

Michigan Facilities' Guide to SARA Title III

Emergency Planning and Release Reporting

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ENVIRONMENT, GREAT LAKES, AND ENERGY

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INTRODUCTION

The Michigan Facilities' Guide to SARA Title III, Emergency Planning, and Release Reporting was developed by the Michigan SARA Title III Program in the Department of Environment, Great Lakes, and Energy (EGLE). This guidebook will help facilities with hazardous and/or toxic chemicals on site understand the regulations that are designed to improve the level of emergency preparedness and chemical awareness in their communities. The guidebook includes reference materials published by state and federal agencies that are pertinent to the regulations.

The Michigan Facilities' Guide to SARA Title III, Emergency Planning, and Release Reporting is intended for guidance only and might be impacted by changes in legislation, rules, and regulations adopted after the date of publication. Although the guidebook makes every effort to provide the user with directions on how to meet the applicable compliance obligations, use of this guidebook does not constitute the rendering of legal advice.

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CHAPTER 1: OVERVIEW OF SARA TITLE III

THE EMERGENCY PLANNING AND COMMUNITY RIGHT-TO-KNOW ACT

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SARA Title III was passed in response to concerns regarding the environmental and safety hazards posed by the storage and handling of toxic chemicals. These concerns were triggered by the 1984 disaster in Bhopal, India, in which thousands of people suffered death or serious injury due to a release of methyl isocyanate gas from a chemical plant. To reduce the likelihood of such a disaster in the United States, Congress imposed requirements on both states and regulated facilities.

SARA Title III establishes requirements regarding emergency planning and Community Right-to-Know reporting on hazardous and toxic chemicals for federal, state, and local governments; Indian tribes; and industry. The Community Right-to-Know provisions help increase the public’s knowledge and access to information concerning chemicals at individual facilities,

The Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) was enacted by Congress in 1980 to clean up the nation’s hazardous waste sites and to provide for emergency response to releases of hazardous substances into the environment. CERCLA is also called Superfund, and in 1986, Superfund was reauthorized and expanded. It is known as the Superfund Amendments and Reauthorization Act (SARA). Title III of SARA (SARA Title III) is the Emergency Planning and Community Right-To-Know Act (EPCRA).

their uses, and chemical releases into the environment. States and communities, working with facilities, can use the information to improve chemical safety and protect public health and the environment.

SARA Title III is a federal act that is enforced in Michigan by the U.S. Environmental Protection Agency (USEPA). The requirements are implemented in Michigan under an executive order from the Governor. Executive Order 2007-18 created the Michigan Citizen-Community Emergency Response Coordinating Council (MCCERC) as an advisory body within the Michigan Department of State Police. This council is responsible for developing and implementing citizen volunteer emergency response plans and hazard mitigation plans, and it acts as the State Emergency Response Commission (SERC), as required by federal statute.

What Does SARA Title III Cover?

SARA Title III has four major provisions:

- Emergency planning (Sections 302 and 303)
- Emergency release notification (Section 304)
- Hazardous chemical inventory (Sections 311 and 312)
- Toxic chemical release inventory (Section 313)

Information gleaned from these four requirements helps states and communities develop a broad perspective of chemical hazards for the entire community, as well as for individual facilities. Regulations implementing SARA Title III are codified in Title 40 of the Code of Federal Regulations (CFR) Parts 350 to 372. The chemicals covered by each of the sections are different, as are the quantities that trigger reporting. Details of these reporting requirements are covered in this guidebook.

Emergency Planning (Sections 302 & 303)

Off-site emergency response plans contain information that community officials can use at the time of a chemical accident. These plans are developed under Section 303 by the Local Emergency Planning Committee (LEPC) for the protection of the community. The plans address the off-site response to emergency releases of Extremely Hazardous Substances (EHS's) from certain facilities in the LEPC planning district. The plans must:

- Identify facilities subject to Section 302.
- Identify routes likely to be used for the transportation of EHS's.
- Identify facilities contributing to the risk due to their proximity to facilities subject to Section 302, such as natural gas facilities.
- Identify facilities subjected to additional risk due to their proximity to facilities subject to Section 302, such as hospitals.

- Describe emergency response procedures, on and off site.
- Designate a community coordinator and facility coordinator(s) to implement the plan.
- Outline emergency notification procedures.
- Describe how to determine the occurrence of a release, and the area or population likely to be affected by such release.
- Describe local emergency equipment and facilities and identify the persons responsible for such.
- Outline evacuation plans.
- Detail training programs, including schedules for training local emergency response and medical personnel.
- Provide methods and schedules for exercising the emergency plan.

What are SERCs and LEPCs?

Each state's governor designated a SERC, which in turn designated local emergency planning districts and appointed an LEPC for each district. There are 87 LEPCs in Michigan – one for each of the 83 counties, as well as LEPCs for the cities of Ann Arbor, Detroit, Romulus, and Wayne.

The SERC supervises and coordinates the activities of the LEPC, establishes procedures for receiving and processing public requests for information collected under SARA Title III, and reviews local emergency response plans. **The Michigan SARA Title III Program in the Department of Environmental, Great Lakes and Energy (EGLE) receives all reports on behalf of the SERC.** The Michigan Department of State Police, Emergency Management and Homeland Security Division, reviews the local emergency response plans and oversees the activities of the LEPCs.

LEPC membership must include, at a minimum, local officials, including police, fire, civil defense, public health, transportation, and environmental professionals, as well as representatives of facilities subject to the emergency planning requirements, community groups, and the media. The LEPC must develop an emergency response plan, review it at least annually, and provide information about chemicals in the community to citizens.

Planning activities of LEPCs and facilities initially focused on, but were not limited to, the 355 EHS' listed by the USEPA in 40 CFR 355 (see Appendix A). The list includes the threshold planning quantity (minimum limit) for each substance. Under Section 302 of SARA Title III, any facility that has any of the listed EHS' at or above its threshold planning quantity must notify the SERC and LEPC. This one-time notification must be made within 60 days after the facility first receives a shipment or produces the substance on site that causes the facility to meet or exceed the threshold planning quantity for that substance.

Emergency Release Notification (Section 304)

Facilities must immediately notify the LEPC and SERC if there is a release into the environment of a hazardous substance that is equal to or exceeds the minimum reportable quantity set in the regulations. This requirement covers the 355 EHSs, as well as over 770 listed hazardous substances subject to the emergency release notification requirements under CERCLA Section 103(a) (40 CFR 302.4). Some chemicals are common to both lists. Emergency release notification requirements involving transportation incidents can be met by dialing 911.

The emergency release notification should include:

- ✓ The chemical name
- ✓ An indication of whether the substance is extremely hazardous
- ✓ An estimate of the quantity released into the environment
- ✓ The time and duration of the release
- ✓ Whether the release occurred into air, water, and/or land
- ✓ Any known or anticipated acute or chronic health risks associated with the emergency and, where necessary, advice regarding medical attention for exposed individuals
- ✓ Proper precautions, such as evacuation or sheltering in place
- ✓ Name and telephone number of the contact person.

A written follow-up notice must be submitted to the SERC and the LEPC as soon as is practicable after the release. The follow-up notice must update information included in the initial notice and provide information on the actual response actions taken and advice regarding medical attention necessary for citizens exposed to the released chemical.

Section 304 is only one of 27 state and federal regulations that have release reporting requirements that apply in Michigan. [Additional release reporting requirements and a release reporting form](#) that can be used to report releases under Section 304 are available at Michigan.gov/ChemRelease.

Hazardous Chemical Inventory (Sections 311 and 312)

Under the Occupational Safety and Health Administration (OSHA) regulations, employers must maintain a Safety Data Sheet (SDS) for any hazardous chemicals stored or used in the work place. Over 650,000 products have SDSs.

Note: The Hazard Communication Standard requires chemical manufacturers, distributors, or importers to provide SDSs (formerly known as Material Safety Data Sheets or MSDSs) to communicate the hazards of hazardous chemical products. As of June 1, 2015, new SDSs must be in a uniform format.

Section 311 of SARA Title III requires facilities that have SDSs for chemicals held above certain quantities to submit either copies of their SDSs or a list of these hazardous chemicals to the

SERC, LEPC, and local fire department within three months after they exceed the threshold. If the facility owner or operator chooses to submit a list of hazardous chemicals, the list must include the chemical or common name of each substance and identify the applicable hazard categories. These hazard categories are:

- Flammable (gases, aerosols, liquids, or solids)
- Gas under pressure
- Explosive
- Self-heating
- Pyrophoric (liquid or solid)
- Pyrophoric Gas
- Oxidizer (liquid, solid or gas)
- Organic peroxide
- Self-reactive
- In contact with water emits flammable gas
- Combustible Dust
- Corrosive to metal
- Carcinogenicity
- Acute toxicity (any route of exposure)
- Reproductive toxicity
- Skin Corrosion or Irritation
- Respiratory or Skin Sensitization
- Serious eye damage or eye irritation
- Specific target organ toxicity (single or repeated exposure)
- Aspiration Hazard
- Germ cell mutagenicity
- Simple Asphyxiant
- Hazard Not Otherwise Classified (HNOC)

Note: See page 1-7 of this chapter for USEPA changes to the hazard categories.

Facilities covered by Section 311 must, under Section 312, annually submit an emergency and hazardous chemical inventory form to the LEPC, the SERC, and the local fire department. Facilities provide either a Tier I or Tier II form. Tier I forms include aggregate information for each applicable hazard category. The Tier II report basically contains the same information as the Tier I report, but it must name the specific chemicals. Most states, including Michigan, require Tier II information. Tier II forms provide the following information for each substance:

- The chemical name or common name as indicated on the SDS.
- An estimate of the maximum amount of the chemical present at any time during the preceding calendar year and the average daily amount.
- A brief description of the manner of storage of the chemical.
- The location of the chemical at the facility.
- An indication of whether the owner elects to withhold location information from disclosure to the public.

Because many states have added requirements or incorporated the Federal contents in their own forms, Tier I or Tier II forms should be obtained from the state SERC. Section 312

information must be submitted every year on or before March 1.

In 1999, the USEPA excluded gasoline held at most retail gas stations from Section 311/312 reporting. The USEPA estimates that about 550,000 facilities, including approximately 7,000 facilities in Michigan, are now covered by SARA Title III Section 311/312 requirements.

The information submitted under Sections 311 and 312 is available to the public from LEPCs and SERCs. The hazardous chemical inventory reports are not available to the public online.

Toxic Chemical Release Inventory (Section 313)

Section 313, commonly referred to as the Toxic Chemical Release Inventory or TRI, requires certain facilities to annually report toxic chemical releases and waste management activities to the USEPA and the state by July 1. Facilities also must report information on source reduction, recycling, and treatment under the Pollution Prevention Act of 1990.

The TRI reporting requirement applies to facilities that have 10 or more full-time employees (or the equivalent), that manufacture (including import), process, or otherwise use a listed toxic chemical above threshold quantities, and that are in certain industry sectors. These sectors include manufacturing, metal mining, coal mining, electric utilities, hazardous waste treatment and disposal facilities, chemical distributors, petroleum bulk plants, solvent recovery services, and federal facilities.

A complete list of covered facilities is available at www.epa.gov/tri.

One purpose of this reporting requirement is to inform the public and communities surrounding covered facilities about toxic chemicals at individual facilities, their uses, and releases into the environment. The data can also be used to:

- Identify sources of toxic chemical releases.
- Help analyze potential toxic chemical hazards to human health and the environment.
- Encourage pollution prevention at facilities.

The following information is required on the form:

- The name, location and type of business.
- Whether the chemical is manufactured (including imported), processed, or otherwise used, and the general categories of use of the chemical.
- An estimate of the maximum amount of the toxic chemical present at the facility at any one time during the preceding year.
- Quantity of the chemical entering the air, land, and water during the preceding year.

- Off-site locations to which the facility transfers toxic chemicals in waste for recycling, energy recovery, treatment, or disposal, and the amount transferred.
- Waste treatment methods and the efficiency of methods for each waste stream.

The USEPA maintains the TRI information in a national database that is available to the public online.

What Else Does SARA Title III Require?

Trade Secrets

SARA Title III Section 322 addresses trade secrets as they apply to SARA Title III Sections 303, 311, 312, and 313 reporting; a facility cannot claim trade secrets under Section 304 of this statute. Only the chemical identity may be claimed as a trade secret, although a generic class for the chemical must be provided. The criteria a facility must meet to claim a chemical identity as a trade secret are in 40 CFR Part 350. In practice, less than one percent of facilities have filed such claims.

Even if chemical identity information can be legally withheld from the public, SARA Title III Section 323 allows the information to be disclosed to health professionals who need the information for diagnostic and treatment purposes or local health officials who need the information for prevention and treatment activities. In non-emergency cases, the health professional must sign a confidentiality agreement with the facility and provide a written statement of need. In medical emergencies, the health professional, if requested by the facility, provides these documents as soon as circumstances permit.

Any person may challenge trade secret claims by petitioning the USEPA. The Agency must review the claim and rule on its validity.

Penalties

SARA Title III Section 325 allows criminal penalties as follows:

- Criminal penalties up to \$50,000 or five years in prison apply to any person who knowingly and willfully fails to provide emergency release notification.
- Penalties of not more than \$20,000 and/or up to one year in prison apply to any person who knowingly and willfully discloses any information entitled to protection as a trade secret.
- SARA Title III does not provide for criminal sanctions for violations of Section 313. However, 18 U.S.C. §1001 makes it a criminal offense to falsify information submitted to the U.S. Government.

SARA Title III Section 325 and the Debt Collection Improvement Act of 1996 and its implementing regulations at 40 CFR 19 allow civil and administrative penalties as follows:

- Any person that fails to comply with emergency release notification requirements in CERCLA Section 103 or SARA Title III Section 304 shall be liable for civil penalties of up to \$53,907 per day per violation. The penalty for subsequent or repeat violations is \$161,721 per violation per day.
- Any person that violates hazardous chemical inventory reporting requirements in Section 311 of SARA Title III shall be liable for civil and administrative penalties of not more than \$21,563 per day per violation.
- Any person that violates hazardous chemical inventory reporting requirements in Section 312 of SARA Title III shall be liable for civil and administrative penalties of not more than \$53,907 per day per violation.
- Any person that violates toxic chemical release inventory reporting requirements in Section 313 of SARA Title III shall be liable for civil penalties not to exceed \$53,907 for each day that each chemical is not reported or incorrectly reported.

Note: The USEPA has adjusted its SARA Title III Civil Penalties. This action, mandated by the Federal Civil Penalties Inflation Adjustment Act of 1990, as amended through 2015, prescribes a formula for adjusting statutory civil penalties to reflect inflation, maintain the deterrent effect of statutory civil penalties, and promote compliance with the law. For additional information see the [Civil Monetary Penalty Inflation Adjustment Rule](https://www.federalregister.gov/articles/2016/07/01/2016-15411/civil-monetary-penalty-inflation-adjustment-rule) at www.federalregister.gov/articles/2016/07/01/2016-15411/civil-monetary-penalty-inflation-adjustment-rule.

Citizens' Suits

SARA Title III Section 326 allows citizens to initiate civil actions against the USEPA, SERCs, and the owner or operator of a facility for failure to meet the SARA Title III requirements. A SERC, LEPC, and state or local government may institute actions against facility owner/operators for failure to comply with SARA Title III requirements. In addition, states may sue the USEPA for failure to provide trade secret information.

Related Laws

The Oil Pollution Act (OPA) of 1990 includes national planning and preparedness provisions for oil spills that are similar to SARA Title III provisions for EHS's. Plans are developed at the local, state, and federal levels. The OPA plans offer an opportunity for LEPCs to coordinate their plans with area and facility oil spill plans covering the same geographical area.

The 1990 Clean Air Act (CAA) Amendments require the USEPA and OSHA to issue regulations for chemical accident prevention. Facilities that have certain chemicals above specified

threshold quantities are required to develop a Risk Management Program to identify and evaluate hazards and manage those hazards safely. Facilities subject to the USEPA's risk management program rules must submit a Risk Management Plan (RMP) summarizing their program to the USEPA. If a facility will respond to a release, it must coordinate the RMP with the LEPC off-site emergency response plan. If a facility will not respond to a release of the toxic chemicals it contains, it must confirm that the facility is included in the LEPC off-site emergency response plan. Facilities that have flammable substances must confirm coordinated response actions with their local fire departments.

On November 20, 2019, USEPA finalized changes to the Risk Management Program (RMP) Amendments to better address potential security risks, regulatory consistency and reasonable consideration of costs. The changes are intended to promote better emergency planning and public information about accidents and maintain the trend of fewer significant accidents involving chemicals regulated under the RMP rule. The changes reflect issues raised in three petitions for reconsideration of the RMP Amendments as well as other revisions USEPA identified in its review of that rule.

The RMP Reconsideration final rule:

- Rescinds all major accident prevention program provisions of the RMP Amendments rule (i.e., third party audits, safer technology and alternatives analyses, incident investigation root cause analysis), and most other minor changes to the prevention program.
- Rescinds the public information availability provisions of the RMP Amendments rule.
- Retains the requirement to hold a public meeting within 90 days after an accident, but only applies the requirement to accidents with offsite impacts.
- Modifies the emergency coordination provisions to address security concerns with the Amendments rule coordination provisions.
- Modifies the exercise provisions to give more flexibility to regulated facilities and local emergency responders in complying with these provisions.
- Modifies some compliance dates to provide necessary time for program changes.

For more information, please see [Final RMP Reconsideration Rule Webpage](https://www.epa.gov/rmp/final-risk-management-program-rmp-reconsideration-rule)
www.epa.gov/rmp/final-risk-management-program-rmp-reconsideration-rule

The Michigan Emergency Management Act (Act 390) provides for planning, mitigation, response, and recovery from natural and human-made disasters within the state. It requires the state to develop an emergency response plan, and counties and large municipalities to develop an emergency operations plan. LEPCs must coordinate their off-site emergency response plans with the county/city emergency operations plan.

Michigan Occupational Safety and Health Administration regulations stipulate that the chief of each organized fire department shall provide the fire fighters with a plan for executing their

responsibilities with respect to each site within the jurisdiction. The Fire Prevention Code [1941 Public Act (PA) 207] requires owners and operators of facilities to provide the local fire department with the quantities and locations of chemicals specified by the fire chief.

Part 31, Water Resources Protection, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended, requires that facilities subject to the Part 5 rules provide notification to the LEPC that they have completed a Pollution Incident Prevention Plan (PIPP) or an integrated contingency plan (ICP) containing the PIPP requirements. They must provide a copy of the PIPP or ICP to the LEPC upon request.

USEPA's Audit Policy and Self-Disclosure

Owners and operators are strongly encouraged to audit their facilities to confirm that they are in compliance with all environmental regulations. If violations are discovered, disclosed, and corrected in accordance with the USEPA's Audit Policy or the Small Business Compliance Policy described here, penalties may be mitigated up to 100 percent.

The [USEPA's Audit Policy \(epa.gov/compliance/epas-audit-policy\)](https://www.epa.gov/compliance/epas-audit-policy) has been in effect since 1995. It reflects input from industry, trade associations, state environmental programs, and public interest groups. The Audit Policy is designed to provide incentives for regulated entities to come into compliance with the federal environmental laws and regulations. These incentives are for regulated entities that voluntarily discover, promptly disclose, and expeditiously correct noncompliance, making formal USEPA investigations and enforcement actions unnecessary.

The [Small Business Compliance Policy \(www.epa.gov/compliance/small-business-compliance\)](https://www.epa.gov/compliance/small-business-compliance) promotes environmental compliance among small businesses (those with 100 or fewer employees) by providing incentives to discover and correct environmental problems. The USEPA will eliminate or significantly reduce penalties for small businesses that voluntarily discover violations of environmental law and promptly disclose and correct them. For more information, see the [Small Business Resources Information Sheet](#).

Changes to the SARA Title III Regulations

[Technical Amendment - Trade Secrecy Claims and Emergency Planning Notification Under Section 322 in 2020](#)

The USEPA published a technical amendment on July 24, 2020 to remove the outdated substantiation form for trade secrecy claims from the Code of Federal Regulations. The most current substantiation form is posted at on the USEPA's website at [epa.gov/epcra/epcra-trade-secret-forms-and-instructions](https://www.epa.gov/epcra/epcra-trade-secret-forms-and-instructions).

The Agency also included clarification within a note in 40 CFR 355.41 to make regulated entities aware that SERCs and/or LEPCs may have a specific format for the follow-up report of the emergency release notification information.

Amendments to EPCRA Section 312 in 2018

Section 2018 of the America's Water Infrastructure Act (AWIA) also amended EPCRA Section 312, requiring SERCs, TERCs, LEPCs, and TEPCs to provide affected community water systems with Tier II information for facilities within their source water area upon request. Source water areas may span multiple jurisdictional boundaries at the state, tribal, and local levels, potentially requiring access to Tier II information from multiple SERCs, TERCs, LEPCs, or TEPCs. If a facility has not complied with Tier II reporting requirements, then the SERC (or TERC) and LEPC (or TEPC) should request that the facility submit its Tier II form and then provide Tier II information to the affected community water systems.

Amendments to EPCRA Section 304 in 2018

Section 2018 of the America's Water Infrastructure Act (AWIA), enacted on October 23, 2018, amended EPCRA Section 304 to require SERCs and TERCs to promptly notify the state drinking water primacy agency (i.e., applicable state agency) of any reportable release and provide this agency with:

- The information collected under section 304(b) from the initial release notification; and
- The follow-up written report received under section 304(l).

The state drinking water primacy agency is then required to promptly provide all the information regarding the release to any community water systems whose source water is affected by the release. A community water system's source water is potentially affected if the release occurs in that system's source water area (also known as a source water protection area) or upstream of the system's water intake. Drinking water primacy agencies and community water systems can provide the boundaries for source water protection areas to the SERCs and TERCs. For states with no state drinking water primacy agency, the SERC and TERC are required to directly notify the potentially affected community water systems.

Changes to Hazard Categories for Reporting Under Sections 311 and 312 in 2018

The final rule outlined below is now effective as of January 1, 2018. This means moving forward facilities are now required to report the revised physical and health hazards (see tables below) for their hazardous chemicals present during 2017 calendar year. These changes are now in effect in the Michigan Tier II Manager™ program.

This final rule revises the hazard categories in the regulations at 40 CFR Part 370, for reporting under Sections 311 and 312 of the EPCRA. On March 26, 2012, OSHA revised its Hazard Communication Standard (HCS) by adopting the United Nations Globally Harmonization System of Classification and Labeling of Chemicals (GHS). The changes to OSHA's HCS affect the reporting requirements under Sections 311 and 312 of the EPCRA.

What are the reporting requirements of the EPCRA Sections 311 and 312?

Sections 311 and 312 of the EPCRA contain provisions for hazardous chemical inventory reporting. Facilities that handle hazardous chemicals defined under the Occupational Safety and Health Act of 1970 and its implementing regulations must provide information on the quantity, locations, and the potential hazards of these chemicals. This information is submitted to the SERC or Tribal Emergency Response Commission (TERC), LEPC or Tribal Emergency Planning Committee (TEPC), and the fire department.

Section 311 requires facilities to submit the SDSs of hazardous chemicals present at or above the reporting thresholds specified in the regulations at 40 CFR Part 370. Facilities may also submit a list of hazardous chemicals grouped into hazard categories, instead of the SDSs.

Section 312 requires these facilities to submit the hazardous chemical inventory form to their SERC (or TERC), LEPC (or TEPC), and the fire department by March 1, annually. The inventory form provides the physical and/or health hazard of each hazardous chemical, their locations, and quantities that were present at the facility during the previous calendar year.

What is the Background of this Final Rule?

The statute specifies that the list of hazardous chemicals reported under Section 311 and the inventory forms reported under Section 312 should be based on the physical and health hazards established under OSHA and its implementing regulations. The statute also states that the USEPA may modify the physical and health hazards set forth by OSHA and its implementing regulations. Accordingly, the USEPA modified OSHA's 23 physical and health hazards into five hazard categories (three physical and two health hazard categories) for facilities to use for reporting under Sections 311 and 312. Facilities have been using these five hazard categories since the regulations were promulgated in 1987.

On March 26, 2012, OSHA published a final rule to revise the HCS due to OSHA's adoption of the GHS classification and labeling of chemicals. GHS is a standardized approach for classifying chemicals by their health, physical, and environmental effects, and communicates this information to downstream users by using consistent signal words, pictograms, hazard statements, etc., on labels and SDSs. OSHA adopted the classification criteria and provisions that are appropriate to its existing standards for hazard communication for labeling and SDSs. Under the revised HCS, chemical manufacturers and importers are required to evaluate their chemicals to ensure that they are classified and labeled appropriately.

What are the Revisions to Hazard Categories for Reporting under Sections 311 and 312?

The classifications of chemicals that OSHA adopted from GHS affect the reporting requirements under the EPCRA, Sections 311 and 312. As stated in the statute, facilities are required to report the quantities, locations, and the potential hazards of the chemicals to the SERC (or TERC), LEPC (or TEPC), and the local fire department. Therefore, the USEPA is revising the existing hazard categories in 40 CFR Part 370, to conform to the hazard classes in the revised OSHA HCS. Although the physical and health hazards in OSHA HCS prior to the 2012 revisions are the same as the revised hazards, the descriptions of each hazard are more detailed. See tables below for descriptions of physical and health hazard classes before and after adopting GHS provisions.

Physical Hazard Classes in OSHA Hazard Communication Standards (HCS)

Physical Hazards (prior to GHS adoption)	Physical Hazards (after adoption, revised in 2012)
Combustible liquid	Flammable (gases, aerosols, liquids, or solids)
Compressed Gas	Gas under pressure
Explosive	Explosive
Flammable	Self-heating
Pyrophoric	Pyrophoric (liquid or solid)
Oxidizer	Oxidizer (liquid, solid, or gas)
Organic Peroxide	Organic peroxide
Unstable (Reactive)	Self-Reactive
Water-Reactive	In contact with water emits flammable gas
	Corrosive to metal
	Hazard Not Otherwise Classified (HNOC)

Health Hazard Classes in OSHA Hazard Communication Standards (HCS)

Health Hazards (prior to GHS adoption)	Health Hazards (after adoption, revised in 2012)
Carcinogens	Carcinogenicity
Toxic or highly toxic agents	Acute toxicity (any route of exposure)
Reproductive toxins	Reproductive toxicity
Irritants; Corrosives	Skin Corrosion or Irritation
Sensitizers	Respiratory or Skin Sensitization
Agents which damage the lungs, skin, eyes, or mucous membranes	Serious eye damage or eye irritation
Hepatotoxins	Specific target organ toxicity (single or repeated exposure)
Nephrotoxins	Germ cell mutagenicity
Neurotoxins	Aspiration Hazard
Agents which act on the hematopoietic system	Hazard Not Otherwise Classified (HNOC)

In addition to the hazards adopted from GHS, OSHA specifically added three hazards that were not yet covered by GHS. These are: simple asphyxiant; combustible dust; and pyrophoric gas. Soon after OSHA's HCS 2012 final rule was published, many stakeholders requested the USEPA adopt physical and health hazard classes as described in the revised HCS. The stakeholders expressed that, if the USEPA adopted these physical and hazard classes, it would be less burdensome to:

- The regulated community, as they would only need to copy the chemical hazard information from the SDS.
- The implementing agencies, as they could more easily compare the hazard information provided on each SDS with the information provided on the list of hazardous chemicals and the inventory form. Under this final rule, the USEPA is adopting the hazard classes as they are in the revised HCS for reporting under Sections 311 and 312.

Physical and Health Hazards (to be effective January 1, 2018)

Physical Hazard	Health Hazards
Flammable (gases, aerosols, liquids, or solids)	Carcinogenicity
Gas under pressure	Acute toxicity (any route of exposure)
Explosive	Reproductive toxicity
Self-heating	Skin Corrosion or Irritation
Pyrophoric (liquid or solid)	Respiratory or Skin Sensitization
Pyrophoric Gas	Serious eye damage or eye irritation
Oxidizer (liquid, solid or gas)	Specific target organ toxicity (single or repeated exposure)
Organic peroxide	Aspiration Hazard
Self-reactive	Germ cell mutagenicity
In contact with water emits flammable gas	Simple Asphyxiant
Combustible Dust	Hazard Not Otherwise Classified (HNOC)
Hazard Not Otherwise Classified (HNOC)	
Corrosive to metal	

What is the Effective Date of this Final Rule?

Many states have developed their own software for hazardous chemical inventory reporting. Other states use Tier2 Submit, electronic software developed by the USEPA. To provide enough time for states (as well as the USEPA) to modify the software to incorporate the new hazard classes, this final rule is now in effective as of January 1, 2018. Facilities are now required to report the revised physical and health hazards for their hazardous chemicals present during the 2017 calendar year.

2012 Revisions to Tier II

On July 13, 2012, the USEPA published the final rule in the Federal Register [77 Federal Register (FR) 41300] that revised the Tier II hazardous chemical inventory report form by adding mandatory and optional data elements to the facility identification and contact information section. It also revised some existing data elements in the chemical reporting section.

The new and revised report elements include:

- Indication if the facility is manned or unmanned.
- An estimate of the maximum number of occupants at one time.
- Indication if the facility is subject to the chemical accident prevention requirements under Section 112(r) of the CAA, also known as the RMP.
- Facility identification numbers assigned under the TRI and the RMP, if subject.
- Indication if the facility is subject to the emergency planning notification requirement under Section 302.
- Parent company details (different from owner/operator details) as optional data elements.
- Emails for facility owner or operator, and emergency contact.
- Name, title, phone number, 24-hour phone number, and email of the facility emergency coordinator, if subject to Section 302.
- Name, title, phone number, and email of person to contact regarding information in the Tier II report.
- Replace storage codes with actual language (i.e., above ground tank, above ambient pressure, cryogenic).
- Changed inventory range codes to cover a smaller range:
 - Old highest range code is 11 \geq 1 billion.
 - New highest range code is 13 \geq 10 million.

2012 Revision to Section 302

On March 22, 2012, the USEPA published the final rule in the Federal Register (77 FR 16679) that revises the manner for applying the threshold planning quantities (TPQs) for those EHS's that are non-reactive solid chemicals in solution. The revision allows facilities that have a non-reactive solid EHS in solution to first multiply the amount of the solid chemical in solution on site by 0.2 before determining if this quantity equals or exceeds the lower published TPQ. This rule became effective on April 23, 2012.

2010 Interpretations of Sections 304, 311 and 312

On July 13, 2010, the USEPA published in the Federal Register (75 FR 39852) guidance on reporting options for Sections 311 and 312, and interpretations. The emergency release notification in 40 CFR 355.40 states that a written follow-up report must be provided by the facility “as soon as practicable” after a release. The USEPA has decided that 30 days should be sufficient to submit the written follow-up notice of the emergency release to the SERC and LEPC.

Under SARA Title III Section 311(e)(2), “Any substance present as a solid in any manufactured item to the extent exposure to the substance does not occur under normal conditions of use” is exempt from the definition of hazardous chemical and, therefore, need not be reported under Sections 311 and 312. Under the USEPA’s new interpretation, facilities will only have to include and count the amount of fume or dust emitted or released from a manufactured solid that is being modified to determine if the SARA Title III Sections 311 and 312 reporting thresholds have been reached. This interpretation applies to metal, bricks, and any other manufactured solid items that undergo a modification process. It does not apply to lead in batteries.

This guidance also included an option for states to use the Section 312 reporting to fulfill the reporting requirements under Section 311.

2008 Amendments to Sections 302 – 312

On October 17, 2008, the USEPA finalized several changes to the SARA Title III regulations (40 CFR Parts 355 and 370). These changes were proposed on June 8, 1998 [63 FR 31268], and took effect ten years later on December 3, 2008 (73 FR 65452).

All sections of 40 CFR Parts 355 and 370 are in plain language, using a question and answer format. There are only minor changes to the emergency planning and emergency release notification sections. For hazardous chemical reporting regulations, there are changes regarding the Tier I and Tier II forms, as well as changes in how to report hazardous chemicals in a mixture.

- The Tier I and Tier II forms and their instructions have been removed from the CFR. They may now be found on the USEPA’s Emergency Management website.
- The revised regulation includes a description of the requirements for Tier I and Tier II. Facilities are now required to report their North American Industry Classification System (NAICS) code on the Tier I or Tier II form.
- The chemical or common name of the chemical, as provided on the SDS, must be provided on the Tier II form.
- When determining whether the threshold quantity of an EHS has been met, facilities must report the total quantity of that EHS present: add together the quantity present in its pure form and as a component in all mixtures.

- For hazardous chemicals that are mixtures and do not contain any EHS, facilities have an option when determining whether the threshold quantity is present:
 - 1) Add together the quantity present in its pure form and as a component in all mixtures (even if the mixture is also being reported as a hazardous chemical), **or**
 - 2) Consider the total quantity of each mixture separately.

TRI Revisions

On November 26, 2010, the USEPA finalized a rule (75 FR 72727) to provide communities with additional information about toxic chemicals being released to the environment. The rule was effective on November 30, 2010 and added 16 chemicals to the TRI list of reportable chemicals.

On October 17, 2011, the administrative stay for reporting hydrogen sulfide was lifted (76 FR 64022). The TRI reports for report year 2012 were the first to include hydrogen sulfide.

On April 19, 2012, the USEPA finalized a rule (77 FR 23409) that requires each facility located in tribal lands to submit their TRI reports to the USEPA and the appropriate tribal government, rather than to the state in which the facility is located.

On August 27, 2013, the USEPA finalized a rule (78 FR 52860) that requires TRI reports to be submitted online to the USEPA using the electronic reporting software provided by the USEPA.

On November 7, 2013, the USEPA finalized a rule (78 FR 66848) that adds *ortho*-nitrotoluene to the TRI list of reportable chemicals.

The FR notices published by [the Office of the Federal Register, National Archives and Records Administration](#), can be viewed online at archives.gov/federal-register/.

Summary of SARA Title III Reporting Requirements in Michigan

SARA TITLE III SECTION	REPORT REQUIREMENT	REPORT FORM	REPORT DUE	AGENCIES TO RECEIVE REPORT
302	Emergency Planning Notification	Emergency Planning Notification in Tier II Manager™	Within 60 days after threshold reached	Michigan SARA Title III Program LEPC
304	Emergency Chemical Release – Initial Notification		Within 15 minutes after discovery	Pollution Emergency Alerting System (PEAS) at 800-292-4706 or Michigan Department of Agriculture and Rural Development Hotline at 800-405-0101 All LEPCs potentially affected by the release U.S. Coast Guard National Response Center at 800-424-8802
304	Emergency Chemical Release – written Follow-up	Spill or Release Report	Within 30 days after the release	Michigan SARA Title III Program All LEPCs affected by the release
311	Initial Hazardous Chemical Inventory	Online in Tier II Manager™	Within 3 months after threshold reached	Michigan SARA Title III Program LEPC Local fire department
312	Tier II – Emergency and Hazardous Chemical Inventory	Tier II online in Tier II Manager™	Annually, by March 1	Michigan SARA Title III Program LEPC Local fire department
313	Toxic Chemical Release Inventory	Form R online in TRI-MEweb	Annually, by July 1	Michigan SARA Title III Program USEPA TRI Data Processing Center

There are **no fees** associated with reporting under SARA Title III in Michigan.

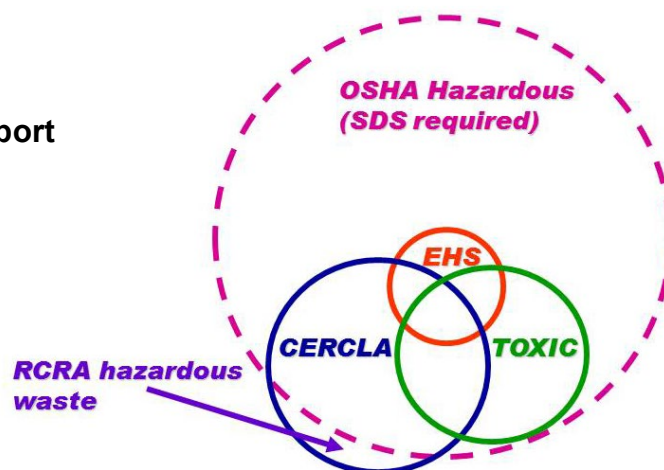
Summary of Chemicals Covered by SARA Title III Requirements

OSHA: Tier II

EHS: Emergency Plan and Release Report

CERCLA: Release Report

Toxic: TRI



On this diagram, the large circle with the dashed line represents the universe of over 650,000 **OSHA Hazardous Chemicals**. These chemicals are potentially subject to Emergency and Hazardous Chemical Inventory reporting under Sections 311 and 312 (Tier II report) of SARA Title III. The line is dashed because there is **no list** of these chemicals.

The **Extremely Hazardous Substances** (EHS on the diagram) are listed, so the circle has a solid line. Each of the 355 EHS's has an associated threshold planning quantity for emergency planning pursuant to SARA Title III Sections 302 and 303, and a reportable quantity for release reporting under SARA Title III Section 304. The EHS's are also subject to Emergency and Hazardous Chemical Inventory reporting unless an exemption applies ([see Chapter 3, What Chemicals Are Excluded](#)).

The **EHS's** are listed and have associated reportable quantities for release reporting under CERCLA Section 103 and SARA Title III Section 304. There are over 770 CERCLA hazardous substances that include hazardous waste subject to RCRA regulations. Part of the CERCLA group falls outside of the OSHA group. This is because OSHA does not require that an SDS be maintained for hazardous waste. Therefore, RCRA hazardous waste is not reportable on the Tier II report, but a release that is above the listed reportable quantity must be reported.

The USEPA published a list of approximately 650 **toxic chemicals** and chemical categories (Toxic on the diagram). Pursuant to SARA Title III Section 313, "subject facilities" must submit a TRI report for each toxic chemical that exceeds an activity threshold ([see Chapter 4, SARA Title III Section 313](#)).

The listed substances (EHS, CERCLA Hazardous, and toxic chemicals) are included in the *List of Lists* located in [Appendix B](#) of this guidebook and on the US EPA's website at [epa.gov/epcra/consolidated-list-lists](https://www.epa.gov/epcra/consolidated-list-lists).

Where Can You Find SARA Title III Information?

In accordance with Community Right-to-Know requirements in SARA Title III, SDSs, hazardous chemical inventory forms, follow-up emergency release notifications, and emergency response plans are available from the SERC and the LEPC.

EPCRA Sections 302-312 are administered by the USEPA's Office of Emergency Management. The USEPA's Office of Environmental Information implements the EPCRA Section 313 program. The USEPA's Emergency Management website has links to SARA Title III regulations; the links offer an abundance of chemical information, including the "List of Lists" located in Appendix B of this guidebook [a consolidated list of chemicals subject to SARA Title III Sections 302, 304, and 313, CERCLA, the CAA Section 112r, and Resource Conservation and Recovery Act (RCRA)], SDSs, profiles of EHS, and TRI information). The USEPA's Environmental Information website has links to the TRI Program and environmental information, including the TRI and multi-media data and information sources.

Michigan's SARA Title III website has up-to-date information regarding Michigan SARA Title III reporting, TRI data, release reporting, emergency planning, and LEPC contacts, and links to numerous websites with related information. The Michigan State Police Emergency Management and Homeland Security Division Web site has information to help LEPCs and emergency responders.

