CHAPTER 6: ENVIROMENTAL EMERGENCIES

IN THIS CHAPTER

PURPOSE AND APPLICABILITY OF REGULATIONS

There are many regulations pertaining to release planning, reporting, employee training, and response. The intent is to protect public health and welfare and the environment from spills or releases of regulated materials. Each regulation targets a specific group of materials that exhibit certain characteristics. Appendix B contains definitions of the various regulated groups of materials referenced in this chapter. These defined terms appear throughout this chapter in bold lettering.

In some instances, multiple agencies use the same term to describe a different regulated group. Such terms will be followed by a dash and the acronym of the defining agency or regulation. For example, the U.S. Department of Transportation (U.S. DOT) and the Michigan Fire Prevention Code, Public Act 207 of 1941, as amended (Act 207) have differing definitions for the term "hazardous material." Therefore, the U.S. DOT and Act 207 definitions of hazardous material will appear as "**hazardous material-U.S. DOT**" and "**hazardous material-Act 207**" respectively.

AGENCIES AND THEIR LAWS AND RULES

Due to the numerous environmental federal and state regulations that apply to this chapter, please refer to the "**Release Notification Requirements in Michigan**" document and the Summary of Common Environmental Release Prevention and Response Plans in Appendix 6-A. This table is a tool to identify the laws and regulations applicable to this chapter and the agencies that implement them.

6.1 RELEASE PREVENTION TIPS

Releases can usually be prevented by using common sense and care when storing, transferring, and transporting regulated materials. Tips include:

- Train all personnel in spill prevention techniques. Some regulations indicate who, at a minimum, must be trained for handling regulated material and waste.
- Practice safe loading and unloading procedures.
- Have inventory control procedures track material from receipt to disposal.
- Post warning and instructional signs in appropriate places.
- Adequately label all containers.

- Use pumps or funnels to transfer liquids.
- Keep lids and covers on containers to control spills and evaporation.
- Use seal-less pumps.
- Install spill basins or dikes in storage areas.
- Install splash guards and drip boards on tanks and faucets.
- Use drip buckets under liquid spigots.
- Prohibit outside draining or replacement of fluids over the ground or on pavement not designed for containment.

You might also reduce the damage caused by spills if you notice them quickly. Routinely check your material handling equipment for deterioration, leaks and spills. This will help to ensure timely repair to prevent a material release and quick response to mitigate damages and clean-up liabilities. Some of the regulations specify how often you must monitor your business. Watch for strange odors and discoloration or corrosion of walls, work surfaces, ceilings, and pipes. Also note if anyone has irritation of the eyes, nose, or throat. All of these can indicate the presence of leaks or poorly maintained equipment.

6.2 RELEASE PREVENTION AND RESPONSE PLANNING

While environmental regulations do not require all businesses to develop release prevention and response plans, having one is recommended to minimize your liability and protect human health and the environment. Depending on your activities, you may be subject to multiple planning regulations, and you're encouraged to develop one plan, an Integrated Contingency Plan (ICP) as described in Chapter 6.2.8, that includes each individual plan's specific requirements as identified in the different federal or state laws.

Even if you are not required to have a written plan under the regulations described in this section, you are responsible for any release on or from your property. You may be required to report the release to different agencies (see Chapter 6.3) and will be required to clean up the release (see Chapter 6.4). Release notifications and cleanup procedures would be included in plans developed voluntarily or as required by regulation. In addition, staff must be properly trained for their role in responding to releases. Information about secondary containment and other material storage requirements discussed in **Chapters 2** and **4** should also be included in emergency plans.

In addition to plans discussed in this chapter, facilities may have other planning related requirements in:

- ✓ Permits issued to the facility.
- ✓ Community Emergency Response Plan required by Section 302 of SARA Title III (**Chapter 5.3**).

Firefighter Right-to-Know requires that you provide to your local fire department information about the hazardous materials kept on site. It is recommended that you invite your local fire department to tour your facility, so they can be adequately trained and have the necessary equipment available to respond to an emergency at your facility. Some fire departments encourage the practice of having a lock box or emergency tube available somewhere outside of the facility building(s) that protects the contents of facility emergency contacts, basic facility information, facility maps, and either Safety Data Sheets (SDSs) or a description of potentially harmful materials on site. Talk to your fire department about this practice. They can provide recommendations regarding what they want to have immediately available if called to the site and where they would like to have the information located. However, due to terrorism concerns, be cautious about the placement of information in case of potential sabotage.

The U.S. DOT regulations require each person in physical possession of the **hazardous material-US DOT** at the time of a reportable incident as defined in 49 CFR 171.15 to provide notice by telephone to the National Response Center (NRC) at 800-424-8802. The notice must be provided as soon as practical but no later than 12 hours after the reportable incident occurs, and a more detailed incident report must follow on DOT Form F 5800.1 within 30 days of discovery of the incident. For more details on incident reporting and training related to **hazardous materials-U.S. DOT**, see Chapter 4 and EGLE's "Release Notification Requirements in Michigan" document.

Consider what needs to be done in case of an emergency and prepare a response plan to protect your company, employees, and the environment. Consider the following in case emergency responders are contacted for assistance to the facility:

- The fire department's response is based on the information you give them. Provide as much detail as possible when calling for help. Have your emergency information readily available and let them know what hazardous materials are involved, how much if known, the location of the spill, if people are inside the facility or taking some response actions, wind direction, etc.
- Have a key contact person (who is knowledgeable about the whole facility and the incident) meet the responders.
- Make sure everyone is accounted for, including both employees and visitors at the facility.
- Keep everyone upwind of the situation and, if necessary, have people move to a different location.
- Have a knowledgeable public relations person from the facility available to address media if they arrive at the scene.
- Follow the emergency responders' directions.

The following are common environmental release prevention and response plans that a manufacturer may be required to develop:

- **Hazardous Waste Contingency Plan**: Part 111 (Hazardous Waste Management) of Act 451 if you have regulated amounts of **hazardous waste** (see Chapter 6.2.1).
- Pollution Incident Prevention Plan (PIPP): Part 31 (Water Resources Protection) of Act 451 if you have regulated amounts of **oil, salt** or **polluting materials** that are listed in R 324.2009, Table 1 in the Part 5 Rules. (see Chapter 6.2.2).
- Spill Prevention, Control, and Countermeasures (SPCC) Plan: federal Clean Water Act if you have regulated storage capacity of **oils** and a release could potentially reach navigable waters, or you have PCB articles regulated under the Toxic Substances Control Act (TSCA) that requires a SPCC Plan. (see Chapter 6.2.3).
- Storm Water Pollution Prevention Plan (SWPPP): Part 31 (Water Resources Protection) of Act 451 if you are subject to a storm water discharge permit. (see Chapter 6.2.4).
- Risk Management Program (RMP): Section 112(r) of the 1990 Clean Air Act Amendments if you have regulated amounts of **CAA Section 112(r) Substances**. (see Chapter 6.2.5).
- Emergency Action Plan: National Fire Protection Association (NFPA) **pamphlet 30** if you have flammable and combustible liquids stored aboveground in containers and drums 60 gallons and larger and tanks 660 gallons and larger. (see Chapter 6.2.6).
- HAZMAT Security Plan if you are shipping **hazardous materials-U.S.DOT**, including shipments of hazardous waste requiring placards in excess of 1000 pounds (Chapter 6.2.7).
- Integrated Contingency Plan (ICP) if you choose to prepare one plan that covers multiple regulatory requirements instead of developing an individual plan under each regulation. (see Chapter 6.2.8).
- Federal Site Security Plan if you have met the threshold amounts for the Chemicals of Interest (see Chapter 6.2.9).

