inspectors, or testify against their employer

Employees may not be discharged or discriminated against in any manner for the exercise of any rights provided by this Act. A waiver of employee rights is void; an employer's request for such a waiver is a violation of the Act. Employees may file complaints with the Texas Department of State Health Services at the telephone number provided below.

EMPLOYERS MAY BE SUBJECT TO ADMINISTRATIVE PENALTIES AND CIVIL OR CRIMINAL FINES RANGING FROM \$50 TO \$100,000 FOR EACH VIOLATION OF THIS ACT

Further information may be obtained from:

Texas Department of State Health Services
Division for Regulatory Services
Enforcement Unit
1100 West 49th Street
Austin, Texas 78756

(512) 834-6665
Fax: (512) 834-6606



Texas Department of
State Health Services
Approved 5/05

AVISO A LOS TRABAJADORES

La Ley sobre Comunicaciones de Peligro en Texas (revisión de 1993), codificada bajo el Capítulo 502 del Código de Salud y Seguridad de Texas, exige que los patrones o empleadores del sector público ofrezcan a los trabajadores con información específica sobre los peligros de aquellos productos químicos a los que trabajadores pueden estar expuestos en su lugar de trabajo. De acuerdo con la ley, el patrón debe ofrecer la información y entrenamiento correspondiente. A continuación tenemos un breve resumen de la ley.

PRODUCTOS QUÍMICOS PELIGROSOS

Los productos químicos peligrosos pueden ser cualquiera de los productos o materiales que presentan algún peligro físico o de salud cuando se está usando, a menos de que sea uno de los exentos por la ley. Algunos ejemplos de los productos químicos peligrosos usados más comúnmente son los combustibles como la gasolina, productos de limpieza y muchos tipos de pinturas, pesticidas, herbicidas, congelantes, productos químicos de laboratorio, cemento, varillas de soldadura, etc.

LISTA DE PRODUCTOS QUÍMICOS EN LOS CENTROS DE TRABAJO

Los patrones deben desarrollar en el lugar de trabajo una lista de productos químicos peligrosos usados o almacenados de tamaño mayor de 55 galones o de 500 libras de peso. Esta lista deberá ser renovada por el patrón, cuando sea necesario, pero cuando menos una vez al año, y debe ponerse al alcance de los trabajadores y sus representantes cuando lo soliciten.

PROGRAMA DE EDUCACIÓN PARA EL TRABAJADOR

Los patrones deberán proveer entrenamiento a los trabajadores nuevos asignados antes de que los trabajadores trabajen en una área que contiene un producto o material peligroso. Los trabajadores cubiertos deberán recibir entrenamiento por parte del patrón sobre el peligro de los productos químicos y sobre las medidas que pueden tomar para protegerse a sí mismos de esos peligros. Este entrenamiento deberá ser repetido tantas veces como sean necesario, pero por lo menos cuando un nuevo producto peligroso es introducido en el lugar de trabajo o se reciba nueva información sobre los productos químicos que ya están presentes.

HOJAS DE DATOS SOBRE LA SEGURIDAD DEL MATERIAL

Los trabajadores que pueden estar expuestos a productos químicos peligrosos deberán ser informados por el patrón sobre esa exposición y deberán tener libre acceso a las hojas de datos más recientes sobre la seguridad de los materiales vigentes (MSDSs), en donde se explican los peligros físicos y de salud y dan información adicional sobre estos productos químicos.

ETIQUETAS

Los trabajadores no deberán trabajar con productos químicos peligrosos con recipientes sin etiquetas, a excepción de los recipientes portátiles para su uso inmediato, cuyos contenidos son conocidos por el usuario.

DERECHOS DE LOS TRABAJADORES

Los trabajadores tienen los siguientes derechos:

- tener acceso a las copias de MSDSs.
- recibir información sobre su exposición a productos químicos peligrosos.
- recibir entrenamiento sobre los productos químicos peligrosos.
- recibir equipo de protección apropiado.
- levantar quejas, ayudar a los inspectores, o atestiguar contra su patrón.

No se pueden despedir o discriminar contra los trabajadores en ninguna forma por hacer ejercicio de cualquiera de estos derechos proporcionados por esta Ley. La renuncia de un trabajador a sus derechos es nula; el patrón que solicita tal renuncia comete una violación de esta Ley. Los trabajadores pueden llamar al número de información que aparece más adelante, para levantar quejas ante el Departamento Estatal de Servicios de Salud.

LOS PATRONES PUEDEN RECIBIR PENALIZACIONES ADMINISTRATIVAS Y MULTAS CRIMINALES O CIVILES QUE VARÍAN DE \$50 HASTA \$100,000 POR CADA VIOLACIÓN A ESTA LEY.

Para poder recibir más información por favor llame al:

Texas Department of State Health Services
Division for Regulatory Services
Enforcement Unit
1100 West 49th Street
Austin, Texas 78756

(512) 834-6665
Fax: (512) 834-6606



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