Michigan Information

Reporting and LEPC contact information:

Michigan Department of Environment, Great Lakes and Energy (EGLE)

SARA Title III Program

P.O. Box 30457

Lansing, MI 48909-7957

517-284-SARA (7272)

egle-sara@michigan.gov

Michigan.gov/SARA

For federal express or UPS deliveries:

Michigan SARA Title III Program

EGLE - ESD

Constitution Hall, 1 South

525 West Allegan

Lansing, MI 48933

Planning information for LEPCs:

Michigan State Police

Emergency Management and Homeland
Security Division

4000 Collins Road

Lansing, MI 48909-8136

EMHSTC@michigan.gov

Michigan.gov/EMHSD

Federal Information:

USEPA Superfund, TRI, EPCRA, RMP, and Oil Information Center

800-424-9346

TDD: 800-553-7672

Monday – Friday 9 am to 5 pm, EST

Closed on Federal holidays

wepa.gov/epcra/forms/contact-us-about-emergency-planning-and-community-right-know-act-epcra

TRI Program website:

epa.gov/toxics-release-inventory-tri-program

Emergency Response | USEPA

www.epa.gov/emergency-response

USEPA Environmental Information website:

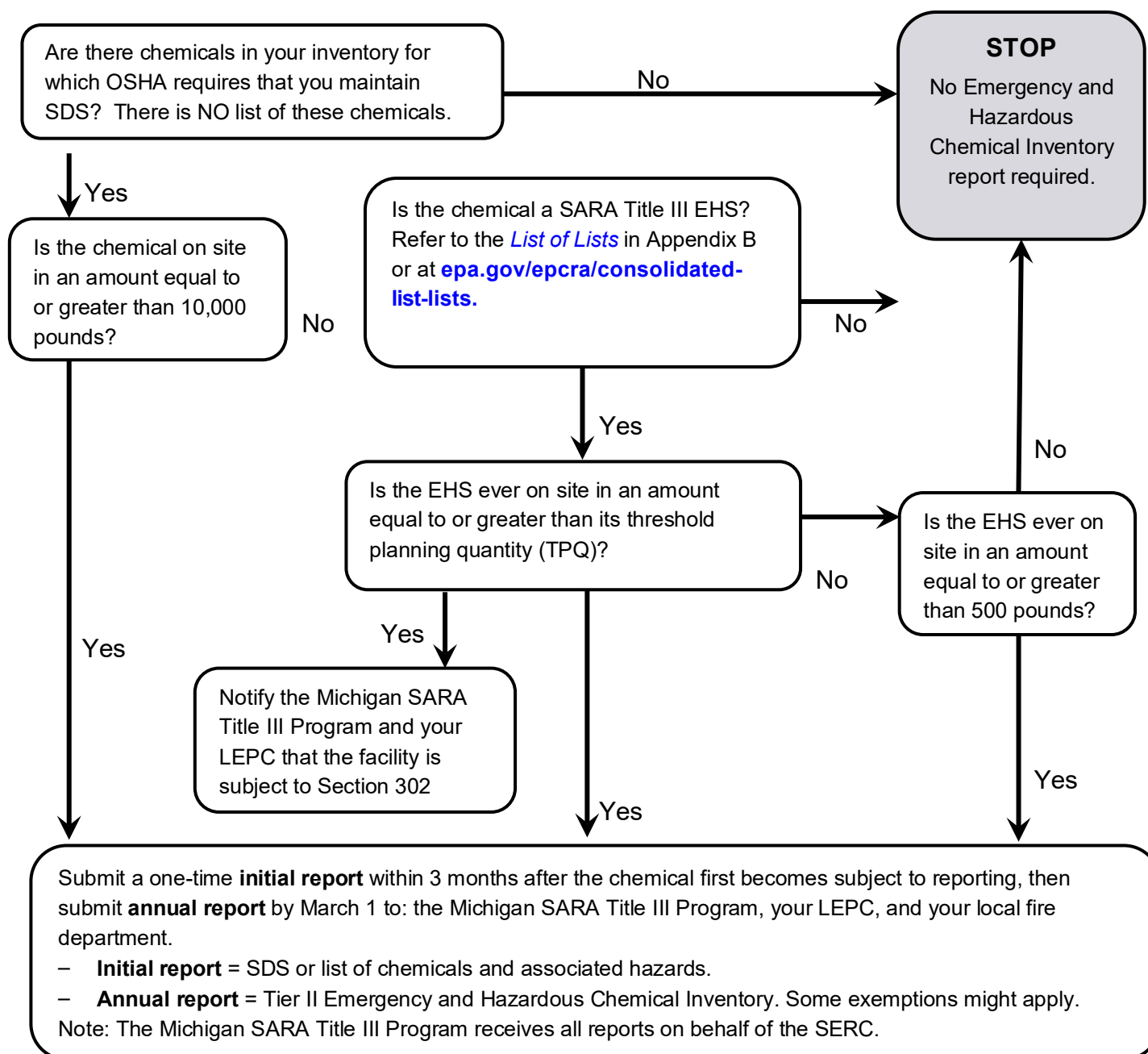
epa.gov/oei

MCCERCC acting as Michigan's SERC
website:

Michigan.gov/MCCERCC

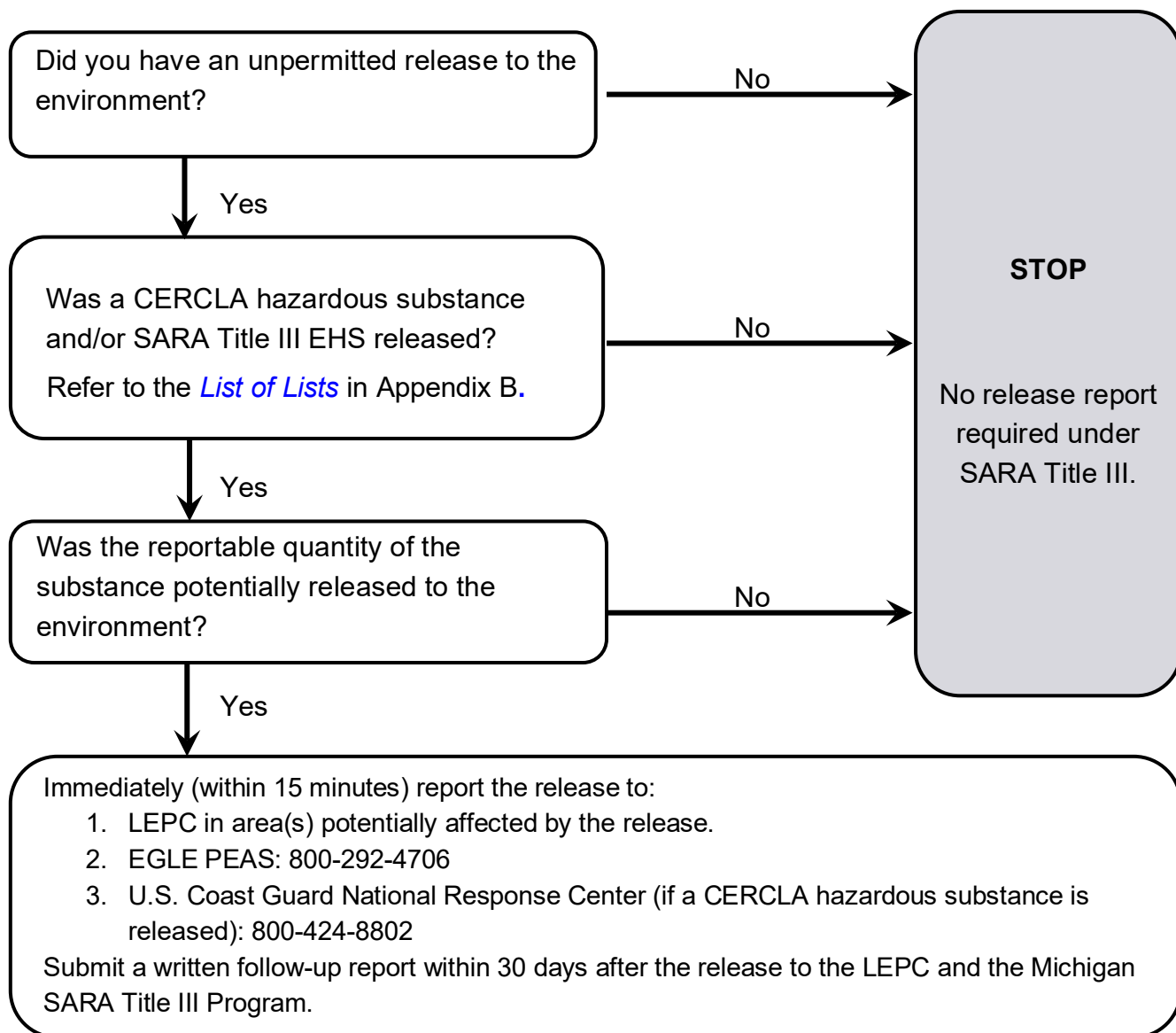
Emergency and Hazardous Chemical Inventory Reporting SARA Title III – Sections 311 and 312

SARA Title III is the EPCRA



Release Reporting - SARA Title III – Section 304

SARA Title III is the EPCRA



Toxic Chemical Release Inventory Reporting

SARA Title III – Section 313

SARA Title III is the EPCRA

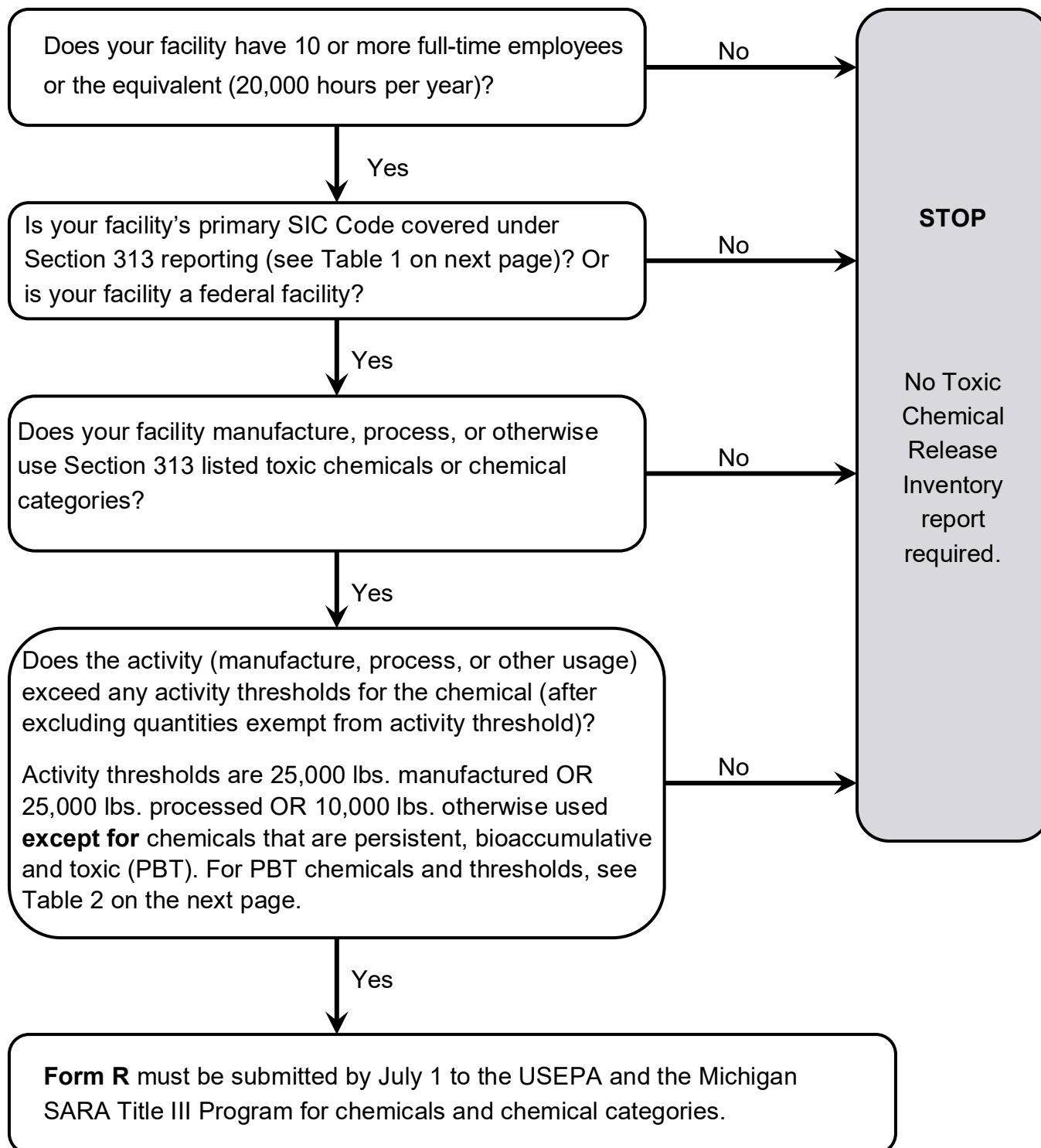


Table 1. TRI Covered Industries by Industry Classification

Industry	SIC Codes	NAICS
Manufacturing	20-39	311-339
Metal Mining	10 (except 1011, 1081, and 1094)	21222, 21223, 21229
Coal Mining	12 (except 1241)	21211
Electrical utilities	4911, 4931, and 4939 (limited to facilities that combust coal and/or oil for purpose of generating electricity for distribution in commerce)	22111, 22112
Treatment, storage and disposal facilities	4953 (limited to RCRA Subtitle C permitted or interim status facilities)	56221
Chemical distributors	5169	42469
Petroleum bulk terminals	5171	42471
Solvent recovery services	7389 (limited to facilities primarily engaged in services on a contract or fee basis)	32599
Federal facilities	Must report by Executive Order 13148.	

Note: Beginning with Report Year 2006, facilities will report the six-digit North American Industry Classification System (NAICS) code that corresponds to the Standard Industrial Classification (SIC) code in the regulation.

Table 2. EPCRA Section 313 Listed PBT Chemicals and Activity Thresholds

Chemical	Threshold (in pounds unless otherwise noted)
ALDRIN	100
BENZO(G,H,I)PERYLENE ♦	10
CHLORDANE	10
DIOXIN AND DIOXIN-LIKE COMPOUNDS ♦	0.1 grams
HEPTACHLOR	10
HEXACHLOROBENZENE	10
ISODRIN	10
LEAD* (not contained in stainless steel, bronze, or brass alloy)	100
LEAD COMPOUNDS *	100
MERCURY	10
MERCURY COMPOUNDS	10
METHOXYCHLOR	100
OCTACHLOROSTYRENE ♦	10
PENDIMETHALIN	100
PENTACHLOROBENZENE ♦	10
POLYCHLORINATED BIPHENYLS	10
POLYCYCLIC AROMATIC COMPOUNDS +	100
TETRABROMOBISPHENOL A (TBBPA) ♦	100
TOXAPHENE	10
TRIFLURALIN	100

Note: PBT chemical reporting effective for 2000 report year, except lead and lead compounds, which were effective for 2001.

♦ Chemical subject to EPCRA Section 313 reporting beginning in 2000.

+ 21 chemicals included in PAC category.

* Thresholds effective for 2001 reporting year.

CHAPTER 2: SARA TITLE III - Sections 302 and 303

EMERGENCY PLANNING - 40 Code of Federal Regulations (CFR) Part 355

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What Are the Emergency Planning Requirements?	3
How Do I Submit the Section 302 Report?	3
What If My Facility Is No Longer Subject to Section 302?	4
Why Are There Section 302 Reports in the Online Database?.....	5
Related Planning Requirements	5
More emergency planning information:.....	6

Look at the list of Extremely Hazardous Substances (EHS) in Appendix A of this guidebook. Does your facility have any of the EHS' on site? Keep in mind that these substances might be ingredients in products that you have. If yes, your facility might be subject to important requirements designed to help protect you, your community, and emergency responders. The implementing regulations for Section 302 are codified in 40 CFR Part 355.

Is My Facility Subject to SARA Title III Emergency Planning Requirements?

A facility is subject to the emergency planning requirements in Section 302 of SARA Title III if it has an EHS on site in an amount equal to or greater than its Threshold Planning Quantity (TPQ).

The TPQs are in pounds and are included in Appendix A of this guidebook. This is the total amount of an EHS present at any one time at a facility (in storage and in process) at concentrations greater than one percent (1%) by weight, regardless of location, number of containers, or method of storage.

This regulation applies even if the chemical is on site for only a day.
There are no exemptions for emergency planning notification.

Special Calculations for Non-Reactive Solid EHSs

There are 157 EHSs on the list in Appendix A that have two TPQ values. These are the non-reactive solid EHSs. If any of these are at your facility, you will want to read this section. The form of the solid will determine which TPQ should be used.

Compare to the lower TPQ value if the EHS is in one of the following forms:

- Powder form (particle size less than 100 microns).
- A solution.
- Molten form.

Otherwise, compare the solid form (particle size ≥ 100 microns) to the higher TPQ value of 10,000 pounds. You must aggregate the amounts of an EHS at the facility and compare the total to the TPQ. This aggregate amount is used to determine if the EHS must be included in the hazardous chemical inventory and/or if it is subject to emergency planning. If the total amount of the EHS equals or exceeds 500 pounds or the TPQ, it must be included in the hazardous chemical inventory (see [Chapter 3](#)). For the emergency planning determination, there is an additional calculation for solids in solution and in molten form that is applied before comparing to the TPQ.

IMPORTANT: Do not aggregate the amount of an EHS in a form that has the lower TPQ with the amount of the same EHS in a form that has the higher TPQ.

- If the EHS is in solution, multiply the amount of the EHS by 0.2 and compare to the lower TPQ.
- If the EHS is in molten form, multiply the amount of the EHS by 0.3 and compare to the lower TPQ.

Note: These calculations are ONLY used for the Section 302 emergency planning determination.

Example:

A facility has acrylamide. This is an EHS, and the TPQ is 1,000/10,000. Here is the inventory:

- 6,000 pounds of solid acrylamide (particle size ≥ 100 microns).
- 500 pounds of acrylamide in powder form (particle size < 100 microns).
- 1,000 pounds of acrylamide in solution.

For reporting purposes, the acrylamide will be treated as two separate chemicals based on which TPQ value applies. The amount of acrylamide in solid form must be compared to the higher TPQ of 10,000 pounds. The amounts of the acrylamide in powder form and in a solution must be added together; the total is then compared to the lower TPQ of 1,000 pounds.

The solid acrylamide will be included in the hazardous chemical inventory because the amount (6,000 pounds) exceeds 500 pounds. It is not subject to emergency planning because the amount is less than the TPQ of 10,000 pounds.

The total amount of acrylamide in powder form and in solution is 1,500 pounds. This must be included in the hazardous chemical inventory because it exceeds 500 pounds. Before you can determine if it is subject to emergency planning, you need to multiply the 1,000 pounds in solution by 0.2. This equals 200 pounds. The aggregate amount of acrylamide for emergency planning purposes is 700 pounds (500 pounds in powder form plus 200 pounds in solution). It is not subject to emergency planning because it is less than the TPQ of 1,000 pounds.

What Are the Emergency Planning Requirements?

If a facility is subject to Section 302 of SARA Title III, the owner or operator must submit Emergency Planning Notifications within 60 days after the threshold is reached to the following:

- The State Emergency Response Commission (SERC).
- The Local Emergency Planning Committee (LEPC).

The Michigan SARA Title III Program receives notifications on behalf of the SERC. The Emergency Planning Notification includes the name and contact information of the facility emergency coordinator. The facility emergency coordinator is the facility's representative who will participate in the local emergency planning process.

- Promptly provide to the LEPC any information necessary for the development or implementation of the off-site plan upon request by the LEPC.
- Notify the LEPC of any changes that affect emergency planning within 30 days after the change. Reportable changes might include the amount or storage location of the EHS, new chemicals, or updated facility contact information.

Under Section 303 of SARA Title III, the LEPC must write an off-site emergency response plan that addresses the protection of the community in the event that there is a release of an EHS substance from a facility subject to Section 302. To meet this requirement, Michigan LEPCs typically obtain information from the facility emergency coordinators to write plans for each of the facilities subject to Section 302. The facility input is important because the off-site response plan must describe the procedures to be followed by the facility once a release is detected. These plans are coordinated with the county or city emergency operations plan or emergency action guidelines. The finished plans are then shared with the local fire departments and emergency responders.

How Do I Submit the Section 302 Report?

The emergency planning notification, also called the Section 302 Report, notifies the SERC and LEPC that the facility is subject to Section 302. Federal changes to the required fields in the Section 312 Tier II report (effective January 1, 2014) include all of the data elements

required for a Section 302 Emergency Planning report. Therefore, these reports have been combined in Tier II Manager™, the online reporting program used in Michigan. See [Chapter 3](#) for online reporting instructions.

If your facility is subject to Section 302, you must submit a Section 312 Tier II report, even if the facility is not subject to Section 312.

When you add an EHS to your Tier II inventory and the maximum amount is equal to or greater than the TPQ, the program automatically identifies your facility as subject to Section 302 and records that in the Tier II report. The program will aggregate EHS amounts if, for example, the same EHS is a mixture component in two different chemicals. You can manually edit the Section 302 status if needed but update the notes to explain why the 302 status is different than what was calculated.

When you submit the Tier II report, it also counts as your Section 302 report.

When your facility first becomes subject to Section 302, you should update the Tier II inventory for the current year and submit a current year Tier II Update report: The Michigan SARA Title III Program and the LEPCs in the counties of

Alpena, Antrim, Arenac, Benzie, Calhoun, Chippewa, Crawford, Eaton, Emmet, Genesee, Gogebic, Grand Traverse, Hillsdale, Ingham, Ionia, Isabella, Kalamazoo, Kalkaska, Kent, Macomb, Mecosta, Midland, Monroe, Oakland, Oceana, Ogemaw, Oscoda, Otsego, Ottawa, Presque Isle, Van Buren, Washtenaw, and Wayne can view your facility's online reports in Tier II Manager™. A paper copy of the report must be mailed to all other LEPCs.

Addresses for LEPCs can be found at Michigan.gov/EGLEEmergencyPlan under Emergency Planning Contacts.

What if My Facility is No Longer Subject to Section 302?

If your facility was once subject to Section 302, but the EHSs has been removed or reduced to below the TPQ, update the chemical inventory in Tier II Manager™. The program will update the Section 302 status accordingly. Certify the updated report and mail a hard copy to the LEPC if it cannot view the report online.

Tier II Emergency and Hazardous Chemical Inventory			
Reporting Period From January 1, 2016 to December 30, 2016			
<input type="checkbox"/> Annual <input checked="" type="checkbox"/> Update <input type="checkbox"/> Revised <input checked="" type="checkbox"/> Facility Information has changed from the last submission			
Facility Identification			
MI SARA ID:	0000	LEPC:	KEWEENAW COUNTY LEPC
Facility Name:	Young's Farms	Lat/Long:	42.7319/-84.5592
Company Name:	DEQ	Maximum Occupants:	30
Physical Location:	525 W Allegan St, Lansing, MI 48909	Nature of Business:	Farming
County:	KEWEENAW	NAICS Code:	111111
Fire Department:	Copper Harbor FD	SIC Code:	0191
Phone:	555-555-5555	Dun and Brad No:	3
<input checked="" type="checkbox"/> Manned <input type="checkbox"/> Unmanned		EIN ID(Tax Number):	
Email:	Youngm1@michigan.gov	FTE:	
		Facility ID:	20209
Subject to EPCRA Section 312 (Annual Inventory)?			<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Subject to Emergency Planning under Section 302 of EPCRA (40 CFR part 355)?			<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Subject to Section 112r of Clean Air Act (CAA)?			<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
RMP Facility ID:			
Subject to EPCRA Section 313 (Toxic Release Inventory - TRI)?			<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

If your facility is not subject to Section 302 or Section 312, you can make the facility “inactive” in the database. See [Chapter 3](#) of this guidebook for details.

Why Are There Section 302 Reports in the Online Database?

You can view all Section 302 reports that were submitted prior to 2014 in the online database. These are for historic reference only. Do not try to edit them.

Related Planning Requirements

The Clean Air Act (CAA) Section 112r has facility onsite chemical accident prevention requirements that parallel the SARA Title III off-site emergency planning requirements. Many of the extremely hazardous air pollutants that trigger the requirement to have a Risk Management Program under the CAA Section 112r are also on the SARA Title III list of EHSs. The [List of Lists](#) (epa.gov/epcra/consolidated-list-lists) (Appendix B) shows which substances are on both lists. If your facility is subject to SARA Title III Section 302, you might want to check the List of Lists to see if it is also potentially subject to the CAA Section 112r. If your facility has extremely hazardous air pollutants that meet or exceed the CAA threshold quantity, refer to [Chapter 5](#) in this guidebook for the U.S. Environmental Protection Agency Region 5 contact that can help you determine your facility’s Risk Management Program requirements under the CAA regulations.

Beginning in 2014, the Tier II report must indicate whether or not the facility is subject to the Risk Management Program (Section 112r of CAA). The ID associated with that program must also be provided (identified as “RMP Facility ID” on the Tier II form).

[Appendix C](#) of this guidebook contains the [Part 5 rules, Spillage of Oil and Polluting Materials](#), which were promulgated pursuant to Part 31, Water Resources Protection, of Michigan’s Natural Resources and Environmental Protection Act. These rules require that certain facilities develop a Pollution Incident Prevention Plan (PIPP). The PIPP can be a stand-alone plan, or it may be incorporated into an Integrated Contingency Plan. Facilities that develop a PIPP, must notify their LEPC within 30 days after its completion that the plan is completed and that it is available upon request.

The Michigan Fire Prevention Code, Public Act 207, requires that the owners and operators of facilities provide the fire department with the quantities and locations of chemicals specified by the fire chief. The data are used by the fire chief to develop a plan for the protection of the fire fighters. The chemicals that must be reported under Act 207 include all hazardous chemicals at the facility in amounts that might be of concern to a responder entering the facility.

More Emergency Planning Information:

- Chapters 1 and 5 of this guidebook
- EGLE's Emergency Planning Website: [Michigan.gov/EGLEEmergencyPlan](https://michigan.gov/EGLEEmergencyPlan)
- Environmental Assistance Center: 800-662-9278 | egle-assist@michigan.gov
- Michigan SARA Title III Program: 517-284-SARA | egle-sara@michigan.gov

CHAPTER 3: SARA TITLE III - Sections 311 and 312

EMERGENCY AND HAZARDOUS CHEMICAL INVENTORY REPORTING

40 Code of Federal Regulations (CFR) Part 370

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Sections 311 and 312 of SARA Title III address emergency and hazardous chemical inventory reporting. The implementing regulations are codified in 40 CFR Part 370. The regulations are intended to provide the public, local governments, fire departments, and other emergency officials with information concerning the potential chemical risks in their communities. Over 7,000 facilities in Michigan submit hazardous chemical inventories to the Michigan SARA Title III Program, Local Emergency Planning Committees (LEPCs), and local fire departments.

Michigan's Hazardous Chemical Inventory website:
[Michigan.gov/SARA](https://michigan.gov/SARA)

Select "SARA Title III - Hazardous Chemical Inventory"
egle-sara@michigan.gov | 517-284-SARA (517-284-7272)

Who Must Submit the Hazardous Chemical Inventory Report?

These reporting requirements apply to any facility that must maintain a safety data sheet (SDS) in accordance with the Occupational Safety and Health Administration (OSHA) Hazard Communication Standard, 29 CFR 1910.1200.

The owner or operator must submit the hazardous chemical inventory report if a hazardous chemical present at the facility meets or exceeds the reporting threshold.

Federal agencies were directed by Executive Order Number 12856, signed by President Clinton on August 3, 1993, to comply with all provisions of SARA Title III and the Pollution Prevention Act.

If your facility is not covered by OSHA, reports are not required. *However*, in the interest of emergency preparedness, you are urged to consider reporting all hazardous substances that meet or exceed the reporting thresholds.

What Hazardous Chemicals Are Included?

The criteria for including chemicals in the Section 311 report are the same as the criteria for including chemicals in the Section 312 (Tier II) report.

Hazardous chemicals are those chemicals or substances stored or used in the work place for which OSHA requires employers to maintain SDSs. Over 650,000 products have SDSs required by OSHA. They are referred to here as “OSHA hazardous chemicals.” There is *no list* of these OSHA hazardous chemicals. The OSHA hazardous chemicals must have an associated physical and/or health hazard as defined in the OSHA regulations in 29 CFR 1910.1200(c).

Note: The Hazard Communication Standard requires chemical manufacturers, distributors, or importers to provide SDSs (formerly known as Material Safety Data Sheets or MSDSs) to communicate the hazards of hazardous chemical products. As of June 1, 2015, new SDSs must be in a uniform format.

Physical and Health Hazards

The physical and health hazards will be described in the SDS. Check your SDS to see if the substance has associated physical and/or health hazards. If the SDS does not clearly describe the hazards, contact the manufacturer or importer of the substance for clarification. It is their responsibility to determine the hazards in accordance with OSHA standards and provide that information in the SDS.

Some non-hazardous substances such as water can also have SDSs. If a substance is not hazardous according to the OSHA definition, the SDS should state that there are “no known hazards.” Be aware that manufacturers sometimes claim in the SDS that a hazardous substance is not hazardous to avoid additional handling costs. Regardless of what is in the SDS, such substances must be included in the hazardous chemical inventory.

The USEPA recently issued revisions to 40 CFR Part 370 that will affect reporting under Sections 311 and 312 of the Emergency Planning and Community Right to Know Act (EPCRA). The revisions are intended to better align EPCRA with the revised OSHA Hazard Communication Standard (HCS) and facilitate safer management of hazardous materials.

To align with the revised physical and health hazards in OSHA's HCS, USEPA has revised the hazard categories in 40 CFR Part 370. Instead of continuing to use the current five hazard categories (Fire, Sudden Release of Pressure, Reactive, Immediate (Acute) health hazard, Delayed (Chronic) health hazard), the U.S. Environmental Protection Agency (USEPA) is adopting the 24 hazards used in the revised OSHA HCS, which are listed below:

Physical and Health Hazards (effective January 1, 2018)

Physical Hazards

Combustible dust
Corrosive to metal
Explosive
Flammable (gases, aerosols, liquid, or solids)
Gas under pressure
Hazard Not Otherwise Classified (HNOC)
In contact with water emits flammable gas
Organic peroxide
Oxidizer (liquid, solid or gas)
Pyrophoric (liquid or solid)
Pyrophoric gas
Self-heating
Self-reactive

Health Hazards

Acute toxicity (any route of exposure)
Aspiration hazard
Carcinogenicity
Germ cell mutagenicity
Hazard Not Otherwise Classified (HNOC)
Reproductive toxicity
Respiratory or skin sensitization
Serious eye damage or eye irritation
Simply asphyxiant
Skin corrosion or irritation
Specific target organ toxicity (single or repeated exposure)

Michigan's Tier II Manager™ program has been updated to accommodate the new standard. Facilities moving forward will need to check all physical and health hazards that apply to their chemical(s) in Tier II Manager™ (see instructions below).

Reporting Thresholds

The thresholds refer to the total amount of chemical on site, in storage and in process, at any one time. The minimum thresholds for reporting are:

- Extremely Hazardous Substance (EHS) = **500 pounds** or the Threshold Planning Quantity (TPQ), whichever is less. The amount of an EHS at a facility (both pure and in mixtures) must be aggregated for purposes of threshold determination. Include the EHS in a mixture if it makes up at least 1% of the mixture or 0.1% if the EHS is a carcinogen. EHSs and their TPQs are listed in Appendix A of this guidebook.

Non-reactive solid EHSs have two TPQs. Do not aggregate the amount of an EHS in a form that has the lower TPQ with the amount of the same EHS in a form that has the higher TPQ. See [Chapter 2](#) for the discussion regarding non-reactive solid EHSs.

- Gasoline (all grades combined) at retail gas stations if all gasoline is stored in compliant underground storage tanks (USTs) = **75,000 gallons**. The term gasoline includes gasohol that is composed of at least 90% gasoline and up to 10% ethanol.*
- Diesel fuel (all grades combined) at retail gas stations if all diesel fuel is stored in compliant USTs = **100,000 gallons**.*
- All other OSHA hazardous chemicals (except as stated in the next bullet) = **10,000 pounds**.
- The threshold for reporting in response to a request from the SERC or TERC. SERC, LEPC, TEPC or local fire department = **zero**. Regardless of the amount of chemical on site, you must submit a report if you are asked to do so by one of these agencies.

* Retail gas stations are those that sell gasoline and/or diesel fuel primarily to the public for motor vehicle use on land. Tanks are compliant if during the full previous year, they were in compliance with all applicable UST requirements in the Michigan Underground Storage Tank rules promulgated pursuant to Part 211, of Public Act 451. The higher gasoline and diesel fuel thresholds do not apply to alternative fuels (except gasohol), aviation fuel, heating fuel, kerosene, E-85, or gasoline with greater than 10% ethanol.

Formula to Convert Gallons to Pounds

The thresholds for most substances are in pounds. If your substance is a liquid, and you only know the number of gallons, you will need to convert gallons to pounds by using this formula:

$$\text{Gallons of Material} \times \text{Specific gravity of product} \times 8.34 \text{ lb./gal (weight of water)} = \text{Weight of product in pounds}$$

The specific gravity (also called the relative density) can be found in Section 9, "Physical and Chemical Properties," of the SDS. It is a unit-less number that tells how much the substance weighs relative to the weight of water. If the specific gravity is 1, the substance weighs the

same as water. If it is less than 1, then the substance weighs less than water. The specific gravity is often reported as a range. Use the highest value in the calculation.

If your substance is a gas, ask your supplier how much it weighs. The weights of some gases are listed in the box to the right.

Liquid oxygen = 9.528 lb./gal
Liquid argon = 11.630 lb./gal
Liquid nitrogen = 6.945 lb./gal

What Chemicals Are Excluded?

Section 311(e) of SARA Title III excludes the following substances from the hazardous chemical inventory reporting requirements in Sections 311 and 312:

- Any food, food additive, color additive, drug, or cosmetic regulated by the Food and Drug Administration.
- Any substance present as a solid in any manufactured item to the extent exposure to the substance does not occur under normal conditions of use.*
- Any substance to the extent it is used for personal, family, or household purposes, or is present in the same form and concentration as a product packaged for distribution and use by the general public.
- Any substance to the extent it is used in a research laboratory or hospital or other medical facility under the direct supervision of a technically qualified individual.
- Any substance to the extent it is used in routine agricultural operations or is a fertilizer held for sale by a retailer to the ultimate customer.

Hazardous waste is exempt from the reporting requirements because the OSHA regulations do not require that an SDS be maintained for it. *However*, in the interest of emergency preparedness, you are urged to **report any hazardous wastes** that meet the reporting threshold.

*Under the USEPA's interpretation published July 13, 2010, facilities only have to include and count the amount of fume or dust emitted or released from a manufactured solid that is being modified to determine if the SARA Title III Sections 311 and 312 reporting thresholds have been reached. This interpretation applies to metal, bricks, and any other manufactured solid item that undergoes a modification process. It does not apply to lead in batteries.

Hazardous Chemical Inventory Reports

Chemicals can be reported as pure substances, as mixtures, or as the total quantity of a chemical at the facility (adding together the amounts present as a component in mixtures and in pure form). Similar substances can be grouped if appropriate. The reporting option you choose should be the same for both the initial and annual reports.

How you report your chemicals depends on what format is of most value to the planners and responders. If you are reporting for a warehouse with 100 different products that all contain the same flammable base ingredient, report the base ingredient. If you have 5 different colors of enamel paint, group them and report enamel paint. Likewise, different grades of gasoline

should be combined and reported as “gasoline.” If you have a plating solution that contains both sulfuric acid and nitric acid, report the plating solution as a mixture, and use the option to report the mixture ingredients on the Tier II report.

Section 311 Initial\Update Report

The purpose of the initial\update report required under Section 311 is to let state and local officials know that your facility recently acquired OSHA hazardous chemicals that are on site in amounts equal to or greater than the thresholds. This initial\update report is sometimes called the Safety Data Sheet (SDS) report because the regulation allows you to submit an SDS to fulfill this requirement. Beginning in 2014, the Section 311 report was submitted as a current year Update Report to the Section 312 Tier II report. In this way, all chemicals, existing and new, appear in the same report.

Section 312 Annual (Tier II) Report

The purpose of the annual report required under Section 312 is to provide state and local officials and the public with specific information on hazardous chemicals that were present at your facility at any time during the previous calendar year at levels that equaled or exceeded the thresholds. The annual report is the Tier II Emergency and Hazardous Chemical Inventory report, or Tier II report.

The Tier 1 report is of limited value and is not supported by any state.

The Tier II report is a certified report that contains specifics about the facility location, the owner or operator, emergency contacts, and other identifying information. It also describes each reportable chemical and includes the amount that was on site during the previous year, where it was located, and how it was stored. Site maps and SDSs can be attached to the Tier II report to clarify the reported information.

Where to Submit the Reports

The Update and Annual reports must be submitted to **ALL** of the following agencies:

- Michigan SARA Title III Program
- LEPC
- Local fire department

The Michigan SARA Title III Program accepts all reports on behalf of the SERC.

The Michigan SARA Title III Program receives all reports online.

LEPCs and fire departments in these counties can receive SARA Title III submittals online: Alpena, Benzie, Calhoun, Chippewa, Crawford, Eaton, Genesee, Grand Traverse, Gratiot, Hillsdale, Ingham, Ionia, Isabella, Kalamazoo, Kent, Macomb, Mecosta, Midland, Monroe, Oakland, Otsego, Ottawa, Presque Isle, Van Buren, Washtenaw, Wayne.

Reports MUST be mailed or emailed directly to LEPCs and fire departments in all other counties (not listed).

Please contact your facility's county LEPC and fire department (not listed above) to confirm how they want to receive Tier II Reports. SARA Title III requires that your facility's LEPC and local fire department receives a current copy of the facility's Tier II Report to make critical emergency management decisions.

All other LEPCs and fire departments must receive a paper copy.

Addresses for LEPCs are available at Michigan.gov/SARA. Before mailing your report, check the website to see if your LEPC's address has been updated.

Due Dates:

- The update report must be submitted within 3 months after the chemical threshold is first met or exceeded.
- The annual (Tier II) report must be submitted annually between January 1 and March 1 and covers the inventory that was on site during the previous calendar year.
- The LEPC may ask a facility owner or operator to submit an SDS for a hazardous chemical present at the facility. The owner or operator must provide the SDS within 30 days after receipt of the request.
- The SERC, LEPC, or fire department having jurisdiction over the facility may ask a facility owner or operator to submit Tier II information regardless of chemical amounts. The owner or operator must provide the Tier II information within 30 days after receipt of the request.

Confidential and Trade Secret Information

Confidential Location Information

Under Section 324 of SARA Title III, you are not required to make chemical storage location information available to the public if doing so might pose a security risk. The chemical location includes the container type, temperature, pressure, and location description. You may not withhold this information from the SERC, the LEPC, or the local fire department. The online reporting program lets you identify which chemical locations should be kept confidential (i.e., not disclosed to the public). You may also mark attachments, such as site maps, as confidential.

Trade Secrets

You may be able to withhold the name of a specific chemical when submitting information under Sections 311 or 312 if that chemical name is claimed as a trade secret by your company. Do not confuse this with SDSs that claim trade secret ingredients. The requirements for withholding trade secret information are specified in SARA Title III Section 322 and

implemented in 40 CFR Part 350. If you are withholding the name of a specific chemical or product as a trade secret, you must report the generic class or category that is structurally descriptive of the chemical (e.g., list toluene diisocyanate as organic isocyanate) along with all other required information. You must submit the withheld information to the USEPA and substantiate your claim every time you report. A link to the Trade Secret Substantiation Form and Instructions (epa.gov/epcra/epcra-trade-secret-forms-and-instructions) is provided in the reporting program.

Online Report Overview

Michigan began using an online reporting program, Tier II Manager™ in 2007 so that the data would be more readily available to planners (LEPCs) and responders (fire departments). The online program allows facilities to manage their own data and enter updates at any time during the year. The Tier II report is a snapshot of the data that is certified annually as being true, accurate, and complete.

The Tier II Manager™ program was rewritten in 2014 on an updated platform and includes new required and optional data elements. The three reports that were previously submitted individually (Section 302 emergency planning, Section 311 initial hazardous chemical inventory, and Section 312 annual hazardous chemical inventory) have been combined into a single report.

- The **annual Tier II report** is submitted at the beginning of the year to report the chemicals that were on site during the previous calendar year, as required under Section 312. This report is a snap shot of the inventory for the specified report year and can be revised if needed.
- When a new chemical is added, a **current year update report** is submitted to meet the requirements of Section 311. Update reports should also be submitted when chemicals are removed or there are other significant changes, such as new emergency contact information.
- Whenever chemical information is updated, the program will aggregate amounts of individual EHSs and compare them to the associated TPQs. It will update the 302 status accordingly. This meets the requirements of a **Section 302, Emergency Planning Notification**.

Community Right-to-Know Provisions

Hazardous chemical inventory information is available to the public under the Community Right-to-Know provisions in SARA Title III. Requests can be made in writing to the LEPC or SERC as described below. The public should not go to the facility or to the fire department with information requests. The Michigan SARA Title III Program handles all information requests on behalf of the SERC.

A person may obtain a SDS for a specific chemical at a specified facility by writing to the LEPC and asking for it. If the LEPC does not have the SDS, the LEPC must request the SDS from the facility's owner or operator. Most SDSs are available to the public on the Internet.

A person may obtain Tier II information for a specific facility by submitting a Freedom of Information Act (FOIA) request through EGLE's website at Michigan.gov/EGLEFOIA. All FOIA requests must go through EGLE's FOIA program. The SERC or LEPC must respond to a request for Tier II information within 45 days after receiving the request. If the SERC or LEPC does not have the Tier II information, it **must** request it from the facility owner or operator in either of the following cases:

- The request is for hazardous chemicals in amount greater than 10,000 pounds stored at the facility at any time during the previous calendar year, **or**
- The person making the request is a State or local official acting in his or her official capacity.

If neither of these conditions is met, the SERC or LEPC may request the information from the facility owner or operator if the request includes a general statement of need.

When responding to a request for Tier II information, the SERC or LEPC must not disclose location information, including attachments, that has been designated confidential in the Tier II report.

Local Fire Department Requests

If you are the owner or operator of a facility that has submitted inventory information under Sections 311 or 312, you must comply with the following two requirements upon request by the fire department with jurisdiction over your facility:

1. You must allow the fire department to conduct an on-site inspection of your facility; and
2. You must provide the fire department with information regarding the specific locations of hazardous chemicals at your facility.

Michigan's Fire Prevention Code, Act 207 of 1941, Section 29.5p, requires that all employers provide information about all hazardous substances at their facility, along with SDSs, to the fire chief with jurisdiction over their facility upon written request by the fire chief.

Online Reporting in Tier II Manager™

Getting Started

Tier II Manager™ is an online reporting program hosted by the Michigan SARA Title III Program. **There is no fee associated with reports submitted in Tier II Manager™.**

Only one report format will be submitted online. This report includes all data elements required in the following SARA Title III reports:

- Section 302, Emergency Planning Notification.
- Section 311, Initial/Update report of hazardous chemicals (known also as the SDS report).
- Section 312, Tier II annual report of hazardous chemicals.

Who Can Report Online?

Everyone can and should submit reports online. The Michigan SARA Title III Program receives reports for all facilities that are submitted online. This meets the requirement to submit reports to the SERC. In addition, if your facility is in one of the participating counties listed below, you will not have to submit paper copies to anyone.

Participating Counties

LEPCs and fire departments in these counties can receive SARA Title III submittals online: Alpena, Antrim, Arenac, Benzie, Calhoun, Chippewa, Crawford, Eaton, Emmet, Genesee, Gogebic, Grand Traverse, Hillsdale, Ingham, Ionia, Isabella, Kalamazoo, Kalkaska, Kent, Macomb, Mecosta, Midland, Monroe, Oakland, Oceana, Ogemaw, Oscoda, Otsego, Ottawa, Presque Isle, Van Buren, Washtenaw, Wayne.