Are you subject to the above planning requirements? First it is necessary to determine if there are regulated materials on site, and then determine if the facility meets other conditions that require planning. Ask yourself the following questions:

1. Are there regulated materials on site? Use your safety data sheets [SDS], hazardous waste manifests, waste survey information gathered as described in Chapter 2.1, and information about polluting materials and PCBs in Chapter 4 to answer the following questions.
    - Is the material on any list of regulated substances?
        - Is the material a product or raw material designated as a **polluting material**?
        - Is the material a **hazardous waste**?

- Is any of it **salt** (sodium chloride, potassium chloride, calcium chloride, and magnesium chloride)?
- Is any material a flammable or combustible liquid (flashpoint below 200 degrees Fahrenheit)?
- Is the material an **oil** (this includes vegetable oils, animal fats, synthetic oils, and petroleum products, and derivatives like mineral spirits, gasoline, diesel fuel, etc.)? Do you have 1,320 or more gallons total storage capacity, or do you have a single container with a capacity of more than 660 gallons?
- Are there regulated PCB articles on site in temporary storage or stationary bulk storage tanks (see Chapter 4.5)?

2. If there are regulated materials or other regulated conditions, do you meet those conditions that would require planning? Information to consider includes:
   - How much is on site?
   - How much is stored outdoors or indoors?
   - How long is it kept on site?
   - Is any material stored in regulated aboveground or underground storage tanks?
   - Can a release reach navigable waters of the state either by direct discharge or via a conveyance system such as drains, ditches, etc.?
   - What is the facility's hazardous waste generator status (see Chapter 2.4.3)?
   - Does the facility have a hazardous waste treatment, storage, and disposal facility permit?
   - Is the facility required to have a storm water discharge permit (see Chapter 3.2.3)?
   - What is the facility's North America Industrial Classification code (NAIC) or Standard Industrial Classification (SIC) code (see Chapter 3.2.3)?
   - If a release occurred, is there a potential for a significant impact on the waters of the state (i.e., rivers, lakes, drains)?
   - Are hazardous materials as defined under U.S. DOT, NFPA, or Act 138 regulations being shipped off-site (see Chapter 4.4)?

Now use your answers while reviewing the planning requirements found in this chapter, reporting requirements found in Appendix 6-A, and the referenced regulations to see which requirements apply to your company. An overview of the various emergency plans and planning resources are discussed in more detail in the sections to follow within this chapter.

Where can you find additional site specific and general emergency planning resources?

- If your facility has any existing emergency plans, determine if it is still subject to the same regulations that require those plans. Then look at current requirements to determine what needs to be updated. Maintain a plan even if it is not specifically required by the regulations to limit your liabilities.
- Go to **EGLE's Emergency Planning Web site** (**michigan.gov/EGLEEmergencyPlan**) for planning information and Web links.
- The Michigan State Police (MSP), Emergency Management and Homeland Security Division, offers HAZMAT training and has publications to help companies and communities prepare for hazardous materials incidents, including the:
  - ✓ "**Emergency Management and Homeland Security Publications Web page**" that details hazard mitigation planning and success stories, and the
  - ✓ **"Critical Incident Protocol — A Public and Private Partnership"** for community and facility joint planning information.
- The Federal Emergency Management Agency has information at **fema.gov** for prevention and preparation.
- The **Center for Disease Control** (**cdc.gov**) (select Emergency Preparedness and Response) has public health emergency preparedness guidance for specific chemical information, including Chemical Safety Cards, information about anthrax or other bioterrorism threats.
- The U.S. Coast Guard National Response Center at **nrc.uscg.mil/default.aspx** provides information about transportation accidents, oil spills, chemical releases, and more.
- The National Oceanic and Atmospheric Administration's Office of Response and Restoration provides numerous links to chemical databases, MSDS databases, and chemical fact sheets developed by ATSDR highlighting toxicity, exposure information, and more at **response.restoration.noaa.gov**.
- The **National Fire Protection Association** (**www.nfpa.org**) has published the *Standard for Site Security Services for Fire Loss Prevention*, (**NFPA – 601**)
- The **Agency for Toxic Substances and Disease Registry** (**atsdr.cdc.gov**) provides a 10-step procedure to analyze, mitigate, and prevent public health hazards resulting from terrorism involving industrial chemicals.
- The **American Society for Industrial Security** (**securitymanagement.com**) develops educational programs and materials that address security concerns.
- The **Center for Chemical Process Safety** (**aiche.org/ccps**) develops engineering and management practices to prevent and mitigate consequences of catastrophic events involving chemical releases.
- The **National Safety Council** (**nsc.org**) provides general safety information on chemical and environmental issues.

6.2.1 CONTINGENCY PLANS FOR HAZARDOUS WASTE GENERATORS

EGLE oversees the hazardous waste regulations that require Large Quantity and Small Quantity Generators of hazardous waste to be prepared in case of a fire, explosion, or release of ***hazardous waste,*** and to maintain and operate their businesses in a way that minimizes these risks. Very Small Quantity Generators of hazardous waste are highly encouraged to also be prepared and to consider meeting the Small Quantity Generator planning conditions even though it is not required by the hazardous waste regulations. See the **Hazardous Waste Generator Category and Summary Accumulation Requirements** Guidance for a summary of the generator categories and requirements they must meet.

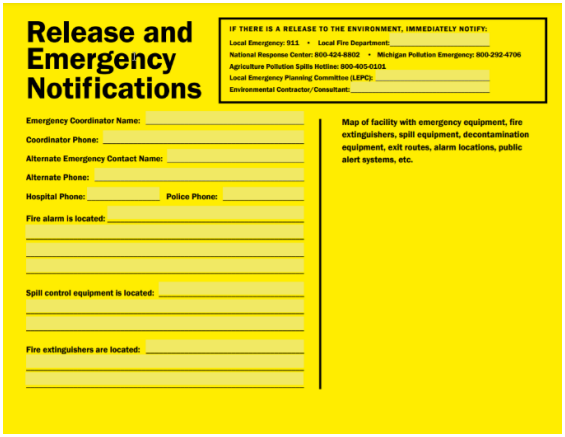
Generators of **hazardous waste** are required to comply with the following:

1. Have proper emergency equipment available:
    a. Communication devices (e.g., phones, radios, intercom, etc.).
    b. Portable fire extinguishers.
    c. Spill control equipment (e.g., absorbents, containers, kits).
    d. Water for fire control in sufficient volumes.
    e. Decontamination equipment
    f. Test and maintain all emergency response equipment as necessary.
    g. Have immediate access to an internal alarm system. This means personnel can activate an alarm within seconds, not minutes.
    h. Provide and maintain sufficient aisle space in the **hazardous waste** handling areas to ensure access of emergency equipment and emergency personnel.
2. Meet applicable planning requirements as outlined below.

    Small Quantity Generators Must:

    a. Identify one employee who is on site or on call and has the responsibility and authority to coordinate all emergency response activities. Alternative coordinators are also recommended, so there is always someone who can implement the plan if ever the primary emergency coordinator is on vacation or otherwise not available.
    b. Post the following next to their telephones and/or in the area(s) where hazardous waste is managed:
        - Name and telephone number(s) of the emergency coordinator and alternates.
        - Locations of fire extinguishers, alarms, spill control, and decontamination equipment.
        - Location of fire alarms if direct to fire department, or the telephone number of the local fire department.
        - Location of exits and exit routes.

EGLE has an optional **"Release and Emergency Notifications"** form you can use to post the required information next to the telephones and in areas where the hazardous waste is handled. You are not required to use this particular form; however, failure to have the information posted is a common violation found during **hazardous waste** inspections. There are other requirements outlined on the back of the form. See also EGLE's "**Small Quantity Generator Requirements**" guide.



Release and Emergency Notifications

IF THERE IS A RELEASE TO THE ENVIRONMENT, IMMEDIATELY NOTIFY:
Local Emergency: 911 • Local Fire Department: _____
National Response Center: 800-424-8802 • Michigan Pollution Emergency: 800-292-4706
Agriculture Pollution Spills Hotline: 800-405-0101
Local Emergency Planning Committee (LEPC): _____
Environmental Contractor/ Consultant: _____

Emergency Coordinator Name: _____
Coordinator Phone: _____
Alternate Emergency Contact Name: _____
Alternate Phone: _____
Hospital Phone: _____ Police Phone: _____
Fire alarm is located: _____
Spill control equipment is located: _____
Fire extinguishers are located: _____

Map of facility with emergency equipment, fire extinguishers, spill equipment, decontamination equipment, exit routes, alarm locations, public alert systems, etc.

c. Send a diagram or discuss the layout of their facility, access roads, and evacuation routes with the local response agencies. Have arrangements in place with authorities that respond to the types of emergencies regarding the waste handled at your business. Invite police, fire departments, and emergency response teams to tour your business. If local or state authorities decline your arrangement, you must have written documentation of that refusal. If you use outside contractors to respond to emergencies, you must make arrangements with emergency response contractors and suppliers. Keep documentation of any visits by emergency response people, agreements, etc.

d. Submit to local hospitals a listing of injuries or illnesses that might result from the **hazardous waste** at their businesses.

Large Quantity Generators Must:

a. Have a written **contingency plan**. This plan describes what staff will do in case of a fire, explosion, or release of **hazardous waste**. The contingency plan must include:

- A Contingency Plan Quick Reference Guide that can be used immediately at the time of an emergency by responders to help them quickly familiarize themselves with the site hazards and respond. The quick reference guide must:

  i) Identify the types/names of hazardous waste handled at the site in layman's terms and the hazards associated with each hazardous waste (e.g., toxic paint wastes, spent ignitable solvent, corrosive acid).

  ii) Identify the maximum amount of each hazardous waste that may be present at any one time.

  iii) Identify any unique threats including any special medical treatment that might be necessary as a result of exposure during an emergency.

  iv) Include a site map showing where hazardous wastes are generated, accumulated, and treated, along with routes to access them.

v) Include a street map for the site, including on-site and public roads, nearby businesses, schools, and residential areas, and the location of any fire hydrants and other water supplies (e.g., identify access type and flow rate) - to help gain access to the site, establish evacuation routes for citizens, and workers, and provide access to water for fire suppression.

vi) Identify on-site notification system capabilities (alarms systems, speakers, etc.) used to notify citizens and workers of an emergency.

vii) Identify the names and phone numbers of emergency coordinators. When identifying the names and telephone numbers of primary and secondary emergency coordinators, keep in mind emergency coordinators must either be on the premises or on call and able to reach the facility within a short amount of time for any emergency, minutes not hours.

- Written procedures to follow in the event of a **hazardous waste** release. . The procedures must be specific to the type of wastes kept on site and the hazards they present. It must include spill and fire response, monitoring actions, and reporting sequence to emergency response organizations.
- A list of emergency equipment at the facility, where it is located, physical description, a brief outline of its capabilities, and provisions to maintain the equipment.
- Include a map of the floor plan that is made available to all staff and shows the location of fire extinguishing equipment (e.g., fire extinguishers, sprinklers, hoses, fire hydrants); communication or alarm systems (e.g., alarm boxes or phones, etc.), spill control equipment (e.g., absorbents, spill kits, shovels); and decontamination equipment using easy-to-understand symbols.
- A written evacuation plan that includes a diagram of the layout of your business, access roads, and primary and alternative evacuation routes. The plan must also describe the signals to be used to begin evacuation. These routes can be shown on the same floor plan as the emergency response equipment. It is recommended that routes include two outside areas where employees should assemble (using the one upwind of the facility) and include exit routes and all facility exit options.

b. Keep multiple copies of the hazardous waste contingency plan at the facility, readily available to those who need it.

Do NOT submit a copy of the Hazardous Waste Contingency Plan to EGLE or to the State Emergency Response Commission (SERC) unless requested.

c. Provide a copy of the contingency plan to *local* police and fire departments, hospitals, emergency response teams, and any emergency response contractors and suppliers you may have hired. Have proof that the plan was distributed (e.g. keep copy of a written cover letter that includes the date of the most recent contingency plan). In the letter, briefly explain why a copy of the plan is being sent, identify a contact who can answers questions, and outline any emergency response you expect from the recipient of the letter. Michigan does not have a state emergency response team that would receive a copy. If local or state authorities decline your arrangement, you must have written documentation of that refusal. If you use outside contractors to respond to emergencies, make arrangements with emergency response contractors and suppliers.

d. Submit to local hospitals a listing of possible injuries or illnesses that might result from the **hazardous waste** at their businesses.

e. Distribute the contingency plan to your employees as part of their hazardous waste training, discuss its provisions, and what is expected of them. Make sure to keep documentation of the initial training and the annual review as they are required records that inspectors will request.

f. Update the plan whenever anything changes, especially if emergency coordinators or equipment changes. If the plan fails during an emergency, it must be updated to address any deficiencies. In addition, updates must be made if the facility makes any changes to its design, construction, operations, materials that change the emergency hazards, and increase the potential for a fire, explosion, or releases of **hazardous waste**, prompting a change in appropriate response actions.

If you are required to prepare another release prevention and response plan or are preparing an integrated contingency plan (Chapter 6.2.8), you only need to add the **hazardous waste** management provisions necessary to make your existing plan comply with these additional requirements. You do not need separate plans to meet the requirements described in the hazardous waste regulations.

Not all of the specific requirements have been outlined above. See EGLE's "**Contingency Plan and Emergency Procedures**" guide and "**Personnel Training Requirements for Fully Regulated Generators of Hazardous Waste**," contact your local **EGLE District Office Hazardous Waste Program** staff, or refer to the regulations for more information.

6.2.2 PART 5 RULES AND POLLUTION INCIDENT PREVENTION PLANS (PIPP)

EGLE's Water Resources Division oversees the Part 5 Rules (Spillage of Oil and Polluting Materials) promulgated under Part 31 (Water Resources Protection) of Act 451. A facility is regulated under the Part 5 Rules if it:

- Meets the definition of an on-land or oil storage facility, AND
- Does not meet any of the listed conditional exemptions, AND

- Has polluting materials that meet or exceed the associated threshold management quantities,

  OR

- EGLE determines a release from the facility could cause substantial harm to the surface or ground waters of the state.