Reports MUST be mailed or emailed directly to LEPCs and fire departments in all other counties (not listed).

Please contact your facility's county LEPC and fire department (not listed above) to confirm how they want to receive Tier II Reports. SARA Title III requires that your facility's LEPC and local fire department receives a current copy of the facility's Tier II Report to make critical emergency management decisions.

The Administrator

The Administrator for this program is the Michigan SARA Title III Program in the Department of Environment, Great Lakes and Energy (EGLE). To contact the Administrator, select "Feedback" in the program menu bar, email egle-sara@michigan.gov, or call 517-284-SARA (517-284-7272).

System Requirements

The Tier II Manager™ program has the following system requirements:

- You need to use Chrome 62 or higher, Edge 90 or higher, or Firefox 59 or higher. Using older versions may create problems.
- You will need Adobe Acrobat Reader to use this System. [Download Adobe Reader](#).
- You need to enable javascript and turn off the pop-up blocker in your browser.
- If you encounter any problem, contact your technology desk to verify whether you have these requirements.

- Cookies need to be enabled in your browser. It is enabled by default
- If "Pop-up Blocker" is not available in the Tools menu, check whether MSN, Yahoo, or Google toolbars are on your computer, and turn off their popup blockers.

Accessing Tier II Manager™

Access the online reporting program from the Michigan SARA Title III Program website, Michigan.gov/SARA.

Michigan.gov | Department of Environment, Great Lakes, and Energy

About Us ▾ For the Public ▾ Regulatory Assistance ▾ Maps and Data ▾ Newsroom ▾ Outreach ▾ Contact Us ▾

SARA Title III Tier II Reporting

Home > Regulatory Assistance > Emergency Planning and Community-Right-to-Know > Tier II Reporting

Sections 311 and 312 of SARA Title III address emergency and hazardous chemical inventory reporting. The implementing regulations are codified in 40 CFR Part 370. The regulations are intended to provide the public, local governments, fire departments and other emergency officials with information concerning the potential chemical risks in their communities. Over 6,000 facilities in Michigan submit hazardous chemical inventories to the Michigan SARA Title III Program, Local Emergency Planning Committees (LEPCs), and local fire departments.

Fire Departments and LEPCs in the following counties can receive your Tier Two report online:

Alpena, Benzie, Calhoun, Chippewa, Crawford, Eaton, Genesee, Grand Traverse, Gratiot, Hillsdale, Ingham, Ionia, Isabella, Kalamazoo, Kent, Macomb, Mecosta, Midland, Monroe, Oakland, Otsego, Ottawa, Presque Isle, Van Buren, Washtenaw, Wayne.

Guidance and Resources

- ⊕ Tier II Reporting Guidance and Tutorials
- ⊕ Tier II Reporting Resources
- ⊕ Tier II Reporting Contacts

EGLE
Click to access
TIER II MANAGER™

[Recorded Training: SARA Title II Tier II Webinar Series](#)

[Recorded Webinar: SARA Title III Tier II Reporting Basics](#)

SARA Title III-The Emergency Planning and Community Right to Know Act





Emergency Planning

Spill and Release Reporting

Executive Order 1994-17

TRI (Section 313)

Tier II Reporting

Follow us    

The Tier II Manager™ log-in screen will open up on your computer.

Existing User Accounts

Log in with your existing username and password.

Each user should have only one user account but can report for multiple facilities. All facilities that are in Tier II Manager™ are assigned to a user account.

Be sure your email service will accept mail from EGLE-EAD-tier2@michigan.gov. Emails generated by the program will come from this email address.

Log In

Log in if you are a reporter for an existing facility. You can access only the facilities that are assigned to your user account.

If you were able to log-in, skip to the “Online Reporting Process” section of this chapter.

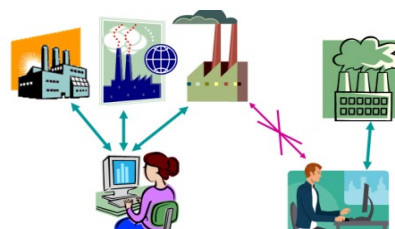
Forgot username and/or password

Click on the “Forgot Username” or “Forgot Password” links on the Tier II Manager™ log-in screen and fill out the required information. If you get an error message or a message saying that the user does not exist, send an email to the Administrator.

A new password must:

- Be 8 to 12 characters in length.
- Contain a mix of upper and lower case letters, and numbers.

A facility can be assigned to only ONE User Account at a time.



Assuming Reporting Duties from Someone Else

If your facility has been actively submitting Tier II Reports, a user account already exists in TIER II MANAGER™ for your facility. Please contact the responsible individual at your facility that previously reported to assume their username and password. Update the account profile upon logging in to the system by clicking on "My Account" tab and then "Update My Profile" and enter your profile information. If you are not able to contact the responsible person previously reporting for your facility, send an email to: EGLE-EAD-Tier2@michigan.gov and include the name, address and if possible the SARA ID or Facility ID number and the first and last name of the individual that previously reported for your facility. It is often faster and easier to assume a user account then to register for a new one.

Please contact the Administrator if you have questions regarding assuming reporting duties from someone else at your facility. The facility or facilities you are looking to assume will be located under the previous person's existing user account. Depending on the situation, the Administrator will either change the user profile for the existing user account to make it yours, or have you register for a new user account and move the facility or facilities to your newly created account.

Consultants

If you are a consultant, you must register to get your own user account. Regardless of the number of companies that you represent, you should have only one user account. Do not register if you are not sure that you will be reporting for a company.

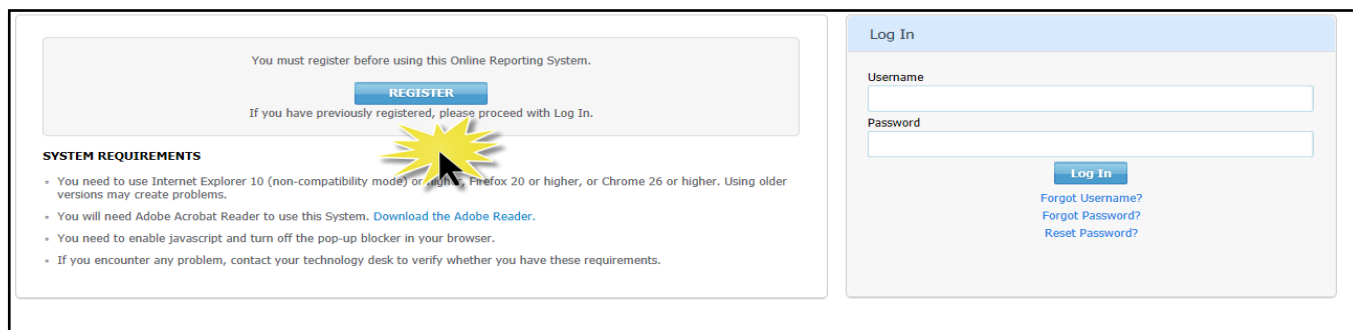
If your company wants to use consultant services, send an email to the Administrator (EGLE-SARA@Michigan.gov) that includes the name of the consultant that has permission to access your data. The email subject line should say "Consultant Needs Access." Copy your email to the consultant. The Administrator will move your facility records to the consultant's user account where the facility records will remain until you indicate otherwise. An email will be sent to you and your consultant when this has been completed.

Consultants can enter the certification information for the company representative that will certify the report. Read about certifications on page 3-29.

Registering for a New Account

If you need to register for a new account, send an email to the Administrator with the names and addresses of the facilities for which you will be reporting to see if those facilities are already in the system. Do not register for someone else. The information entered for the user account must be for the actual user of the program. You will be contacted by email when the Administrator has approved your user account.

Click on the "Register" button in the middle of the form.



You must register before using this Online Reporting System.

REGISTER

If you have previously registered, please proceed with Log In.

SYSTEM REQUIREMENTS

- You need to use Internet Explorer 10 (non-compatibility mode) or higher, Firefox 20 or higher, or Chrome 26 or higher. Using older versions may create problems.
- You will need Adobe Acrobat Reader to use this System. [Download the Adobe Reader.](#)
- You need to enable javascript and turn off the pop-up blocker in your browser.
- If you encounter any problem, contact your technology desk to verify whether you have these requirements.

Log In

Username

Password


Log In

[Forgot Username?](#)

[Forgot Password?](#)

[Reset Password?](#)

Select user type "Reporting Facility/Business User" from the drop down menu.



New User Registration

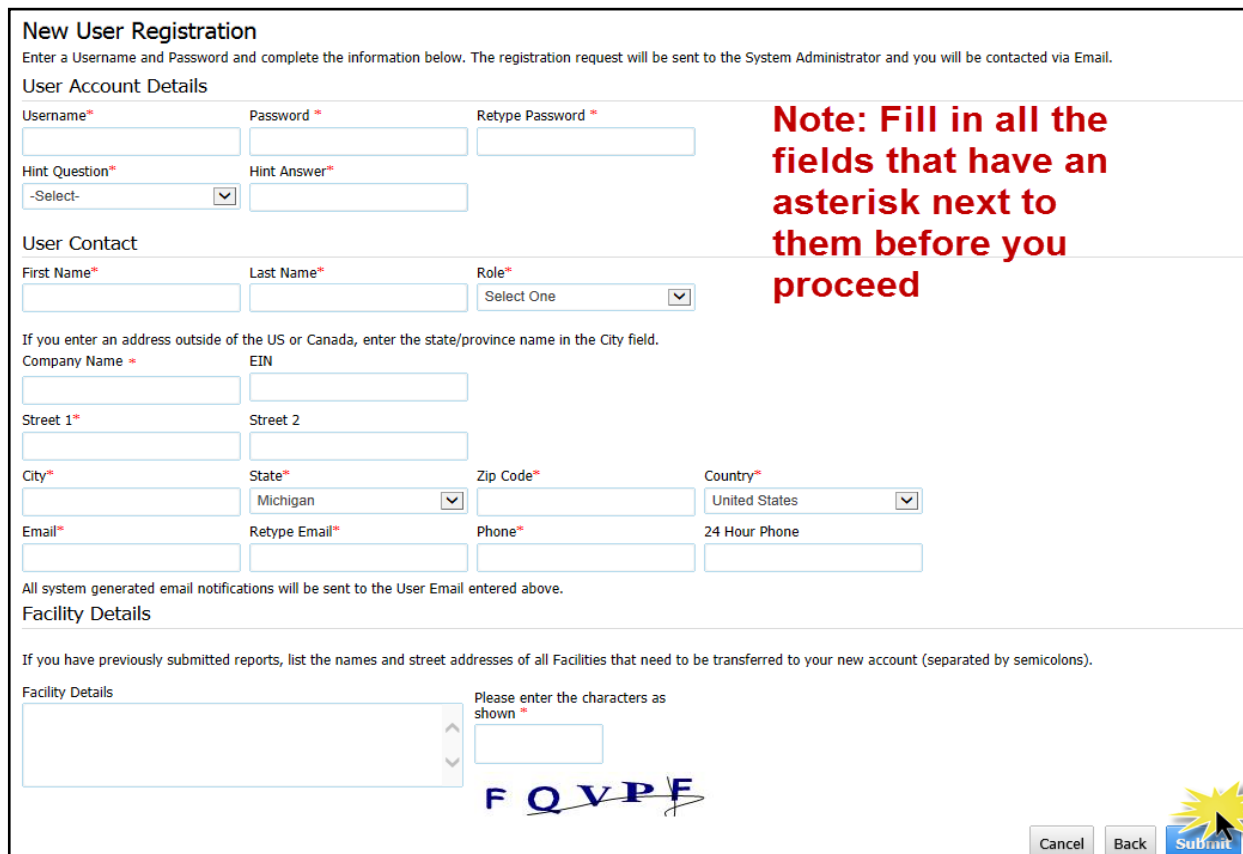
What Type of User are you? *

Reporting Facility/Business

Cancel **Next**

Select "Reporting Facility/Business User" from the drop down menu

Fill in all of the fields with an asterisk and then click "Submit."



New User Registration

Enter a Username and Password and complete the information below. The registration request will be sent to the System Administrator and you will be contacted via Email.

User Account Details

Username* Password* Retype Password*

Hint Question* Hint Answer*

-Select-

User Contact

First Name* Last Name* Role*

Select One

If you enter an address outside of the US or Canada, enter the state/province name in the City field.

Company Name* EIN

Street 1* Street 2

City* State* Zip Code* Country*

Michigan United States

Email* Retype Email* Phone* 24 Hour Phone

All system generated email notifications will be sent to the User Email entered above.

Facility Details

If you have previously submitted reports, list the names and street addresses of all Facilities that need to be transferred to your new account (separated by semicolons).

Facility Details

Please enter the characters as shown *

F Q V P F

Cancel **Back** **Submit**

Note: Fill in all the fields that have an asterisk next to them before you proceed

Online Reporting Process

Once you are able to open and access Tier II Manager the welcome page will appear on your computer screen. You will be able to perform the following actions.

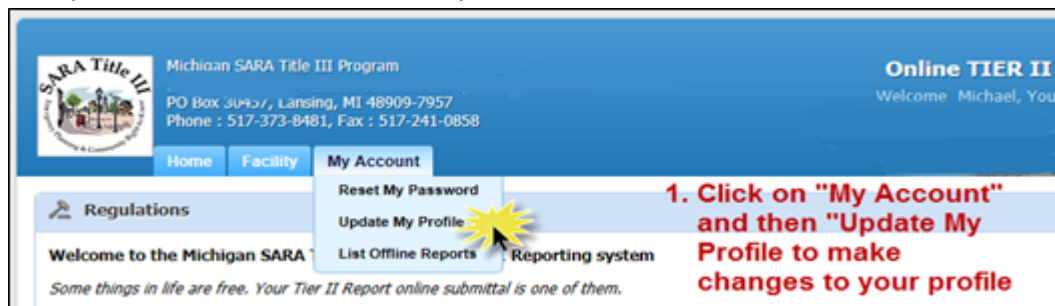
- Update your account profile.
- Access your list of facilities (active and inactive)
- View submissions for a selected facility.
- Create a new report or edit/revise an existing report.

Note: As a security feature, the program times out after 20 minutes of inactivity. Make sure that you select “save” after entering information on each screen to prevent data loss. A warning will appear 2 minutes before timing out. Press “OK” to refresh the time or “Cancel” to allow the program to time out.

Please follow the step by step instructions below to update your profile, make changes, and create a new report.

1. Update Your Account Profile

Click on “My Account” on the menu at the top of the welcome page. Then click “Update My profile”; do this whenever your contact information has changed. Emails and phone numbers must be kept current.

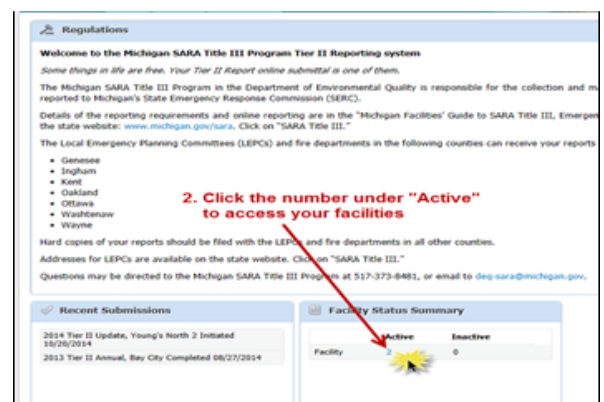


2. Access Your List of Active Facilities

Click on the number under “Facility Status Summary” to access a list of your active facilities.

A list of your facilities will be displayed. You can access reports for any of these facilities or add a new facility.

IMPORTANT! Contact the Administrator if this list is not correct or complete.



3. View Submissions for a Select Facility

Select a facility from the list of active facilities to see all past submissions for that facility. *Click on the "Facility/Site Name" (highlighted in blue).*

The List Submissions page includes Tier II Reports both "Annual" and "Update Report", as well as historic Section 302 Reports and Section 311 Reports. The Section 302 and 311 reports are for viewing only.

Back List Submissions

Bay City (MI SARA ID:)
 401 Ketchum Street, Bay City, MI 48708, United States
 Status: Active Type: Facility

Bay City stores EHS over TPQ

Change Facility Status

Reports Add a New Annual/Revision/Update Report

Tier II Reports (Annual Inventory)

Report ID	Report (Click to Edit Reports)	Status	Signed By	Signed Date	Submission Type	View
174087	2013 Tier II Report Annual	Completed	Michael Young	10/9/2014 8:36:29 AM	Online	

4. Add a New Report

All reports submitted in Tier II Manager™ moving forward will be Tier II Reports (Annual, Revision, or Update Report). There are three types of Tier II Reports.

- An **Annual Report** is required under Section 312 and is a report of the hazardous chemical inventory that was on site during the previous calendar year.
- A **Revision Report** is submitted if there was an error in the Annual Report.
- A current year **Update Report** is required when you bring a new chemical on site in an amount that exceeds the threshold. This replaces the separate Section 311 Report. If you add or revise an EHS that exceeds the threshold planning quantity, then the Update Report replaces the separate Section 302 Report. The Update Report should also be submitted when there are changes that affect emergency planning and response – such as when chemicals are removed from the site or contact information changes.

To start a new report, this includes editing/revising an existing report, select "Add a New Annual/Revision/Update Report." Then choose a report class to continue.

Back List Submissions

Bay City (MI SARA ID:)
 401 Ketchum Street, Bay City, MI 48708, United States
 Status: Active Type: Facility

Bay City stores EHS over TPQ

Change Facility Status

Reports Add a New Annual/Revision/Update Report

Tier II Reports (Annual Inventory)

Report ID	Report (Click to Edit Reports)	Status	Signed By	Signed Date	Submission Type	View
174087	2013 Tier II Report Annual	Completed	Michael Young	10/9/2014 8:36:29 AM	Online	

4. Click on "Add a New Annual/Revision/Update Report"

Next, choose a report class to continue.

Home Facilities My Account Resources

Start a New Report


Young's Farms - EGLE Test Facility (MI SARA ID: 0000)

16254 W Allegan St, Lansing, MI 48909, United States
Contact: 555-555-3333, Youngm1@michigan.gov
Type: Facility

Choose a Report Type (click on button next to selection)

☒ **Tier II Report (312 Annual Report)**
Facilities covered by Emergency Planning and Community Right-to-Know Act (EPCRA) requirements must submit an Emergency and Hazardous Chemical Inventory Form to the Local Emergency Planning Committee (LEPC), the State Emergency Response Commission (SERC), and the local fire department annually by March 1 covering activities at the facility during the previous calendar year.


Choose a Report Class (click on button next to selection)

☒ **Annual for 2023**  Annuals should be submitted to meet EPCRA Section 312 Annual Reporting of Chemical Inventory for chemicals onsite during the **previous calendar year**.

☐ **Revision** Revisions should be submitted to **correct errors or omissions** in already submitted reports.

If you have already submitted an ANNUAL for 2022 and want to update new information or fix an error on the submitted report, please select an option below.

☐ **Update** Updates should be submitted to capture changes to facility contacts or chemical quantities/locations onsite during the **current calendar year**.

Cancel **Proceed** 

Annual Reports are REQUIRED and are submitted for the previous calendar year. For example, in January of 2024 you will submit the 2023 annual report (just like your taxes). These are the reports that are due annually by March 1.

Revision Reports are submitted to correct an annual report.

Update Reports are submitted when there are changes that have occurred in the current year. In 2024 select “Update for 2024.”

5. Edit Report

When you select the report class, the program will take you to the “Edit Report Homepage.” There are six steps on this page that must be completed. A response is needed for each of the fields that have asterisks next to them. The program will put a check mark by each step that is complete and an exclamation point next to those steps that are not complete. A completed step does not mean that the data are correct, just that they are complete. Please confirm that the information is current and accurate.

Please see some of the navigation tools available in the program screen shot below.

- Click on the “+” sign to expand the step and edit the data.
- Click on the name of the facility to go back to the “List Submissions” page.
- Click on “Print Report” to view or print the report.
- Click on “Edit” to make changes to the step.
- Step is complete when green check is present (but not necessarily accurate).
- Step is not complete when exclamation point is present.
- Add notes that will show up on this report only.

The screenshot shows the 'Edit Report Homepage for Bay City' interface. At the top, there are links for 'List Facilities' and 'List Submissions'. The main title is 'Edit Report Homepage for Bay City (MI SARA ID :)'. Below this is a progress bar with steps 1 through 6. Step 6 is highlighted with a yellow circle and an exclamation mark. To the right of the progress bar is a button labeled '0 Notes'. Below the progress bar is a dropdown menu for 'Report' set to '2020 Annual Tier II Report (Bay City) - 174093'. Below this are two rows of status information: 'Submission Status : Initiated' and 'Status Date : 10/29/2019' on the first row, and 'Last Updated : 10/29/2019' and 'Submission Type : Online' on the second row. To the right of the status information is a link labeled 'Print Report'. At the bottom, there is a blue bar with a plus icon and the text 'Step 1 : Review Facility Information'. To the right of this bar is a button labeled 'Edit'. Annotations A through G are present: A points to the plus icon in the bottom bar; B points to the facility name 'Bay City'; C points to the 'Print Report' link; D points to the 'Edit' button; E points to the exclamation mark in step 6; F points to the progress bar; G points to the '0 Notes' button.

List Facilities

Back Edit Report Homepage for Bay City (MI SARA ID :) List Submissions

Step 1 ✓ Step 2 ✓ Step 3 ✓ Step 4 ✓ Step 5 ✓ Step 6 ! 0 Notes

Report 2020 Annual Tier II Report (Bay City) - 174093

Submission Status : Initiated Status Date : 10/29/2019

Last Updated : 10/29/2019 Submission Type : Online

Print Report

+ Step 1 : Review Facility Information Edit

+ Step 2 : Review Chemical Inventory Total: 3 EHS: 1 EHS>TPO: 1 Add Chemicals Import Chemicals

Detailed instructions below correspond to the 6 Steps listed on the Edit Report Homepage.

Step 1: Review Facility Information

The Facility Information is divided into three pages that all need to be edited and saved. Click on each tab and enter the required information. The tab that is highlighted is the tab in which you are working. When you save the information under a tab, the program will automatically go to the next tab. The check mark at the top of the tab will indicate when you have filled in all the required information.

Facility Identification

Bay City (MI SARA ID:)

401 Ketchum Street, Bay City, MI 48708, United States
Contact: 989-894-6238 x 0000, Youngm1@Michigan.gov
Type: Facility

The check mark will indicate that you have entered all the required information

Location & Nature of Business ✓

Owner/Operator ✓

Mailing Address ✓

Under the “Location and Nature of Business” tab:

- Enter the full name and full street address of the facility where the chemicals are located. If a street address is not available, enter other appropriate identifiers that describe the physical location of your facility. Do not enter a post office box.
- If you are editing an existing facility, do not edit the address. The SARA ID is associated with your facility at the existing address. Sometimes the post office will change your address. In this case, notify the Administrator that the facility address, but not the location, has changed.

- Choose the name of the primary Fire Department that will respond to an emergency at your facility, and that will receive this report. Contact the Administrator if your fire department is not listed in the drop down;
- Enter the primary 6-digit 2012 North American Industry Classification System (NAICS) code for your facility. You can enter multiple NAICS codes if appropriate. Use the Nature of Business field to describe the type of facility; and
- All steps should be reviewed and completed. Required fields are marked with a red asterisk. Following are the required fields in Step 1.
 - Indication if the facility is manned or unmanned.
 - Estimate of the maximum number of occupants at one time (use the shift that has the most employees on site at one time).
 - Parent company details (different from owner/operator details).
 - Email for facility owner or operator.

The Facility Contact under the Contacts tab in Step 1 is optional. The person to contact for information regarding the Tier II report is required in Step 4.

Step 2: Review Chemical Inventory

- The inventory must include all chemicals that are on site and equal or exceed the reporting threshold at any time.
- Current Year Update: Submit a current year Update report at the time that chemicals are added or deleted from the facility inventory. This keeps the inventory current (see the “Inventory Updates” discussion at the end of this chapter). Update reports should also be submitted for new facilities that must start reporting during the current year.
- Annual Report: If update reports were submitted during the previous year, then the inventory should be current, and no changes should be needed. Note: Data from your last submitted Tier II Report is imported into the current report you have just created.
- If update reports were not submitted and chemicals were added or removed from the facility during the previous year, then the annual report must reflect all chemicals that were on site during the previous year with the number of days that they were on site (even if already removed). After the annual report is submitted with all chemicals, add an update report and delete the chemicals from it that are no longer at the facility.

- Information for each chemical must be saved in the program at least once even if there are no changes. The program will otherwise not recognize the chemical amounts.
- Pure chemicals and mixture chemicals must be reported separately. This is a new requirement needed for accurate amount calculations.
- Review the SDS for the chemical you are reporting. It will have much of the information that you need to complete this section.

Remember that you *must* report OSHA hazardous chemicals that meet or exceed the threshold. If requested by your LEPC or fire department, you must report these chemicals regardless of the amount on site. You are encouraged to report OSHA hazardous chemicals that do not meet the threshold, or other hazardous substances (such as hazardous wastes), if you determine that it might be beneficial for the LEPC or fire department to have this information.

The chemical details are divided into two pages that both need to be edited and saved.

Chemical Details

Youngs Funny Farm (MI SARA ID: 007)
5000 Crazy Street Bay City , Michigan 48708
Contact: 999-999-9999, Youngm1@michigan.gov
Type: Facility

Chemical Description Inventory & Storage

Chemical Description

Search by CAS/Chemical Name

CAS Number (If no CAS, type N/A) * Chemical Name *

N/A Lead Acid Batteries

Chemical Added to Site Date

08/30/2017

☐ Substance is Trade Secret Trade Secret Proof

Choose File No file chosen

- Enter the Chemical Abstracts Service (CAS) number. You can find this on the SDS. You may also use the chemical search function in the program to find this number. For mixtures, enter the CAS number of the mixture as a whole if it has been assigned a number distinct from its constituents. If the mixture has no CAS number, enter N/A.
- If you are adding a chemical to comply with Section 311, enter the "Chemical Added to Site Date."

- Enter the chemical name or common name of the hazardous chemical. Do not enter the trade name. You may use the chemical search function to find the chemical or common name associated with the CAS number.
- Trade secret information refers to the product or chemical and should not be confused with SDSs that claim trade secrecy with regard to the ingredients in a product. Read about trade secrets on page 3-11 before you check this box.
- If you are reporting an EHS only, it must be marked as Pure. If the EHS is really part of a mixture, enter the product name in the Chemical Name field, check off Mixture, and enter the EHS (and other ingredients) in the Mixture Component List.
- Enter the CAS number, chemical name, and weight percent (%) of any *significant* mixture component(s). Use the “search” function to help assure that the chemical name matches the CAS number. The mixture component percentages do not need to add up to 100%. If the mixture percentage is reported as a range on the SDS, enter the highest number in that range.
- If you are adding an EHS that is a non-reactive solid (see [Chapter 2](#)), then the program will require that you answer additional questions about the form of the EHS at your facility.

Physical and Health Hazards *

Physical Hazards
[Check all that apply](#)

<input type="checkbox"/> Combustible dust	<input type="checkbox"/> Organic peroxide
<input type="checkbox"/> Corrosive to metal	<input type="checkbox"/> Oxidizer (liquid, solid or gas)
<input type="checkbox"/> Explosive	<input type="checkbox"/> Pyrophoric (liquid or solid)
<input type="checkbox"/> Flammable (gases, aerosols, liquids, or solids)	<input type="checkbox"/> Pyrophoric gas
<input type="checkbox"/> Gas under pressure	<input type="checkbox"/> Self-heating
<input type="checkbox"/> Hazard Not Otherwise Classified (HNOC)	<input type="checkbox"/> Self-reactive
<input type="checkbox"/> In contact with water emits flammable gas	

Health Hazards
[Check all that apply](#)

<input type="checkbox"/> Acute toxicity (any route of exposure)	<input type="checkbox"/> Reproductive toxicity
<input type="checkbox"/> Aspiration hazard	<input type="checkbox"/> Respiratory or skin sensitization
<input type="checkbox"/> Carcinogenicity	<input type="checkbox"/> Serious eye damage or eye irritation
<input type="checkbox"/> Germ cell mutagenicity	<input type="checkbox"/> Simple asphyxiant
<input type="checkbox"/> Hazard Not Otherwise Classified (HNOC)	<input type="checkbox"/> Skin corrosion or irritation
	<input type="checkbox"/> Specific target organ toxicity (single or repeated exposure)

This is an EHS with 2 TPQ values. You must report all states separately. Please indicate which state you are reporting. Choose only one: (1) powder with particle size < 100 microns, (2) in solution, (3) molten form, (4) solid with particle size ≥ 100 microns.

☐ Powder with particle size < 100 microns

☒ In solution

☐ Molten form

☐ Solid with particle size ≥ 100 microns

- Check all physical and health hazards that apply. This information should be on the SDS. Due to the new USEPA Tier II Reporting requirements effective January of 2018, Tier II facilities will be required to report revised physical and health hazards for all their hazardous chemicals. Moving forward all your chemicals in Tier II Manage Program will be flagged until the Physical and Health Hazards have been updated to the new standard.
- Attaching a SDS is usually not necessary for common chemicals. The SDSs are an important resource for the LEPCs and fire departments, and Tier II Manager™ allows you to attach SDSs. However, the program module used by planners and responders also accesses an extensive SDS database and can usually link the applicable SDS to the reported chemical. In general, an SDS should not be needed if you have provided the chemical name or common name (not the trade name) of the substance along with a CAS number.
- The **Maximum Daily Amount** in the Chemical Inventory is an estimate of the largest amount of the chemical that was present at your facility (in storage and in process) on any single day during the reporting period. *In preparation for the worst case scenario: In the event of an emergency at your facility, what is the maximum amount of chemical that could be involved in an incident?* Enter this amount in pounds. Beginning in 2014, the amount codes in the chemical inventory section represented new ranges. The new amount code will be entered for you in the program when you tab over that field.

Chemical Description Inventory & Storage

Chemical Inventory

Gals To Lbs Converter

Maximum Daily Amount * Unit Maximum Daily Amount Code*

Pounds Select One


Gals To Lbs Converter

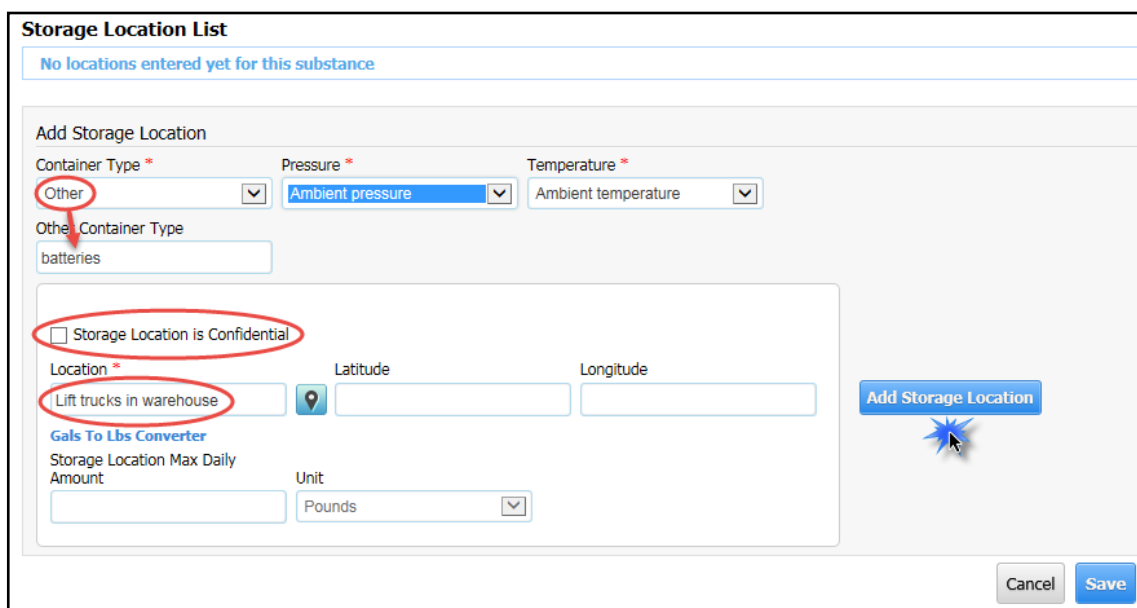
Average Daily Amount * Unit Average Daily Amount Code *

Pounds Select One

Number of Days Onsite *

- In “The Average Daily Amount” field, enter an estimate of the amount of the chemical that was present at your facility on an average day during the reporting period. *This is the most likely scenario in the event of an emergency at your facility: How much chemical would generally be expected to be on site?* Enter this amount in pounds. The amount code will be entered for you in the online program when you tab over that field.

- For the “Number of Days on Site” field, enter the number of days that the chemical was on site in any amount during the previous full calendar year (the reporting period).
- In 2014, the codes used in the Storage Location information were defined. Choose from a drop down list under each tab of “Container Types,” “Pressure,” and “Temperature Conditions.” If you choose container type “Other,” a new field will appear in which to enter that container type.
- The “Location” field allows you to enter a storage location at your facility. If you select  a new field will appear where you can enter the location description. This describes where the chemical is located at the facility, such as “NW corner of bldg. 1.” Do not enter the facility address here.



- Read about **Confidential Locations** on page 3-11. If you choose to keep the location and storage conditions confidential, check the “confidential location” box for that storage location.
- If any of the locations are confidential, be sure that the site map with chemical locations identified is also marked “Confidential” (see Step 5: Review Attachments).
- The **Storage Location Max Daily Amount** is a new, optional (highly encouraged) field that is especially useful to planners and responders when a chemical is present in multiple buildings at the facility.

Mixture Example: Lead-Acid Batteries

Lead-acid batteries are mixtures containing lead (an OSHA hazardous chemical) and sulfuric acid (an EHS). If you know the total weight of the battery, the amount of lead and sulfuric acid can be estimated. This example uses a formula approved by the USEPA to estimate the weight of the mixture components of typical lead-acid batteries based on the total weight of the batteries. It is not required that you use this formula.

Sulfuric acid in lead-acid batteries with liquid electrolyte is often less than, and never more than, 11% of the total battery weight.

Basic formula for lead-acid batteries: 2/3 of the total weight is lead; 1/3 of the total weight is electrolyte (water and sulfuric acid); and 1/3 of the electrolyte is sulfuric acid.

Enter lead-acid battery as the main chemical as shown below. When you check the "Mixture" box, the "Mixture Component List" will appear; enter the lead and sulfuric acid mixture components and the associated percentages. If you have batteries and do not know the actual percentages of the mixture components, the percentages in this example may be used.

Chemical Details
Youngs Funny Farm (MI SARA ID: 007)
 5000 Crilly Street, Bay City, Michigan 48708
 Contact: 999-999-9999, youngs1@mschicago.gov
 Type: Facility

Notes on Reporting Chemicals
 1. Pure Chemicals and Mixture Chemicals must be reported separately.
 2. If reporting an EHS chemical only, mark as "Pure". If the EHS is a part of a Mixture, enter the product name in "Chemical Name", check "Mixture" and enter the EHS (and other ingredients) in the "Mixture Component List".

Chemical Description
 Search by CAS/Chemical Name
 CAS Number (if no CAS, type N/A): N/A
 Chemical Name: Lead Acid Batteries
 Chemical Added to Site Date: 08/30/2017
 Substance is Trade Secret: ☐
 Trade Secret Proof: No file chosen

Chemical State
 Check all that apply
 State: ☒ Solid ☐ Liquid ☐ Gas

MSDS/SDS
 Attach MSDS/SDS: No file chosen

Chemical Format
 Pure/Mixture: ☒ Mixture

Chemical Mixture
 Does the mixture contain an EHS? ☒ Yes ☐ No

Mixture Component List

CAS Number	Chemical Name	EHS	EHS Name	Maximum Amount Percentage	Max Daily Amt. (lbs)	* Size <100 Microns / Powder / Solution?	Edit	Delete
7439921	Lead	No		<u>66.00</u>	13200			
7664939	Sulfuric acid	Yes	Sulfuric acid (aerosol forms only)	<u>11.00</u>	2200			

* This field is only required for non-reactive solid EHSs that have two TRP values in the list of EHSs. If you report one of these EHSs, you will be prompted to provide input for this item.

Add Mix Components
 Search by CAS/ Chemical Name
 CAS Number (if no CAS, type N/A):
 Chemical Name:
 EHS Name:
 Maximum Amount Percentage:

On the Inventory and Storage page, enter the total battery weight. The weights of sulfuric acid and lead in the batteries will be calculated by the program and will populate the “Max Daily Amount” field in the screen above.

Here is what the battery entry looks like on the printed report:

Tier II Emergency and Hazardous Chemical Inventory

Facility/Site Name: Youngs Funny Farm MI SARA ID: 007
Reporting Period From January 1, 2017 to December 31, 2017

Chemical Description	Physical Hazards	Health Hazards																		
Chemical ID: 521373 Check if Chemical Information is changed from the last submission: <input checked="" type="checkbox"/> CAS #: N/A Trade Secret: <input type="checkbox"/> Chemical Name: Lead Acid Batteries EHS: <input type="checkbox"/> Contains EHS: <input checked="" type="checkbox"/> Exceeds TPQ: <input checked="" type="checkbox"/> EHS Name: <input type="checkbox"/> Pure <input checked="" type="checkbox"/> Mix <input checked="" type="checkbox"/> Solid <input checked="" type="checkbox"/> Liquid <input type="checkbox"/> Gas Chemical Added On: 08/30/2017 Exceed TPQ On: Check if the chemical is below reporting threshold: <input type="checkbox"/>	<input type="checkbox"/> Combustible dust <input type="checkbox"/> Corrosive to metal <input checked="" type="checkbox"/> Explosive <input type="checkbox"/> Flammable (gases, aerosols, liquids, or solids) <input type="checkbox"/> Gas under pressure <input type="checkbox"/> Hazard Not Otherwise Classified (HNOC) <input type="checkbox"/> In contact with water emits flammable gas <input type="checkbox"/> Organic peroxide <input type="checkbox"/> Oxidizer (liquid, solid or gas) <input type="checkbox"/> Pyrophoric (liquid or solid) <input type="checkbox"/> Pyrophoric gas <input type="checkbox"/> Self-heating <input type="checkbox"/> Self-reactive	<input checked="" type="checkbox"/> Acute toxicity (any route of exposure) <input checked="" type="checkbox"/> Aspiration hazard <input checked="" type="checkbox"/> Carcinogenicity <input type="checkbox"/> Germ cell mutagenicity <input type="checkbox"/> Hazard Not Otherwise Classified (HNOC) <input checked="" type="checkbox"/> Reproductive toxicity <input type="checkbox"/> Respiratory or skin sensitization <input checked="" type="checkbox"/> Serious eye damage or eye irritation <input type="checkbox"/> Simple asphyxiant <input checked="" type="checkbox"/> Skin corrosion or irritation <input checked="" type="checkbox"/> Specific target organ toxicity (single or repeated exposure)																		
Inventory	Storage Codes & Location																			
Max Daily Amt (lbs): 20000 Max Daily Amt Code: 06 Avg Daily Amt (lbs): 20000 Avg Daily Amt Code: 06 Max Amt in Largest Container (lbs): No of days onsite: 365	<table border="1"> <thead> <tr> <th>Container Type</th> <th>Pressure</th> <th>Temperature</th> <th>Storage Location</th> <th>Description</th> <th>Is Confidential</th> <th>Max Amt At Location(lbs)</th> </tr> </thead> <tbody> <tr> <td>(R)Other Desc:</td> <td>(1)Ambient pressure</td> <td>(4)Ambient temperature</td> <td>Warehouse</td> <td></td> <td></td> <td></td> </tr> </tbody> </table>	Container Type	Pressure	Temperature	Storage Location	Description	Is Confidential	Max Amt At Location(lbs)	(R)Other Desc:	(1)Ambient pressure	(4)Ambient temperature	Warehouse								
Container Type	Pressure	Temperature	Storage Location	Description	Is Confidential	Max Amt At Location(lbs)														
(R)Other Desc:	(1)Ambient pressure	(4)Ambient temperature	Warehouse																	
MIXTURE COMPONENTS																				
Chemical Name	%	CAS #	EHS	EHS Name	Max Daily Amount (lbs)	Max Daily Amount Code														
Lead	66	7439-92-1	<input type="checkbox"/>		13200	06														
Sulfuric acid	11	7664-93-9	<input checked="" type="checkbox"/>	Sulfuric acid (aerosol forms only)	2200	04														

Step 3: Review Subject to Status

This section of the report includes the following environmental program status fields:

- An indication whether the facility is subject to Section 312 of SARA Title III.
- An indication whether the facility is subject to the emergency planning notification requirement under Section 302 of SARA Title III. This will be assigned automatically based on the EHS inventory that you entered in Step 2.
- An indication whether the facility is subject to the chemical accident prevention requirements under Section 112(r) of the Clean Air Act, also known as the Risk Management Program.
- Facility identification numbers assigned under the Toxic Chemical Release Inventory and the Risk Management Program. If the facility has not been assigned an identification number under these programs, or if the facility is not subject to reporting under these programs, enter "N/A" in this field.

Subject to Status

(MI SARA ID:)

525 W Allegan St, Lansing, MI 48909, United States
Contact: 555-555-5555,
Type: Facility

EPCRA Section 312 (Annual Inventory) Active
The facility is subject to 312? [What is this?](#) * ☒ Yes ☐ No

EPCRA Section 302 (EHS Amt>TPQ) Active
The facility is subject to Emergency Planning under Section 302 of EPCRA (40 CFR part 355)? [What is this?](#) * ☒ Yes ☐ No

CAA Section 112(r) (RMP) Inactive
The facility is subject to Chemical Accident Prevention under Section 112(r) of CAA (40 CFR part 68, Risk Management Program)? [What is this?](#) * ☐ Yes ☒ No
RMP ID

EPCRA Section 313 (TRI) Inactive
The facility is subject to Toxic Release Inventory under Section 313 of EPCRA (40 CFR Part 372) [What is this?](#) * ☐ Yes ☒ No
TRI Facility ID

Cancel Save

Step 4: Review Report Contacts

You must now report the following new data elements in Step 4:

- **Name, Title, Phone, Email** of the person to contact regarding information in the Tier II report. This will usually be the person who entered the report in the online program.
- **Name, Title, Phone, 24-hour Phone, Email** of the facility emergency coordinator, if subject to Section 302. This is the person who will work with the LEPC to develop the offsite emergency response plan.
- **Name, Title, Phone, 24-hour Phone, Email** for facility emergency contacts.

Contacts			
<div>(MI SARA ID:)</div> <div>525 W Allegan St, Lansing, MI 48909, United States Contact: 555-555-5555, parkers5@michigan.gov Type: Facility</div>			
Tier II Contact			
Pick Tier II Contact			
Name *	Title *		
<input type="text"/>	<input type="text" value="Owner"/>		
Email *	Phone *	24 Hr. Phone	Mobile/Pager
<input type="text" value="I"/>	<input type="text" value="999-999-9999"/>	<input type="text"/>	<input type="text"/>
Emergency Planning Coordinator			
Required only if Chemical Inventory has Extremely Hazardous Substance quantities greater than the Threshold Planning Quantity			
Pick Emergency Planning Coordinator			
Name *	Title *		
<input type="text"/>	<input type="text" value="Owner"/>		
Email *	Phone *	24 Hr. Phone *	Mobile/Pager
<input type="text" value="-"/>	<input type="text" value="999-999-9999"/>	<input type="text" value="999-999-9999"/>	<input type="text"/>
Emergency Contacts			
Pick Emergency Contact			
Name *	Title *		
<input type="text"/>	<input type="text" value="Owner"/>		
Email *	Phone *	24 Hr. Phone *	Mobile/Pager
<input type="text"/>	<input type="text" value="333-333-3333"/>	<input type="text" value="333-333-3333"/>	<input type="text"/>

Step 5: Review Attachments

The “Site Plan” (site map), and the “Facility Emergency Response Plan” are optional attachments that are important resources for planners and responders that have access to the program. You are encouraged to attach these documents. They can be attached and updated at any time. It is recommended that you use the PDF file format. The files must be less than 2 MB. Be sure to mark the files as confidential before you attach them if you do not want them made available to the public. Provide these documents in paper copy to LEPCs and fire departments that are not in participating counties. If you have already provided them, you do not need to do so again.

Add/Edit Tier II Report Attachments
(MI SARA ID:)
525 W Allegan St, Lansing, MI 48909, United States
Contact: 555-555-5555,
Type: Facility

Attachment	File	Browse File to Upload	Sent as Hardcopy
Site Plan (Map)		<input type="text"/> Browse...	<input type="checkbox"/>
Site Coordinate Abbreviations		<input type="text"/> Browse...	<input type="checkbox"/>
Safeguard Measures		<input type="text"/> Browse...	<input type="checkbox"/>
Facility Emergency Response Plan		<input type="text"/> Browse...	<input type="checkbox"/>

Cancel
Save

Notes

The “Notes” field is at the top of the Edit Report Homepage. Enter notes before you submit your report. Notes will print at the end of the report, and they will be viewable by the Administrator and any planners and responders with access to the online database. Notes may be added to explain issues or problems you had during the reporting process. The notes you enter for this report will only appear on this report.

Back
Edit Report Homepage
(MI SARA ID :)
List Submissions

Step 1 ✓ Step 2 ✓ Step 3 ✓ Step 4 ✓ Step 5 ✓ Step 6 ⚠


Report 2015 Update Tier II Report

Submission Status : Initiated
Status Date :
Last Updated :
Submission Type : Online

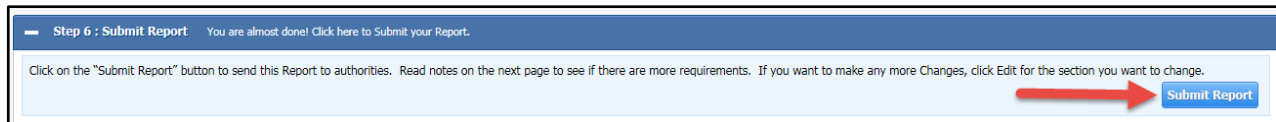
Print Report

0 Notes

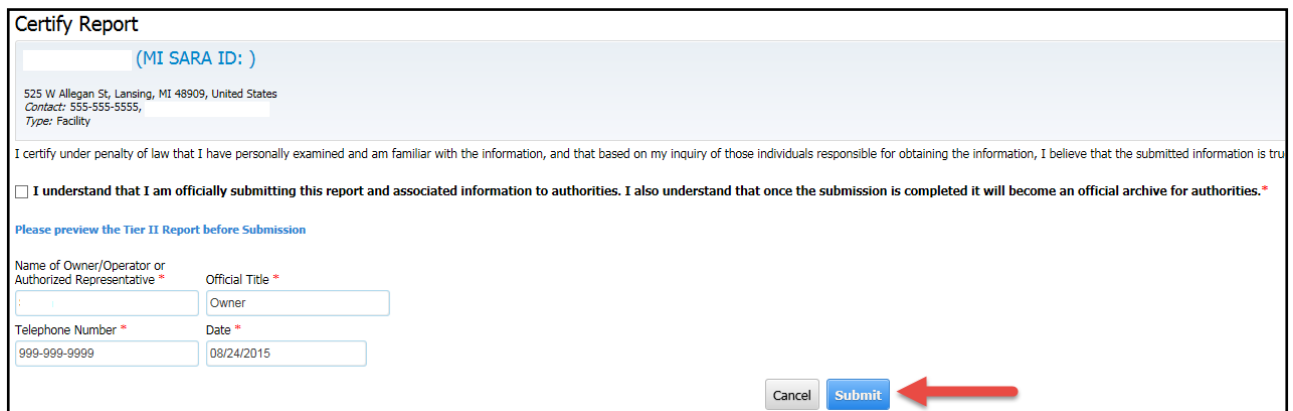
Step 6: Submit Report

If any of the required data elements are incomplete, they will be identified by this symbol , and you will not be able to submit your report. When you click on the alert symbol, a pop-up will describe any problems with the entry.

The Tier II report certification is the last step in the submittal process. *The reporter can enter the certification information, even if the reporter is not the person that is actually certifying the report.*



Enter the name and official title of the owner, operator, or the officially designated representative of the owner or operator who can and will certify that the information in the report is “true, accurate, and complete.” If you are the reporter but not the certifier, the certifier should review the report before you complete the certification.



After the report has been updated, click on “Print Report” at the top of the Edit Report Homepage. This displays the uncertified Tier II report as a PDF file.

You can email this PDF file to the certifier for their review. When the certifier is satisfied with the report, you can complete the certification and the submittal by clicking on “Submit”.

Do not mail a certification letter or the certified report to the agencies that can receive the report online. It is recommended that you keep a signed paper copy for your records. If you mail a paper copy of the report to an agency, it should be signed by the certifier.

Final Step

After submitting the report, you can print the report. The Michigan SARA Title III Program and LEPCs and fire departments in the participating counties (Alpena, Antrim, Arenac, Benzie, Calhoun, Chippewa, Crawford, Eaton, Emmet, Genesee, Gogebic, Grand Traverse, Hillsdale, Ingham, Ionia, Isabella, Kalamazoo, Kalkaska, Kent, Macomb, Mecosta, Midland, Monroe, Oakland, Oceana, Ogemaw, Oscoda, Otsego, Ottawa, Presque Isle, Van Buren, Washtenaw, and Wayne) receive the report online. Please do not file paper copies of your Tier II report with these agencies unless specifically asked to do so. All other LEPCs and fire departments require signed paper reports.

[\(MI SARA ID: \)](#)

525 W Allegan St, Lansing, MI 48909, United States
Contact: 555-555-5555,
Type: Facility

Thank you for submitting the online report.

If you have entered a valid e-mail, you will be notified of this successful report submission. This report will be reviewed by State officials.

For questions, please reference the Help Guide for the appropriate contact.

[View Report](#) [Print Report](#) [List Submissions](#) [List Facilities](#)

A paper copy of the Tier II report MUST be mailed to the LEPC and fire department if they are not in one of the participating counties.

Managing Reports and Data

Add New Facility

Before you add a new facility, it is recommended that you contact the Administrator to assure that the new facility is not already in the database. Remember that you cannot see all facilities in the database, and the facility that you think is new might be in the database assigned to a different user account. **NOTE:** If you add a new facility and it already exists in the database, the Administrator will delete the new facility and ask that you update the information for the existing facility.

Do not add a new facility unless you are certain that it does not already exist in the online database. Ask the Administrator if you do not know.

Facility No Longer Required to File

If your facility is no longer required to file a report (both Tier II and Section 302), select the facility from the list of active facilities by clicking on the name of the facility. This will open the list of submissions for that facility. Click on “Change Facility Status” that appears on the top right side of the page. Select the reason or reasons you are making the facility inactive, and enter the date this event occurred.

Facility Closed and Chemicals Removed

If your facility has closed, make sure that all chemicals are removed from the property. Then follow the procedures for “Facility No Longer Required to File.”

Facility Moved

If your facility moved its operations and chemicals to a new location, follow the procedures for “Facility No Longer Required to File” for the old location, and then add a new facility to the database for the new location. Do NOT change the address for an existing facility. Be sure to use the Notes field to explain the move.

Facility Sold or Purchased

If your facility was sold to another company and you are no longer responsible for reporting, do NOT make it inactive. Contact the Administrator and provide contact information for the new owner. If you have purchased a facility, contact the Administrator to see if it is already in the database. In both cases, the Administrator will move the facility file to the new company’s user account.

Ownership Change

If your facility was sold to another company but you will continue to report, update the Facility Information as appropriate. Be sure to use the “Notes” field to explain the ownership change.

Inventory Updates

The Tier II report process in Michigan has been reinvented with the updated Tier II Manager™ program that was implemented in 2014. The 2023 Annual Tier II report that you submit prior to the March 1, 2024, deadline will include all chemicals that were on site at any time during 2023 that met or exceeded the reporting threshold – regardless of whether or not it was on site at the end of the year. Going forward, this will change. When a chemical is removed, edit the inventory and submit an Update report. This will document when the chemical was removed, and it will not need to be included on the next Annual Tier II report.

The inventory in the online reporting program should always be current, and Update reports should be mailed to the LEPCs and fire departments that are not in participating counties. This will assure that our emergency planners and responders always have the best information available. It is all about safety, being prepared, and protecting the first responders, your community, and your business.

Access to the Data and Reports

The data are stored in a secure online database. Approved individuals in the Michigan SARA Title III Program, the Michigan State Police Emergency Management and Homeland Security Division, the USEPA Region 5, and the LEPCs and fire departments in the participating counties will have access to your certified reports as well as your current data via the Internet. Facility users only have access to reports and data for facilities assigned to their user account.

A member of the community may request SDS or Tier II information for a specified facility pursuant to the Community Right-to-Know provisions of SARA Title III. Information from the database can also be obtained through Freedom of Information Act requests. All requests must be in writing. Confidential location information and any attachments that are marked confidential are not provided.

Keeping Copies of the Reports

SARA Title III does not have record retention requirements for Sections 302, 311, and 312 (Tier II) reports. The reports that you submit online are available to you at any time. However, in the event of an unforeseen situation, it is recommended that you keep a signed hardcopy of your reports on file for five years. Five years is the statute of limitations. The statute of limitations is the maximum period of time, after certain events, that legal proceedings based on those events can be initiated.

CHAPTER 4: SARA TITLE III - Sections 313

TOXIC CHEMICAL RELEASE INVENTORY REPORTING

40 Code of Federal Regulations (CFR) Part 372

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Section 313 of Title III of the Superfund Amendments and Reauthorization Act (SARA Title III) of 1986 is referred to as the Toxic Chemical Release Inventory (TRI). SARA Title III, also known as the Emergency Planning and Community Right-to-Know Act (EPCRA), is a federal act. Section 313 requires certain facilities to complete a report annually for specified toxic chemicals. Reports must be submitted to both the U.S. Environmental Protection Agency (USEPA) and the State Emergency Response Commission (SERC) by July 1, and cover releases and other waste management activities of listed toxic chemicals during the preceding calendar year. Facilities also must report information on source reduction, recycling, and treatment under the Pollution Prevention Act of 1990.

The information below provides basic details about TRI reporting to assist the reader in determining whether the facility might have reporting obligations under Section 313. **For complete information, refer to the USEPA’s “Toxic Chemical Release Inventory Reporting Forms and Instructions”** at epa.gov/toxics-release-inventory-tri-program. The Instructions are published every report year and contain detailed information and examples to help the user determine reporting obligations and complete the reports. The Instructions identify any changes in the requirements, chemical list, or forms since the previous report year. For help filing a TRI report, please see the list of program contacts at: www.epa.gov/toxics-release-inventory-tri-program/forms/tri-program-contacts.

Subject Facilities

A facility is subject to TRI reporting if it meets all of the following three criteria:

1. It has ten or more full-time employees (or the equivalent of 20,000 hours per year).
2. It is a “covered” industry, based on its primary North American Industry Classification System (NAICS) codes, or is a federal facility; see also: USEPA.gov/toxics-release-inventory-tri-program/my-facilitys-six-digit-naics-code-tri-covered-industry.
3. It manufactures and/or imports, processes, or otherwise uses a listed toxic chemical or chemical compound above a specified amount, based on the activity for that toxic substance.

Section 313 defines a facility as “all buildings, equipment, structures, and other stationary items which are located on a single site or on contiguous or adjacent sites” [40 Code of Federal Regulations (CFR) 372.3] and having a single owner or operator. A facility may have more than one establishment at a site.

Section 313 Reporting: Facilities now report using the NAICS codes instead of the Standard Industrial Classification (SIC) codes. Table 1 shows the covered industries, the SIC Major Group code, and corresponding NAICS groups. However, a facility should refer to the U.S. Census Bureau website, www.census.gov/naics, to determine the appropriate NAICS code. To

determine TRI-Covered Industry eligibility, facilities should also reference the USEPA's website, "[Is My Facility's Six-Digit NAICS Code a TRI-Covered Industry?](https://www.usepa.gov/toxics-release-inventory-tri-program/my-facilitys-six-digit-naics-code-tri-covered-industry)" ([usepa.gov/toxics-release-inventory-tri-program/my-facilitys-six-digit-naics-code-tri-covered-industry](https://www.usepa.gov/toxics-release-inventory-tri-program/my-facilitys-six-digit-naics-code-tri-covered-industry)).

Table 1. TRI Covered Industries by Industry Classification

Industry	SIC Codes	NAICS (suggested)
Manufacturing	20-39	311-339
Metal Mining	10 (except 1011, 1081, and 1094)	21222, 21223, 21229
Coal Mining	12 (except 1241)	21211
Electrical utilities	4911, 4931, and 4939 (limited to facilities that combust coal and/or oil for purpose of generating electricity for distribution in commerce)	22111, 22112
Treatment, storage and disposal facilities	4953 (limited to RCRA Subtitle C permitted or interim status facilities)	56221
Chemical and allied products wholesale distributors	5169	42469
Petroleum bulk plants and terminals	5171	42471
Solvent recovery services	7389 (limited to facilities primarily engaged in services on a contract or fee basis)	32599
Federal facilities	Must report by Executive Order 13148 if they meet the activity threshold.	

In July 2022, the USEPA proposed a rule that would update the NAICS codes to reflect OMB's 2022 revisions. Facilities would be required to use 2022 NAICS codes on reports that are due to the agency by July 1, 2023. Learn more about the NAICS code update.

Toxic Chemicals

Approximately 775 toxic chemicals and 33 chemical categories are currently reportable under Section 313. These chemicals are listed in 40 CFR 372.65 and 40 CFR 372.28. The USEPA can add, remove, or modify the Section 313 chemicals that must be reported. Facilities should check each year for changes to the toxic chemical registry and for qualifiers that apply to some chemicals at [epa.gov/toxics-release-inventory-tri-program/tri-listed-chemicals](https://www.epa.gov/toxics-release-inventory-tri-program/tri-listed-chemicals).

In general, chemicals covered by the Toxics Release Inventory (TRI) Program are those that cause one or more of the following:

- Cancer or other chronic human health effects
- Significant adverse acute human health effects
- Significant adverse environmental effects

TRI Chemical List Changes: 1987-2022

[TRI Chemical List Changes](#) includes all additions to and deletions from the TRI chemical list. Indicates the first or last reporting year for those chemicals.

TRI Chemicals Classified as OSHA Carcinogens

Chemicals considered to be carcinogens under the requirements adopted from the Occupational Safety and Health Administration (OSHA) (see 40 CFR §372.38(a)) and the basis for the classifications.

Persistent Bioaccumulative Toxic (PBT) Chemicals

PBT chemicals have lower reporting thresholds than other TRI chemicals. PBTs are of particular concern because they remain in the environment for long periods of time, are not readily destroyed and build up or accumulate in body tissue.

- [List of PBT Chemicals Subject to TRI Reporting](#)
- [TRI PBT-Related Rulemakings](#)
- [Dioxin and Dioxin-like Compounds Toxic Equivalency Information Final Rule](#)

TRI Chemicals and Other EPA Regulatory Programs

[Consolidated "List of Lists"](#): the USEPA prepared this document to help facilities determine, for a specific chemical, whether they may be subject to reporting requirements under Sections 302 and 313 of the Emergency Planning and Community Right-to-Know Act (EPCRA), the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA or Superfund); the Resource Conservation and Recovery Act (RCRA); and Section 112(r) of the Clean Air Act.

Recent TRI Chemical List Changes

Under the automatic listing provisions of the 2020 National Defense Authorization Act:

- four PFAS were added for reporting year 2021. Reporting forms on these chemicals are due July 1, 2022, for 2021 data if TRI reporting thresholds are met.
- four PFAS were added for reporting year 2022. Reporting forms on these chemicals are due July 1, 2023, for 2022 data if TRI reporting thresholds are met.

Toxicity of TRI Chemicals

- [TRI-Chemical Hazard Information Profiles \(TRI-CHIP\)](#): TRI's searchable database system contains hazard information for TRI chemicals. Among other features, users can search for toxicity information from multiple information sources and identify TRI chemicals associated with a particular critical adverse human health effect.
- [Agency for Toxic Substances and Disease Registry \(ATSDR\)](#): ToxFAQs is a series of printable fact sheets that answer the most frequently asked questions about exposure to hazardous substances and the effects of exposure on human health. Many of these substances are also TRI chemicals. Available in multiple languages.
- [Right-to-Know Hazardous Substance Fact Sheets](#): The New Jersey Department of Health's library includes information on more than 1,600 hazardous substances, many of which are TRI chemicals. Available in English and Spanish.
- Toxic Chemicals Added Under 1994 Chemical Expansion: Summary hazard information on the 286 chemicals that were added to the TRI in 1994.
 - [Toxicity Data by Category for TRI-Listed Chemicals \(pdf\)](#)
 - [Acute Toxicity Data for TRI-Listed Chemicals \(pdf\)](#)
 - [Chronic \(Non-Cancer\) Toxicity Data for TRI-Listed Chemicals \(pdf\)](#)
 - [Cancer Data for TRI-Listed Chemicals \(pdf\)](#)
 - [Environmental Toxicity Data for TRI-Listed Chemicals \(pdf\)](#)

Activity Thresholds

When determining whether a Section 313 chemical exceeds an activity threshold, a facility must look at each activity ***separately*** for each chemical. Once an activity threshold is exceeded, a facility must determine releases and quantities managed as waste from all uses of the chemical at the facility. This includes any quantities of waste resulting from spills, remedial activities, or catastrophic events.

Activities

- *Manufacture* – means to produce, prepare, compound, or import into the country a Section 313 chemical. This includes chemicals manufactured as an impurity or byproduct.
- *Process* – means the preparation of a Section 313 chemical, after its manufacture, for distribution into commerce. Processing usually involves the incorporation of a Section 313 chemical into a product.
- *Otherwise Use* – means any other use of a Section 313 chemical that is not manufactured or processed.

Exemptions

Exemptions to activity threshold determination and release and other waste management calculations are allowed for certain situations. These exemptions are briefly explained below. Refer to the TRI Instructions for detailed information on the exemptions.

- *Article Exemption* – applies to Section 313 chemicals contained in articles that are processed or otherwise used at a covered facility. The item or article must meet three specific criteria to retain the Article Exemption. Briefly, the article must: (1) be formed to a specific shape or design during manufacture, (2) have end use functions dependent in whole or in part upon its shape or design, and (3) not release a toxic chemical under normal circumstances of processing or otherwise use of the item at the facility.
- *De Minimis Exemption* – applies to certain minimal concentrations of non-PBT Section 313 chemicals in mixtures or trade name products that are processed or otherwise used. The de minimis concentration in a mixture “...is below 1 percent of the mixture, or 0.1 percent of the mixture in the case of a toxic chemical which is a carcinogen...” (40 CFR 372.38). De minimis concentrations are included in the Section 313 chemical list in the instructions.
- *Motor Vehicle Exemption* – applies to the otherwise use of products containing Section 313 chemicals used for maintaining motor vehicles operated at the facility (i.e., gasoline, lead acid batteries, cleaning solutions).
- *Otherwise Use Exemption* – applies to other uses of products containing Section 313 chemicals. The Otherwise Use Exemption includes chemicals used to maintain the facility structure, for routine janitorial or facility grounds maintenance, or for personal use by employees. This exemption does not apply to process-related equipment. Chemicals contained in intake water (used for processing or non-contact cooling) or in intake air (used either as compressed air or for combustion) may also be exempt.
- *Laboratory Activities Exemption* – applies to Section 313 chemicals used in a laboratory under the direct supervision of a “technically qualified individual.”
- *Coal Extraction Activities Exemption* – applies to a Section 313 chemical that is manufactured, processed, or otherwise used in extraction by facilities in SIC Major Group 12, Coal Mining.
- *Metal Mining Overburden Exemption* – applies to a Section 313 chemical that is a constituent of overburden and that is processed or otherwise used by facilities in SIC Major Group 10, Metal Mining.

Toxic Chemical Release Inventory Report

If a facility determines that it meets the criteria, it must submit the **“Form R – Toxic Chemical Release Inventory Reporting Form”** by July 1 to the USEPA and the state. If the facility is in tribal lands, the report must be submitted to the USEPA and the appropriate tribe. One “Form R” report must be submitted for each chemical that exceeds an activity threshold.

Each year, the USEPA produces the “Toxic Chemical Release Inventory Reporting Forms and Instructions” and updates the web-based reporting program called *TRI-ME* (TRI Made Easy). Any changes to reporting criteria are incorporated into the Instructions and forms and *TRI-MEweb*. Instructions can be found on the USEPA [TRI Program website](https://www.epa.gov/toxics-release-inventory-tri-program) at [epa.gov/toxics-release-inventory-tri-program](https://www.epa.gov/toxics-release-inventory-tri-program).

The “Form R” report data elements include:

- Facility information.
- Chemical information.
- Releases.
- Off-site transfers.
- On-site waste management activities.
- Source reduction and recycling.

Chemical Information

Facilities must identify the Section 313 chemical or chemical compound category being reported, the reportable activity (manufacture, process, otherwise use), and the maximum amount on site at any one time during the calendar year. The chemical or chemical category name should be entered as it appears in the toxic chemical registry.

There are two exceptions to reporting a chemical name that is not on the Section 313 list. In the case of a substantiated claim of trade secrecy, a facility can report a generic chemical name. The second is a case of a supplier claiming that a Section 313 chemical identity in a mixture or trade name product is proprietary or trade secret; in this situation, the facility can report a “mixture component identity.” These exceptions are rare.

Releases and Transfers

The quantities of Section 313 chemical releases or transfers off-site are reported in Sections 5 and 6 of the “Form R.” Quantities are reported in pounds per year, except for dioxin and dioxin-like compounds that are reported in grams per year. Dioxin and dioxin-like compounds category requires additional data reporting.

Release/Disposal

Facilities report the quantities released and disposed of on-site at the facility in Section 5. On-site releases include air releases (both fugitive and stack emissions), surface water discharges, disposal to deep injection wells (Class I or Class II-V), disposal to landfills, or release to surface impoundments or other land disposal. For surface water discharges, facilities must include the stream or water body name and percent of discharge from storm water.

Transfer

The quantities of Section 313 chemicals in wastes transferred off-site are reported in Section 6. This includes discharges to publicly owned treatment works (POTWs). Transfers to other off-site locations for disposal and further waste management must include the receiving facility name and address, quantity transferred, and a code that identifies whether the waste was disposed, recycled, treated, or used for energy recovery. For POTW discharges, facilities report the total amount discharged, as well as the POTW facility information.

Waste Management

Activities involving the Section 313 chemicals in waste managed on site must be reported in Section 7. Activities for on-site treatment, energy recovery, and recycling include:

- Treatment of the general waste stream containing the Section 313 chemical.
- Energy recovery use for Section 313 chemicals that have a significant heating value and are combusted in an energy recovery unit such as an industrial furnace, kiln or boiler.
- Recycling of the Section 313 chemical through solvents/organics recovery, metals recovery, and acid regeneration or other recycling activity.

Source Reduction

The federal Pollution Prevention Act (PPA) of 1990 established a national policy to prevent or reduce pollution at its source whenever feasible. Among other requirements, the act requires facilities to report quantities of the Section 313 chemicals managed as waste and any source reduction practices used with respect to that chemical during the year.

Source reduction information required by the PPA is reported in Section 8 of the “Form R.” Facilities report all releases and waste quantities for the Section 313 chemical, both on-site and off-site. The quantities reported in Sections 5 and 6 of the “Form R” and additional information are used to complete Section 8.

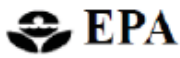
The USEPA increased the prominence and accessibility of the pollution prevention information reported in Sections 8.10 and 8.11 in order to highlight and promote pollution prevention activities. In addition, new source reduction codes were added to the list of selections available for completing Section 8.10.

Source reduction activities aimed at a chemical during the year must also be reported. The source reduction activity for a specific chemical should be reported only in the year that it is first implemented. It should not be carried over to future years.

Form R Schedule 1 Reports

Facilities must report the mass quantities for each reportable release or waste management activity for each of the 17 individual chemicals in the dioxin compound category. This additional information is submitted on the Schedule 1 report. For TRI Training and Guidance Materials please see: [Information accessible via GuideME](#).

SAMPLE FORM R

 EPA United States Environmental Protection Agency		FORM R <small>Section 313 of the Emergency Planning and Community Right-to-Know Act of 1986, also Known as Title III of the Superfund Amendments and Reauthorization Act</small>		<small>Form Approved OMB Number: 2025-0009</small> <small>Approval Expires: 11/30/2017</small>	<small>Page 1 of 6</small>
		TRI Facility ID Number			
		Toxic Chemical, Category, or Generic Name			
<small>This section only applies if you are revising or withdrawing a previously submitted form, otherwise leave blank.</small>		Revision (Enter up to two code(s)) <div style="border: 1px solid black; width: 40px; height: 20px; display: inline-block;"></div> <div style="border: 1px solid black; width: 40px; height: 20px; display: inline-block;"></div>		Withdrawal (Enter up to two code(s)) <div style="border: 1px solid black; width: 40px; height: 20px; display: inline-block;"></div> <div style="border: 1px solid black; width: 40px; height: 20px; display: inline-block;"></div>	
IMPORTANT: See instructions to determine when "Not Applicable (NA)" boxes should be checked.					
PART I. FACILITY IDENTIFICATION INFORMATION					
SECTION 1. REPORTING YEAR _____					
SECTION 2. TRADE SECRET INFORMATION					
2.1 Are you claiming the toxic chemical identified on page 2 as a trade secret? <input type="checkbox"/> Yes (Answer question 2.2; attach substantiation forms)		<input type="checkbox"/> No (Do not answer 2.2; go to Section 3)		2.2 Is this copy <input type="checkbox"/> Sanitized <input type="checkbox"/> Unsanitized <small>(Answer only if "Yes" in 2.1)</small>	
SECTION 3. CERTIFICATION (Important: Read and sign after completing all form sections.) <small>I hereby certify that I have reviewed the attached documents and that, to the best of my knowledge and belief, the submitted information is true and complete and that the amounts and values in this report are accurate based on reasonable estimates using data available to the preparers of this report.</small>					
Name and official title of owner/operator or senior management official: _____				Signature: _____ Date signed: _____	
SECTION 4. FACILITY IDENTIFICATION					
Facility or Establishment Name		TRI Facility ID Number			
Physical Street Address		Mailing Address (if different from physical street address)			
City/County/Tribe/State/ZIP Code		City/State/ZIP Code		Country (Non-US)	
4.2 This report contains information for: (Important: Check a or b; check c or d if applicable) <div style="display: flex; justify-content: space-between; font-size: small;"> a. <input type="checkbox"/> An entire facility b. <input type="checkbox"/> Part of a facility c. <input type="checkbox"/> A federal facility d. <input type="checkbox"/> GOCO </div>					
4.3 Technical Contact Name		Telephone Number (include area code and ext.)			
Email Address					
4.4 Public Contact Name		Telephone Number (include area code and ext.)			
Email Address					
4.5 NAICS Code(s) (6 digits)		Primary a. b. c. d. e. f.			
4.6 Dun & Bradstreet Number(s) (9 digits)		a. b. c. d. e. f.			
SECTION 5. Parent Company Information					
5.1 Name of U.S. Parent Company (for TRI Reporting purposes)		No U.S. Parent Company (for TRI Reporting purposes) <input type="checkbox"/>			
5.2 Parent Company's Dun & Bradstreet Number		NA <input type="checkbox"/>			

EPA form 9350 -1 (Rev 06/2014) - Previous editions are obsolete.

Form A Reports

An alternate “Form A Certification Statement” can be submitted for those chemicals that meet the eligibility requirement and threshold. The eligibility requirement for “Form A” is below one million pounds for an activity (manufacture or process or otherwise use) and less than 500 pounds of the annual reportable amount. This form cannot be used for reporting PBT chemicals. Refer to the Instructions for clarification on “Form A” criteria.

How to Submit Reports

Note: Facilities that submit TRI reporting forms (without claiming a trade secret), including revisions and withdrawals of TRI reporting forms, to the USEPA must prepare, certify, and submit their data to the USEPA electronically using the TRI online reporting software provided by the USEPA.

Facilities must submit TRI reports to *both* the USEPA and the state (or tribal government official) to comply with Section 313 reporting requirements. The USEPA finalized rule 77 Federal Register (FR) 23409 that requires each facility located in tribal lands to submit TRI reports to the USEPA and the appropriate tribe, rather than to the state in which the facility is geographically located. The final rule also provides the tribal chairperson or equivalent elected official of a tribe with the same opportunities as the governor of a state with regard to TRI-related requests and petitions. For a list of TRI Tribal Contacts, go to epa.gov/toxics-release-inventory-tri-program/tri-tribal-contacts.

Facilities must file electronically to the USEPA using *TRI-MEweb*. The submission will be sent simultaneously to the USEPA and the State of Michigan and will fulfill the dual reporting requirement. For help filing a TRI report please see the list of program contacts at: www.epa.gov/toxics-release-inventory-tri-program/forms/tri-program-contacts, Facilities in tribal lands will submit a paper copy of the TRI reports to the tribal government official. Facilities that submit, revise, or withdraw TRI reporting forms for report years 1991 through the present must do so using the *TRI-MEweb* application even if the original submittal did not use *TRI-MEweb*.

The only exception to the requirement to file TRI reports electronically to the USEPA relates to TRI submissions that claim a trade secret (including sanitized and un-sanitized report forms) and revisions and withdrawals of such TRI submissions. These must be submitted to the USEPA (and the state or tribal authority) on paper.

TRI-MEweb is an interactive application that helps a facility prepare, submit, and certify the TRI reports. If you are using *TRI-MEweb* for the first time, certifying officials must register prior to reporting at cdx.USEPA.gov. This registration requires the printing, completion, and mailing of an electronic signature agreement (ESA) for the USEPA approval. The time for the mailing and processing of this form is estimated to take two weeks. The USEPA implemented an alternative

method for certifying officials to apply for and process an ESA in real-time using a third-party identity verification vendor named LexisNexis.

The USEPA will send an e-mail in January to former TRI filers that *TRI-MEweb* is open for the newest report year filing. The facility reporter can access *TRI-MEweb* by logging in to the USEPA Central Data Exchange (CDX). The preparer and certifier must be registered at CDX ([USEPA.gov/cdx](https://www.epa.gov/cdx)), and the certifier must have an electronic signature agreement on file. *TRI-MEweb* maintains submissions on line for prior report years.

Complete information regarding TRI-ME reporting is found on the USEPA website at [USEPA.gov/tri](https://www.epa.gov/tri). This site includes links for instructions and TRI “Forms R” and “A.”

Facilities with trade secret TRI reports submitted on paper will need to mail their reports separately to the USEPA and the state or tribe to fulfill the dual reporting requirement. Information regarding where to mail reports to the USEPA can be found on the USEPA TRI Program website ([USEPA.gov/tri](https://www.epa.gov/tri)). The address for the Michigan SARA Title III Program that accepts reports on behalf of the SERC is in [Chapter 1](#), page 1-9 of this guidebook.

There are **no fees** associated with TRI reporting in Michigan.

Recordkeeping

Facilities reporting under Section 313 must keep copies of their reports for three years from the date of submission. Facilities also are required to keep any documents, calculations, or material used to determine reporting obligations and waste estimates. If the USEPA has questions about reported data, it may request the supporting documentation. The USEPA may also request documentation during a TRI inspection for all Section 313 chemicals, reported or not.

While the regulation requires a facility to maintain documents for three years, federal authority can take enforcement action back five years. It is recommended that a facility keep the reports and documentation for five years in the event of a TRI inspection.

Use of TRI Data

Under the Community Right-to-Know provisions of SARA Title III, TRI information must be made available to the public. The public can get information about toxic chemicals at reporting facilities, their uses, and releases into the environment. The USEPA maintains the national TRI information in a database that is available to anyone through the Internet. TRI data are also important to the State in other regulatory programs and for other environmental reports.

TRI Program Contacts and Assistance

Michigan SARA Title III Program

Phone: 517-284-SARA

egle-sara@michigan.gov | 517-284-SARA

Michigan.gov/SARA

Saginaw Chippewa Indian Tribe

Craig Graveratte, Environmental Response
Program Specialist

989-775-4081 | cgraveratte@sagchip.org

USEPA Region 5 TRI Program

Kushal Som, TRI Coordinator

Land and Chemicals Division, Chemicals

Management Branch

312-353-5792 | som.kushal@epa.gov

epa.gov/toxics-release-inventory-tri-program

epa.gov/toxics-release-inventory-tri-program/tri-data-and-tools

USEPA's Superfund, TRI, EPCRA, RMP, and Oil Information Center

800-424-9346; Option 3 | TDD: 800-553-7672

Type of Question you may have	Where to find your answer
TRI data submitted for a specific facility	USEPA's Envirofacts database: enviro.epa.gov/ Resources for facilities to complete and submit TRI reporting forms: epa.gov/toxics-release-inventory-tri-program/reporting-tri-facilities
Central Data Exchange : technical questions related to CDX accounts, submission status, <i>TRI-MEweb</i> submission	cdx.epa.gov/contact CDX Hotline: 888-890-1995 Email: helpdesk@epacdx.net
TRI reporting assistance: verification of the USEPA's receipt of reports, electronic signature agreements, report errors	TRI Training and Guidance Materials: Information accessible via GuideME TRI Data Processing Center: Email: tridpc@epacdx.net Call 703-227-7644 or Fax to 703-227-4199
Electronic Facility Data Profiles (eFDPs)	TRI Data Processing Center: 703-227-7944 tri.efdp@epacdx.net
<i>If you have already tried the support avenues listed above, but you still have unresolved TRI problems or issues.</i>	TRI Program Division: Email: tri.help@USEPA.gov Call 202-566-1415
Incentives for regulated entities to voluntarily discover, disclose, and correct noncompliance with federal environmental laws and regulations.	USEPA Audit Policy: epa.gov/compliance/epas-audit-policy
TRI for Tribal Communities	epa.gov/toxics-release-inventory-tri-program/tri-tribal-communities

CHAPTER 5: EMERGENCY PLANNING FOR FACILITIES

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Emergency Planning for Facilities in Michigan

Every facility should have an emergency response plan in place to address hazards in the workplace. Emergency planning is important to address the protection of employees, the facility, the community, and first responders. Emergency Planning for a facility is both an internal and an external function. The internal function stems from the facility’s responsibility to have a plan—and potentially to have multiple plans that meet multiple state and federal regulatory requirements. The external function is met by the police, fire fighters, and Local Emergency Planning Committees (LEPCs). Each of these has unique planning objectives to address the protection of the facility, the community, and the responders. The facility’s internal plans must “talk to” the external plans. This communication is complicated and redundant if the facility keeps multiple plans to meet the various regulatory requirements.

In 1996, the National Response Team published the *Integrated Contingency Plan Guidance* (ICP), to combine all of the federal plan requirements for responding to releases of oil and non-radiological hazardous substances into one plan. In 2002, the Michigan Emergency Planning and Community Right-to-Know Commission (MCCERC) endorsed Michigan’s commitment to the ICP. Under the direction from the State Emergency Response Commission (SERC), the Michigan SARA Title III Program compiled and published matrices of the requirements in several Michigan plans and described how they can be incorporated into the ICP. The MCCERC now acts as the SERC in Michigan. See [Chapter 1](#) for details.

Use of the ICP is supported by the U.S. Environmental Protection Agency (USEPA), and the U.S. Departments of Transportation; Interior; and Labor. It is also supported by the Michigan Departments of State Police (MSP); Environment, Great Lakes, and Energy (EGLE); Agriculture and Rural Development (MDARD); and Licensing and Regulatory Affairs (LARA).

The ICP guidance and Michigan matrices are available on [EGLE's Emergency Planning and Community Right-to-Know](#) web site at Michigan.gov/egleEmergencyPlan. The guidance provides a format in which all state and federal planning requirements relating to oil and non-radiological hazardous substances can be satisfied. It is recommended, but not mandatory that this format be used.

The National Response Team's ICP Guidance provides:

- An outline of a comprehensive ICP.
- A development matrix that shows where federal plan requirements can be included in the ICP.
- Regulatory cross-comparison matrices that describe the plan requirements in each regulation and identify where each requirement is addressed in the ICP.

Michigan has added:

- A development matrix that shows where state plan requirements can be included in the ICP.
- Regulatory cross-comparison matrices that describe the plan requirements in each regulation.
- A development matrix template.

While contingency plans should always be kept on site, only some need to be submitted to the regulatory agency. Refer to the "Submittal Guidance for Contingency Plans in Michigan" before you submit your plan to an agency in Michigan. If your plan must be submitted to a state or federal agency, you should create a regulatory cross-comparison matrix referencing the section and page number in the ICP where each plan requirement is addressed. Submit that matrix with the ICP to the requesting agency.

If you have questions regarding specific plans, refer to the Contacts for Help. The individuals listed in that document are experts with respect to the listed plan and should also be able to help you with questions about how to incorporate the plan requirements into the ICP format.