Polluting materials include oil, salt, or any material specified in table 1 (R 324.2009) in the Part 5 Rules. Mixtures that contain one percent or more by weight of a polluting material are included.

Threshold management quantity (TMQ) means any of the following:

- For **salt** used, stored, or otherwise managed on the contiguous property:
  - Solid form - 5 tons
  - Liquid form - 1,000 gallons
- For **polluting materials** listed in table 1 of the Part 5 Rules at a discrete use or storage area:
  - Outdoors - 440 pounds
  - Indoors - 2,200 pounds
- For **oil**:
  - Single container or tank having a capacity of more than 660 gallons; or
  - Total capacity of 1,320 gallons in above ground tanks

The Part 5 Rules have *conditional exemptions* that exempt facilities from regulation under the Part 5 Rules. Many of these exemptions apply if the facility is meeting the requirements in certain other regulations:

- If flammable or combustible liquids (flash point less than 200 degrees Fahrenheit) are **polluting materials** that exceed the TMQ, and if the facility is subject to 1941 PA 207 (Michigan's fire prevention code), then it must be in compliance with the fire prevention code for flammable and combustible liquids. Regulation under Part 5 Rules would only be required if it also had other polluting materials that exceeded the TMQ.
- If the **polluting materials** exceed the TMQ and are contained in underground storage tanks that are subject to Parts 211 and 213 of Act 451 (underground storage tanks and leaking underground storage tanks), then the facility must be in compliance with these regulations. Regulation under the Part 5 Rules is only required if it had polluting materials that exceeded the TMQ that were not contained in underground storage tanks.
- If hazardous wastes are **polluting materials** that exceed the TMQ and if the facility is subject to Part 111 of Act 451 (hazardous waste management), then it must be in compliance with the Part 111 requirements. Regulation under the Part 5 Rules would only be required if it also had other polluting materials that exceeded the TMQ.

- If oil exceeds the TMQ and if the facility is subject to Part 615 of Act 451 (oil and gas production fields) then it must be in compliance with the Part 615 requirements. Regulation under the Part 5 Rules would only be required if the facility also had other polluting materials that exceeded the TMQ.
- A facility is exempt from the Part 5 Rules if all polluting materials in excess of TMQ are stored in containers that do not individually exceed 10 gallons or 100 lbs in capacity and are located indoors at a facility that is designed, constructed, maintained, and operated to prevent any spilled polluting materials from being released directly or indirectly to the surface or ground waters of the state.

EGLE can require that a facility be regulated under the Part 5 Rules even if the polluting materials do not exceed the TMQ. A facility that receives, uses, processes, manufactures, stores, or ships polluting materials in amounts less than the applicable TMQ could be required to comply with the Part 5 Rules if it is determined that a release could be reasonably expected to result in substantial harm to the surface or groundwaters of the state.

Both on-land and oil storage facilities, as defined by the Part 5 Rules, are subject to the following:

- Surveillance to detect releases and procedures implemented to prevent any polluting materials from reaching waters of state.
- Use and indoor storage must be designed, constructed, maintained, and operated to prevent releases from reaching sewers, drains, or reaching waters of the state.
- Release reporting.

On-land facilities, as defined by the Part 5 Rules, also have other requirements that must be met, including outdoor secondary containment and the development of a PIPP. The main components of a PIPP include the following:

- Facility information including emergency contacts.
- Spill control and cleanup procedures.
- Inventory of polluting materials exceeding TMQs.
- Site plan.
- Description of outdoor secondary containment for liquid polluting materials.
- Other spill control measures.
- General facility physical security methods.
- **Emergency notification procedures** that include release reporting. See Chapter 6.3 for a description of the release reporting requirements in the Part 5 Rules.

New, or existing facilities that are changing operations, so they will be meeting threshold management quantities, should have a PIPP completed before beginning those operations. Plans must be reviewed every three years or after any release that required implementation of the plan.

Within 30 days after the completion or modification of a PIPP, the owner or operator must notify the following agencies:

- **Local emergency planning committee**.
- **Local health department**.
- **EGLE District Office Part 5 Rules Program**. A certification stating the facility is in compliance with all the Part 5 Rules must also be submitted to EGLE.

When submitting the certification to EGLE, a specific form is not required. Following is sample certification language that may be used:

> "Under penalty of law, this certifies that (company name) at (site address) is in full compliance with the Part 5 administrative rules pursuant to Part 31, Water Resources Protection, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (Act 451). A copy of the Pollution Incident Prevention Plan (PIPP) [or Integrated Contingency Plan (ICP) if prepared] may be requested by [include who and how to contact to request a copy]. The facility has met the threshold management quantity for (indicate what polluting materials you have)." Include a signature, title, date, phone number, and mailing address if different than the site address.

Although not required by the rules, facilities are being asked to voluntarily identify the category of polluting material (i.e., salt, Table 1 material, or oil) that is on-site. That information may help the agency decide if they want to request a copy of your PIPP.

Send a letter to the local agencies explaining that you are notifying them that your company has completed a PIPP or ICP and that it is available to them upon request. You must provide a copy the plan within 30 days after receiving a request.

PIPPs may be combined with other plans into an Integrated Contingency Plan (ICP) as long as all of the information required to be in the PIPP is included. More details and a checklist are in the "**PIPP and Part 5 Rules Informational Packet**" (under revision) available under the Part 5 Rules Guidance Documents on EGLE's Part 5 Rules Web site at **Michigan.gov/part5**.

Keep a copy of the PIPP on site.
Do not submit a copy to EGLE or local authorities unless requested.

6.2.3 SPILL PREVENTION, CONTROL, AND COUNTERMEASURE (SPCC) PLAN AND FACILITY RESPONSE PLAN (FRP)

The U.S. EPA, not EGLE, oversees the federal Spill Prevention, Control, and Countermeasure (SPCC) and Facility Response Plan (FRP) requirements for oils contained in Title 40, Part 112 of the Code of Federal Regulations (40 CFR 112).

The Oil Pollution Prevention regulation (40 CFR 112) specifies requirements for prevention of, preparedness for, and response to oil discharges. It includes requirements for Facility Response Plans. The requirements help prevent oil discharges from reaching navigable waters or adjoining shorelines. Certain facilities are required to develop SPCC plans that describe equipment, workforce, procedures, and training to prevent, control, and provide adequate countermeasures to a discharge of oil.

Oils include synthetic oils, petroleum, and refined products such as mineral spirits, gasoline, diesel fuel, kerosene, vegetable oils, animal fats, etc. Other examples of oils are at this U.S. Coast Guard web site: **uscg.mil/vrp/faq/oil.shtml**.

The SPCC rule has undergone numerous amendments and revisions since it was first implemented in 1973. The most recent amendments were effective January 14, 2010 and required compliance by November 10, 2010 (facilities located offshore or with an offshore component or an onshore facility that is required to have a FRP) and November 10, 2011 (onshore facilities not required to have a FRP). Because this rule changes so frequently, it is recommended that you review the current regulations on the U.S. EPA's Web site.