Acronyms

CAA	Clean Air Act
CEPPS	Chemical Emergency Preparedness & Prevention Section
CFATS	Chemical Facility Anti-Terrorism Standards
CSAT	Chemical Security Assessment Tool
DHS	Department of Homeland Security
DWEHD	Drinking Water and Environmental Health Division
EGLE	Michigan Department of Environment, Great Lakes and Energy
ERP	Emergency Response Plan
FMCSA	Federal Motor Carrier Safety Administration
FRP	Facility Response Plan
GISHD	General Industry Safety & Health Division
HAZWOPER..	Hazardous Waste Operations & Emergency Response
HM	Hazardous Materials
MDARD	Michigan Department of Agriculture and Rural Development
MIOSHA	Michigan Occupational Safety & Health Administration
MSP	Michigan State Police
NFPA 30	National Fire Protection Association pamphlet 30: Flammable & Combustible Liquids Code
DWMAD	Drinking Water and Municipal Assistance Division
OGMD	Oil, Gas, and Minerals Division
MMD	Materials Management Division
PEAS	Pollution Emergency Alerting System
PHMSA	Pipeline & Hazardous Materials Safety Administration
PIPP	Pollution Incident Prevention Plan
RCRA	Resource Conservation and Recovery Act
RMP	Risk Management Plan
RRD	Remediation and Redevelopment Division
SDWA	Safe Drinking Water Act
SPCC	Spill Prevention, Containment & Countermeasures
SWPPP	Storm Water Pollution Prevention Plan
TSD	Treatment Storage and Disposal
USCG	United States Coast Guard
WRD	Water Resources Division

Contacts for Help

Michigan Department of Licensing and Regulatory Affairs (LARA)

Fire Exits; Grain Handling

GISHD, MIOSHA

517-284-7750

HAZWOPER

Laura Basile, GISHD, MIOSHA

BasileL@michigan.gov | 517-283-8452

Highly Hazardous

Laura Basile, GISHD, MIOSHA

BasileL@michigan.gov | 517-283-8452

Emergency Action Plan for Storage Tanks

(see NFPA 30)

Jeff Tanner, Bureau of Fire Services Storage
Tank Program

tannerj@michigan.gov | 517-335-2137

Michigan Department of Agriculture and Rural Development (MDARD)

Pesticide Storage; Discharge Response Plan; Fertilizer Discharge Response Plan

Jarrold Fletcher, Pesticide and Plant Pest Management Division

fletcherJ6@michigan.gov | 517-449-2635

Michigan Department of Natural Resources (DNR)

Communications, Emergency Management and Homeland Security

Jennifer Wolf, Law Enforcement

wolfj1@michigan.gov | 517-284-6231

Michigan State Police (MSP)

Emergency Management Homeland Security

EMHSTC@michigan.gov | 517-284-3727

Michigan Department of Environment, Great Lakes and Energy (EGLE)

Emergency Management

Jay Eickholt, Emergency Manager
EickholtJ1@Michigan.gov | 517-256-4408

Pollution Emergency Alerting System (PEAS)

Dana Bradt, PEAS Administrator
BradtD@Michigan.gov | 517-256-7816

Pollution Incident Prevention Plan (PIPP)

Tom Asmus, WRD, Part 5 Statewide Contact
AsmusT@Michigan.gov | 906-202-1439
(or District Office Part 5 Rules staff)

Radiological Protection, MMD

David Asselin, MMDD
AsselinD1@Michigan.gov | 517-614-9913

Oil and Gas Wells - Drilling

Ray Vugrinovich, OGMD
VugrinovichR@Michigan.gov | 517-284-6841

Oil and Gas Wells - Production

Larry Organek, OGMD
OrganekL@Michigan.gov | 517-284-6836

RCRA for Generators

Trisha Confer, Hazardous Waste Coordinator
ConferT@Michigan.gov | 989-225-7968

RCRA for Licensed TSD Facilities

Rich Conforti, MMD, Engineering Manager
ConfortiR@Michigan.gov | 517-227-1649

Hazardous Waste Transportation

Krista Hettich, MMD Transportation Specialist
HettichK@Michigan.gov | 269-370-8527

SARA Title III Program

Michael Young, SARA Title III Program
YoungM1@michigan.gov | 989-894-6238

SDWA-ERP for Community Water Supplies

Kris Philip, DWEHD
PhilipK@Michigan.gov | 517-284-6518

Storm Water Pollution Prevention Plan

Ryan Grant, Program Specialist, WRD
GrantR3@Michigan.gov | 616-250-6134

Remediation and Redevelopment

Joshua Scheels, Incident Management Specialist
ScheelsJ@Michigan.gov | 586-324-0372

David Wierzbicki, Incident Management Specialist
WierzbickiD@Michigan.gov | 517-420-2605

Loren Curtis, Incident Management Specialist
CurtisL@Michigan.gov | 989-274-0614

Laura Lambert, Incident Management Specialist
LambertL4@michigan.gov | 517-581-3182

Eric Van Riper, Incident Management Specialist
VanRiperE@Michigan.gov | 989-413-1377

Brian Flickinger, Incident Management Specialist
FlickingerB@Michigan.gov | 231-876-4456

Joseph DeGrazia, Incident Management Specialist
DegraziaJ@Michigan.gov | 586-291-0476

Donovan Thomas, Incident Management Specialist
ThomasD38@michigan.gov | 269-615-4451

Ashley Miller, Incident Management Specialist
MillerA65@Michigan.gov | 906-235-7435

FEDERAL CONTINGENCY PLAN REQUIREMENTS

U.S. Environmental Protection Agency (USEPA)

Oil Pollution Prevention - Spill Prevention, Containment & Countermeasures

Kim Churchill, Chemical Emergency Preparedness & Prevention Section (CEPPS)

churchill.kimberly@epa.gov | 734-692-7618

Oil Pollution Prevention - Facility Response Plan (FRP)

Alex Tzallas, Oil Planning and Response Section

tzallas.alexander@epa.gov | 312-886-0622

Clean Air Act - Risk Management Plan

Monika Chrzaszcz, CEPPS

chrzaszcz.monika@epa.gov | 312-886-0181

U.S. Department of Homeland Security (DHS)

U.S. Coast Guard – FRP

Capt. Richard P. Armstrong, United States Coast Guard Sector

Detroit Administrative Assistant: 313-568-9574

Officer of the Day: 313-296-5726

Sector Detroit Command Center: 313-568-9559

For Emergency/24-hour access: 313-568-9559

General Questions: 313-296-5726

DHS - Chemical Facility Anti-Terrorism Standards

CSAT (Chemical Security Assessment Tool) Help Desk

csat@hq.dhs.gov | 866-323-2957

U.S. Department of Transportation (DOT)

Pipeline & Hazardous Materials Safety Administration – FRP

Alan Mayberry, Washington D.C., Office of Pipeline Safety, Emergency Support & Security Div.

PHMSA.OPA90@dot.gov | 202-366-4595

Hazmat Security Plan for Shippers

Cindy Hedman, Hazardous Materials Specialist FMCSA Michigan Division

cindy.hedman@dot.gov | 517-282-3379

Sgt. John Holder, MSP, Commercial Vehicle Enforcement Division

holderj@michigan.gov | 517-241-0551

Submittal Guidance for Contingency Plans in Michigan

Emergency Action Plan for Aboveground Storage Tanks (ASTs): Do not submit the plan to the LARA unless it is requested. The plan must be kept on site. This plan is required per Michigan's Storage and Handling of Flammable and Combustible Liquids Rules, which adopted, by reference, the National Fire Protection Association 30, 2000 Edition, for facilities with regulated ASTs. The plan shall be coordinated with the local emergency response agency, so that they may be aware of any special provisions associated with the facility. For additional information, contact the LARA Bureau of Fire Services, Storage Tank Division at 517-241-8847.

NOTE: Executive Order 2012-14 transferred the storage tank program from the EGLE's Remediation and Redevelopment Division to the Bureau of Fire Services in LARA.

Discharge Response Plan for Commercial Pesticide Bulk Storage: If this plan is used to meet some of the requirements of a Pollution Incident Prevention Plan (PIPP), then the submittal procedures for the PIPP, as stated below, apply. The plan must be kept readily available at the storage facility and at the nearest local office from which the storage facility is administered and shall be available for inspection by the MDARD. A current copy of the plan shall be provided to the local fire and police departments. For additional information, contact the MDARD Pesticide and Plant Pest Management Division at 517-284-5644.

Discharge Response Plan for Bulk Fertilizer Storage: If this plan is used to meet some of the requirements of a PIPP, then the submittal procedures for the PIPP, as stated below, apply. The plan is not required to be submitted to any agency but must be kept current and readily available. The local fire and police departments must be notified that the plan has been completed. For additional information, contact the MDARD Pesticide and Plant Pest Management Division at 517-284-5644.

Hazardous Waste Contingency Plan & Emergency Procedures for Generators: Do not submit to the EGLE or the MSP unless it is requested. This plan must be kept on site. Administrative Rule 306 (R299.9306), promulgated under Part 111, Hazardous Waste Management, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended, and 40 Code of Federal Regulations (CFR) Part 265, requires that copies of a generator contingency plan and all revisions must be "submitted to all local police departments, fire departments, hospitals, and State and local emergency response teams that may be called upon to provide emergency services." The EGLE does not have an emergency response team and does not provide these emergency services. While the MSP Emergency Management and Homeland Security Division provides coordination support for local emergency responders, it does not have a state-level emergency response team. For additional information, contact the EGLE MMD at 517-284-6562, or you may contact your district office.

Contingency Plan for Licensed Hazardous Waste Treatment Storage and Disposal

Facilities (TSDF): Instructions are very facility specific and a copy is required to be kept current and onsite per the Administrative Rule 607 (R299.9607), promulgated under Part 111, Hazardous Waste Management, of the Natural Resources and Environmental Protection Act, 1994 PA 451; 40 CFR Part 264, Subpart D; and the facility's Operating License. The regulations require that copies of a TSDF contingency plan and all revisions must be “submitted to all local police departments, fire departments, hospitals, and State and local emergency response teams that may be called upon to provide emergency services.” The EGLE does not have an emergency response team and does not provide these emergency services. While the MSP Emergency Management and Homeland Security Division provides coordination support for local emergency responders, it does not have a state-level emergency response team. For additional information, contact the EGLE MMDD, Hazardous Waste Section, at 517-284-6562.

PIPP: Do not submit to the EGLE unless requested. This includes the requirement in Agriculture regulations to submit the PIPP to the EGLE—do not submit unless specifically requested to do so. The PIPP must be kept on site. Submit notification to the EGLE WRD district office that the PIPP (or ICP that includes the PIPP) was prepared along with a certification that the facility is in compliance with the Part 5 administrative rules. Notifications that a PIPP has been prepared must also be sent to the LEPC and local health department. This is required per administrative rule (R324.2006(2)), promulgated under Part 31, Water Resources Protection, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended. For additional information, contact the EGLE Water Resources Division at 586-208-5075, or you may contact your local district office, Part 5 Rules staff.

Stormwater Pollution Prevention Plan (SWPPP): Do not submit to the EGLE unless it is requested. The SWPPP must be kept on site. Plans must be developed as required under Part I.B of Michigan's National Pollutant Discharge Elimination System general permit for stormwater discharges. For additional information, contact the EGLE WRD at 989-894-6282, or you may contact your local district office Industrial Stormwater Program staff.

Emergency Response Plan (ERP) for Community Water Supplies: Do not submit to EGLE unless it is requested. Administrative rules (R325.12301 through R325.12304) promulgated under the Safe Drinking Water Act, 1976 PA 399, as amended, require that the ERP shall be located and distributed as necessary to assure effective use of the ERP by all necessary waterworks system personnel. The plan shall be made available for inspection by the EGLE. This plan outlines a program for rapid correction or mitigation of emergencies which

can significantly lessen the impact of terrorist acts or other intentional actions on the public health and the safety and supply of drinking water provided to the public. For additional information, contact the EGLE Drinking Water and Municipal Assistance Division at 517-284-6519, or you may contact your district office.

Spill Prevention Control and Countermeasure (SPCC) Plan: Do not submit to the EGLE or the USEPA unless it is requested. The SPCCs are required by the USEPA for oil storage facilities and are kept on site per 40 CFR 112.3(e)(1) and (2). For additional information, contact the USEPA Region 5 at 312-886-9497.

Risk Management Plan (RMP): Submit in accordance with 40 CFR 68.150 to the USEPA only. The RMP must contain an emergency response program that includes an emergency response plan. It must be kept on site. Because the emergency response plan for your process must be coordinated with the community emergency response plan developed in accordance SARA Title III Section 303 by the LEPC, it is recommended that you notify the LEPC when your RMP has been updated. Submit a copy of the RMP to the LEPC upon request. Contact the USEPA Region 5 at 312-886-0181 for more information.

On November 20, 2019, USEPA finalized changes to the Risk Management Program (RMP) Amendments to better address potential security risks, regulatory consistency and reasonable consideration of costs. The changes are intended to promote better emergency planning and public information about accidents and maintain the trend of fewer significant accidents involving chemicals regulated under the RMP rule. The changes reflect issues raised in three petitions for reconsideration of the RMP Amendments as well as other revisions USEPA identified in its review of that rule.

The RMP Reconsideration final rule:

- Rescinds all major accident prevention program provisions of the RMP Amendments rule (i.e., third party audits, safer technology and alternatives analyses, incident investigation root cause analysis), and most other minor changes to the prevention program.
- Rescinds the public information availability provisions of the RMP Amendments rule.
- Retains the requirement to hold a public meeting within 90 days after an accident, but only applies the requirement to accidents with offsite impacts.
- Modifies the emergency coordination provisions to address security concerns with the Amendments rule coordination provisions.
- Modifies the exercise provisions to give more flexibility to regulated facilities and local emergency responders in complying with these provisions.
- Modifies some compliance dates to provide necessary time for program changes.

For more information, please see the [Final RMP Reconsideration Rule Webpage \(epa.gov/rmp/final-risk-management-program-rmp-reconsideration-rule\)](https://epa.gov/rmp/final-risk-management-program-rmp-reconsideration-rule).

Chemical Facility Anti-Terrorism Standards (CFATS): Submit in accordance with 6 CFR Part 27 to the U.S. Department of Homeland Security (DHS). The DHS published the CFATS regulation in 2007. The CFATS regulation imposes federal security regulations for high-risk chemical facilities and establishes risk-based performance standards for the security of the facilities. It requires covered chemical facilities to prepare Security Vulnerability Assessments and to develop and implement Site Security Plans that include measures that satisfy the identified risk-based performance standards. For more information on CFATS, contact the Chemical Security Assessment Tool (CSAT) Help Desk at 866-323-2957 or csat@dhs.gov. You may also visit dhs.gov/ChemicalSecurity.

ICP: Do not submit to EGLE unless it is requested or unless the ICP includes planning requirements that must be submitted. If you are submitting an ICP, please indicate why the ICP is being submitted, and include a regulatory cross-comparison matrix as described in the ICP guidance.

Do not send any contingency plans to the SERC. There is no requirement to submit emergency or contingency plans to the SERC. For further information, contact the Michigan SARA Title III Program in the EGLE at 517-284-7272, or send an email to EGLE-SARA@Michigan.gov.

Certain types of facilities might have other planning requirements that are not summarized above. If you are not sure who to contact for emergency plan information, contact the EGLE Environmental Assistance Center at 800-662-9278, or send an email to EGLE-Assist@Michigan.gov.

CHAPTER 6: RELEASE REPORTING IN MICHIGAN

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Release Notification Requirements in Michigan

Chemical releases in Michigan are potentially reportable under one or more of twenty-seven different state and federal regulations. Determining which regulations apply to a specific release can be an overwhelming task. The “[Release Notification Requirements in Michigan](#)” document was compiled by the Michigan SARA Title III Program staff in the Department of Environment, Great Lakes and Energy (EGLE) to help owners and operators of facilities in Michigan, including vehicles and farms, determine their potential notification and reporting requirements in the event of a chemical release.

Check your permits, licenses, registrations, pollution prevention plans, and local ordinances for additional release reporting requirements. In particular, all National Pollutant Discharge Elimination System permits, and most air permits, have release reporting requirements in them that are not included in this document.

The “Release Notification Requirements” document should be used as a tool to identify potential reporting requirements before a release occurs, and to identify follow-up reporting requirements based on the release. It outlines what releases must be reported, when they must be reported, and to whom they must be reported.

Links to the referenced release reporting forms and chemical lists are available on the [EGLE release reporting website \(Michigan.gov/ChemRelease\)](#). Visit this site for updated EGLE and LEPC contact information.

NOTE: Executive Order 2012-14 transferred the EGLE storage tank program to the Bureau of Fire Services in the Michigan Department of Licensing and Regulatory Affairs. Phone numbers and email addresses associated with the storage tank program and staff have not changed.

For information regarding a specific regulation, contact the agency specified in the “notes” column of the table. If it is a EGLE division, contact the [district division office](#).

General questions or comments regarding this table should be directed to the EGLE Environmental Assistance Center at 800-662-9278 or egle-assist@michigan.gov. EGLE program information is available at Michigan.gov/EGLE, or you may contact the Environmental Assistance Center.

What is a Chemical Release?

The term “release” means spilling, leaking, pumping, pouring, emitting, emptying, discharging, injecting, escaping, leaching, dumping, or disposing. “Chemical” includes substances considered to be toxic or hazardous, as well as substances as seemingly harmless as salad oil.

Chemical Lists

The U.S. Environmental Protection Agency (USEPA) published a consolidated list of chemicals subject to SARA Title III, Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), and Section 112(r) of the Clean Air Act called the “List of Lists.” The List of Lists (2022 Version) is located in [Appendix B](#) of this guidebook. It is also available as a Microsoft Excel file via the following USEPA link: epa.gov/epcra/consolidated-list-lists

The “List of Lists” includes:

- **CERCLA Hazardous Substances**, including Resource Conservation and Recovery Act waste streams and unlisted hazardous wastes, with Reportable Quantities (RQ) for releases (originally published in 40 CFR 302, Table 302.4).
- **SARA Title III Extremely Hazardous Substances (EHS)** with RQs for releases (originally published in 40 CFR 355, Appendix A).
- **SARA Title III Section 313 Toxic chemicals** (originally published in 40 CFR 372 Subpart D).

The Part 5 Rules, Spillage of Oil and Polluting Materials, were promulgated pursuant to Part 31 of Michigan's Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (NREPA). These rules include a list of "polluting materials" with threshold reporting quantities for releases. The Part 5 Rules are provided in [Appendix C](#) of this guidebook.

NO_x Exemption in CERCLA and SARA Title III

The USEPA finalized an exemption for certain releases of emissions of nitric oxide (NO) and nitrogen dioxide (NO₂) (collectively nitrogen oxides or NO_x) to air from CERCLA and SARA Title III reporting requirements (71 FR 58525). The exemption was effective November 3, 2006 and applies to releases to the air of less than 1,000 pounds of NO_x in 24 hours that are the result of combustion. The exemption also applies to emissions from combustion-related activities such as detonation or processes that include both combustion and non-combustion operations (e.g., nitric acid production).

Petroleum Exclusion in CERCLA

Petroleum, including crude oil or any fraction thereof is excluded from the definitions of "hazardous substance," and "pollutant or contaminant" under CERCLA. Petroleum releases, accordingly, must generally be addressed under the authority of other law, such as the underground storage tank (UST) provisions of RCRA, or the Clean Water Act (CWA). This exception, which has become known as the "**petroleum exclusion**," plays a significant role in CERCLA because many sites contain petroleum contamination. Petroleum frequently contains specific listed hazardous substances, the most common of which are benzene, toluene and xylenes. In general, such substances are not treated as CERCLA hazardous substances, as long as they are found in refined petroleum fractions and are not present at levels that exceed those normally found in such fractions. Substances present in petroleum as a result of contamination during use or from mixing or combining are not within the petroleum exclusion, and in such cases, the substances are considered CERCLA hazardous substances.

NREPA Part 201, Environmental Remediation, Section 20114(1)(b) states that the requirements to report a release under this regulation apply to "reportable quantities of hazardous substances established pursuant to 40 CFR 302.4 and 302.6" This regulation references the listed hazardous substances published in the Code of Federal Regulations. It does not adopt the petroleum exclusion that applies to federal regulation of releases of CERCLA hazardous substances. As a result, petroleum constituents, including component substances such as benzene, toluene, and xylenes, plus any additives (e.g., MTBE, lead) are all reportable under Part 201, based on the reportable quantities in the CERCLA list of hazardous substances published in 40 CFR 302.4 and 302.6. See the release calculation example at the end of this chapter.

Initial Notification: There is NO PENALTY for over-reporting!

When there is a release, determining if, when, and to whom it should be reported can be a daunting task, even if you are familiar with the table. It is therefore recommended that if there is a release, immediately call the three numbers in the box to the right, even if the content or quantity of the released material has not yet been determined:

You can then respond to the release, reassess the situation, and make additional notifications as required (e.g., as specified in the table or in your permits). Your follow-up report will provide details that explain why a release was or was not reportable.

Post These Numbers by Every Phone!

911 to notify Local authorities

800-292-4706 (PEAS) to notify
State authorities

800-424-8802 (NRC) to notify
Federal authorities

SARA Title III Section 304 requires that the LEPC be notified immediately of a release. Many LEPCs accept the call to 911 as notification. Others require direct notification. Contact your LEPC in advance to find out their requirements.

Written Follow-up Report

Written follow-up report forms that are specified in the table are required by regulation. The EGLE has developed a generic written report form called “[Spill or Release Report](#)” (EQP 3465) that can be used to report releases of:

- Hazardous and extremely hazardous substances under SARA Title III.
- Hazardous waste under NREPA Part 111.
- Liquid industrial waste under NREPA Part 121.
- Hazardous substances under NREPA Part 201.
- Polluting materials under NREPA Part 31, Part 5 Rules.

Hot Tip!

Use the generic [Spill or Release Report form](#) to record *initial* notifications.

EGLE Release Reporting website: Michigan.gov/ChemRelease

Release Calculations

How to determine the reportable quantity of a product based on the reportable quantity of an ingredient.

Example Calculation: When is a release of gasoline reportable?

Under NREPA Part 201 regulation, releases of CERCLA hazardous substances as published in the 2012 version of 40 CFR 302, Table 302.4 must be reported. Gasoline is not included on this list. However, some of the ingredients in gasoline are on the list of CERCLA hazardous substances.

This example shows how to determine when a release of gasoline *in gallons* is reportable under NREPA Part 201 based on reportable quantities *in pounds* of the ingredients.

1. Identify the hazardous ingredients, reportable quantities, and weight percentages.

Look at the example Safety Data Sheet (SDS) for gasoline at the end of this chapter to find the hazardous ingredients and the weight percent of those ingredients. Look at the “List of Lists” to find the reportable quantity of an ingredient that is a CERCLA hazardous substance.

Benzene (CAS number 71-43-2) is a CERCLA hazardous substance listed in the “List of Lists.” The reportable quantity (RQ) for benzene under CERCLA is 10 pounds. That means that a release of 10 pounds or more of benzene to the environment must be reported to the EGLE Remediation and Redevelopment Division district office (or PEAS after hours). The weight percent of benzene in the example gasoline is 0.4 to 5%. When calculating a reportable release, use the higher, more conservative, weight percent.

2. Calculate the weight of the gasoline.

Because the gasoline is a liquid measured in gallons, and the reportable quantity of benzene is in pounds, calculate the weight of a gallon of gasoline. The formula is as follows:

$$\text{Specific gravity of the product} \times 8.34 \text{ lb/gal (weight of water)} = \text{weight of the product in lb/gal}$$

The specific gravity, also called the relative density, can be found in the “Physical & Chemical Properties” section of the SDS. It is a unit-less number that tells how much the substance weighs relative to the weight of water. If the specific gravity is 1, the substance weighs the same as water. If it is less than 1, then the substance weighs less than water. If you think about this logically, you know that gasoline floats on water (thus the sheen you see on water at boat launches), so you can conclude that gasoline must weigh less than water. The specific gravity is often reported as a range. In this example, the specific gravity is reported on the SDS as a range of 0.72 to 0.75. If you plug these values into the calculation, this gasoline can weigh anywhere from 6.0 lb/gal to 6.3 lb/gal. When

calculating a reportable release, use the higher, more conservative, value. The weight we will use for our example gasoline is 6.3 lb/gal.

3. Calculate the smallest reportable release of gasoline.

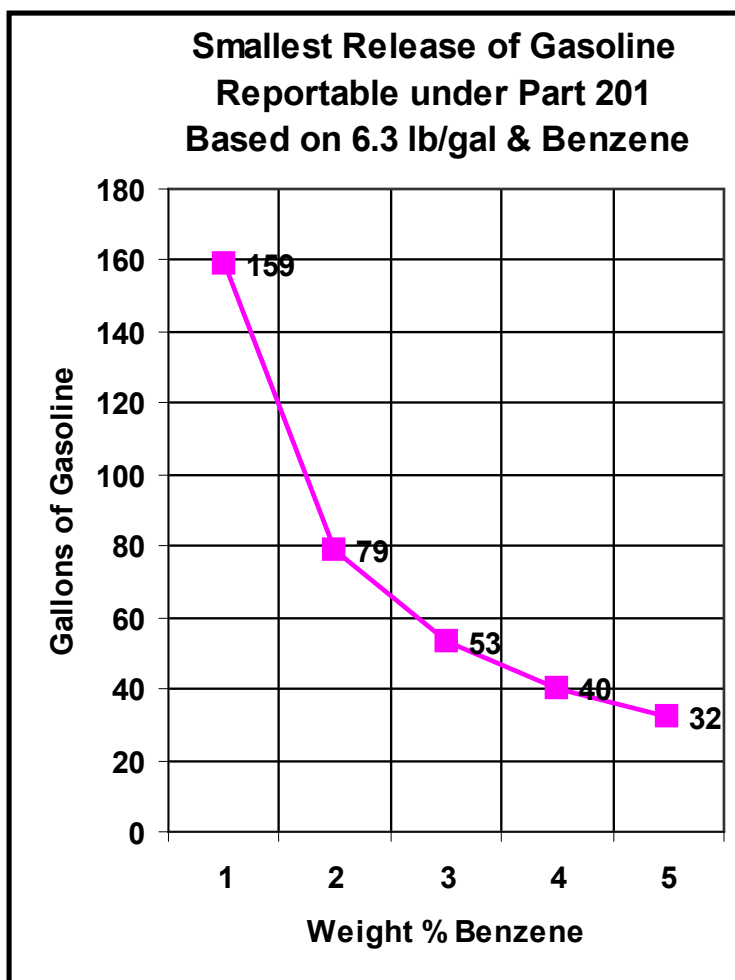
For this example, determine the smallest reportable release under NREPA Part 201 based on the ingredient benzene. Here is the formula:

$$\text{RQ of ingredient (lbs)} \div \text{weight of product (lb/gal)} \div \text{weight \% of ingredient} = \text{reportable gallons of product}$$

Using the numbers we have determined above, we get:

10 lb (RQ benzene) \div 6.3 lb/gal gasoline \div .05 (wt. % benzene) = 32 gallons of gasoline (reportable if released to the environment).

The following graph shows how the reportable quantity of gasoline varies with the weight percent of benzene:



There would be a smaller reportable quantity (the line would shift down) for “heavier” gasoline. Look at all hazardous ingredients to determine which one would “control” the reportable quantity. The controlling ingredient is the one that results in the smallest reportable quantity. For gasoline, the controlling ingredient is benzene.

In real life, this is not an exact science. Use this as a way to come up with educated guesstimates for when to report. For gasoline, report any release that looks like it is approaching 30 gallons or more.

Keep in mind that smaller releases of gasoline are potentially reportable under other regulations (e.g., if the release reaches surface or groundwater). Also remember that all releases must be cleaned up to the extent specified in the regulations. This includes releases that are not reportable under any regulation.

Summary:

When determining reportable releases, it is important to realize that it is sometimes the ingredients in a given product that makes the release of the product reportable. There are three main steps in the process for determining when a release of a product is subject to reporting based on the reportable quantities of the ingredients:

Identify the hazardous ingredients, corresponding reportable quantities, and weight percentages. This depends on the regulation!

If the product is a liquid and the reportable quantity of the ingredient is given in pounds, calculate the weight of the product in pounds per gallon. If the product is a solid, skip this step.

Calculate the smallest reportable release.

For a liquid, use the formula in step 3 of the example. If the product is a solid, the formula is:

$$\text{RQ of ingredient (lbs)} \div \text{weight \% of ingredient in solid product} = \text{reportable pounds of solid product}$$

Safety Data Sheet – Gasoline, Unleaded – Sample

Section 1: Identification**Product name:** Gasoline, Unleaded**Synonyms:** Blend of Highly Flammable Petroleum Distillates, Regular, Mid-Grade, Premium, 888100008809**Section 2: Hazard(s) Identification**

Classifications: Flammable Liquid – Category 1
 Aspiration Hazard – Category 1
 Carcinogenicity – Category 2
 Specific Target Organ Toxicity (Repeated Exposure) – Category 2
 Specific Target Organ Toxicity (Single Exposure) – Category 3
 Skin Irritation – Category 2
 Eye Irritation – Category 2B
 Chronic Aquatic Toxicity – Category 2

Pictograms:**Signal Word:** Danger**Hazard Statements:** Extremely flammable liquid and vapor.

May be fatal if swallowed and enters airways. Do not siphon gasoline by mouth.

Suspected of causing blood cancer if repeated over-exposure by inhalation and/or skin contact occurs.

May cause damage to liver, kidneys and nervous system by repeated and prolonged inhalation or skin contact. Causes eye irritation. Can be absorbed through skin.

May cause drowsiness or dizziness. Extreme exposure such as intentional inhalation may cause unconsciousness, asphyxiation and death.

Repeated or prolonged skin contact can cause irritation and dermatitis.

Harmful to aquatic life.

Precautionary statements:**Prevention:****Response:****Storage:****Disposal:****Section 3: Composition/Information on Ingredients**

Component	CAS-No.	Weight %
Gasoline, natural; Low boiling point naphtha	8006-61-9	10 -30%
Toluene	108-88-3	10 -30%
Xylene	1330-20-7	10 -30%
Ethanol; ethyl alcohol	64-17-5	0-8.2%
Trimethylbenzene	25551-13-7	1 -5%
Isopentane; 2-methylbutane	78-78-4	1 -5%
Naphthalene	91-20-3	1 -5%
Benzene	71-43-2	Less than 5%
Pentane	109-66-0	1 -5%
Cyclohexane	110-82-7	1 -5%
Ethylbenzene	100-41-4	1 -5%
Butane	106-97-8	1 -20%
Heptane [and isomers]	142-82-5	0.5 -0.75%
N-hexane	110-54-3	0.5 -0.75%

Section 4: First-Aid Measures

Omitted

Section 5: Fire-Fighting Measures

Suitable extinguishing media: SMALL FIRES: Any extinguisher suitable for Class B fires, dry chemical, CO₂, water spray or firefighting foam. LARGE FIRES: Water spray, fog or firefighting foam. Water may be ineffective for fighting the fire, but may be used to cool fire exposed containers. Keep containers and surroundings cool with water spray.

Specific hazards during fire-fighting: Extremely flammable liquid and vapor. This material is combustible/flammable and is sensitive to fire, heat, and static discharge.

Special protective equipment for fire-fighters: Firefighting activities that may result in potential exposure to high heat, smoke or toxic by-products of combustion should require NIOSH/MSHA- approved pressure-demand self-contained breathing apparatus with full face-piece and full protective clothing.

Further information: Isolate area around container involved in fire. Cool tanks, shells, and containers exposed to fire and excessive heat with water. For massive fires the use of unmanned hose holders or monitor nozzles may be advantageous to further minimize personnel exposure. Major fires may require withdrawal, allowing the tank to burn. Large storage tank fires typically require specially trained personnel and equipment to extinguish the fire, often including the need for properly applied firefighting foam. Exposure to decomposition products may be a hazard to health. Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. Use water spray to cool unopened containers. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.

Section 6: Accidental Release Measures

Personal precautions: Evacuate personnel to safe areas. Ventilate the area. Remove all sources of ignition. Response and clean-up crews must be properly trained and must utilize proper protective equipment (see Section 8).

Environmental precautions: Discharge into the environment must be avoided. If the product contaminates rivers and lakes or drains inform respective authorities.

Methods for cleaning up: Contain and collect spillage with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations.

Section 7: Handling and Storage

Omitted

Section 8: Exposure Controls/Personal Protection

Omitted

Section 9: Physical and Chemical Properties

Appearance: Clear to straw colored liquid

Odor: Characteristic hydrocarbon-like

Odor threshold: 0.5 - 1.1 ppm

pH: Not applicable

Melting point/freezing point: About -101°C (-150°F)

Initial boiling point & range: Flash point < -21°C (-5.8°F)

Boiling point varies: 30 – 200°C (85 – 392°F)

Evaporation rate: Higher initially and declining as lighter components evaporate

Upper explosive limit: 7.6 %(V)

Lower explosive limit: 1.3 %(V)

Vapor pressure: 345 -1,034 hPa at 37.8 °C (100.0 °F)
 Vapor density (air = 1): Approximately 3 to 4
 Relative density (water = 1): 0.72 to 0.75
 Solubility (in water): Negligible
 Partition coefficient (n-octanol/water) 2 – 7 as log Pow
 Auto-ignition temperature: Approximately 250°C (480°F)
 Decomposition temperature: Will evaporate or boil and possibly ignite before decomposition occurs.

Section 10: Stability and Reactivity

Reactivity: Vapors may form explosive mixture with air.
 Chemical stability: Stable under normal conditions.
 Possibility of hazardous reactions: Can react with strong oxidizing agents.
 Conditions to avoid: Avoid high temperatures, open flames, sparks, welding.
 Hazardous decomposition products: Ignition and burning can release carbon monoxide, carbon dioxide.

Section 11: Toxicological Information

Omitted

Section 12: Ecological Information

Omitted

Section 13: Disposal Considerations

Omitted

Section 14: Transport Information

Omitted

Section 15: Regulatory Information

OSHA Hazards: Flammable liquid
 Highly toxic by ingestion
 Moderate skin irritant
 Severe eye irritant
 Carcinogen

TSCA Status: On TSCA Inventory

SARA 311/312 Hazards: Fire Hazard
 Acute Health Hazard
 Chronic Health Hazard

CERCLA SECTION 103 and SARA SECTION 304 (RELEASE TO THE ENVIRONMENT)
 The CERCLA definition of hazardous substances contains a "petroleum exclusion" clause which exempts crude oil, and products (both finished and intermediate) from the crude oil refining process and any indigenous components of such from the CERCLA Section 103 reporting requirements. However, other federal reporting requirements, including SARA Section 304, as well as the Clean Water Act may still apply.

Section 16: Other Information

Omitted

APPENDIX A

Appendix A: **SARA Title III** **Extremely Hazardous** **Substances**

**SARA Title III
EXTREMELY HAZARDOUS SUBSTANCES**

CAS	EHS NAME	TPQ*
108054	Acetic acid ethenyl ester	1,000
75865	Acetone cyanohydrin	1,000
1752303	Acetone thiosemicarbazide	1,000/10,000
107028	Acrolein	500
79061	Acrylamide	1,000/10,000
107131	Acrylonitrile	10,000
814686	Acrylyl chloride	100
111693	Adiponitrile	1,000
116063	Aldicarb	100/10,000
309002	Aldrin	500/10,000
107186	Allyl alcohol	1,000
107119	Allylamine	500
20859738	Aluminum phosphide	500
2763964	5-(Aminomethyl)-3-isoxazolol	500/10,000
54626	Aminopterin	500/10,000
504245	4-Aminopyridine	500/10,000
78535	Amiton	500
3734972	Amiton oxalate	100/10,000
7664417	Ammonia	500
300629	Amphetamine	1,000
62533	Aniline	1,000
88051	Aniline, 2,4,6-trimethyl-	500
7783702	Antimony pentafluoride	500
1397940	Antimycin A	1,000/10,000
86884	ANTU	500/10,000
1303282	Arsenic pentoxide	100/10,000
1327533	Arsenic trioxide	100/10,000
1327533	Arsenous oxide	100/10,000
7784341	Arsenous trichloride	500
7784421	Arsine	100
2642719	Azinphos-ethyl	100/10,000
86500	Azinphos-methyl	10/10,000
151564	Aziridine	500
75558	Aziridine, 2-methyl	10,000
98873	Benzal chloride	500
98168	Benzenamine, 3-(trifluoromethyl)-	500
98055	Benzeneearsonic acid	10/10,000
100141	Benzene, 1-(chloromethyl)-4-nitro-	500/10,000
584849	Benzene, 2,4-diisocyanato-1-methyl-	500
91087	Benzene, 1,3-diisocyanato-2-methyl-	100
108985	Benzenethiol	500
3615212	Benzimidazole, 4,5-dichloro-2-(trifluoromethyl)-	500/10,000
98077	Benzoic trichloride	100
98077	Benzotrithloride	100
100447	Benzyl chloride	500
140294	Benzyl cyanide	500
15271417	Bicyclo[2.2.1]heptane-2-carbonitrile, 5-chloro-6-(((methylamino)carbonyl)oxy)imino)-, (1-alpha,2-beta,4-alpha,5-alpha,6E))-	500/10,000
1464535	2,2'-Bioxirane	500
111444	Bis(2-chloroethyl) ether	10,000
542881	Bis(chloromethyl) ether	100

CAS	EHS NAME	TPQ*
534076	Bis(chloromethyl) ketone	10/10,000
4044659	Bitoscanate	500/10,000
10294345	Borane, trichloro-	500
7637072	Borane, trifluoro-	500
10294345	Boron trichloride	500
7637072	Boron trifluoride	500
353424	Boron trifluoride compound with methyl ether (1:1)	1,000
353424	Boron, trifluoro[oxybis(methane)]-, (T-4)-	1,000
28772567	Bromadiolone	100/10,000
7726956	Bromine	500
74839	Bromomethane	1,000
4170303	2-Butenal	1,000
123739	2-Butenal, (e)-	1,000
1306190	Cadmium oxide	100/10,000
2223930	Cadmium stearate	1,000/10,000
7778441	Calcium arsenate	500/10,000
8001352	Campechlor	500/10,000
8001352	Camphene, octachloro-	500/10,000
56257	Cantharidin	100/10,000
51832	Carbachol chloride	500/10,000
26419738	Carbamic acid, methyl-, O-(((2,4-dimethyl-1,3-dithiolan-2-yl)methylene)amino)-	100/10,000
1563662	Carbofuran	10/10,000
75150	Carbon disulfide	10,000
75445	Carbonic dichloride	10
79221	Carbonochloridic acid, methylester	500
108236	Carbonochloridic acid, 1-methylethyl ester	1,000
109615	Carbonochloridic acid, propylester	500
786196	Carbophenothion	500
57749	Chlordane	1,000
470906	Chlorfenvinfos	500
7782505	Chlorine	100
24934916	Chlormephos	500
999815	Chlormequat chloride	100/10,000
79118	Chloroacetic acid	100/10,000
107073	Chloroethanol	500
627112	Chloroethyl chloroformate	1,000
67663	Chloroform	10,000
542881	Chloromethyl ether	100
107302	Chloromethyl methyl ether	100
3691358	Chlorophacinone	100/10,000
542767	3-Chloropropionitrile	1,000
1982474	Chloroxuron	500/10,000
21923239	Chlorthiophos	500
10025737	Chromic chloride	1/10,000
10210681	Cobalt carbonyl	10/10,000
62207765	Cobalt, ((2,2'-(1,2-ethanediyldis(nitrilomethylidene))bis(6-fluorophenylato))((2-)-N,N',O,O')-	100/10,000
64868	Colchicine	10/10,000

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CAS	EHS NAME	TPQ*
56724	Coumaphos	100/10,000
5836293	Coumatetralyl	500/10,000
95487	o-Cresol	1,000/10,000
535897	Crimidine	100/10,000
4170303	Crotonaldehyde	1,000
123739	Crotonaldehyde, (E)-	1,000
12002038	Cupric acetoarsenite	500/10,000
506683	Cyanogen bromide	500/10,000
506785	Cyanogen iodide	1,000/10,000
2636262	Cyanophos	1,000
675149	Cyanuric fluoride	100
108918	Cyclohexanamine	10,000
58899	Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1.alpha.,2.alpha.,3.beta.,4.alpha.,5.alpha.,6.beta.)-	1,000/10,000
66819	Cycloheximide	100/10,000
108918	Cyclohexylamine	10,000
17702419	Decaborane(14)	500/10,000
8065483	Demeton	500
919868	Demeton-S-methyl	500
10311849	Dialifor	100/10,000
19287457	Diborane	100
19287457	Diborane(6)	100
110576	trans-1,4-Dichloro-2-butene	500
110576	trans-1,4-Dichlorobutene	500
111444	Dichloroethyl ether	10,000
542881	Dichloromethyl ether	100
149746	Dichloromethylphenylsilane	1,000
696286	Dichlorophenylarsine	500
62737	Dichlorvos	1,000
141662	Dicrotophos	100
1464535	Diepoxybutane	500
814493	Diethyl chlorophosphate	500
297972	O,O-Diethyl O-pyrazinyl phosphorothioate	500
71636	Digitoxin	100/10,000
2238075	Diglycidyl ether	1,000
20830755	Digoxin	10/10,000
115264	Dimefox	500
309002	1,4:5,8-Dimethanonaphthalene, 1,2,3,4,10,10-hexachloro-1,4,4a,5,8,8a-hexahydro-(1.alpha.,4.alpha.,4a.beta.,5.alpha.,8.alpha.,8a.beta.)-	500/10,000
60515	Dimethoate	500/10,000
2524030	Dimethyl chlorothiophosphate	500
75785	Dimethyldichlorosilane	500
57147	1,1-Dimethyl hydrazine	1,000
57147	Dimethylhydrazine	1,000
99989	Dimethyl-p-phenylenediamine	10/10,000
2524030	Dimethyl phosphorochloridothioate	500
77781	Dimethyl sulfate	500
644644	Dimetilan	500/10,000
88857	Dinitrobutyl phenol	100/10,000

CAS	EHS NAME	TPQ*
534521	4,6-Dinitro-o-cresol	10/10,000
534521	Dinitrocresol	10/10,000
88857	Dinoseb	100/10,000
1420071	Dinoterb	500/10,000
78342	Dioxathion	500
82666	Diphacinone	10/10,000
152169	Diphosphoramidate, octamethyl-	100
298044	Disulfoton	500
514738	Dithiazanine iodide	500/10,000
541537	Dithiobiuret	100/10,000
541537	2,4-Dithiobiuret	100/10,000
316427	Emetine, dihydrochloride	1/10,000
115297	Endosulfan	10/10,000
2778043	Endothion	500/10,000
72208	Endrin	500/10,000
106898	Epichlorohydrin	1,000
2104645	EPN	100/10,000
50146	Ergocalciferol	1,000/10,000
379793	Ergotamine tartrate	500/10,000
107153	1,2-Ethanediamine	10,000
79210	Ethaneperoxy acid	500
1622328	Ethanesulfonyl chloride, 2-chloro-	500
505602	Ethane, 1,1'-thiobis[2-chloro-	500
16752775	Ethanimidothioic acid, N-[[methylamino]carbonyl]	500/10,000
10140871	Ethanol, 1,2-dichloro-, acetate	1,000
563122	Ethion	1,000
13194484	Ethoprop	1,000
13194484	Ethoprophos	1,000
538078	Ethylbis(2-chloroethyl)amine	500
107120	Ethyl cyanide	500
107153	Ethylenediamine	10,000
371620	Ethylene fluorohydrin	10
151564	Ethyleneimine	500
75218	Ethylene oxide	1,000
542905	Ethylthiocyanate	10,000
22224926	Fenamiphos	10/10,000
115902	Fensulfothion	500
4301502	Fluenetil	100/10,000
7782414	Fluorine	500
640197	Fluoroacetamide	100/10,000
144490	Fluoroacetic acid	10/10,000
62748	Fluoroacetic acid, sodium salt	10/10,000
359068	Fluoroacetyl chloride	10
51218	Fluorouracil	500/10,000
944229	Fonofos	500
50000	Formaldehyde	500
107164	Formaldehyde cyanohydrin	1,000
23422539	Formetanate hydrochloride	500/10,000
2540821	Formothion	100
17702577	Formparanate	100/10,000
21548323	Fosthietan	500
3878191	Fuberidazole	100/10,000

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CAS	EHS NAME	TPQ*
110009	Furan	500
13450903	Gallium trichloride	500/10,000
58899	Hexachlorocyclohexane (gamma isomer)	1,000/10,000
77474	Hexachlorocyclopentadiene	100
4835114	Hexamethylenediamine, N,N'-dibutyl-	500
302012	Hydrazine	1,000
57147	Hydrazine, 1,1-dimethyl-	1,000
60344	Hydrazine, methyl-	500
74908	Hydrocyanic acid	100
7664393	Hydrofluoric acid	100
7647010	Hydrogen chloride (gas only)	500
74908	Hydrogen cyanide	100
7664393	Hydrogen fluoride	100
7722841	Hydrogen peroxide (Conc.> 52%)	1,000
7783075	Hydrogen selenide	10
7783064	Hydrogen sulfide	500
123319	Hydroquinone	500/10,000
13463406	Iron carbonyl (Fe(CO) ₅), (TB-5-11)-	100
13463406	Iron, pentacarbonyl-	100
297789	Isobenzan	100/10,000
78820	Isobutyronitrile	1,000
102363	Isocyanic acid, 3,4-dichlorophenyl ester	500/10,000
465736	Isodrin	100/10,000
55914	Isofluorophate	100
4098719	Isophorone diisocyanate	500
108236	Isopropyl chloroformate	1,000
119380	Isopropylmethylpyrazolyl dimethylcarbamate	500
556616	Isothiocyanatomethane	500
78977	Lactonitrile	1,000
21609905	Leptophos	500/10,000
541253	Lewisite	10
58899	Lindane	1,000/10,000
7580678	Lithium hydride	100
109773	Malononitrile	500/10,000
12108133	Manganese, tricarbonyl methylcyclopentadienyl	100
51752	Mechlorethamine	10
950107	Mephosfolan	500
2032657	Mercaptodimethur	500/10,000
1600277	Mercuric acetate	500/10,000
7487947	Mercuric chloride	500/10,000
21908532	Mercuric oxide	500/10,000
10476956	Methacrolein diacetate	1,000
760930	Methacrylic anhydride	500
126987	Methacrylonitrile	500
920467	Methacryloyl chloride	100
30674807	Methacryloyloxyethyl isocyanate	100
10265926	Methamidophos	100/10,000
62759	Methanamine, N-methyl-N-nitroso-	1,000
107302	Methane, chloromethoxy-	100
624839	Methane, isocyanato-	500

CAS	EHS NAME	TPQ*
542881	Methane, oxybis[chloro-	100
594423	Methanesulfonyl chloride, trichloro-	500
558258	Methanesulfonyl fluoride	1,000
509148	Methane, tetranitro-	500
74931	Methanethiol	500
67663	Methane, trichloro-	10,000
57749	4,7-Methanoindan, 1,2,3,4,5,6,7,8,8-octachloro-2,3,3a,4,7,7a-hexahydro-	1,000
950378	Methidathion	500/10,000
2032657	Methiocarb	500/10,000
16752775	Methomyl	500/10,000
151382	Methoxyethylmercuric acetate	500/10,000
74839	Methyl bromide	1,000
80637	Methyl 2-chloroacrylate	500
79221	Methyl chlorocarbonate	500
79221	Methyl chloroformate	500
60344	Methyl hydrazine	500
624839	Methyl isocyanate	500
556616	Methyl isothiocyanate	500
75865	2-Methylactonitrile	1,000
74931	Methyl mercaptan	500
502396	Methylmercuric dicyanamide	500/10,000
298000	Methyl parathion	100/10,000
3735237	Methyl phenkapton	500
676971	Methyl phosphonic dichloride	100
556649	Methyl thiocyanate	10,000
75796	Methyltrichlorosilane	500
78944	Methyl vinyl ketone	10
1129415	Metolcarb	100/10,000
7786347	Mevinphos	500
315184	Mexacarbate	500/10,000
50077	Mitomycin C	500/10,000
6923224	Monocrotophos	10/10,000
2763964	Muscimol	500/10,000
505602	Mustard gas	500
13463393	Nickel carbonyl	1
54115	Nicotine	100
65305	Nicotine sulfate	100/10,000
7697372	Nitric acid	1,000
10102439	Nitric oxide	100
98953	Nitrobenzene	10,000
1122607	Nitrocyclohexane	500
10102440	Nitrogen dioxide	100
10102439	Nitrogen oxide (NO)	100
62759	N-Nitrosodimethylamine	1,000
62759	Nitrosodimethylamine	1,000
991424	Norbormide	100/10,000
0	Organorhodium Complex (PMN-82-147)	10/10,000
630604	Ouabain	100/10,000
23135220	Oxamyl	100/10,000
78717	Oxetane, 3,3-bis(chloromethyl)-	500
75218	Oxirane	1,000

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CAS	EHS NAME	TPQ*
106898	Oxirane, (chloromethyl)-	1,000
75569	Oxirane, methyl-	10,000
2497076	Oxydisulfoton	500
10028156	Ozone	100
1910425	Paraquat dichloride	10/10,000
2074502	Paraquat methosulfate	10/10,000
56382	Parathion	100
298000	Parathion-methyl	100/10,000
12002038	Paris green	500/10,000
19624227	Pentaborane	500
2570265	Pentadecylamine	100/10,000
79210	Peracetic acid	500
594423	Perchloromethyl mercaptan	500
108952	Phenol	500/10,000
64006	Phenol, 3-(1-methylethyl)-, methylcarbamate	500/10,000
4418660	Phenol, 2,2'-thiobis[4-chloro-6-methyl-	100/10,000
58366	Phenoxarsine, 10,10'-oxydi-	500/10,000
696286	Phenyl dichloroarsine	500
59881	Phenylhydrazine hydrochloride	1,000/10,000
62384	Phenylmercuric acetate	500/10,000
62384	Phenylmercury acetate	500/10,000
2097190	Phenylsilatrane	100/10,000
103855	Phenylthiourea	100/10,000
298022	Phorate	10
4104147	Phosacetim	100/10,000
947024	Phosfolan	100/10,000
75445	Phosgene	10
13171216	Phosphamidon	100
7803512	Phosphine	500
2703131	Phosphonothioic acid, methyl-, O-ethyl O-(4-(methylthio)phenyl) ester	500
50782699	Phosphonothioic acid, methyl-, S-(2-(bis(1-methylethyl)amino)ethyl) O-ethyl ester	100
2665307	Phosphonothioic acid, methyl-, O-(4-nitrophenyl) O-phenyl ester	500
62737	Phosphoric acid, 2-dichloroethenyl dimethyl ester	1,000
3254635	Phosphoric acid, dimethyl 4-(methylthio) phenyl ester	500
13194484	Phosphorodithioic acid O-ethyl S,S-dipropyl ester	1,000
56382	Phosphorothioic acid, O,O-diethyl-O-(4-nitrophenyl) ester	100
2587908	Phosphorothioic acid, O,O-dimethyl-5-(2-(methylthio)ethyl)ester	500
7719122	Phosphorous trichloride	1,000
7723140	Phosphorus	100
10025873	Phosphorus oxychloride	500
10026138	Phosphorus pentachloride	500
7719122	Phosphorus trichloride	1,000
10025873	Phosphoryl chloride	500
57476	Physostigmine	100/10,000
57647	Physostigmine, salicylate (1:1)	100/10,000

CAS	EHS NAME	TPQ*
124878	Picrotoxin	500/10,000
110894	Piperidine	1,000
23505411	Pirimifos-ethyl	1,000
75741	Plumbane, tetramethyl-	100
10124502	Potassium arsenite	500/10,000
151508	Potassium cyanide	100
506616	Potassium silver cyanide	500
2631370	Promecarb	500/10,000
107120	Propanenitrile	500
78820	Propanenitrile, 2-methyl-	1,000
106967	Propargyl bromide	10
107028	2-Propenal	500
107119	2-Propen-1-amine	500
107131	2-Propenenitrile	10,000
126987	2-Propenenitrile, 2-methyl-	500
107186	2-Propen-1-ol	1,000
814686	2-Propenoyl chloride	100
57578	beta-Propiolactone	500
107120	Propionitrile	500
542767	Propionitrile, 3-chloro-	1,000
70699	Propiophenone, 4'-amino	100/10,000
109615	Propyl chloroformate	500
75558	Propyleneimine	10,000
75569	Propylene oxide	10,000
2275185	Prothoate	100/10,000
129000	Pyrene	1,000/10,000
504245	Pyridine, 4-amino-	500/10,000
140761	Pyridine, 2-methyl-5-vinyl-	500
1124330	Pyridine, 4-nitro-, 1-oxide	500/10,000
53558251	Pyriminil	100/10,000
14167181	Salcomine	500/10,000
107448	Sarin	10
7783008	Selenious acid	1,000/10,000
7791233	Selenium oxychloride	500
563417	Semicarbazide hydrochloride	1,000/10,000
3037727	Silane, (4-aminobutyl)diethoxymethyl-	1,000
75774	Silane, chlorotrimethyl-	1,000
75785	Silane, dichlorodimethyl-	500
75796	Silane, trichloromethyl-	500
7631892	Sodium arsenate	1,000/10,000
7784465	Sodium arsenite	500/10,000
26628228	Sodium azide (Na(N3))	500
124652	Sodium cacodylate	100/10,000
143339	Sodium cyanide (Na(CN))	100
62748	Sodium fluoroacetate	10/10,000
13410010	Sodium selenate	100/10,000
10102188	Sodium selenite	100/10,000
10102202	Sodium tellurite	500/10,000
900958	Stannane, acetoxetriphenyl-	500/10,000
57249	Strychnine	100/10,000
60413	Strychnine, sulfate	100/10,000
3689245	Sulfotep	500
3569571	Sulfoxide, 3-chloropropyl octyl	500

October 2006 List

SARA Title III EXTREMELY HAZARDOUS SUBSTANCES

CAS	EHS NAME	TPQ*
7446095	Sulfur dioxide	500
7783600	Sulfur fluoride (SF ₄), (T-4)-	100
7664939	Sulfuric acid	1,000
7783600	Sulfur tetrafluoride	100
7446119	Sulfur trioxide	100
77816	Tabun	10
7783804	Tellurium hexafluoride	100
107493	TEPP	100
13071799	Terbufos	100
3689245	Tetraethyldithiopyrophosphate	500
78002	Tetraethyl lead	100
107493	Tetraethyl pyrophosphate	100
597648	Tetraethyltin	100
75741	Tetramethyllead	100
509148	Tetranitromethane	500
6533739	Thallium(I) carbonate	100/10,000
7791120	Thallium chloride TlCl	100/10,000
7446186	Thallium(I) sulfate	100/10,000
10031591	Thallium sulfate	100/10,000
6533739	Thallous carbonate	100/10,000
7791120	Thallous chloride	100/10,000
2757188	Thallous malonate	100/10,000
7446186	Thallous sulfate	100/10,000
2231574	Thiocarbazine	1,000/10,000
556649	Thiocyanic acid, methyl ester	10,000
39196184	Thiofanox	100/10,000
74931	Thiomethanol	500
297972	Thionazin	500
108985	Thiophenol	500
79196	Thiosemicarbazide	100/10,000
5344821	Thiourea, (2-chlorophenyl)-	100/10,000
614788	Thiourea, (2-methylphenyl)-	500/10,000

CAS	EHS NAME	TPQ*
86884	Thiourea, 1-naphthalenyl-	500/10,000
7550450	Titanium chloride (TiCl ₄) (T-4)-	100
7550450	Titanium tetrachloride	100
584849	Toluene-2,4-diisocyanate	500
91087	Toluene-2,6-diisocyanate	100
8001352	Toxaphene	500/10,000
1031476	Triamiphos	500/10,000
24017478	Triazofos	500
76028	Trichloroacetyl chloride	500
1558254	Trichloro(chloromethyl)silane	100
27137855	Trichloro(dichlorophenyl)silane	500
115219	Trichloroethylsilane	500
594423	Trichloromethanesulfonyl chloride	500
327980	Trichloronate	500
98135	Trichlorophenylsilane	500
998301	Triethoxysilane	500
75774	Trimethylchlorosilane	1,000
824113	Trimethylolpropane phosphite	100/10,000
1066451	Trimethyltin chloride	500/10,000
639587	Triphenyltin chloride	500/10,000
555771	Tris(2-chloroethyl)amine	100
2001958	Valinomycin	1,000/10,000
1314621	Vanadium pentoxide	100/10,000
108054	Vinyl acetate	1,000
108054	Vinyl acetate monomer	1,000
81812	Warfarin	500/10,000
129066	Warfarin sodium	100/10,000
28347139	Xylylene dichloride	100/10,000
58270089	Zinc, dichloro(4,4-dimethyl-5((((methylamino)carbonyl)oxy)imino)pentanenitrile)-, (T-4)-	100/10,000
1314847	Zinc phosphide	500

***TPQ** = Threshold Planning Quantity in **pounds**.
For some solid chemicals, there are two TPQs (e.g. 500/10,000). The lower TPQ applies to solids in powder form, in solution, or in molten form.

October 2006 List

APPENDIX B

Appendix B: List of Lists

Provided here are the Appendices of the [USEPA's List of Lists](#). This document can be viewed in its entirety at (epa.gov/epcra/consolidated-list-lists) in the following formats:

- ❖ [PDF version of EPCRA/CERCLA/CAA §112\(r\) Consolidated List of Lists](#)
- ❖ [PDF of changes to the Consolidated List of Lists](#)
- ❖ [Excel version of the Consolidated List of Lists](#)

APPENDIX C

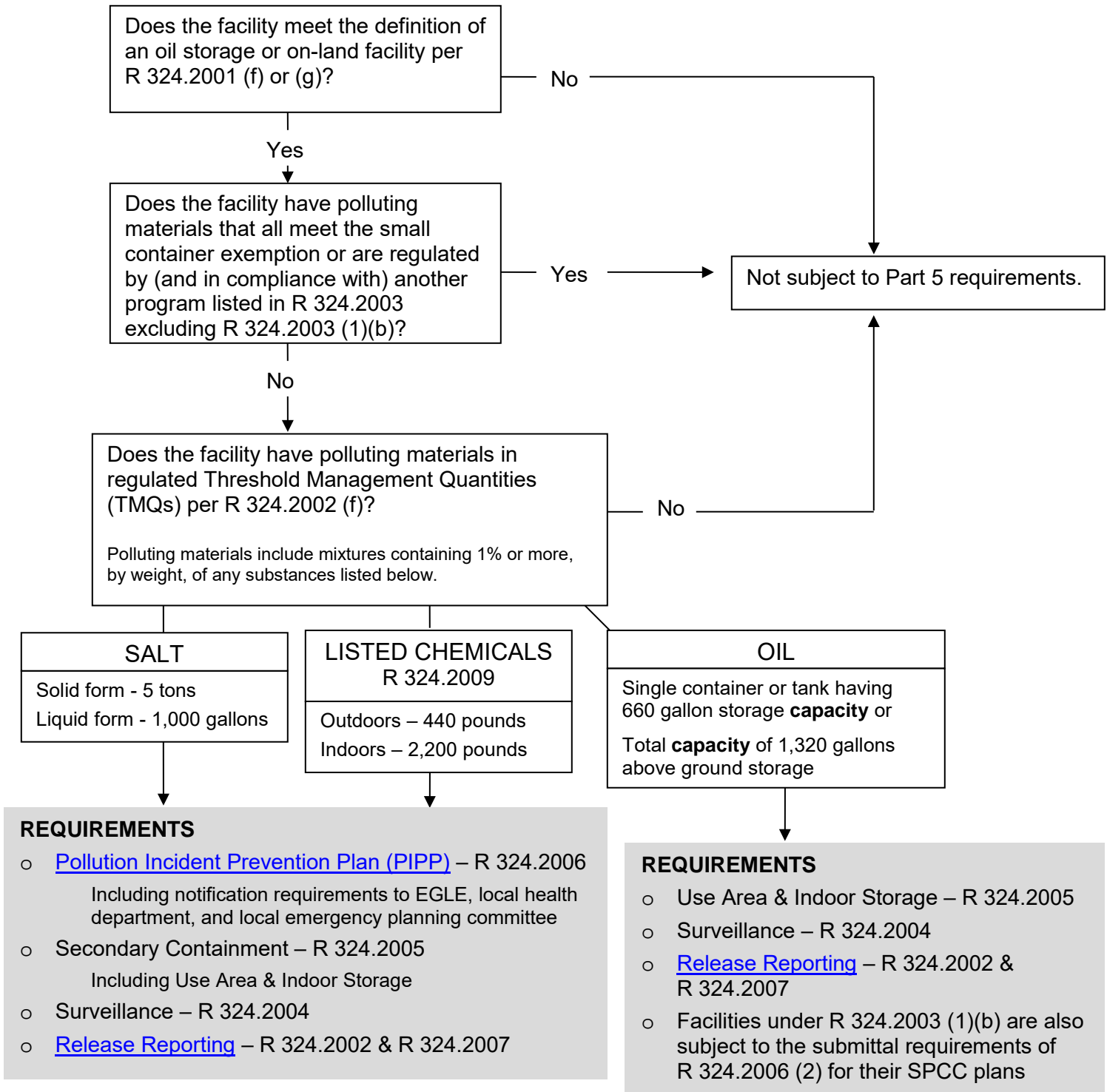
Appendix C: **Natural Resources and Environmental Protection Act (NREPA) Part 31 – Part 5 Rules**

- **Applicability Flow Chart**
- **Part 5 Rules with Notes**

Applicability Flow Chart - Part 5 Rules

Spillage of Oil and Polluting Materials

Review the administrative rules (R 324.2001 – R 324.2009) on the following pages and ask the questions below to determine if the Part 5 requirements apply.



For more information, go to Michigan.gov/EGLEwater - “Part 5 Rules - Spillage of Oil, Polluting Materials” or contact the Environmental Assistance Center at 800-662-9278

Report spills: Contact 911 and the Michigan Pollution Emergency Alerting System (PEAS) at 800-292-4706

NOTE: The Part 5 rules, Spillage of Oil and Polluting Materials, are promulgated pursuant to [Part 31](#), Water Resources Protection, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (Act 451) MCL 324.3101 et seq. These rules became effective August 31, 2001.

The Department of Environment, Great Lake, and Energy (EGLE), Water Division, oversees the Part 5 rules per the DEQ Delegation Letter WD-01, effective September 15, 2002. Subsequent reorganization resulted in the Part 5 rules being overseen by the ELGE Water Resources Division. Internet links and notes have been inserted in this file to aid the reader in finding referenced regulations and program information.

**DEPARTMENT OF ENVIRONMENT, GREAT LAKES, AND ENERGY
WATER RESOURCES DIVISION**

WATER RESOURCES PROTECTION

Filed with the Secretary of State on August 23, 2001. These rules take effect 7 days after filing with the Secretary of State. (By authority conferred on the director and the department of environmental quality by sections 3102 and 3106 of 1994 PA 451, MCL 324.3102 and 324.3106, and Executive Reorganization Order No. 1991-22, MCL 299.13)

R 324.2001 to R 324.2009 are added to the Michigan Administrative Code and R 323.1151 to R 323.1159, R 323.1162 to R 323.1164, and R 323.1169 of the Code are rescinded to read as follows:

PART 5. SPILLAGE OF OIL AND POLLUTING MATERIALS

R 323.1151	Rescinded	R 323.1158	Rescinded
R 323.1152	Rescinded	R 323.1159	Rescinded
R 323.1153	Rescinded	R 323.1162	Rescinded
R 323.1154	Rescinded	R 323.1163	Rescinded
R 323.1155	Rescinded	R 323.1164	Rescinded
R 323.1156	Rescinded	R 323.1169	Rescinded
R 323.1157	Rescinded		

R 324.2001 Definitions; a to o.

Rule 1. As used in this part:

- (a) "Act" means [1994 PA 451](#), MCL 324.101 et seq., and known as the natural resources and environmental protection act.
- (b) "Department" means the department of environmental quality.
- (c) "Indoors" means within a building or other enclosure which provides protection from the elements, which has doors or other means of entry that can be closed or otherwise protected from unauthorized entry, and which has a floor capable of containing liquid or solid materials.
- (d) "Manufactured item" means any solid article, other than a container holding solid or liquid polluting materials, which is formed to specific shape during manufacture, and which does not leach or otherwise release polluting materials to the groundwaters or surface waters of the state under normal conditions of use or storage.
- (e) "Oil" means oil of any kind or in any form, including any of the following:
 - (i) Petroleum.
 - (ii) Gasoline.
 - (iii) Fuel oil.
 - (iv) Grease.
 - (v) Oily sludges.
 - (vi) Oil refuse.

(vii) Oil mixed with waste.

(f) "Oil storage facility" means a temporary or permanent land-based industry, plant, establishment, firm, or other facility which receives, processes, manufactures, uses, stores, or ships oil, and at which there is present an amount of oil equal to or more than the threshold management quantity and which is so situated that oil could directly or indirectly reach the surface or groundwaters of this state, including any facility that discharges through a public sewer system. "Oil-storage facility" does not include an oil field petroleum or brine storage facility, a recreational marina, installations of oil-containing electrical equipment, or any transportation-related facility, as defined in [40 C.F.R. part 112](#).

(g) "On-land facility" means a temporary or permanent land-based industry, plant, establishment, firm, storage site, or other facility, which receives, processes, manufactures, uses, stores or ships polluting materials and at which there is present an amount of any polluting material equal to or more than its threshold management quantity and which is so situated that loss of polluting materials could directly or indirectly reach the surface or groundwaters of this state, including any facility which discharges through a public sewer system. "On-land facility" does not include an oil storage facility, an oil field petroleum or brine storage facility, a recreational marina, installations of oil containing electrical equipment, or a transportation-related facility as defined in [40 C.F.R. part 112](#).

NOTE: See [Water Bureau POG #1](#) regarding transportation, storage, and use areas of polluting materials in railcars and trucks at Part 5 facilities.

R 324.2002 Definitions; p to u.

Rule 2. As used in this part:

(a) "Polluting material" means all of the following:

- (i) Oil.
- (ii) Salt.
- (iii) Any material specified in table 1 in R 324.2009.
- (iv) Any compound or product that contains 1%, or more, by weight, of any material listed in paragraphs (i) through (iii) of this subdivision based on material safety data sheet formulation information for the compounds or products.
- (v) "Polluting material" does not include manufactured items.

NOTE: This document includes R 324.2009 polluting materials in 2 lists, one is sorted by the CAS number and the other is sorted alphabetically by chemical name.

(b) "Release" is defined in section 20101(1)(bb) of the act. For the purposes of this rule, "release" does not include any of the following:

CORRECTION: "Release" is defined in [section 20101\(1\)\(II\)](#) of the act.

- (i) Spilling, leaking, or discharging less than 1000 gallons of a polluting material into a secondary containment structure that complies with these rules, if recovery of the material spilled, leaked, or discharged is initiated within 24 hours of detection, is completed as soon as practicable, but not more than 72 hours after detection, and if no polluting materials are released directly or indirectly to any public sewer system or to the surface waters or groundwaters of this state.
- (ii) Spilling, leaking, or discharging less than 55 gallons of oil to the ground surface, if the spill, leak, or discharge is detected and the oil recovered within 24 hours of the spill, leak, or discharge, and if oil is not released directly or indirectly to any public sewer system or to the surface waters or groundwaters of this state.
- (iii) Spilling, leaking, or discharging less than 55 gallons of oil to the surface waters of this state, if effective recovery measures are implemented in response to the spill, leak, or discharge immediately upon detection.
- (iv) Releases of air contaminants as defined in section 5501(a) of the act.
- (iv) Permitted releases as defined in section 20101(1)(aa) of the act.

CORRECTION: "Permitted release" is defined in [section 20101\(1\)\(ii\)](#) of the act.

(c) "Salt" means sodium chloride, potassium chloride, calcium chloride, and magnesium chloride, and solutions or mixtures of these compounds in solid or liquid form.

(d) "Secondary containment structure" means a unit, other than the primary container in which polluting material is packaged or held, that is designed, constructed, and operated so that the polluting material cannot escape from the unit through public sewers, drains, or otherwise directly or indirectly into any public sewer system or to the surface waters or groundwaters of this state.

(e) "Sewer system" is defined in R 299.2903(8).

CORRECTION: "Sewer system" is defined in [R 299.2903\(l\)](#).

(f) "Threshold management quantity" means any of the following:

- (i) For salt in solid form used, stored, or otherwise managed at any location at or within an on-land or oil storage facility, 5 tons.
- (ii) For salt in liquid form used, stored, or otherwise managed at any location at or within an on-land or oil storage facility, 1000 gallons.
- (iii) For oil, 1320 gallons in aboveground tanks or containers if no single tank or container has a capacity of more than of 660 gallons.
- (iv) For all other polluting materials at any discrete outdoor use or storage location at an on-land or oil storage facility, 200 kilograms (440 pounds).
- (v) For all other polluting materials at any discrete indoor use or storage location at an on-land or oil storage facility, 1000 kilograms (2200 pounds).

(g) "Threshold reporting quantity" means any of the following:

- (i) For releases of oil to the surface of the ground, 50 pounds.
- (ii) For releases of oil to the waters of the state, any quantity that causes unnatural turbidity, color, visible sheens, oil films, foams, solids, or deposits in the receiving waterbody.
- (iii) For release of salt to the surface of the ground, or waters of the state, 50 pounds in solid form, unless the use is authorized by the department for deicing purposes, or 50 gallons in liquid form, unless authorized by the department as a dust suppressant or deicing agent or permitted under part 31 of the act.

NOTE: See [R 323.2210\(b\)](#) in the Part 22 groundwater quality rules about applications for deicing and dust control. Discuss requirements with Water Resources Division groundwater discharge program [district staff](#).

- (iv) For releases of all other polluting materials, the quantity specified in table 1 in R 324.2009, or any quantity that causes unnatural turbidity, color, visible sheens, oil films, foams, solids, or deposits in the receiving waterbody.

(h) "Use area" means any area within an oil storage facility or on-land facility that is used for handling, treating, or processing polluting materials.

R 324.2003 Conditional exemptions.

Rule 3. (1) Except as otherwise provided in these rules, the following facilities are exempt from these rules subject to the following conditions:

(a) Any facility that manages polluting materials in excess of threshold quantities is exempt from these rules if the polluting materials are managed in containers that do not individually exceed 10 gallons or 100 pounds in capacity and that are located indoors at a facility that is designed, constructed, maintained, and operated to prevent any spilled polluting material from being released directly or indirectly to the surface or groundwaters of the state.

NOTE: See [Water Bureau POG #4](#) regarding Part 5 rule requirements clarifying conditional exemptions for sulfuric acid batteries in equipment.

(b) An on-land or oil storage facility which does not manage any other polluting materials in excess of an applicable threshold management quantity and which is otherwise subject to the federal oil pollution prevention requirements of 40 C.F.R. part 110 or 112, (1997), shall comply with these rules by fully complying

with the federal requirements and shall also report all releases of oil as required in R 324.2007. The owner or operator of such a facility shall submit a copy of the facility's spill prevention, control, and countermeasure plan in accordance with R 324.2006(2). An oil storage facility that manages both oil and other polluting materials in excess of an applicable threshold management quantity shall comply with these rules for the other polluting materials. Failure to fully comply with the federal oil pollution prevention requirements is a violation of these rules and the federal requirements and is subject to the provisions of part 31 of the act.

NOTE: See [Water Bureau POG #2](#) regarding Part 5 rule requirements when a facility is subject to federal regulations noted in Rule 3(1)(b).

(c) An on-land or oil storage facility subject to [1941 PA 207](#), MCL 29.1, et seq., and known as the fire prevention code, shall comply with these rules by fully complying with the provisions of 1941 PA 207, for any flammable liquids, or combustible liquids, or both, subject to 1941 PA 207. An on-land facility that manages flammable liquids, or combustible liquids, or both, and other polluting materials in excess of an applicable threshold management quantity shall comply with these rules for the other polluting materials.

(d) An on-land or oil storage facility that owns or manages underground storage tanks subject to [part 211](#) or [213](#) of the act shall comply with these rules by fully complying with the requirements of part 211 or 213 of the act for the underground storage tanks. An on-land or oil storage facility that has underground storage tanks subject to part 211 or 213 of the act that also manages other polluting materials in excess of an applicable threshold management quantity that are not subject to part 211 or 213 of the act shall comply with these rules for the other polluting materials.

(e) An on-land or oil storage facility that manages hazardous wastes subject to [part 111](#) of the act shall comply with these rules by fully complying with the requirements of part 111 of the act for those hazardous wastes. An on-land or oil storage facility that manages hazardous wastes subject to part 111 of the act that also manages other polluting materials in excess of an applicable threshold management quantity that are not subject to part 111 of the act shall comply with these rules for the other polluting materials.

(f) An on-land or oil storage facility that is subject to [part 615](#) of the act shall comply with these rules by fully complying with the requirements of part 615 of the act. An on-land or oil storage facility subject to part 615 of the act that also manages other polluting materials in excess of an applicable threshold management quantity that are not subject to part 615 of the act shall comply with these rules for the other polluting materials.

(2) Notwithstanding any other provision of these rules, if the department determines, on the basis of the physical state, chemical properties, location, manner of management, or proximity to vulnerable natural resources, that a facility that receives, uses, processes, manufactures, stores, or ships polluting materials in amounts less than an applicable threshold management quantity, can, if there is a release, be reasonably expected to cause substantial harm to the surface or groundwaters of the state, then the facility may be required to comply with these rules by a permit or an order issued under part 31 of the act and the rules promulgated under part 31 of the act.

R 324.2004 Oil storage and on-land facilities: surveillance.

Rule 4. Oil storage and on-land facilities shall maintain adequate surveillance of all manufacturing processes, treatment systems, storage areas, and other such areas so that any polluting material loss therefrom can be detected in a timely manner and procedures implemented to prevent any polluting materials from reaching the waters of this state.

R 324.2005 Secondary containment.

Rule 5. (1) Except as may be authorized under subrule (5) of this rule, not later than 24 months after the effective date of these rules, any on-land facility that has any outdoor storage areas used to store liquid polluting materials in excess of a threshold management quantity shall provide secondary containment structures for those outdoor storage areas as required in subrule (2) of this rule.

(2) Secondary containment structures for liquids shall comply with all of the following provisions:

(a) Be constructed of materials that are compatible with, and impervious to, or otherwise capable of containing, any spilled, leaked, or discharged polluting materials so that the materials can be recovered and so

that polluting materials cannot escape directly or indirectly to any public sewer system or to the surface waters or groundwaters of this state.

(b) Provide a capacity that is not less than 10% of the total volume of the tanks or containers within the secondary containment structure or provide a capacity of 100% of the largest single tank or container within the secondary containment structure, whichever is larger.

(c) Allow surveillance of the tanks or containers, the timely detection of any leaks and recovery of any spillage, and the removal and proper disposal of any captured precipitation so that the minimum required capacity is maintained at all times. Captured precipitation may be removed by drainage through normally closed valves if all of the following conditions are met:

- (i) The drainage is conducted under the direct supervision of qualified facility personnel.
- (ii) The valves are secured closed at all times, except during precipitation removal.
- (iii) The drainage is performed in full compliance with all applicable local, state, and federal requirements.

(3) All use areas and indoor storage areas shall be designed, constructed, maintained, and operated to prevent the release of polluting materials through sewers, drains, or otherwise directly or indirectly into any public sewer system or to the surface or groundwaters of this state.

(4) Polluting materials in solid form shall be enclosed, covered, contained, or otherwise protected to prevent run-on and any runoff, seepage, or leakage to any public sewer system or to the surface or groundwaters of the state. Solid polluting materials shall not be stored within 50 feet of a designated wetland or the shore or bank of any lake or stream. Solid polluting material containment structures located within a [100-year floodplain](#) as defined by the federal flood disaster protection act of 1973, 42 U.S.C. 4001 et seq., shall be designed and constructed to remain effective during a 100-year flood.

(5) Alternate secondary containment, control, or treatment systems other than those required in subrule (1) of this rule that provide adequate protection may be used upon written approval of the department. Requests for alternate secondary containment, control, or treatment systems shall be submitted in writing to the chief of the department's waste management division. The chief of the department's waste management division, or his or her authorized delegee, shall either approve, approve with specific modifications, or disapprove a request for an alternate secondary containment, control, or treatment system not more than 180 days after receipt.

R 324.2006 Pollution incident prevention plan.

Rule 6. (1) Except as provided in subrule (3) of this rule, not more than 24 months after the effective date of these rules, the owner or operator of any on-land facility that receives, uses, processes, manufactures, stores, or ships polluting materials in excess of the applicable threshold management quantity shall develop, maintain, and operate in accordance with, a pollution incident prevention plan. At a minimum, the pollution incident prevention plan shall include all of the following information:

- (a) All of the following general facility information:
 - (i) Facility name.
 - (ii) Mailing address.
 - (iii) Street address, if other than the mailing address.
 - (iv) Facility phone number.
 - (v) 24-hour emergency phone number or numbers.
 - (vi) Internal emergency notification procedures.
 - (vii) The name of the designated spill prevention and control coordinator.
 - (viii) The name of the person or persons responsible for on-site spill prevention and control, if different than the designated spill prevention and control coordinator.
 - (ix) The name of the facility owner.
 - (x) A map showing the facility relative to the surrounding area, including thoroughfares.
- (b) Procedures for emergency notification of all of the following entities:
 - (i) The department's pollution emergency alerting system (PEAS).
 - (ii) National response center.
 - (iii) Local emergency planning committee.

- (ix) Local fire department.
- (x) Local law enforcement agency.
- (vi) Municipal wastewater treatment plant if the facility is served by a municipal wastewater treatment plant.
- (vii) Appropriate spill cleanup contractor, or consulting firm, or both.
- (c) All of the following spill control and cleanup procedures:
 - (i) Inventory and location of spill control and cleanup equipment available on-and off-site.
 - (ii) Procedures for response and cleanup.
 - (iii) Procedures for characterization and disposal of recovered materials.
- (d) A polluting material inventory, including all of the following information:
 - (i) Identification of all polluting materials typically on-site in quantities exceeding the threshold management quantity during the preceding 12 months. The materials shall be identified by product name, chemical name, and chemical abstracts service number.
 - (ii) The location of material safety data sheets for all polluting materials on-site in quantities exceeding the threshold management quantity.
- (e) A site plan depicting relevant site structures and all storage and use areas where polluting materials are managed on-site in quantities exceeding the threshold management quantity, including any of the following:
 - (i) Aboveground and underground tanks.
 - (ii) Floor drains.
 - (iii) Loading and unloading areas.
 - (iv) Sumps.
 - (v) On-site water supplies.
- (f) Outdoor secondary containment structures, including all of the following information:
 - (i) Location or locations.
 - (ii) Design and construction data, including dimensions, materials, capacity, and the amount of the polluting materials stored in each area.
 - (iii) Provisions for the capture and removal of spilled polluting materials.
 - (iv) Provisions for secondary containment structure physical security, including signage, gates, fences, and barriers.
 - (xi) Precipitation management procedures, including characterization and disposal procedures and copies of any permits authorizing discharge.
 - (vi) Inspection and maintenance procedures.
- (g) Other controls.
- (h) Provisions for general facility physical security.
- (2) The facility owner or operator shall maintain the plan at the facility available for inspection upon request of the department. Within 30 days after its completion, the facility owner or operator shall notify the department and certify that the facility is in full compliance with these rules and notify the local emergency planning committee and the local health department serving the facility that the pollution incident prevention plan has been completed and is available upon request. Within 30 days after receiving a request for a copy of the plan from the department, the local emergency planning committee or the local health department, the facility owner or operator shall submit a copy of the pollution incident prevention plan to the requesting agency.
- (3) A facility that is subject to other local, state, or federal emergency or contingency planning requirements may integrate the pollution incident prevention plan with other plans if the required elements of the pollution incident prevention plan are contained in the integrated plan. Upon preparation of an integrated plan, the facility owner or operator shall submit the updated plan and shall renotify the department and recertify compliance with these rules in accordance with subrule (2) of this rule.
- (4) The facility owner or operator shall evaluate the pollution incident prevention plan or integrated plan every 3 years or after any release that requires implementation of the plan, whichever is more frequent. The facility owner or operator shall update the plan when facility personnel, processes, or procedures identified in the plan change or as otherwise necessary to maintain compliance with this rule. Upon preparation of an

updated plan, the facility owner or operator shall renotify the department and recertify compliance with these rules in accordance with subrule (2) of this rule.

(5) If the department determines that a pollution incident prevention plan prepared under subrule (1) of this rule or the applicable portions of an integrated plan prepared under subrule (3) of this rule is incomplete or inadequate, then the department may inform the owner or operator of an oil storage or on-land facility, in writing, of the department's findings and recommendations and request modification of the plan. The owner or operator of the oil storage or on-land facility shall modify the plan and resubmit it in accordance with subrule (2) of this rule within 30 days after receipt of the department's request, unless a longer response period is authorized by the department in writing.

R 324.2007 *Pollution incident report.*

Rule 7. (1) As soon as practicable after detection of a release, the owner, operator, or manager of an oil storage facility or an on-land facility that releases or permits to be released any polluting material in excess of a threshold reporting quantity during any 24-hour period shall notify the department by contacting the department's PEAS at 1-800-292-4706.

NOTE: In addition to Rule 7 reporting requirements, the legislature requires additional release reporting if a facility was required to report under Rule 7 pursuant to:

Section 3111b of Part 31 was added to require a facility to call 911 (or their primary public safety answering point) and to provide a written follow-up report to their local health department if the facility is subject to release reporting under the Part 5 rules. Effective June 15, 2004.

Section 3115 of Part 31 was revised to include penalties for failing to report a release as required or having discharges in violation of Part 31. Effective June 15, 2004.

A summary for release reporting under the Part 5 rules is available at http://www.michigan.gov/documents/deq/deq-wb-emres-reporting_releases_265047_7.pdf. A facility may also be subject to other release reporting regulations. See the summary of release reporting requirements at www.michigan.gov/chemrelease.

See the [Water Bureau POG #3](#) regarding "Reporting Spills Involving Installations of Oil-Containing Electrical Equipment"

(2) Within 10 days after the release, the owner or operator shall file a written report with the chief of the department's waste management division outlining the cause of the release, discovery of the release, and the response measures taken or a schedule for completion of measures to be taken, or both, to prevent recurrence of similar releases.

NOTE: Due to the reorganization of the DEQ and subsequent merger of DEQ and DNR into the DNRE, submittal of notices and certifications as required in R 324.2006 and release reporting as required in R 324.2007 are sent to the DNRE Water Resources Division District Supervisor instead of the Waste Management Division as noted in the rule. Addresses for mailing to the district offices and Part 5 rule staff contacts are at www.michigan.gov/documents/deq/wrd-pipp-staff_344829_7.pdf. An optional release reporting form is available at www.michigan.gov/chemrelease; select "release reporting forms" and then form EQP 3465 (E).

(3) This rule does not supersede, rescind, or otherwise alter any other existing procedure, rule, or statute pertaining to pollution of the waters of this state, nor does it relieve any person from any reporting requirement imposed under federal law or regulation.

R 324.2008 *Enforcement.*

Rule 8. A person who violates any provision of this part is subject to the procedures and penalties prescribed in sections 3112, 3114, 3115, and 3115a of [part 31](#) of the act.

R 324.2009 Table 1; polluting materials sorted by CAS number.

APPENDIX C: NREPA Part 31 – Part 5 Rules

This table format is not part of the official rule package but is being provided as an aid in finding listed materials using the CAS numbers. The first entries do not have a CAS number listed in the rule.