The SPCC regulations and guidance, FRP guidance, sample SPCC plans, and more information can be accessed at **epa.gov/emergencies/content/spcc/index.htm**.

Contact the U.S. EPA Region 5 at 312-886-9497 with questions regarding the SPCC. Call 312-886-0622 if you have questions regarding the FRP.

Owners or operators of non-transportation related facilities subject to this regulation must prepare and implement an SPCC plan and meet other requirements regarding storage and secondary containment. In addition to the federal release reporting requirements, the SPCC plan should also include the Part 5 Rules (Spillage of Oil and Polluting Materials) release reporting requirements as discussed in Chapter 6.2.2.

You might be subject to SPCC regulation if:

1. A release from your facility could potentially reach navigable waters or adjoining shorelines. Most of Michigan meets this condition. Discuss with the U.S. EPA Region 5 if a site might be exempted. The exemption determination is based on geographical aspects of the facility such as proximity to navigable waters, land contour or topography, drainage, and soil conditions. If any **oil-EPA** could reach a sewer line, drainage ditch, intermittent stream bed, or similar

structure that discharges into navigable waters, either directly or indirectly, then the facility would be subject to SPCC regulations if they have threshold amounts.

AND

2. The storage capacity for **oil-EPA** at your facility meets any of the following:
   - Aboveground storage capacity exceeds 1,320 gallons.
   - Underground storage capacity exceeds 42,000 gallons.

   OR

3. The U.S. EPA determines the facility needs an SPCC based on other concerns.

   Note that the applicability of the SPCC regulation is based on the facility's storage capacity for **oil-EPA** and not on the actual amount stored. Containers less than 55 gallons are not included. See the U.S. EPA information about other situations where oil capacity is not required to be counted.

Compliance Dates for all Facilities

A facility starting operation…	Must…
On or before August 16, 2002	• Maintain its existing SPCC plan • Amend and implement the SPCC plan no later than November 10, 2011 (farms have until May 10, 2013)
After August 16, 2002, through November 10, 2010	Prepare and implement the SPCC plan no later than November 10, 2011 (farms have until May 10, 2013)
After November 10, 2010	Prepare and implement a SPCC plan before beginning operations. (Owners or operators of new oil production facilities must prepare and implement and SPCC plan six months after the start of operations.)

You must complete a review and evaluation of the SPCC plan at least once every 5 years from the date the facility became subject to the requirement. See 40 CFR 112.5(b) for more information.

Three areas that must be addressed in the Plan are:

1. Operating procedures the facility implements to prevent oil spills.
2. Control measures installed to prevent oil from entering navigable waters or adjoining shorelines.
3. Countermeasures to contain, cleanup, and mitigate the effects of an oil spill that has an impact on navigable waters or adjoining shorelines.

Some other important elements of an SPCC plan include the following:

- Professional Engineer certification (unless facility meets one of the exemptions)
- Facility diagram
- Oil spill predictions
- Release reporting

- Facility drainage
- Facility inspections
- Site security
- Five-year Plan review
- Management approval
- Appropriate secondary containment or diversionary structures
- Loading/unloading requirements and procedures for tank car and tank trucks
- Personnel training and oil discharge prevention briefings
- Brittle fracture evaluations
- Bulk storage container compliance, inspection, and integrity testing
- Transfer procedures and equipment (including piping)

> Keep a copy of the SPCC plan on site. SPCC plans are not submitted to the local health department, LEPC, EGLE or the U.S. EPA unless requested.

If you are combining a SPCC plan with other plans, be sure to include a detailed cross reference to requirements in 40 CFR 112.7 that clearly indicates where SPCC information is located. See the ICP guidance materials discussed in Chapter 6.2.8.

See the U.S. EPA Web site for **Facility Response Plan (FRP)** requirements for "substantial harm" facilities. A "substantial harm" facility is a facility that, because of its location, could reasonably be expected to cause substantial harm to the environment by discharging oil into or on navigable waters or adjoining shorelines. A facility may pose "substantial harm" according to the Facility Response Plan (FRP) rule if it:

1. Has a total oil storage capacity greater than or equal to 42,000 gallons and it transfers oil over water to/from vessels; or
2. Has a total oil storage capacity greater than or equal to one million gallons and meets one of the following conditions:
   - Does not have sufficient secondary containment for each aboveground storage area
   - Is located at a distance such that a discharge from the facility could cause "injury" to fish, wildlife, and sensitive environments
   - Is located at a distance such that a discharge from the facility would shut down a public drinking water intake
   - Has had, within the past five years, a reportable discharge greater than or equal to 10,000 gallons

6.2.4 STORM WATER POLLUTION PREVENTION PLAN (SWPPP)

If your facility is required to obtain a permit for the discharge of storm water associated with industrial activity (see Chapter 3.2.3) you will be required to obtain the services of a certified storm water operator and develop a Storm Water Pollution Prevention Plan (SWPPP). EGLE has many materials to help you prepare a SWPPP. Materials include:

- Guidance documents,
- Training videos,
- Certified operator training materials, and
- Sample SWPPP and visual assessment written procedures templates.

These materials can be found at the "Industrial Program" link on **EGLE's stormwater Web site (Michigan.gov/EGLEstormwater)** or from an **EGLE District Office**.

The SWPPP must be:

- Signed by the certified storm water operator and either the permittee or an authorized agent.
- Kept on-site.
- Reviewed annually to assure that it adequately details the current personal and industrial activity.
- An **annual certification** report must be submitted by January 10 of each year.

Written documentation that is required to be maintained for 3 years with the SWPPP includes:

- Routine preventive maintenance inspection reports
- Routine good housekeeping inspection reports
- Comprehensive site inspection reports
- Discharge visual assessment reports
- Employee training records
- Written summaries of the annual SWPPP review, and
- Any other documents relevant to the storm water program at the facility.

After the plan is completed, send notification that the plan was completed to the **EGLE District Office**. Another requirement is to update the SWPPP whenever there are changes or releases at the facility that have the potential to increase the risk of material contact with storm water.

Do not submit a copy of the SWPPP to EGLE unless requested.

Do submit an annual compliance report by January 10 of each year.

6.2.5 RISK MANAGEMENT PROGRAM

When Congress passed the Clean Air Act Amendments of 1990, Section 112(r) required the USEPA to publish regulations and guidance for chemical accident prevention at facilities using substances that posed the greatest risk of harm from accidental releases. These regulations require companies of all sizes that use certain listed, regulated flammable and toxic substances to develop a Risk Management Program that includes:

- Hazard assessment that details the potential effects of an accidental release, an accident history of the last five years, and an evaluation of worst-case and alternative accidental releases scenarios.
- Prevention program that includes safety precautions and maintenance, monitoring, and employee training measures.
- Emergency response program that spells out emergency health care, employee training measures and procedures for informing the public and response agencies (e.g., the fire department) should an accident occur.

A summary of the facility's risk management program (known as a "Risk Management Plan" or "RMP") was to be submitted to the USEPA by June 21, 1999, *for existing facilities*. The plans must be revised and resubmitted every five years. There are other circumstances described in the RMP regulations that might require a more frequent submission. Facilities after June 21, 1999 must submit a completed RMP as soon as they have a covered chemical above the threshold quantity.