Note: It is recommended facilities first search using CAS numbers because chemicals may be known by different names, and then if not found on this list, check by searching the alphabetical list. CAS numbers may be found on the Material Safety Data Sheets (MSDS) obtained from manufacturers or suppliers

<i>The TRQ column is the amount that requires reporting under Rule 7 if it is a release per Rule 2(b) and (g). See Rule 2(f) for threshold management quantities.</i> Name	CAS	TRQ (lbs.)
ANTIMONY COMPOUNDS		1
ARSENIC COMPOUNDS		1
Benzidine (and salts)		1
BERYLLIUM COMPOUNDS		1
CADMIUM COMPOUNDS		1
Chloramines		1
CHLORINATED BENZENES		1
Chlorinated dibenzofurans		1
Chlorinated dioxins		1
CHLORINATED ETHANES		1
CHLORINATED NAPHTHALENE		1
CHLORINATED PHENOLS		1
Chlorine (elemental and hypochlorite salts)		10
CHLOROALKYL ETHERS		1
CHROMIUM COMPOUNDS		1
COBALT COMPOUNDS		1
COKE OVEN EMISSIONS		1
COPPER COMPOUNDS		1
CYANIDE COMPOUNDS		1
DDT (p'p', o'p' and technical salts)		1
DDT AND METABOLITES		1
DICHLOROBENZIDENE		1
DIPHENYLHYDRAZINE		1
ENDOSULFAN AND METABOLITES		1
ENDRIN AND METABOLITES		1
Fine mineral fibers		
GLYCOL ETHERS		1
HALOETHERS		1
HALOMETHANES		1
HEPTACHLOR AND METABOLITES		1
LEAD COMPOUNDS		1
Lithium and lithium salts		1
MANGANESE COMPOUNDS		1
MERCURY COMPOUNDS		1
NICKEL COMPOUNDS		1
NITROPHENOLS		1
NITROSAMINES		1

<i>The TRQ column is the amount that requires reporting under Rule 7 if it is a release per Rule 2(b) and (g). See Rule 2(f) for threshold management quantities.</i> Name	CAS	TRQ (lbs.)
Pentachlorophenol (and salts)		10
PHTHALATE ESTERS		1
Polybrominated biphenyls		1
POLYCYCLIC ORGANIC MATTER		1
POLYNUCLEAR AROMATIC HYDROCARBONS		1
SELENIUM COMPOUNDS		1
SILVER COMPOUNDS		1
THALLIUM COMPOUNDS		1
Triaryl phosphate esters		10
Tributyltin (and salts and esters)		1
ZINC COMPOUNDS		1
Formaldehyde	50000	10
Phenobarbitol	50066	10
Mitomycin C	50077	10
Cyclophosphamide	50180	10
DDT	50293	1
Benzo[a]pyrene	50328	1
Reserpine	50555	500
actinomycin D	50760	10
2,4-Dinitrophenol	51285	10
Epinephrine	51434	100
Propylthiouracil	51525	10
nitrogen mustard	51752	10
Urethane	51796	10
Trichlorfon	52686	10
Famphur	52857	100
Dibenz[a,h]anthracene	53703	1
2-Acetylaminofluorene	53963	1
Nicotine and salts	54115	10
isonicotinic acid hydrazine	54853	10
N-Nitrosodiethylamine	55185	1
Fenthion	55389	1
Nitroglycerin	55630	10
Diisopropylfluorophosphate	55914	10
Methylthiouracil	56042	10
Carbon tetrachloride	56235	10
Parathion	56382	10
3-Methylcholanthrene	56495	10
Diethylstilbestrol	56531	1

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<i>The TRQ column is the amount that requires reporting under Rule 7 if it is a release per Rule 2(b) and (g). See Rule 2(f) for threshold management quantities.</i> Name	CAS	TRQ (lbs.)
Benz[a]anthracene	56553	10
Coumaphos	56724	10
Cyanides (soluble salts and complexes)	57125	10
1,1-Dimethylhydrazine	57147	10
Strychnine, and salts	57249	10
Phenytol	57410	10
Physostigmine	57476	1
Semicarbazide	57567	10
beta-Propiolactone	57578	10
Physostigmine, salicylate (1:1)	57647	1
Chlordane	57749	1
7,12-Dimethylbenz[a]anthracene	57976	1
Lindane	58899	1
2,3,4,6-Tetrachlorophenol	58902	10
p-Chloro-m-cresol	59507	500
N-Nitrosomorpholine	59892	1
N-nitrosomorpholine	59892	10
Ethylenediamine-tetraacetic acid (EDTA)	60004	500
Aminoazobenzene	60093	10
Dimethylaminoazobenzene	60117	10
Ethyl ether	60297	10
Methyl hydrazine	60344	10
Acetamide	60355	10
Strychnine, sulfate	60413	10
Dimethoate	60515	10
Dieldrin	60571	1
Niridazole	61574	10
Amitrole	61825	10
Phenylmercury acetate	62384	10
Phenacetin	62442	10
Ethyl methanesulfonate	62500	1
Aniline	62533	500
Thioacetamide	62555	10
Thiourea	62566	10
Dichlorvos	62737	10
Sodium fluoroacetate	62748	10
sodium fluoroacetate	62748	1
N-Nitrosodimethylamine	62759	10
Carbaryl	63252	10
Phenol, 3-(1-methylethyl)-, methylcarbamate	64006	1
Formic acid	64186	500
Acetic acid	64197	500
Diethyl sulfate	64675	10
Nicotine sulfate	65305	10
Benzoic acid	65850	500
Uracil mustard	66751	10

<i>The TRQ column is the amount that requires reporting under Rule 7 if it is a release per Rule 2(b) and (g). See Rule 2(f) for threshold management quantities.</i> Name	CAS	TRQ (lbs.)
Cycloheximide	66819	1
Methanol	67561	500
Acetone	67641	500
Chloroform	67663	10
Hexachloroethane	67721	10
Dimethylformamide	68122	10
Guanidine, N-methyl-N'-nitro-N-nitroso-	70257	10
Hexachlorophene	70304	10
n-Butyl alcohol	71363	500
Benzene	71432	10
1,1,1-Trichloroethane	71556	100
Endrin	72208	1
Mestranol	72333	10
Methoxychlor	72435	1
DDD	72548	1
DDE	72559	1
Trypan blue	72571	10
Bromomethane	74839	100
Chloromethane	74873	10
Methyl iodide	74884	10
Monomethylamine	74895	10
Hydrogen cyanide	74908	10
Methyl mercaptan	74931	10
Methylene bromide	74953	100
Chloroethane	75003	10
Vinyl chloride	75014	1
Monoethylamine	75047	10
Acetonitrile	75058	500
Acetaldehyde	75070	100
Methylene chloride	75092	100
Carbon disulfide	75150	10
Calcium carbide	75207	10
Ethylene oxide	75218	10
Bromoform	75252	10
Dichlorobromomethane	75274	500
1,1-Dichloroethane	75343	100
1,1-Dichloroethylene	75354	10
Acetyl chloride	75365	500
Phosgene	75445	10
Trimethylamine	75503	10
Aziridine, 2-methyl	75558	1
Propylene oxide	75569	10
Cacodylic acid	75605	1
tert-Butylamine	75649	100
Trichlorofluoromethane (CFC-11)	75694	500
Dichlorodifluoromethane (CFC-12)	75718	500

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<i>The TRQ column is the amount that requires reporting under Rule 7 if it is a release per Rule 2(b) and (g). See Rule 2(f) for threshold management quantities.</i> Name	CAS	TRQ (lbs.)
2-Methylacetonitrile	75865	10
Acetaldehyde, trichloro-	75876	500
2,2-Dichloropropionic acid	75990	500
Pentachloroethane	76017	10
Heptachlor	76448	1
Hexachlorocyclopentadiene	77474	10
Dimethyl sulfate	77781	10
Tetraethyl lead	78002	10
Dioxathion	78342	1
Isophorone	78591	500
Isoprene	78795	10
iso-Butylamine	78819	100
Isobutyl alcohol	78831	500
1,2-Dichloropropane	78875	100
2,3-Dichloropropene	78886	10
Methyl ethyl ketone (MEK)	78933	500
Lactonitrile	78977	10
1,1-Dichloropropane	78999	100
1,1,2-Trichloroethane	79005	10
Trichloroethylene	79016	10
Acrylamide	79061	500
Propionic acid	79094	500
Acrylic acid	79107	500
Chloroacetic acid	79118	10
Thiosemicarbazide	79196	10
Carbonochloridic acid, methylester	79221	100
iso-Butyric acid	79312	500
1,1,2,2-Tetrachloroethane	79345	10
Dimethylcarbaryl chloride	79447	1
2-Nitropropane	79469	10
Cumene hydroperoxide	80159	10
Methyl methacrylate	80626	100
Saccharin and salts	81072	10
Warfarin, & salts, conc.>0.3%	81812	10
1-amino-2-methylanthraquinone	82280	10
Pentachloronitrobenzene	82688	10
Acenaphthene	83329	10
Rotenone	83794	1
Diethyl phthalate	84662	100
n-Butyl phthalate	84742	10
Diquat	85007	100
Phenanthrene	85018	500
Phthalic anhydride	85449	500
Butyl benzyl phthalate	85687	10
N-Nitrosodiphenylamine	86306	10
Guthion	86500	1
Fluorene	86737	500

<i>The TRQ column is the amount that requires reporting under Rule 7 if it is a release per Rule 2(b) and (g). See Rule 2(f) for threshold management quantities.</i> Name	CAS	TRQ (lbs.)
Thiourea, 1-naphthalenyl-	86884	10
1,2,3-trichlorobenzene	87616	10
2,6-Dichlorophenol	87650	10
Hexachlorobutadiene	87683	1
Pentachlorophenol	87865	10
2,4,6-Trichlorophenol	88062	10
o-Nitrotoluene	88722	100
2-Nitrophenol	88755	10
Dinoseb	88857	100
o-Anisidine	90040	10
o-phenylphenol	90437	10
Toluene-2,6-diisocyanate	91087	10
Naphthalene	91203	10
Quinoline	91225	500
2-Chloronaphthalene	91587	500
beta-Naphthylamine	91598	10
N,N-Diethylaniline	91667	100
Methapyrilene	91805	500
3,3'-Dichlorobenzidine	91941	1
Biphenyl	92524	10
4-Aminobiphenyl	92671	1
Benzidine	92875	1
4-Nitrobiphenyl	92933	10
Silvex (2,4,5-TP)	93721	10
2,4,5-T acid	93765	100
2,4,5-T esters	93798	100
2,4-D Esters	94111	10
Dihydrosafrole	94586	10
Safrole	94597	10
2,4-D, salts and esters	94757	10
2,4-D Esters	94791	10
2,4-D Esters	94804	10
Sulfallate	95067	1
Sulfallate	95067	10
o-Xylene	95476	100
o-Cresol	95487	10
o-Dichlorobenzene	95501	10
o-Toluidine	95534	10
2-Chlorophenol	95578	10
5-chloro-o-toluidine	95794	10
2,4-Diaminotoluene	95807	10
4-chloro-o-phenylenediamine	95830	10
1,2,4,5-Tetrachlorobenzene	95943	500
2,4,5-Trichlorophenol	95954	10
Styrene oxide	96093	10
1,2-Dibromo-3-chloropropane	96128	1
Ethylene thiourea	96457	10
o-aminoazotoluene	97563	10

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<i>The TRQ column is the amount that requires reporting under Rule 7 if it is a release per Rule 2(b) and (g). See Rule 2(f) for threshold management quantities.</i> Name	CAS	TRQ (lbs.)
Ethyl methacrylate	97632	100
Bis(dimethylthiocarbamoyl) sulfide	97745	1
Disulfiram	97778	1
Furfural	98011	500
Benzoic trichloride	98077	10
Benzenesulfonyl chloride	98099	10
Cumene	98828	500
Acetophenone	98862	500
Benzal chloride	98873	500
Benzoyl chloride	98884	100
Nitrobenzene	98953	100
m-Nitrotoluene	99081	100
1,3,5-Trinitrobenzene	99354	10
5-Nitro-o-toluidine	99558	10
5-nitro-o-anisidine	99592	1
m-Dinitrobenzene	99650	10
p-Nitrotoluene	99990	100
p-Nitroaniline	100016	500
p-Nitrophenol	100027	10
p-Dinitrobenzene	100254	10
Ethylbenzene	100414	100
Styrene	100425	100
Benzyl chloride	100447	10
Benzonitrile	100470	500
N-Nitrosopiperidine	100754	10
Anilazine	101053	1
4,4'-Methylenebis(2-chloroaniline)	101144	10
Barban	101279	1
4-Bromophenyl phenyl ether	101553	10
4,4'-methylenebis(N,N-dimethyl)benzenamine	101611	10
Methylenebis(phenylisocyanate)	101688	500
4,4'-Methylenedianiline	101779	10
4,4'-diaminodiphenyl ether	101804	10
diphenyl ether	101848	10
Azobenzene	103333	1
Phenylthiourea	103855	10
sec-Butyl acetate	105464	500
N,N'-diethylthiourea	105555	10
Caprolactam	105602	500
2,4-Dimethylphenol	105679	10
p-Xylene	106423	10
p-Cresol	106445	10
1,4-Dichlorobenzene	106467	10
p-Chloroaniline	106478	100
p-chlorophenol	106489	10
p-Toluidine	106490	10

<i>The TRQ column is the amount that requires reporting under Rule 7 if it is a release per Rule 2(b) and (g). See Rule 2(f) for threshold management quantities.</i> Name	CAS	TRQ (lbs.)
p-Phenylenediamine	106503	500
Quinone	106514	10
1,2-Butylene oxide	106887	10
Epichlorohydrin	106898	10
1,2-Dibromoethane	106934	1
1,3-Butadiene	106990	10
Acrolein	107028	1
Allyl chloride	107051	100
1,2-Dichloroethane	107062	10
n-Propylamine	107108	500
Ethyl cyanide	107120	10
Acrylonitrile	107131	10
Ethylenediamine	107153	500
Allyl alcohol	107186	10
Propargyl alcohol	107197	100
Chloroacetaldehyde	107200	100
Ethylene glycol	107211	500
Chloromethyl methyl ether	107302	10
Tetraethyl pyrophosphate	107493	10
Butyric acid	107926	500
Vinyl acetate	108054	500
Methyl isobutyl ketone	108101	500
Acetic anhydride	108247	500
Maleic anhydride	108316	500
m-Xylene	108383	100
m-Cresol	108394	10
Resorcinol	108463	500
Bis(2-chloro-1-methylethyl)ether	108601	100
Dichloroisopropyl ether	108601	100
Toluene	108883	100
Chlorobenzene	108907	10
Cyclohexanone	108941	500
Phenol	108952	100
Benzenethiol	108985	10
2-Methylpyridine	109068	500
Butylamine	109739	100
Malononitrile	109773	100
Diethylamine	109897	10
Furan, tetrahydro-	109999	100
Furan	110009	10
Maleic acid	110167	500
Fumaric acid	110178	500
iso-Butyl acetate	110190	500
Hexane	110543	500
2-Chloroethyl vinyl ether	110758	100
2-Ethoxyethanol	110805	100
Cyclohexane	110827	100
Pyridine	110861	100

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<i>The TRQ column is the amount that requires reporting under Rule 7 if it is a release per Rule 2(b) and (g). See Rule 2(f) for threshold management quantities.</i> Name	CAS	TRQ (lbs.)
Diethanolamine	111422	10
Bis(2-chloroethyl) ether	111444	10
Ethylenebisdithiocarbamic acid, salts & esters	111546	500
Bis(2-chloroethoxy) methane	111911	100
Phenol, 2-(1-methylethoxy)-, methylcarbamate	114261	10
Azaserine	115026	1
Endosulfan	115297	1
Benzenemethanol, 4-chloro-.alpha.-4-chlorophenyl)-.alpha.-(trichloromethyl)-	115322	10
Dicofol	115322	10
Fensulfotion	115902	1
Aldicarb	116063	1
2-aminoanthraquinone	117793	10
Dichlone	117806	1
Bis(2-ethylhexyl)phthalate	117817	10
Di-n-octyl phthalate	117840	500
Hexachlorobenzene	118741	10
Isopropylmethylpyrazolyl dimethylcarbamate	119380	1
3,3'-Dimethoxybenzidine	119904	10
3,3'-Dimethylbenzidine	119937	10
Anthracene	120127	500
Piperidine, 1,1'-(tetrathiodicarbonothioyl)-bis-	120547	1
Isosafrole	120581	10
piperonyl sulfoxide	120627	10
p-cresidine	120718	10
Catechol	120809	10
1,2,4-Trichlorobenzene	120821	10
2,4-Dichlorophenol	120832	10
2,4-Dinitrotoluene	121142	10
Pyrethrins	121211	1
Pyrethrins	121299	1
Triethylamine	121448	500
N,N-Dimethylaniline	121697	10
Malathion	121755	10
Benzeneethanamine, alpha, alpha-dimethyl-	122098	500
Propham	122429	1
1,2-Diphenylhydrazine	122667	10
Hydroquinone	123319	10
Maleic hydrazide	123331	500
Propionaldehyde	123386	100
N-methyl formamide	123397	10
Propionic anhydride	123626	500
Paraldehyde	123637	100

<i>The TRQ column is the amount that requires reporting under Rule 7 if it is a release per Rule 2(b) and (g). See Rule 2(f) for threshold management quantities.</i> Name	CAS	TRQ (lbs.)
2-Butenal, (e)-	123739	10
Butyl acetate	123864	500
1,4-Dioxane	123911	10
iso-Amyl acetate	123922	500
Adipic acid	124049	500
Dimethylamine	124403	100
Sodium methylate	124414	100
Chlorodibromomethane	124481	10
Tris(2,3-dibromopropyl) phosphate	126727	10
Methacrylonitrile	126987	100
Chloroprene	126998	10
Tetrachloroethylene	127184	10
Zinc phenolsulfonate	127822	500
Potassium dimethyldithiocarbamate	128030	1
Sodium dimethyldithiocarbamate	128041	1
Pyrene	129000	500
Warfarin sodium	129066	10
2-methyl-1-nitroanthraquinone	129157	10
1,4-Naphthoquinone	130154	500
Dimethyl phthalate	131113	500
Ammonium picrate	131748	10
2-Cyclohexyl-4,6-dinitrophenol	131895	10
sodium-o-phenylphenol	132274	10
3-amino-9-ethylcarbazole	132321	10
Dibenzofuran	132649	10
Captan	133062	10
Chloramben	133904	10
o-anisidine hydrochloride	134292	10
alpha-Naphthylamine	134327	10
Cupferron	135206	10
Carbamodithioic acid, dibutyl-, sodium salt	136301	1
phenazopyridine hydrochloride	136403	10
2,4,5-trimethylaniline	137177	10
Thiram	137268	10
Copper, bis(dimethylcarbamodithioato-S,S')-	137291	1
Ziram	137304	1
Potassium N-methyldithiocarbamate	137417	1
Sodium methyldithiocarbamate	137428	1
4,4'-thiodianiline	139651	10
Nithiazide	139946	10
Aramite	140578	1
Ethyl acrylate	140885	100
Dichrophos	141662	1

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Ethyl acetate	141786	500
aniline hydrochloride	142041	10
1,3-Dichloropropane	142289	500
Cupric acetate	142712	10
Dipropylamine	142847	500
Sodium cyanide (Na(CN))	143339	10
Kepone	143500	1
Selenium, tetrakis(dimethyldithiocarbamate)	144343	1
Endothall	145733	100
Carbamodithioic acid, diethyl-, sodium salt	148185	1
Melphalan	148823	1
Potassium cyanide	151508	10
Ethyleneimine	151564	1
Diphosphoramidate, octamethyl-	152169	10
p-nitrosodiphenylamine	156105	10
1,2-Dichloroethylene	156605	100
Calcium cyanamide	156627	100
Dibenz[a,i]pyrene	189559	10
Benzo[ghi]perylene	191242	500
Indeno(1,2,3-cd)pyrene	193395	10
Benzo[b]fluoranthene	205992	1
Fluoranthene	206440	10
Benzo(k)fluoranthene	207089	500
Acenaphthylene	208968	500
Chrysene	218019	10
Benz[c]acridine	225514	10
O,O-Diethyl O-pyrazinyl phosphorothioate	297972	10
Methyl parathion	298000	10
Phorate	298022	10
Disulfoton	298044	1
1,2:3,4-diepoxybutane	298180	10
Naled	300765	10
Lead acetate	301042	10
Oxydemetonmethyl	301122	10
Hydrazine	302012	1
Lasiocarpine	303344	10
Chlorambucil	305033	10
Aldrin	309002	1
Diethyl-p-nitrophenyl phosphate	311455	10
Mexacarbate	315184	100
Monocrotaline	315220	10
alpha-BHC	319846	10
alpha-Hexachlorocyclohexane	319846	10
beta-BHC	319857	1
delta-BHC	319868	1
2,5-Dinitrophenol	329715	10

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Diuron	330541	10
Diazinon	333415	1
Diazomethane	334883	10
Carbonic difluoride	353504	100
Brucine	357573	10
Cyanogen	460195	10
Ketene	463514	1
Carbon oxide sulfide (COS)	463581	10
Carbonyl sulfide	463581	10
Isodrin	465736	1
Chlorfenvinphos	470906	10
neoabietic acid	471772	1
Auramine	492808	10
Chlornaphazine	494031	10
Diaminotoluene	496720	10
4-Aminopyridine	504245	100
1,3-Pentadiene	504609	10
mustard gas	505602	10
Potassium silver cyanide	506616	1
Silver cyanide	506649	1
Cyanogen bromide	506683	100
Cyanogen chloride	506774	10
Ammonium carbonate	506876	500
Acetyl bromide	506967	500
Tetranitromethane	509148	10
Benzeneacetic acid, 4-chloro-.alpha.-(4-chlorophenyl)-.alpha.-hydroxy-, ethyl ester	510156	10
Trimethylphosphate	512561	1
sec-Butylamine	513495	100
abietic acid	514103	10
o-Dinitrobenzene	528290	10
Furathiazole	531828	1
2-Chloroacetophenone	532274	10
Tetrahydro-3,5-dimethyl-2H-1,3,5-thiadiazine-2-thione	533744	1
4,6-Dinitro-o-cresol and salts	534521	10
1,2-Dimethylhydrazine	540738	1
Hydrazine, 1,2-dimethyl-	540738	1
2,2,4-Trimethylpentane	540841	100
tert-Butyl acetate	540885	500
Uranyl acetate	541093	10
2,4-Dithiobiuret	541537	10
1,3-Dichlorobenzene	541731	10
Barium cyanide	542621	10
1,3-Dichloropropylene	542756	10
3-Chloropropionitrile	542767	100
Bis(chloromethyl) ether	542881	10
Cadmium acetate	543908	10

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<i>The TRQ column is the amount that requires reporting under Rule 7 if it is a release per Rule 2(b) and (g). See Rule 2(f) for threshold management quantities.</i> Name	CAS	TRQ (lbs.)
Cobaltous formate	544183	100
Copper cyanide	544923	10
m-Nitrophenol	554847	10
Nickel cyanide	557197	10
Zinc cyanide	557211	10
Zinc acetate	557346	100
Zinc formate	557415	100
Ethion	563122	10
semicarbazide hydrochloride	563417	10
Thallium(I) acetate	563688	10
malachite green	569642	1
2,6-Dinitrophenol	573568	10
Benzene, 2,4-diisocyanato-1-methyl-	584849	10
1-chloropropene	590216	10
1-Acetyl-2-thiourea	591082	100
Calcium cyanide	592018	10
Mercuric cyanide	592041	1
Mercuric thiocyanate	592858	10
Lead thiocyanate	592870	10
Vinyl bromide	593602	10
Perchloromethyl mercaptan	594423	10
Bromoacetone	598312	100
5-nitroacenaphthene	602879	10
2,6-Dinitrotoluene	606202	10
hexachlorocyclohexane (all isomers)	608731	1
Pentachlorobenzene	608935	10
3,4,5-Trichlorophenol	609198	10
3,4-Dinitrotoluene	610399	10
N-Nitroso-N-methylurethane	615532	1
N-Nitrosodi-n-propylamine	621647	10
Methyl isocyanate	624839	10
dimethyl disulphide	624920	10
tert-Amyl acetate	625161	500
sec-Amyl acetate	626380	500
Amyl acetate	628637	500
Mercury fulminate	628864	10
Selenourea	630104	100
1,1,1,2 Tetrachloroethane	630206	10
phenytoin sodium	630933	10
Ammonium acetate	631618	500
1,2,3,4-tetrachlorobenzene	634662	10
1,2,3,5-tetrachlorobenzene	634902	10
o-Toluidine hydrochloride	636215	10
Fluoroacetamide	640197	10
Dimetilan	644644	1
Hexamethylphosphoramide	680319	1

<i>The TRQ column is the amount that requires reporting under Rule 7 if it is a release per Rule 2(b) and (g). See Rule 2(f) for threshold management quantities.</i> Name	CAS	TRQ (lbs.)
N-Nitroso-N-methylurea	684935	1
Diethylarsine	692422	1
Dichlorophenylarsine	696286	1
Phosmet	732116	10
Hexaethyl tetraphosphate	757584	10
N-Nitroso-N-ethylurea	759739	1
Ethyl dipropylthiocarbamate	759944	1
1,4-Dichloro-2-butene	764410	1
Glycidylaldehyde	765344	10
Carbophenothion	786196	1
Cupric tartrate	815827	10
Hexamethylene-1,6-diisocyanate	822060	10
Diaminotoluene	823405	10
4,4'-methylenebis(2-methylaniline)	838880	10
N-Nitrosodi-n-butylamine	924163	10
N-Nitrosopyrrolidine	930552	1
2,3,6-Trichlorophenol	933755	10
2,3,5-Trichlorophenol	933788	10
2,3,5,6-tetrachlorophenol	935955	10
alpha – Endosulfan	959988	1
Tetrachlorvinphos	961115	10
Heptachlor epoxide	1024573	1
Endosulfan sulfate	1031078	1
Chromic acetate	1066304	100
Ammonium bicarbonate	1066337	500
Lead stearate	1072351	10
N-(2-hydroxyethyl)ethyleneimine	1072522	10
Ammonium carbamate	1111780	500
Butylethylcarbamothioic acid S-propyl ester	1114712	1
N-Nitrosodiethanolamine	1116547	1
Propane sultone	1120714	10
Metolcarb	1129415	1
Cycloate	1134232	1
Ferric ammonium citrate	1185575	100
Dichlobenil	1194656	10
Xylenol	1300716	100
Arsenic pentoxide	1303282	1
Arsenic disulfide	1303328	1
Arsenic trisulfide	1303339	1
Antimony trioxide	1309644	100
Potassium hydroxide	1310583	100
Sodium hydroxide	1310732	100
Thallic oxide	1314325	10
Vanadium pentoxide	1314621	100
Sulfur phosphide	1314803	10
Zinc phosphide	1314847	10

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<i>The TRQ column is the amount that requires reporting under Rule 7 if it is a release per Rule 2(b) and (g). See Rule 2(f) for threshold management quantities.</i> Name	CAS	TRQ (lbs.)
Zinc phosphide (conc. <= 10%)	1314847	10
Lead sulfide	1314870	10
2,4,5-T amines	1319728	500
Cresol (mixed isomers)	1319773	10
2,4-D Esters	1320189	10
Nitrotoluene	1321126	100
Arsenic acid	1327522	1
Arsenic trioxide	1327533	1
Xylene (mixed isomers)	1330207	10
Zinc borate	1332076	100
Asbestos (friable)	1332214	1
Sodium bifluoride	1333831	10
Lead subacetate	1335326	10
Ammonium hydroxide	1336216	100
Polychlorinated biphenyls	1336363	1
Methyl ethyl ketone peroxide	1338234	10
Naphthenic acid	1338245	10
Ammonium bifluoride	1341497	10
antimycin A	1397940	1
Aflatoxins	1402682	1
Clonitralid	1420048	10
Diepoxybutane	1464535	10
Carbofuran phenol	1563388	1
Carbofuran	1563662	10
Benezeneamine, 2,6-dinitro-N,N-dipropyl-4-(trifluoromethyl)-	1582098	10
Hydrazine, 1,2-diethyl-	1615801	10
Tetrabutylthiuram disulfide	1634022	1
Methyl tert-butyl ether	1634044	100
Aldicarb sulfone	1646884	1
Bromoxynil	1689845	1
dehydroabietic acid	1740198	10
2,3,7,8-Tetrachlorodibenzo-p-dioxin (TCDD)	1746016	1
Ammonium thiocyanate	1762954	500
Nitrofen	1836755	10
Ammonium benzoate	1863634	500
Hexachloropropene	1888717	100
Paraquat	1910425	10
3,6-Dichloro-2-methoxybenzoic acid	1918009	100
2,4-D Esters	1928387	10
2,4,5-T esters	1928478	100
2,4-D Esters	1928616	10
2,4-D Esters	1929733	10
Carbamothioic acid, dipropyl-, S-propyl ester	1929777	1
Butylate	2008415	1
2,4,5-T amines	2008460	500

<i>The TRQ column is the amount that requires reporting under Rule 7 if it is a release per Rule 2(b) and (g). See Rule 2(f) for threshold management quantities.</i> Name	CAS	TRQ (lbs.)
Methiocarb	2032657	10
EPN	2104645	1
1H-Azepine-1 carbothioic acid, hexahydro-S-ethyl ester	2212671	1
1,5-naphthalenediamine	2243621	10
Carbamothioic acid, bis(1-methylethyl)-S-(2,3-dichloro-2-propenyl)ester	2303164	10
Triallate	2303175	1
Propargite	2312358	10
silvex, propylene glycol butyl ether ester	2317240	10
Mirex	2385855	1
Captafol	2425061	1
Tetrachloroguaiacol	2539175	10
2,4,5-T esters	2545597	100
Promecarb	2631370	1
azinphos-ethyl	2642719	1
5-(Aminomethyl)-3-isoxazolol	2763964	100
Diquat	2764729	100
Chlorpyrifos	2921882	1
Ferric ammonium oxalate	2944674	100
2,4-D chlorocrotyl ester	2971382	10
2,4-D Esters	2971382	10
Ammonium citrate, dibasic	3012655	500
Ammonium tartrate	3164292	500
4-Chloro-o-toluidine, hydrochloride	3165933	10
Cupric nitrate	3251238	10
O,O-Diethyl S-methyl dithiophosphate	3288582	500
Zinc carbonate	3486359	100
Phenesterin	3546109	10
DDE	3547044	500
Nifurthiazole	3570750	10
Tetraethyldithiopyrophosphate	3689245	10
2,4,5-T amines	3813147	500
butylbutanol nitrosamine	3817116	10
Phosazetim	4104147	1
2-Butenal	4170303	10
N-Nitrosomethylvinylamine	4549400	10
2,3,4,5-tetrachlorophenol	4901513	10
4-chloro-m-phenylenediamine	5131602	10
Thiourea, (2-chlorophenyl)-	5344821	10
Cupric oxalate	5893663	10
Ethanol, 2,2'-oxybis-, dicarbamate	5952261	1
Ammonium oxalate	5972736	500
Ammonium oxalate	6009707	500

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<i>The TRQ column is the amount that requires reporting under Rule 7 if it is a release per Rule 2(b) and (g). See Rule 2(f) for threshold management quantities.</i> Name	CAS	TRQ (lbs.)
2,4,5-T amines	6369966	500
2,4,5-T amines	6369977	500
Thallium(I) carbonate	6533739	10
2,4,5-trichlorotoluene	6639301	10
Monocrotophos	6923224	1
3-(chloromethyl)pyridine hydrochloride	6959484	10
4-Chlorophenyl phenyl ether	7005723	500
Endrin aldehyde	7421934	1
Lead stearate	7428480	10
Lead	7439921	10
Mercury	7439976	1
Nickel	7440020	10
Silver	7440224	100
Sodium	7440235	10
Thallium	7440280	100
Antimony	7440360	500
Arsenic	7440382	1
Beryllium	7440417	10
Cadmium	7440439	10
Chromium	7440473	500
Copper	7440508	500
Zinc	7440666	100
Zinc (fume or dust)	7440666	100
Selenium dioxide	7446084	10
Lead sulfate	7446142	10
Thallium(I) sulfate	7446186	10
Lead phosphate	7446277	10
Cupric chloride	7447394	10
Selenium sulfide	7488564	10
Titanium chloride (TiCl ₄) (T-4)-	7550450	100
Titanium tetrachloride	7550450	100
Sodium phosphate, dibasic	7558794	500
Sodium phosphate, tribasic	7601549	500
Sodium arsenate	7631892	1
Sodium bisulfite	7631905	500
Sodium nitrite	7632000	10
Lead arsenate	7645252	1
Zinc chloride	7646857	100
Hydrochloric acid	7647010	500
Antimony pentachloride	7647189	100
Phosphoric acid	7664382	500
Hydrofluoric acid	7664393	10
Ammonia	7664417	10
Sulfuric acid	7664939	100
Sodium fluoride	7681494	100
Sodium hypochlorite	7681529	10
Nitric acid	7697372	100

<i>The TRQ column is the amount that requires reporting under Rule 7 if it is a release per Rule 2(b) and (g). See Rule 2(f) for threshold management quantities.</i> Name	CAS	TRQ (lbs.)
Zinc bromide	7699458	100
Crotoxyphos	7700176	10
Ferric chloride	7705080	100
Nickel chloride	7718549	10
Phosphorous trichloride	7719122	100
Ferrous sulfate	7720787	100
Potassium permanganate	7722647	10
Phosphorus	7723140	1
Zinc sulfate	7733020	100
Chromic acid	7738945	10
Sodium phosphate, tribasic	7758294	500
Ferrous chloride	7758943	10
Lead chloride	7758954	10
Cupric sulfate	7758987	10
Silver nitrate	7761888	1
Ammonium sulfamate	7773060	500
Sodium chromate	7775113	10
Arsenic acid	7778394	1
Calcium arsenate	7778441	1
Potassium bichromate	7778509	10
Calcium hypochlorite	7778543	10
Zinc hydrosulfite	7779864	100
Zinc nitrate	7779886	100
Fluorine	7782414	10
Selenium	7782492	10
Chlorine	7782505	10
Ferrous sulfate	7782630	100
Sodium selenite	7782823	10
Mercurous nitrate	7782867	10
Selenious acid	7783008	10
Hydrogen sulfide	7783064	10
Mercuric sulfate	7783359	10
Lead fluoride	7783462	10
Zinc fluoride	7783495	100
Ferric fluoride	7783508	10
Antimony trifluoride	7783564	100
Arsenous trichloride	7784341	1
Lead arsenate	7784409	1
Potassium arsenate	7784410	1
Sodium arsenite	7784465	1
Sodium phosphate, tribasic	7785844	500
Mevinphos	7786347	10
Nickel sulfate	7786814	10
Beryllium chloride	7787475	1
Beryllium fluoride	7787497	1
Beryllium nitrate	7787555	1
Ammonium chromate	7788989	10
Potassium chromate	7789006	10

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<i>The TRQ column is the amount that requires reporting under Rule 7 if it is a release per Rule 2(b) and (g). See Rule 2(f) for threshold management quantities.</i> Name	CAS	TRQ (lbs.)
Strontium chromate	7789062	10
Ammonium bichromate	7789095	10
Cadmium bromide	7789426	10
Cobaltous bromide	7789437	100
Antimony tribromide	7789619	100
Chlorosulfonic acid	7790945	100
Thallium chloride TlCl	7791120	10
Phosphine	7803512	10
Ammonium vanadate	7803556	100
Toxaphene	8001352	1
Creosote	8001589	1
Dichloropropane – Dichloropropene (mixture)	8003198	10
Pyrethrins	8003347	1
Sulfuric acid (fuming)	8014957	100
Demeton	8065483	1
Sodium hypochlorite	10022705	10
Phosphoryl chloride	10025873	100
Antimony trichloride	10025919	100
Zirconium tetrachloride	10026116	500
Ferric sulfate	10028225	100
Thallium sulfate	10031591	10
Sodium phosphate, dibasic	10039324	500
Aluminum sulfate	10043013	500
Ferrous ammonium sulfate	10045893	100
Mercuric nitrate	10045940	10
Chromous chloride	10049055	100
Lead nitrate	10099748	10
Chromic sulfate	10101538	100
Lead iodide	10101630	10
Sodium phosphate, tribasic	10101890	500
Uranyl nitrate	10102064	10
Sodium selenite	10102188	10
Nitric oxide	10102439	10
Nitrogen dioxide	10102440	10
Thallium(I) nitrate	10102451	10
Lead arsenate	10102484	1
Cadmium chloride	10108642	10
Potassium arsenite	10124502	1
Sodium phosphate, tribasic	10124568	500
Sodium phosphate, dibasic	10140655	500
Ammonium bisulfite	10192300	500
Ammonium sulfite	10196040	500
Sodium phosphate, tribasic	10361894	500
Cupric sulfate, ammoniated	10380297	10
Mercurous nitrate	10415755	10
Ferric nitrate	10421484	100
Nitrogen dioxide	10544726	10

<i>The TRQ column is the amount that requires reporting under Rule 7 if it is a release per Rule 2(b) and (g). See Rule 2(f) for threshold management quantities.</i> Name	CAS	TRQ (lbs.)
Sodium bichromate	10588019	10
Carbendazim	10605217	1
Aroclor 1260	11096825	1
Aroclor 1254	11097691	1
Aroclor 1221	11104282	1
Chromic acid	11115745	10
Aroclor 1232	11141165	1
Cupric acetoarsenite (Paris green)	12002038	1
Selenious acid, dithallium(1+) salt	12039520	100
Nickel hydroxide	12054487	10
Ammonium fluoride	12125018	10
Ammonium chloride	12125029	500
Ammonium sulfide	12135761	10
Aroclor 1248	12672296	1
Aroclor 1016	12674112	1
Sulfur monochloride	12771083	100
Terbufos	13071799	1
Phosphamidon	13171216	1
N-nitrososarcosine	13256229	10
Nickel carbonyl	13463393	10
2,4,5-T salts	13560991	100
Beryllium nitrate	13597994	1
Zirconium nitrate	13746899	500
Calcium chromate	13765190	10
Lead fluoborate	13814965	10
Ammonium fluoborate	13826830	500
sec-Butylamine	13952846	100
Cobaltous sulfamate	14017415	100
Nickel nitrate	14216752	10
Ammonium oxalate	14258492	500
Ammonium tartrate	14307438	500
Ethyl Ziram	14324551	1
Tris(dimethylcarbamodithioato-S,S')iron	14484641	1
Zinc ammonium chloride	14639975	100
Zinc ammonium chloride	14639986	100
Zirconium sulfate	14644612	500
Cycasin	14901087	10
Manganese, bis (dimethylcarbamodithioato-S,S')-	15339363	1
Nickel ammonium sulfate	15699180	10
Lead sulfate	15739807	10
2,3,4-Trichlorophenol	15950660	10
Sodium hydrosulfide	16721805	500
Ethanimidothioic acid, N- [[methylamino]carbonyl]	16752775	10
Zinc silicofluoride	16871719	500
Ammonium silicofluoride	16919190	100

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<i>The TRQ column is the amount that requires reporting under Rule 7 if it is a release per Rule 2(b) and (g). See Rule 2(f) for threshold management quantities.</i> Name	CAS	TRQ (lbs.)
Zirconium potassium fluoride	16923958	100
Formparanate	17702577	1
Benomyl	17804352	1
Streptozotocin	18883664	1
Osmium tetroxide	20816120	100
Daunomycin	20830813	10
Aluminum phosphide	20859738	10
Leptophos	21609905	1
2,2-Dimethyl-1,3-benzodioxol-4-ol methylcarbamate	22781233	1
Bendiocarb	22781233	10
Bendiocarb phenol	22961826	1
Oxamyl	23135220	1
Formetanate hydrochloride	23422539	1
Thiophanate-methyl	23564058	1
Benzamide, 3,5-dichloro-N-(1,1-dimethyl-2-propynyl)	23950585	500
Dinitrobenzene (mixed isomers)	25154545	10
Nitrophenol (mixed isomers)	25154556	10
Sodium dodecylbenzenesulfonate	25155300	100
Trichlorophenol	25167822	10
2,4,5-T esters	25168154	100
2,4-D Esters	25168267	10
Dinitrotoluene (mixed isomers)	25321146	10
Dichlorobenzene	25321226	10
Toluenediamine	25376458	10
Dinitrophenol	25550587	10
Calcium dodecylbenzenesulfonate	26264062	100
Carbamic acid, methyl-, O-(((2,4-dimethyl-1,3-dithiolan-2-yl)methylene)amino)-	26419738	1
Toluene diisocyanate (unspecified isomer)	26471625	10
Sodium azide (Na(N ₃))	26628228	100
Dichloropropane	26638197	100
Dichloropropene	26952238	10
Dodecylbenzenesulfonic acid	27176870	100

<i>The TRQ column is the amount that requires reporting under Rule 7 if it is a release per Rule 2(b) and (g). See Rule 2(f) for threshold management quantities.</i> Name	CAS	TRQ (lbs.)
Triethanolamine dodecylbenzene sulfonate	27323417	100
Vanadyl sulfate	27774136	100
Antimony potassium tartrate	28300745	10
Octachlorostyrene	29082744	10
Paraformaldehyde	30525894	100
Ethanimidothioic acid, 2-(dimethylamino)-N-hydroxy-2-oxo-, methyl ester	30558431	1
2,4,5-TP esters	32534955	10
beta – Endosulfan	33213659	1
Fluchloralin	33245395	1
Uranyl nitrate	36478769	10
Nickel chloride	37211055	10
2,4-diaminoanisole sulfate	39156417	10
Thiofanox	39196184	10
Dinocap	39300453	1
Isopropanolamine dodecylbenzene sulfonate	42504461	100
Potassium N-hydroxymethyl-N-methyldithiocarbamate	51026289	1
Zinc ammonium chloride	52628258	100
Lead stearate	52652592	10
Calcium arsenite	52740166	1
Carbamothioic acid, dipropyl-, S-(phenylmethyl) ester	52888809	1
2,4-D Esters	53467111	10
Aroclor 1242	53469219	1
Carbosulfan	55285148	1
3-Iodo-2-propynyl butylcarbamate	55406536	1
Ferric ammonium oxalate	55488874	100
Lead stearate	56189094	10
3-amino-9-ethylcarbazole hydrochloride	57360175	10
kanechlor C	59299513	10
Thiodicarb	59669260	1
2,4,5-T esters	61792072	100

R 324.2009 Table 1; polluting materials sorted alphabetically by material name.

Note: The TRQ column is the amount that requires reporting under Rule 7 if it is a release per Rule 2(b) and (g). See Rule 2(f) for threshold management quantities.

It is recommended facilities first search using CAS numbers in the first listing because polluting materials may be known by different names, and then if not found on that list, check by the searching the alphabetical list.

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Rule 9. Table 1 reads as follows:

Name	CAS	TRQ (lbs.)
1,1,1,2 Tetrachloroethane	630206	10
1,1,1-Trichloroethane	71556	100
1,1,2,2-Tetrachloroethane	79345	10
1,1,2-Trichloroethane	79005	10
1,1-Dichloroethane	75343	100
1,1-Dichloroethylene	75354	10
1,1-Dichloropropane	78999	100
1,2-Dimethylhydrazine	540738	1
1,1-Dimethylhydrazine	57147	10
1,2,3,4-tetrachlorobenzene	634662	10
1,2,3,5-tetrachlorobenzene	634902	10
1,2,3-trichlorobenzene	87616	10
1,2,4,5-Tetrachlorobenzene	95943	500
1,2,4-Trichlorobenzene	120821	10
1,2:3,4-diepoxybutane	298180	10
1,2-Butylene oxide	106887	10
1,2-Dibromo-3-chloropropane	96128	1
1,2-Dibromoethane	106934	1
1,2-Dichloroethane	107062	10
1,2-Dichloroethylene	156605	100
1,2-Dichloropropane	78875	100
1,2-Diphenylhydrazine	122667	10
1,3,5-Trinitrobenzene	99354	10
1,3-Butadiene	106990	10
1,3-Dichlorobenzene	541731	10
1,3-Dichloropropane	142289	500
1,3-Dichloropropylene	542756	10
1,3-Pentadiene	504609	10
1,4-Dichloro-2-butene	764410	1
1,4-Dichlorobenzene	106467	10
1,4-Dioxane	123911	10
1,4-Naphthoquinone	130154	500
1,5-naphthalenediamine	2243621	10
1-Acetyl-2-thiourea	591082	100
1-amino-2-methylantraquinone	82280	10
1-chloropropene	590216	10
1H-Azepine-1 carbothioic acid, hexahydro-S-ethyl ester	2212671	1
2,2,4-Trimethylpentane	540841	100
2,2-Dichloropropionic acid	75990	500
2,2-Dimethyl-1,3-benzodioxol-4- ol methylcarbamate	22781233	1
2,3,4,5-tetrachlorophenol	4901513	10
2,3,4,6-Tetrachlorophenol	58902	10
2,3,4-Trichlorophenol	15950660	10
2,3,5,6-tetrachlorophenol	935955	10
2,3,5-Trichlorophenol	933788	10
2,3,6-Trichlorophenol	933755	10

Name	CAS	TRQ (lbs.)
2,3,7,8-Tetrachlorodibenzo-p- dioxin (TCDD)	1746016	1
2,3-Dichloropropene	78886	10
2,4,5-T acid	93765	100
2,4,5-T amines	1319728	500
2,4,5-T amines	6369966	500
2,4,5-T amines	2008460	500
2,4,5-T amines	6369977	500
2,4,5-T amines	3813147	500
2,4,5-T esters	25168154	100
2,4,5-T esters	61792072	100
2,4,5-T esters	2545597	100
2,4,5-T esters	93798	100
2,4,5-T esters	1928478	100
2,4,5-T salts	13560991	100
2,4,5-TP esters	32534955	10
2,4,5-Trichlorophenol	95954	10
2,4,5-trichlorotoluene	6639301	10
2,4,5-trimethylaniline	137177	10
2,4,6-Trichlorophenol	88062	10
2,4-D chlorocrotyl ester	2971382	10
2,4-D Esters	1320189	10
2,4-D Esters	94791	10
2,4-D Esters	53467111	10
2,4-D Esters	1928387	10
2,4-D Esters	1928616	10
2,4-D Esters	2971382	10
2,4-D Esters	1929733	10
2,4-D Esters	94111	10
2,4-D Esters	25168267	10
2,4-D Esters	94804	10
2,4-D, salts and esters	94757	10
2,4-diaminoanisole sulfate	39156417	10
2,4-Diaminotoluene	95807	10
2,4-Dichlorophenol	120832	10
2,4-Dimethylphenol	105679	10
2,4-Dinitrophenol	51285	10
2,4-Dinitrotoluene	121142	10
2,4-Dithiobiuret	541537	10
2,5-Dinitrophenol	329715	10
2,6-Dichlorophenol	87650	10
2,6-Dinitrophenol	573568	10
2,6-Dinitrotoluene	606202	10
2-Acetylaminofluorene	53963	1
2-aminoantraquinone	117793	10
2-Butenal	4170303	10
2-Butenal, (e)-	123739	10
2-Chloroacetophenone	532274	10
2-Chloroethyl vinyl ether	110758	100

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Name	CAS	TRQ (lbs.)
2-Chloronaphthalene	91587	500
2-Chlorophenol	95578	10
2-Cyclohexyl-4,6-dinitrophenol	131895	10
2-Ethoxyethanol	110805	100
2-methyl-1-nitroanthraquinone	129157	10
2-Methylactonitrile	75865	10
2-Methylpyridine	109068	500
2-Nitrophenol	88755	10
2-Nitropropane	79469	10
3-(chloromethyl)pyridine hydrochloride	6959484	10
3,3'-Dichlorobenzidine	91941	1
3,3'-Dimethoxybenzidine	119904	10
3,3'-Dimethylbenzidine	119937	10
3,4,5-Trichlorophenol	609198	10
3,4-Dinitrotoluene	610399	10
3,6-Dichloro-2-methoxybenzoic acid	1918009	100
3-amino-9-ethylcarbazole	132321	10
3-amino-9-ethylcarbazole hydrochloride	57360175	10
3-Chloropropionitrile	542767	100
3-Iodo-2-propynyl butylcarbamate	55406536	1
3-Methylcholanthrene	56495	10
4,4'-diaminodiphenyl ether	101804	10
4,4'-Methylenebis(2-chloroaniline)	101144	10
4,4'-methylenebis(2- methylaniline)	838880	10
4,4'-methylenebis(N,N- dimethyl)benzenamine	101611	10
4,4'-Methylenedianiline	101779	10
4,4'-thiodianiline	139651	10
4,6-Dinitro-o-cresol and salts	534521	10
4-Aminobiphenyl	92671	1
4-Aminopyridine	504245	100
4-Bromophenyl phenyl ether	101553	10
4-chloro-m-phenylenediamine	5131602	10
4-chloro-o-phenylenediamine	95830	10
4-Chloro-o-toluidine, hydrochloride	3165933	10
4-Chlorophenyl phenyl ether	7005723	500
4-Nitrobiphenyl	92933	10
5-(Aminomethyl)-3-isoxazolol	2763964	100
5-chloro-o-toluidine	95794	10
5-nitroacenaphthene	602879	10
5-nitro-o-anisidine	99592	1
5-Nitro-o-toluidine	99558	10
7,12-Dimethylbenz[a]anthracene	57976	1
abietic acid	514103	10
Acenaphthene	83329	10
Acenaphthylene	208968	500
Acetaldehyde	75070	100

Name	CAS	TRQ (lbs.)
Acetaldehyde, trichloro-	75876	500
Acetamide	60355	10
Acetic acid	64197	500
Acetic anhydride	108247	500
Acetone	67641	500
Acetonitrile	75058	500
Acetophenone	98862	500
Acetyl bromide	506967	500
Acetyl chloride	75365	500
Acrolein	107028	1
Acrylamide	79061	500
Acrylic acid	79107	500
Acrylonitrile	107131	10
actinomycin D	50760	10
Adipic acid	124049	500
Aflatoxins	1402682	1
Aldicarb	116063	1
Aldicarb sulfone	1646884	1
Aldrin	309002	1
Allyl alcohol	107186	10
Allyl chloride	107051	100
alpha – Endosulfan	959988	1
alpha-BHC	319846	10
alpha-Hexachlorocyclohexane	319846	10
alpha-Naphthylamine	134327	10
Aluminum phosphide	20859738	10
Aluminum sulfate	10043013	500
Aminoazobenzene	60093	10
Amitrole	61825	10
Ammonia	7664417	10
Ammonium acetate	631618	500
Ammonium benzoate	1863634	500
Ammonium bicarbonate	1066337	500
Ammonium bichromate	7789095	10
Ammonium bifluoride	1341497	10
Ammonium bisulfite	10192300	500
Ammonium carbamate	1111780	500
Ammonium carbonate	506876	500
Ammonium chloride	12125029	500
Ammonium chromate	7788989	10
Ammonium citrate, dibasic	3012655	500
Ammonium fluoborate	13826830	500
Ammonium fluoride	12125018	10
Ammonium hydroxide	1336216	100
Ammonium oxalate	14258492	500
Ammonium oxalate	5972736	500
Ammonium oxalate	6009707	500
Ammonium picrate	131748	10
Ammonium silicofluoride	16919190	100
Ammonium sulfamate	7773060	500
Ammonium sulfide	12135761	10
Ammonium sulfite	10196040	500

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Name	CAS	TRQ (lbs.)
Ammonium tartrate	3164292	500
Ammonium tartrate	14307438	500
Ammonium thiocyanate	1762954	500
Ammonium vanadate	7803556	100
Amyl acetate	628637	500
Anilazine	101053	1
Aniline	62533	500
aniline hydrochloride	142041	10
Anthracene	120127	500
Antimony	7440360	500
ANTIMONY COMPOUNDS		1
Antimony pentachloride	7647189	100
Antimony potassium tartrate	28300745	10
Antimony tribromide	7789619	100
Antimony trichloride	10025919	100
Antimony trifluoride	7783564	100
Antimony trioxide	1309644	100
antimycin A	1397940	1
Aramite	140578	1
Aroclor 1016	12674112	1
Aroclor 1221	11104282	1
Aroclor 1232	11141165	1
Aroclor 1242	53469219	1
Aroclor 1248	12672296	1
Aroclor 1254	11097691	1
Aroclor 1260	11096825	1
Arsenic	7440382	1
Arsenic acid	1327522	1
Arsenic acid	7778394	1
ARSENIC COMPOUNDS		1
Arsenic disulfide	1303328	1
Arsenic pentoxide	1303282	1
Arsenic trioxide	1327533	1
Arsenic trisulfide	1303339	1
Arsenous trichloride	7784341	1
Asbestos (friable)	1332214	1
Auramine	492808	10
Azaserine	115026	1
azinthos-ethyl	2642719	1
Aziridine, 2-methyl	75558	1
Azobenzene	103333	1
Barban	101279	1
Barium cyanide	542621	10
Bendiocarb	22781233	10
Bendiocarb phenol	22961826	1
Benezeneamine, 2,6-dinitro-N,N-dipropyl-4-(trifluoromethyl)-	1582098	10
Benomyl	17804352	1
Benz[a]anthracene	56553	10
Benz[c]acridine	225514	10
Benzal chloride	98873	500
Benzamide, 3,5-dichloro-N-(1,1-	23950585	500

Name	CAS	TRQ (lbs.)
dimethyl-2-propynyl		
Benzene	71432	10
Benzene, 2,4-diisocyanato-1-methyl-	584849	10
Benzeneacetic acid, 4-chloro-.alpha.-(4-chlorophenyl)-.alpha.-hydroxy-, ethyl ester	510156	10
Benzeneethanamine, alpha,alpha-dimethyl-	122098	500
Benzenemethanol, 4-chloro-.alpha.-4-chlorophenyl)-.alpha.-(trichloromethyl)-	115322	10
Benzenesulfonyl chloride	98099	10
Benzenethiol	108985	10
Benzidine	92875	1
Benzidine (and salts)		1
Benzo(k)fluoranthene	207089	500
Benzo[a]pyrene	50328	1
Benzo[b]fluoranthene	205992	1
Benzo[ghi]perylene	191242	500
Benzoic acid	65850	500
Benzoic trichloride	98077	10
Benzonitrile	100470	500
Benzoyl chloride	98884	100
Benzyl chloride	100447	10
Beryllium	7440417	10
Beryllium chloride	7787475	1
BERYLLIUM COMPOUNDS		1
Beryllium fluoride	7787497	1
Beryllium nitrate	7787555	1
Beryllium nitrate	13597994	1
beta – Endosulfan	33213659	1
beta-BHC	319857	1
beta-Naphthylamine	91598	10
beta-Propiolactone	57578	10
Biphenyl	92524	10
Bis(2-chloro-1-methylethyl)ether	108601	100
Bis(2-chloroethoxy) methane	111911	100
Bis(2-chloroethyl) ether	111444	10
Bis(2-ethylhexyl)phthalate	117817	10
Bis(chloromethyl) ether	542881	10
Bis(dimethylthiocarbamoyl) sulfide	97745	1
Bromoacetone	598312	100
Bromoform	75252	10
Bromomethane	74839	100
Bromoxynil	1689845	1
Brucine	357573	10
Butyl acetate	123864	500
Butyl benzyl phthalate	85687	10
Butylamine	109739	100
Butylate	2008415	1

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Name	CAS	TRQ (lbs.)
butylbutanol nitrosamine	3817116	10
Butylethylcarbamothioic acid S-propyl ester	1114712	1
Butyric acid	107926	500
Cacodylic acid	75605	1
Cadmium	7440439	10
Cadmium acetate	543908	10
Cadmium bromide	7789426	10
Cadmium chloride	10108642	10
CADMIUM COMPOUNDS		1
Calcium arsenate	7778441	1
Calcium arsenite	52740166	1
Calcium carbide	75207	10
Calcium chromate	13765190	10
Calcium cyanamide	156627	100
Calcium cyanide	592018	10
Calcium dodecylbenzenesulfonate	26264062	100
Calcium hypochlorite	7778543	10
Caprolactam	105602	500
Captafol	2425061	1
Captan	133062	10
Carbamic acid, methyl-, O-(((2,4-dimethyl-1,3-dithiolan-2-yl)methylene)amino)-	26419738	1
Carbamodithioic acid, dibutyl-, sodium salt	136301	1
Carbamodithioic acid, diethyl-, sodium salt	148185	1
Carbamothioic acid, bis(1-methylethyl)-S-(2,3-dichloro-2-propenyl)ester	2303164	10
Carbamothioic acid, dipropyl-, S-(phenylmethyl) ester	52888809	1
Carbamothioic acid, dipropyl-, S-propyl ester	1929777	1
Carbaryl	63252	10
Carbendazim	10605217	1
Carbofuran	1563662	10
Carbofuran phenol	1563388	1
Carbon disulfide	75150	10
Carbon oxide sulfide (COS)	463581	10
Carbon tetrachloride	56235	10
Carbonic difluoride	353504	100
Carbonochloridic acid, methylester	79221	100
Carbonyl sulfide	463581	10
Carbophenothion	786196	1
Carbosulfan	55285148	1
Catechol	120809	10
Chloramben	133904	10
Chlorambucil	305033	10
Chloramines		1

Name	CAS	TRQ (lbs.)
Chlordane	57749	1
Chlorfenvinphos	470906	10
CHLORINATED BENZENES		1
Chlorinated dibenzofurans		1
Chlorinated dioxins		1
CHLORINATED ETHANES		1
CHLORINATED NAPHTHALENE		1
CHLORINATED PHENOLS		1
Chlorine	7782505	10
Chlorine (elemental and hypochlorite salts)		10
Chlornaphazine	494031	10
Chloroacetaldehyde	107200	100
Chloroacetic acid	79118	10
CHLOROALKYL ETHERS		1
Chlorobenzene	108907	10
Chlorodibromomethane	124481	10
Chloroethane	75003	10
Chloroform	67663	10
Chloromethane	74873	10
Chloromethyl methyl ether	107302	10
Chloroprene	126998	10
Chlorosulfonic acid	7790945	100
Chlorpyrifos	2921882	1
Chromic acetate	1066304	100
Chromic acid	7738945	10
Chromic acid	11115745	10
Chromic sulfate	10101538	100
Chromium	7440473	500
CHROMIUM COMPOUNDS		1
Chromous chloride	10049055	100
Chrysene	218019	10
Clonitralid	1420048	10
COBALT COMPOUNDS		1
Cobaltous bromide	7789437	100
Cobaltous formate	544183	100
Cobaltous sulfamate	14017415	100
COKE OVEN EMISSIONS		1
Copper	7440508	500
COPPER COMPOUNDS		1
Copper cyanide	544923	10
Copper, bis(dimethylcarbamodithioato-S,S')-	137291	1
Coumaphos	56724	10
Creosote	8001589	1
Cresol (mixed isomers)	1319773	10
Crotoxyphos	7700176	10
Cumene	98828	500
Cumene hydroperoxide	80159	10
Cupferron	135206	10
Cupric acetate	142712	10

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Name	CAS	TRQ (lbs.)
Cupric acetoarsenite (Paris green)	12002038	1
Cupric chloride	7447394	10
Cupric nitrate	3251238	10
Cupric oxalate	5893663	10
Cupric sulfate	7758987	10
Cupric sulfate, ammoniated	10380297	10
Cupric tartrate	815827	10
CYANIDE COMPOUNDS		1
Cyanides (soluble salts and complexes)	57125	10
Cyanogen	460195	10
Cyanogen bromide	506683	100
Cyanogen chloride	506774	10
Cycasin	14901087	10
Cycloate	1134232	1
Cyclohexane	110827	100
Cyclohexanone	108941	500
Cycloheximide	66819	1
Cyclophosphamide	50180	10
Daunomycin	20830813	10
DDD	72548	1
DDE	3547044	500
DDE	72559	1
DDT	50293	1
DDT (p'p', o'p' and technical salts)		1
DDT AND METABOLITES		1
dehydroabiatic acid	1740198	10
delta-BHC	319868	1
Demeton	8065483	1
Diaminotoluene	496720	10
Diaminotoluene	823405	10
Diazinon	333415	1
Diazomethane	334883	10
Dibenz[a,h]anthracene	53703	1
Dibenz[a,i]pyrene	189559	10
Dibenzofuran	132649	10
Dichlobenil	1194656	10
Dichlone	117806	1
Dichlorobenzene	25321226	10
DICHLOROBENZIDENE		1
Dichlorobromomethane	75274	500
Dichlorodifluoromethane (CFC-12)	75718	500
Dichloroisopropyl ether	108601	100
Dichlorophenylarsine	696286	1
Dichloropropane	26638197	100
Dichloropropane – Dichloropropene (mixture)	8003198	10
Dichloropropene	26952238	10
Dichlorvos	62737	10

Name	CAS	TRQ (lbs.)
Dichrotophos	141662	1
Dicofol	115322	10
Dieldrin	60571	1
Diepoxybutane	1464535	10
Diethanolamine	111422	10
Diethyl phthalate	84662	100
Diethyl sulfate	64675	10
Diethylamine	109897	10
Diethylarsine	692422	1
Diethyl-p-nitrophenyl phosphate	311455	10
Diethylstilbestrol	56531	1
Dihydrosafrole	94586	10
Diisopropylfluorophosphate	55914	10
Dimethoate	60515	10
dimethyl disulphide	624920	10
Dimethyl phthalate	131113	500
Dimethyl sulfate	77781	10
Dimethylamine	124403	100
Dimethylaminoazobenzene	60117	10
Dimethylcarbaryl chloride	79447	1
Dimethylformamide	68122	10
Dimetilan	644644	1
Dinitrobenzene (mixed isomers)	25154545	10
Dinitrophenol	25550587	10
Dinitrotoluene (mixed isomers)	25321146	10
Dinocap	39300453	1
Di-n-octyl phthalate	117840	500
Dinoseb	88857	100
Dioxathion	78342	1
diphenyl ether	101848	10
DIPHENYLHYDRAZINE		1
Diphosphoramidate, octamethyl-	152169	10
Dipropylamine	142847	500
Diquat	85007	100
Diquat	2764729	100
Disulfiram	97778	1
Disulfoton	298044	1
Diuron	330541	10
Dodecylbenzenesulfonic acid	27176870	100
Endosulfan	115297	1
ENDOSULFAN AND METABOLITES		1
Endosulfan sulfate	1031078	1
Endothall	145733	100
Endrin	72208	1
Endrin aldehyde	7421934	1
ENDRIN AND METABOLITES		1
Epichlorohydrin	106898	10
Epinephrine	51434	100
EPN	2104645	1
Ethanimidothioic acid, 2-(dimethylamino)-N-hydroxy-2-	30558431	1

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Name	CAS	TRQ (lbs.)
oxo-, methyl ester		
Ethanimidothioic acid, N- [[methylamino]carbonyl]	16752775	10
Ethanol, 2,2'-oxybis-, dicarbamate	5952261	1
Ethion	563122	10
Ethyl acetate	141786	500
Ethyl acrylate	140885	100
Ethyl cyanide	107120	10
Ethyl dipropylthiocarbamate	759944	1
Ethyl ether	60297	10
Ethyl methacrylate	97632	100
Ethyl methanesulfonate	62500	1
Ethyl Ziram	14324551	1
Ethylbenzene	100414	100
Ethylene glycol	107211	500
Ethylene oxide	75218	10
Ethylene thiourea	96457	10
Ethylenebisdithiocarbamic acid, salts & esters	111546	500
Ethylenediamine	107153	500
Ethylenediamine-tetraacetic acid (EDTA)	60004	500
Ethyleneimine	151564	1
Famphur	52857	100
Fensulfothion	115902	1
Fenthion	55389	1
Ferric ammonium citrate	1185575	100
Ferric ammonium oxalate	2944674	100
Ferric ammonium oxalate	55488874	100
Ferric chloride	7705080	100
Ferric fluoride	7783508	10
Ferric nitrate	10421484	100
Ferric sulfate	10028225	100
Ferrous ammonium sulfate	10045893	100
Ferrous chloride	7758943	10
Ferrous sulfate	7720787	100
Ferrous sulfate	7782630	100
Fine mineral fibers		
Fluchloralin	33245395	1
Fluoranthene	206440	10
Fluorene	86737	500
Fluorine	7782414	10
Fluoroacetamide	640197	10
Formaldehyde	50000	10
Formetanate hydrochloride	23422539	1
Formic acid	64186	500
Formparanate	17702577	1
Fumaric acid	110178	500
Furan	110009	10
Furan, tetrahydro-	109999	100
Furathiazole	531828	1

Name	CAS	TRQ (lbs.)
Furfural	98011	500
Glycidylaldehyde	765344	10
GLYCOL ETHERS		1
Guanidine, N-methyl-N'-nitro-N- nitroso-	70257	10
Guthion	86500	1
HALOETHERS		1
HALOMETHANES		1
Heptachlor	76448	1
HEPTACHLOR AND METABOLITES		1
Heptachlor epoxide	1024573	1
Hexachlorobenzene	118741	10
Hexachlorobutadiene	87683	1
hexachlorocyclohexane (all isomers)	608731	1
Hexachlorocyclopentadiene	77474	10
Hexachloroethane	67721	10
Hexachlorophene	70304	10
Hexachloropropene	1888717	100
Hexaethyl tetraphosphate	757584	10
Hexamethylene-1,6-diisocyanate	822060	10
Hexamethylphosphoramide	680319	1
Hexane	110543	500
Hydrazine	302012	1
Hydrazine, 1,2-diethyl-	1615801	10
Hydrazine, 1,2-dimethyl-	540738	1
Hydrochloric acid	7647010	500
Hydrofluoric acid	7664393	10
Hydrogen cyanide	74908	10
Hydrogen sulfide	7783064	10
Hydroquinone	123319	10
Indeno(1,2,3-cd)pyrene	193395	10
iso-Amyl acetate	123922	500
iso-Butyl acetate	110190	500
Isobutyl alcohol	78831	500
iso-Butylamine	78819	100
iso-Butyric acid	79312	500
Isodrin	465736	1
isonicotinic acid hydrazine	54853	10
Isophorone	78591	500
Isoprene	78795	10
Isopropanolamine dodecylbenzene sulfonate	42504461	100
Isopropylmethylpyrazolyl dimethylcarbamate	119380	1
Isosafrole	120581	10
kanachlor C	59299513	10
Kepone	143500	1
Ketene	463514	1
Lactonitrile	78977	10
Lasiocarpine	303344	10

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Name	CAS	TRQ (lbs.)
Lead	7439921	10
Lead acetate	301042	10
Lead arsenate	10102484	1
Lead arsenate	7784409	1
Lead arsenate	7645252	1
Lead chloride	7758954	10
LEAD COMPOUNDS		1
Lead fluoborate	13814965	10
Lead fluoride	7783462	10
Lead iodide	10101630	10
Lead nitrate	10099748	10
Lead phosphate	7446277	10
Lead stearate	56189094	10
Lead stearate	1072351	10
Lead stearate	7428480	10
Lead stearate	52652592	10
Lead subacetate	1335326	10
Lead sulfate	7446142	10
Lead sulfate	15739807	10
Lead sulfide	1314870	10
Lead thiocyanate	592870	10
Leptophos	21609905	1
Lindane	58899	1
Lithium and lithium salts		1
malachite green	569642	1
Malathion	121755	10
Maleic acid	110167	500
Maleic anhydride	108316	500
Maleic hydrazide	123331	500
Malononitrile	109773	100
MANGANESE COMPOUNDS		1
Manganese, bis (dimethylcarbamidithioato-S,S')-	15339363	1
m-Cresol	108394	10
m-Dinitrobenzene	99650	10
Melphalan	148823	1
Mercuric cyanide	592041	1
Mercuric nitrate	10045940	10
Mercuric sulfate	7783359	10
Mercuric thiocyanate	592858	10
Mercurous nitrate	10415755	10
Mercurous nitrate	7782867	10
Mercury	7439976	1
MERCURY COMPOUNDS		1
Mercury fulminate	628864	10
Mestranol	72333	10
Methacrylonitrile	126987	100
Methanol	67561	500
Methapyrilene	91805	500
Methiocarb	2032657	10
Methoxychlor	72435	1
Methyl ethyl ketone (MEK)	78933	500

Name	CAS	TRQ (lbs.)
Methyl ethyl ketone peroxide	1338234	10
Methyl hydrazine	60344	10
Methyl iodide	74884	10
Methyl isobutyl ketone	108101	500
Methyl isocyanate	624839	10
Methyl mercaptan	74931	10
Methyl methacrylate	80626	100
Methyl parathion	298000	10
Methyl tert-butyl ether	1634044	100
Methylene bromide	74953	100
Methylene chloride	75092	100
Methylenebis(phenylisocyanate)	101688	500
Methylthiouracil	56042	10
Metolcarb	1129415	1
Mevinphos	7786347	10
Mexacarbate	315184	100
Mirex	2385855	1
Mitomycin C	50077	10
m-Nitrophenol	554847	10
m-Nitrotoluene	99081	100
Monocrotaline	315220	10
Monocrotophos	6923224	1
Monoethylamine	75047	10
Monomethylamine	74895	10
mustard gas	505602	10
m-Xylene	108383	100
N-(2-hydroxyethyl)ethyleneimine	1072522	10
N,N-Diethylaniline	91667	100
N,N'-diethylthiourea	105555	10
N,N-Dimethylaniline	121697	10
Naled	300765	10
Naphthalene	91203	10
Naphthenic acid	1338245	10
n-Butyl alcohol	71363	500
n-Butyl phthalate	84742	10
neoabietic acid	471772	1
Nickel	7440020	10
Nickel ammonium sulfate	15699180	10
Nickel carbonyl	13463393	10
Nickel chloride	37211055	10
Nickel chloride	7718549	10
NICKEL COMPOUNDS		1
Nickel cyanide	557197	10
Nickel hydroxide	12054487	10
Nickel nitrate	14216752	10
Nickel sulfate	7786814	10
Nicotine and salts	54115	10
Nicotine sulfate	65305	10
Nifurthiazole	3570750	10
Niridazole	61574	10
Nithiazide	139946	10
Nitric acid	7697372	100

APPENDIX C: NREPA Part 31 – Part 5 Rules

Name	CAS	TRQ (lbs.)
Nitric oxide	10102439	10
Nitrobenzene	98953	100
Nitrofen	1836755	10
Nitrogen dioxide	10102440	10
Nitrogen dioxide	10544726	10
nitrogen mustard	51752	10
Nitroglycerin	55630	10
Nitrophenol (mixed isomers)	25154556	10
NITROPHENOLS		1
NITROSAMINES		1
Nitrotoluene	1321126	100
N-methyl formamide	123397	10
N-Nitrosodiethanolamine	1116547	1
N-Nitrosodiethylamine	55185	1
N-Nitrosodimethylamine	62759	10
N-Nitrosodi-n-butylamine	924163	10
N-Nitrosodi-n-propylamine	621647	10
N-Nitrosodiphenylamine	86306	10
N-Nitrosomethylvinylamine	4549400	10
N-Nitrosomorpholine	59892	1
N-nitrosomorpholine	59892	10
N-Nitroso-N-ethylurea	759739	1
N-Nitroso-N-methylurea	684935	1
N-Nitroso-N-methylurethane	615532	1
N-Nitrosopiperidine	100754	10
N-Nitrosopyrrolidine	930552	1
N-nitrososarcosine	13256229	10
n-Propylamine	107108	500
O,O-Diethyl O-pyrazinyl phosphorothioate	297972	10
O,O-Diethyl S-methyl dithiophosphate	3288582	500
o-aminoazotoluene	97563	10
o-Anisidine	90040	10
o-anisidine hydrochloride	134292	10
o-Cresol	95487	10
Octachlorostyrene	29082744	10
o-Dichlorobenzene	95501	10
o-Dinitrobenzene	528290	10
o-Nitrotoluene	88722	100
o-phenylphenol	90437	10
Osmium tetroxide	20816120	100
o-Toluidine	95534	10
o-Toluidine hydrochloride	636215	10
Oxamyl	23135220	1
Oxydemetonmethyl	301122	10
o-Xylene	95476	100
Paraformaldehyde	30525894	100
Paraldehyde	123637	100
Paraquat	1910425	10
Parathion	56382	10
p-Chloroaniline	106478	100

Name	CAS	TRQ (lbs.)
p-Chloro-m-cresol	59507	500
p-chlorophenol	106489	10
p-cresidine	120718	10
p-Cresol	106445	10
p-Dinitrobenzene	100254	10
Pentachlorobenzene	608935	10
Pentachloroethane	76017	10
Pentachloronitrobenzene	82688	10
Pentachlorophenol	87865	10
Pentachlorophenol (and salts)		10
Perchloromethyl mercaptan	594423	10
Phenacetin	62442	10
Phenanthrene	85018	500
phenazopyridine hydrochloride	136403	10
Phenesterin	3546109	10
Phenobarbital	50066	10
Phenol	108952	100
Phenol, 2-(1-methylethoxy)-, methylcarbamate	114261	10
Phenol, 3-(1-methylethyl)-, methylcarbamate	64006	1
Phenylmercury acetate	62384	10
Phenylthiourea	103855	10
Phenytoin	57410	10
phenytoin sodium	630933	10
Phorate	298022	10
Phosazetim	4104147	1
Phosgene	75445	10
Phosmet	732116	10
Phosphamidon	13171216	1
Phosphine	7803512	10
Phosphoric acid	7664382	500
Phosphorous trichloride	7719122	100
Phosphorus	7723140	1
Phosphoryl chloride	10025873	100
PHTHALATE ESTERS		1
Phthalic anhydride	85449	500
Physostigmine	57476	1
Physostigmine, salicylate (1:1)	57647	1
Piperidine, 1,1'- (tetrathiodicarbonothioyl)-bis-	120547	1
piperonyl sulfoxide	120627	10
p-Nitroaniline	100016	500
p-Nitrophenol	100027	10
p-nitrosodiphenylamine	156105	10
p-Nitrotoluene	99990	100
Polybrominated biphenyls		1
Polychlorinated biphenyls	1336363	1
POLYCYCLIC ORGANIC MATTER		1
POLYNUCLEAR AROMATIC HYDROCARBONS		1

APPENDIX C: NREPA Part 31 – Part 5 Rules

Name	CAS	TRQ (lbs.)
Potassium arsenate	7784410	1
Potassium arsenite	10124502	1
Potassium bichromate	7778509	10
Potassium chromate	7789006	10
Potassium cyanide	151508	10
Potassium dimethyldithiocarbamate	128030	1
Potassium hydroxide	1310583	100
Potassium N-hydroxymethyl-N-methyldithiocarbamate	51026289	1
Potassium N-methyldithiocarbamate	137417	1
Potassium permanganate	7722647	10
Potassium silver cyanide	506616	1
p-Phenylenediamine	106503	500
Promecarb	2631370	1
Propane sultone	1120714	10
Propargite	2312358	10
Propargyl alcohol	107197	100
Propham	122429	1
Propionaldehyde	123386	100
Propionic acid	79094	500
Propionic anhydride	123626	500
Propylene oxide	75569	10
Propylthiouracil	51525	10
p-Toluidine	106490	10
p-Xylene	106423	10
Pyrene	129000	500
Pyrethrins	121299	1
Pyrethrins	121211	1
Pyrethrins	8003347	1
Pyridine	110861	100
Quinoline	91225	500
Quinone	106514	10
Reserpine	50555	500
Resorcinol	108463	500
Rotenone	83794	1
Saccharin and salts	81072	10
Safrole	94597	10
sec-Amyl acetate	626380	500
sec-Butyl acetate	105464	500
sec-Butylamine	513495	100
sec-Butylamine	13952846	100
Selenious acid	7783008	10
Selenious acid, dithallium(1+) salt	12039520	100
Selenium	7782492	10
SELENIUM COMPOUNDS		1
Selenium dioxide	7446084	10
Selenium sulfide	7488564	10
Selenium, tetrakis(dimethyldithiocarbamate)	144343	1
Selenourea	630104	100

Name	CAS	TRQ (lbs.)
Semicarbazide	57567	10
semicarbazide hydrochloride	563417	10
Silver	7440224	100
SILVER COMPOUNDS		1
Silver cyanide	506649	1
Silver nitrate	7761888	1
Silvex (2,4,5-TP)	93721	10
silvex, propylene glycol butyl ether ester	2317240	10
Sodium	7440235	10
Sodium arsenate	7631892	1
Sodium arsenite	7784465	1
Sodium azide (Na(N3))	26628228	100
Sodium bichromate	10588019	10
Sodium bifluoride	1333831	10
Sodium bisulfite	7631905	500
Sodium chromate	7775113	10
Sodium cyanide (Na(CN))	143339	10
Sodium dimethyldithiocarbamate	128041	1
Sodium dodecylbenzenesulfonate	25155300	100
Sodium fluoride	7681494	100
Sodium fluoroacetate	62748	10
sodium fluoroacetate	62748	1
Sodium hydrosulfide	16721805	500
Sodium hydroxide	1310732	100
Sodium hypochlorite	10022705	10
Sodium hypochlorite	7681529	10
Sodium methylate	124414	100
Sodium methyldithiocarbamate	137428	1
Sodium nitrite	7632000	10
Sodium phosphate, dibasic	10039324	500
Sodium phosphate, dibasic	10140655	500
Sodium phosphate, dibasic	7558794	500
Sodium phosphate, tribasic	10361894	500
Sodium phosphate, tribasic	7785844	500
Sodium phosphate, tribasic	7601549	500
Sodium phosphate, tribasic	7758294	500
Sodium phosphate, tribasic	10101890	500
Sodium phosphate, tribasic	10124568	500
Sodium selenite	7782823	10
Sodium selenite	10102188	10
sodium-o-phenylphenol	132274	10
Streptozotocin	18883664	1
Strontium chromate	7789062	10
Strychnine, and salts	57249	10
Strychnine, sulfate	60413	10
Styrene	100425	100
Styrene oxide	96093	10
Sulfallate	95067	1
Sulfallate	95067	10
Sulfur monochloride	12771083	100

APPENDIX C: NREPA Part 31 – Part 5 Rules

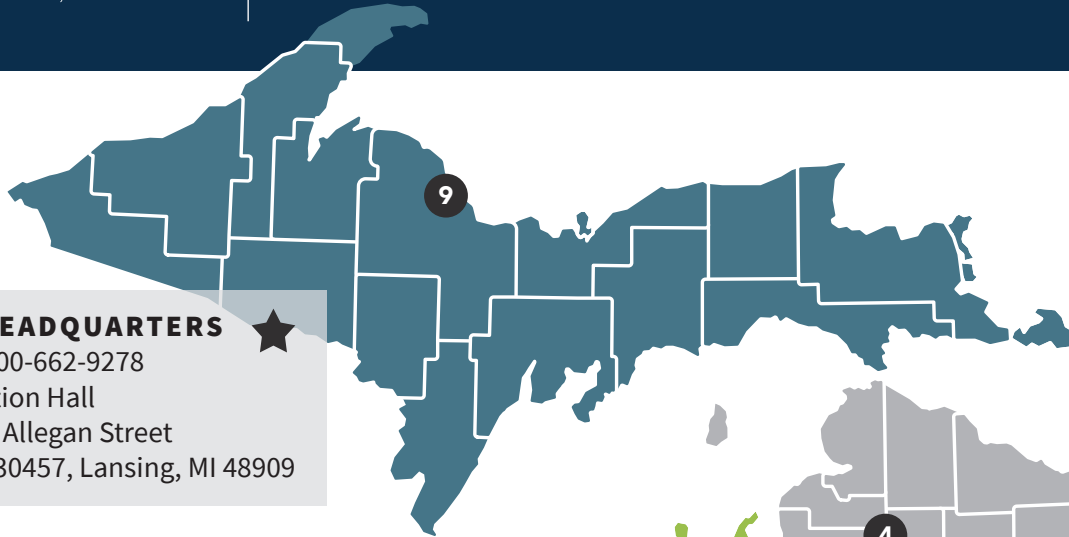
Name	CAS	TRQ (lbs.)
Sulfur phosphide	1314803	10
Sulfuric acid	7664939	100
Sulfuric acid (fuming)	8014957	100
Terbufos	13071799	1
tert-Amyl acetate	625161	500
tert-Butyl acetate	540885	500
tert-Butylamine	75649	100
Tetrabutylthiuram disulfide	1634022	1
Tetrachloroethylene	127184	10
Tetrachloroguaiacol	2539175	10
Tetrachlorvinphos	961115	10
Tetraethyl lead	78002	10
Tetraethyl pyrophosphate	107493	10
Tetraethyldithiopyrophosphate	3689245	10
Tetrahydro-3,5-dimethyl-2H-1,3,5-thiadiazine-2-thione	533744	1
Tetranitromethane	509148	10
THALLIUM COMPOUNDS		1
Thallic oxide	1314325	10
Thallium	7440280	100
Thallium chloride TlCl	7791120	10
Thallium sulfate	10031591	10
Thallium(I) acetate	563688	10
Thallium(I) carbonate	6533739	10
Thallium(I) nitrate	10102451	10
Thallium(I) sulfate	7446186	10
Thioacetamide	62555	10
Thiodicarb	59669260	1
Thiofanox	39196184	10
Thiophanate-methyl	23564058	1
Thiosemicarbazide	79196	10
Thiourea	62566	10
Thiourea, (2-chlorophenyl)-	5344821	10
Thiourea, 1-naphthalenyl-	86884	10
Thiram	137268	10
Titanium chloride (TiCl ₄) (T-4)-	7550450	100
Titanium tetrachloride	7550450	100
Toluene	108883	100
Toluene diisocyanate (unspecified isomer)	26471625	10
Toluene-2,6-diisocyanate	91087	10
Toluenediamine	25376458	10
Toxaphene	8001352	1
Triallate	2303175	1
Triaryl phosphate esters		10
Tributyltin (and salts and esters)		1
Trichlorfon	52686	10
Trichloroethylene	79016	10
Trichlorofluoromethane (CFC-11)	75694	500
Trichlorophenol	25167822	10
Triethanolamine dodecylbenzene sulfonate	27323417	100

Name	CAS	TRQ (lbs.)
Triethylamine	121448	500
Trimethylamine	75503	10
Trimethylphosphate	512561	1
Tris(2,3-dibromopropyl) phosphate	126727	10
Tris(dimethylcarbamodithioato-S,S')iron	14484641	1
Trypan blue	72571	10
Uracil mustard	66751	10
Uranyl acetate	541093	10
Uranyl nitrate	36478769	10
Uranyl nitrate	10102064	10
Urethane	51796	10
Vanadium pentoxide	1314621	100
Vanadyl sulfate	27774136	100
Vinyl acetate	108054	500
Vinyl bromide	593602	10
Vinyl chloride	75014	1
Warfarin sodium	129066	10
Warfarin, & salts, conc.>0.3%	81812	10
Xylene (mixed isomers)	1330207	10
Xylenol	1300716	100
Zinc	7440666	100
Zinc (fume or dust)	7440666	100
Zinc acetate	557346	100
Zinc ammonium chloride	14639986	100
Zinc ammonium chloride	14639975	100
Zinc ammonium chloride	52628258	100
Zinc borate	1332076	100
Zinc bromide	7699458	100
Zinc carbonate	3486359	100
Zinc chloride	7646857	100
ZINC COMPOUNDS		1
Zinc cyanide	557211	10
Zinc fluoride	7783495	100
Zinc formate	557415	100
Zinc hydrosulfite	7779864	100
Zinc nitrate	7779886	100
Zinc phenolsulfonate	127822	500
Zinc phosphide	1314847	10
Zinc phosphide (conc. <= 10%)	1314847	10
Zinc silicofluoride	16871719	500
Zinc sulfate	7733020	100
Ziram	137304	1
Zirconium nitrate	13746899	500
Zirconium potassium fluoride	16923958	100
Zirconium sulfate	14644612	500
Zirconium tetrachloride	10026116	500

A P P E N D I X D

Appendix D: **EGL E District** **Offices**

District Offices



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120 West Chapin St., Cadillac, MI 49601

3 DETROIT DISTRICT OFFICE

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10 WARREN DISTRICT OFFICE

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A P P E N D I X D

Appendix C: **Release Notification** **Requirements in** **Michigan**