Owners and operators of a facility (stationary source) that manufactures, uses, stores, or otherwise handles more than a threshold quantity of a listed regulated substance in a process, must implement a risk management program and submit a single RMP for all covered processes at the facility. “Process” means any activity involving a listed regulated substance, including any use, storage, manufacturing, handling, or onsite movement of such substances, or combination of these activities. The regulations do not apply to transportation, including storage incident to transportation. However, transportation containers used for storage not incident to transportation and transportation containers connected to equipment at a stationary source are considered part of the stationary source and are potentially covered by the regulations. See the **General Guidance on Risk Management Program for Chemical Accident Prevention (40 CFR Part 68)** or one of the industry-specific guidance documents at **epa.gov/rmp/guidance-facilities-risk-management-programs-rmp** for more information on regulatory coverage.

The regulation includes a list of 140 toxic and flammable substances, including threshold quantities (in pounds), to help assess if a process is subject to the Risk Management Program requirements **or the general duty clause**. The U.S. EPA’s “**List of Lists**” identifies the **Clean Air Act (CAA) 112(r)** substances.

RMPs must be submitted to the U.S. EPA using the Web-based software RMP*eSubmit. For software or submittal questions, contact the RMP Reporting Center at 703-227-7650.

The General Duty Clause (GDC), section 112(r)(1), applies to any facility were extremely hazardous substances are present. There is no list of these substances and no minimal threshold. In this case, the term "extremely hazardous substance" means any substance "which may or may not be listed or otherwise identified by any Government agency which may as the result of short-term exposures associated with releases to the air cause death, injury or property damage due to its toxicity, reactivity, flammability, volatility, or corrosivity." The GDC requires that owners and operators of stationary sources producing, processing, handling, or storing extremely hazardous substances identify hazards associated with an accidental release, design and maintain a safe facility, and minimize consequences of accidental releases that occur.

Access the software and additional information at **Michigan.gov/EGLEEmergencyPlan**.

6.2.6 EMERGENCY ACTION PLAN

Written Emergency Action Plans are required when a facility has flammable and combustible liquids on site in aboveground containers if the following exemptions do not apply:

- Liquids are used solely for onsite consumption as fuels.
- Operations where Class II liquids (flashpoint of 100 degrees and below 140 degrees Fahrenheit) or Class III liquids (flashpoint of 140 degrees Fahrenheit or higher) are stored in atmospheric tanks or transferred at temperatures below their flash points.
- Mercantile occupancies, crude petroleum exploration, drillings and well servicing operations, and normally unoccupied facilities in remote locations. Mercantile occupations include the use of a building or structure for the wholesale or retail display, storage and merchandising of goods or wares.

This planning requirement is included in Chapter 5 of the **National Fire Protection Association (NFPA) pamphlet number 30, 2021 edition**, which is adopted by the state Flammable and Combustible Liquid Rules. This pamphlet can be ordered from the NFPA at **nfpa.org**. The facility needs to evaluate site specific conditions and risks of fire hazards, including the emergency response capabilities of local emergency services. The plan needs to include the following:

- Procedures to follow in case of fire, such as sounding the alarm, notifying fire department, evacuating people, controlling, and extinguishing the fire.
- Procedures and schedules for having drills of these procedures.
- Identifying and training employees to carry out assigned duties.
- Maintenance of fire protection equipment.
- Procedures for shutting down or isolating equipment to reduce the release of liquid.
- Identifying alternate measures for safety of employees.

See Chapter 4.3 for plan requirements for underground storage tanks and for more information on storage of flammable and combustible liquids. Contact the DLARA, Storage Tank Program at 517-241-8847 for questions or go to Michigan.gov/StorageTanks.

Keep a copy of the plan on site. Do not submit to EGLE unless requested.

6.2.7 HAZMAT SECURITY PLAN

The U.S. DOT transportation regulations (Subpart I Part 172 (49 CFR 172.800) require shippers of any of the following hazardous materials to develop a hazardous materials security plan:

- Highway route-controlled quantities of Class 7 (radioactive) materials as defined in 49 CFR173.403 in a motor vehicle, rail car, or freight container.
- More than 25 kg (55 lb.) of Division 1.1, 1.2, or 1.3 (explosive) materials in a motor vehicle, rail car, or freight container.
- More than 1 L (1.06 qt) per package of any material that is extremely toxic by inhalation, as defined by 49 CFR 171.8, that meets criteria for Hazard Zone A, as specified in 49 CFR 173.116(a), or 49 CFR 173.133(a).
- Hazardous materials in bulk packaging having a capacity of 13,248 L (3,500 gal) or more for liquids or gases, or 13.24 cubic meters (468 cubic feet) or more for solids.
- Hazardous materials, not in a bulk package, of 2,268 kg (5,000 lb) gross weight or more of a class of hazardous materials for which placarding of the vehicle, rail car, or freight container is required for that class under the provisions of 49 CFR 172 subpart F.
- Any quantity of hazardous material that requires placarding under 49 CFR 172 subpart F, including hazardous waste. Placards are required when the shipment is in excess of 1000 pounds.
- Select agents or toxins regulated by the Centers for Disease Control and Prevention under 42 CFR 73.

A written security plan must contain the following sections:

- Personnel Security
- Unauthorized Access
- En Route Security

Go to fmcsa.dot.gov/safety-security/safety-security.htm for resources regarding safety and security for highway transport of hazardous materials. Many of the other emergency planning requirements cover some components required within the security plan.

The plan must be made available to the employees responsible for implementing it. Unlike other contingency plans, the security plan contents should be shared only with those employees whose responsibilities involve the shipment and handling of hazardous materials. Typically, this could include plant security, EHS representatives, maintenance, and shipping/receiving personnel. An appropriate list of personnel who require disclosure of the plan contents should be developed.

Keep the security plan as long as it remains in effect and any updates or changes must be communicated to the affected employees.

Every hazmat facility needs security training (see Chapter 4.4) and must keep training records. Even if you don't ship any of the above hazardous materials requiring a security plan, your employees must receive hazmat security awareness training if you ship any hazardous materials. This training can be combined with other required training sessions.

Call the U.S. DOT Hazardous Materials Information Center 800-467-4922 for more information.

6.2.8 INTEGRATED CONTINGENCY PLAN (ICP)

Many facilities are required to maintain more than one emergency response plan. If you are subject to plan requirements under multiple regulations, you may combine all the required components into one plan called an Integrated Contingency Plan (ICP). The National Response Team's ICP Guidance provides a format for a comprehensive emergency response plan. This one-plan guidance is intended to be used by facilities to prepare emergency response plans for responding to releases of oil and non-radiological hazardous substances. It can be used by *any* facility, whether or not the facility is subject to specific planning requirements under federal and/or state regulations. The guidance was published in 1996 and is available at Michigan.gov/EGLEEmergencyPlan.

Use of the ICP format by facilities is supported by federal agencies (U.S. EPA, U.S. DOT, Department of the Interior, and Department of Labor) and state agencies (Michigan Citizen-Community Emergency Response Coordinating Council, State Police, EGLE, Department of Agriculture and Rural Development, and Department of Licensing and Regulatory Affairs). Michigan agencies strongly encourage facilities to use the ICP format.

There are three main sections of an ICP as described below:

Plan Introduction. This section is designed to provide facility response personnel, outside responders, and regulatory officials with basic information about the plan and the entity it covers. It includes:

- Purpose and Scope of Plan Coverage
- Table of Contents
- Current Revision Date
- General Facility Identification Information

Core Plan. This section is intended to reflect the essential steps necessary to initiate, conduct, and terminate an emergency response action. It should be concise, easy to follow, reference annexes that provide more detailed information, and fit into the glove-box of a response vehicle. It includes:

- Discovery
- Initial Response Procedures
- Sustained Actions
- Termination and Follow-Up Actions

Supporting Annexes. The annexes are designed to provide key supporting information for conducting an emergency response under the core plan as well as document compliance with regulatory requirements not addressed elsewhere in the ICP. They should augment, not duplicate, core plan information. Annexes include:

- Facility and Locality Information
- Notification Requirements
- Response Management System
- Incident Documentation
- Training and Exercises/Drills
- Response Critique and Plan Review and Modification Process
- Prevention
- Regulatory Compliance and Cross-Reference Matrices

In addition to the ICP guidance, information on many of the plans that can be integrated into the ICP, such as SPCC, RMP, PIPP, and SWPPP, are available on EGLE's Emergency Planning Web site. This site includes guidance specific to the inclusion of federal and state plan requirements into the ICP, contacts for help regarding requirements of specific plans, emergency planning information and workbooks for facilities that are not subject to specific planning requirements, and plan submittal guidance.

> Not all plans are required to be submitted to EGLE. Please read about where you should submit your plan **before** you submit a copy.

6.2.9 FEDERAL SITE SECURITY PLAN (SSP)

A regulated facility under this federal site security planning requirement is any establishment that possesses or plans to possess, at any relevant point in time, a quantity of a chemical substance determined to be potentially dangerous or that meets other risk-related criteria identified by the U.S. Department of Homeland Security (DHS). Review the Appendix A "Chemicals of Interest List" and site security planning information available at **dhs.gov/critical-infrastructure-chemical-security**. Appendix A includes approximately 300 chemicals of interest. Some of these chemicals are also listed as polluting materials under the state's Part 5 Rules as discussed in Chapter 6.2.2.

The DHS oversees the Chemical Facility Anti-Terrorism Standards (CFATS) that require facilities to prepare vulnerability assessments and develop and implement Site Security Plans if they are considered high risk. In some specified circumstances, a facility may be able to submit an alternate security program.

Owners of facilities with chemicals above the threshold quantities should have completed a preliminary online assessment to determine the level of risk associated with their facility **by January 19, 2008**. After this step, the DHS will determine if the facility presents a security risk and is subject to the Chemical Facility and Anti-Terrorism Standards. Submissions will be validated through audits and site inspections. The DHS will provide technical assistance to facility owners and operators as needed. Security standards will be required to achieve specific outcomes, such as securing the perimeter and critical targets, controlling access, deterring theft of potentially dangerous chemicals, and preventing internal sabotage.

If you have questions about CFATS go to **csat-help.dhs.gov** or call the CFATS Help Desk at 866-323-2957.

6.3 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.

6.3.1 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.

6.3.2 CHEMICAL LISTS

The U.S. EPA published a consolidated list of chemicals subject to SARA Title III, CERCLA, and section 112(r) of the Clean Air Act called the "List of Lists." The List of Lists (June 2019) is available at epa.gov/epcra/consolidated-list-lists-under-epcracerclacaa-ss112r-august-2020-version and includes:

- **Hazardous substances-CERCLA** including RCRA waste streams and unlisted hazardous wastes, with reportable quantities (RQ) for releases (originally published in 40 CFR 302, Table 302.4).
- SARA Title III section 304 **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 Act 451. These rules include a list of "**polluting materials**" with threshold reporting quantities for releases.

NOx Exemption in CERCLA and SARA Title III

The U.S. EPA finalized an exemption for certain releases of emissions of NO and NO_2 (collectively NOx) 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 NOx 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, such as 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 **hazardous substances-CERCLA**.

Part 201 of Act 451, 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 (2012)…." 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 **hazardous substances-CERCLA**. 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 2012 version of the CERCLA list of hazardous substances published in 40 CFR 302.4 and 302.6. (See the release calculation example in Chapter 6.3.1.)

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.

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.

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

Written Follow-up Report

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

Hot Tip!

Use the generic **Spill or Release Report form** to record *initial* notifications.

- Hazardous substances-CERCLA and extremely hazardous substances under SARA Title III.
- **Hazardous waste** under Part 111 of Act 451.
- Liquid industrial by-products under Part 121 of Act 451.
- **Hazardous substances** under Part 201 of Act 451.
- **Polluting materials** under Part 31 of Act 451, Part 5 Rules.

EGLE Release Reporting Web site: Michigan.gov/ChemRelease

6.3.1 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 Part 201 of Act 451, releases of **hazardous substances-CERCLA** published in the 2012 version of 40 CFR 302, Table 302.4 must be reported. Gasoline is not a **hazardous substance-CERCLA**. However, some of the ingredients in gasoline are **hazardous substances-CERCLA** and are reportable under this regulation.

This example shows you how to determine when a release of gasoline *in gallons* is reportable under Part 201 of Act 451 based on reportable quantities *in pounds* of the ingredients.

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

   Look at a Safety Data Sheet (SDS) for gasoline to find the hazardous ingredients and the weight percentages of those ingredients. This is from Section 3 in an SDS for "Gasoline, Unleaded."

CAS #	Component	Weight %
8006-61-9	Gasoline, natural	10-30
108-88-3	Toluene	10-30
106-97-8	Butane	1-20
1330-20-7	Xylenes (o-, m-, p- isomers)	10-30
64-17-5	Ethanol; Ethyl alcohol	0-8.2
100-41-4	Ethylbenzene	1-5
71-43-2	Benzene	<5
110-54-3	N-Hexane	0.5-0.75

   Look at the "List of Lists" to find the reportable quantity of an ingredient that is a **hazardous substance-CERCLA.**

   Benzene (CAS number 71-43-2) is a **hazardous substance-CERCLA** 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 EGLE's 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, 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, we must calculate the weight of a gallon of gasoline. The formula is as follows:

Specific gravity of the product x 8.34 lb./gal (weight of water) = 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.

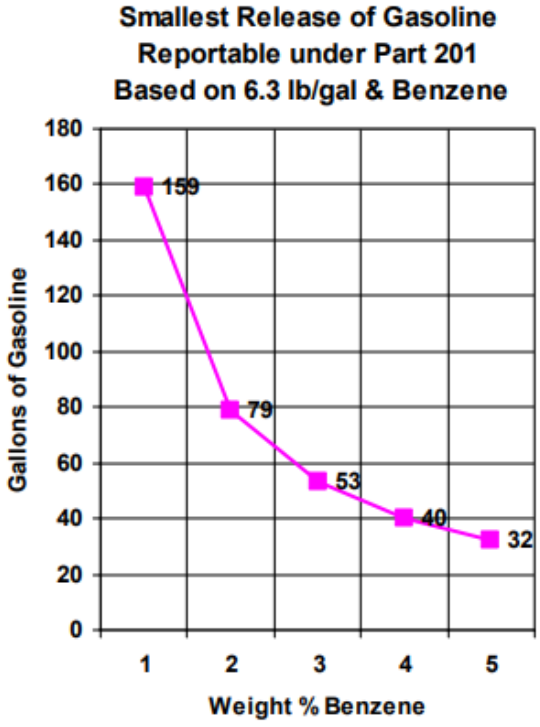
3. Calculate the smallest reportable release of gasoline under Part 201 of Act 451 based on the ingredient benzene. Here is the formula:

RQ of ingredient (lbs) ÷ weight of product (lb./gal) ÷ weight % of ingredient = reportable gallons of product

Using the numbers we determined above, we get:

10 lb (RQ benzene) ÷ **6.3** lb/gal gasoline ÷ **0.05** (wt. % benzene)
= **32 gal of gasoline** (reportable if released to the environment)

This graph below 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.

In summary: When determining reportable releases, it is important to realize that it is sometimes the ingredients in a given product that make 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:

1. Identify the hazardous ingredients, corresponding reportable quantities, and weight percents. This depends on the regulation!
2. 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.
3. Calculate the smallest reportable release using the formula above. If the product is a solid, the formula is simply:

   RQ of ingredient (lbs.) ÷ weight % of ingredient in solid product = reportable pounds of solid product.

6.4 RELEASE RESPONSE AND CLEANUP

Response and cleanup of a spill or release of hazardous and/or toxic substance can be very costly and detrimental to the health of your employees and environment. To become more efficient and effective in release response and cleanup, make it a priority to integrate pollution prevention planning activities into all aspects of your operations, including the prevention of spills and reduction or minimization of waste during response and cleanup.

In addition to the release reporting requirements described above in Chapter 6.3, you must be ready to immediately respond whenever a release occurs. Whether you are legally required to prepare an environmental release prevention and response plan (described in Chapter 6.2) or voluntarily decide to prepare one, it needs to be in effect with personnel who are trained to

implement it. This helps to ensure that when a release occurs, appropriate response is taken without delay. At least one person trained in release control and cleanup procedures, equipment use, and disposal methods of recovered materials should be on duty or on call at all times. It is important to remember that you are obligated to respond and clean up all contamination, and failure to do so may result in escalated enforcement, including but not limited to the imposition of civil penalties. If your release involves a regulated underground storage tank, see Chapter 4 for information on how to respond and clean up the release. Some excellent Internet resource links for environmental emergency operations and response are the **Computer Aided Management of Emergency Operations (CAMEO) Web site** at **response.restoration.noaa.gov** and the National Institute for Occupational Safety and Health (NIOSH) pocket guide Web site at **cdc.gov/niosh/npg**.

Post EGLE's Pollution Emergency Alerting System number and *use* it: **800-292-4706**

All hazardous and/or toxic chemical release responders need to consider the following actions:

- ✓ Immediately **assess** the nature of the release; chemicals and exposure pathways of concern; toxicity; safety; type of personal protection equipment (PPE) needed; and take appropriate response and cleanup actions to protect the health and safety of those in the affected area, when and where possible. See Chapter 6.3 “Release Notification Requirements in Michigan.”
- ✓ If possible, quickly work to **contain** the release to prevent the spread of contamination. For example, cover floor drains to prevent the release from reaching the sewer, and dike the release with absorbents such as spill pillows or cat litter and dirt as necessary to prevent it from spreading. Staff responding to the release must be trained in wearing the appropriate PPE. Most facilities managing hazardous and/or toxic chemicals are required to have an environmental release prevention and response plan in the event of a release. These plans need to be practical, efficient, and provide useful instructions to trained facility personnel that can be easily followed to clean up a release.
- ✓ **Clean up** contamination quickly to prevent impacts to human health and the environment. Release prevention planning (i.e., rapid containment, response, and cleanup) may minimize the environmental impacts as well as decrease the overall cost of cleanup. This can be as simple as quickly positioning an absorbent to contain a release to protect a natural resource, or as complex as purging and treating groundwater for years under an approved state remedial action plan or state/federal enforcement order. Waste generated from a cleanup must be properly characterized, managed, and disposed in accordance with applicable state and federal regulations. Most importantly, communicate with the environmental regulatory agencies in your area during the planning phase or in advance of any release. Your **EGLE District Office** can provide additional guidance to help assure your response is appropriate and cost-effective.

Some released hazardous or toxic substances and cleanup wastes may pose a serious health threat to personnel. Have appropriate PPE available and personnel trained in its proper use. Depending on the hazardous and/or toxic nature of the release, PPE may include the appropriate chemical resistant suits, gloves, boots, respirators, self-contained breathing apparatus, and eye protection such as goggles or face shields. Safety Data Sheets (SDSs) or the **NIOSH Pocket Guide to Chemical Hazards** contain valuable information for selecting the appropriate PPE. These resources can be accessed at the **cdc.gov/niosh** web site or in the **Emergency Response Guidebook** (**phmsa.dot.gov/hazmat/erg/emergency-response-guidebook-erg**).

Persons responding to hazardous releases must be *trained* in accordance with the Hazardous Waste Operations and Emergency Response (HAZWOPER) procedures. Another option is to have previously procured professional assistance. Search under the terms, "Environmental and Ecological Services," "Spill Control Service," or "Waste Reduction, Disposal, and Recycling Service" for companies offering environmental cleanup services in your area.

Release planning will help to identify environmental response equipment (e.g., spill cleanup kits, PPE, etc.) specific to a company's needs to quickly contain and cleanup releases. Many products are used to contain and clean up released chemicals and waste. Absorbent pads, booms, or portable dikes are often used to control, contain, and cleanup large liquid releases. Commercially available absorbent powders and granular clay (like cat litter) are examples of items used to absorb and contain free-phase liquids during release response and cleanup.

If a release cannot be cleaned up by trained personnel, hiring an experienced environmental cleanup contractor is recommended. Depending on the severity of a release, a contractor may provide more efficient and cost-effective response and cleanup solutions. Environmental contractors who work on regulated leaking underground storage tank facilities must be knowledgeable in Part 213 (Leaking Underground Storage Tanks) of the Natural Resources and Environmental Protection Act, Public Act 451 of 1994, as amended (Act 451). Environmental contractors performing work at leaking or underground storage tank sites must be qualified per Part 215 (Michigan Underground Storage Tank Financial Assurance Act) of Act 451 (Section 324.21542). Your **EGLE District Office** can verify that your state notification and reporting obligations have been satisfied and that your response and cleanup is being conducted properly. If you need further information or assistance about response and cleanup procedures, please contact your District Office).

6.4.1 ENVIRONMENTAL INVESTIGATION REQUIREMENTS

Under Part 201 (Environmental Remediation) of Act 451, Section 324.20126, the property is considered a "Facility" or site of environmental contamination if environmental data shows hazardous and/or toxic substances are present on the property at levels that exceed the Part 201 generic residential criteria. A person who owns or operates a "Facility" and who is liable under Part 201 of Act 451, shall do all of the following:

a) Immediately stop or prevent the release at the source.
b) Immediately implement source control or removal measures to remove or contain hazardous substances.
c) Immediately identify and eliminate any threat of fire or explosion or any direct contact hazards.
d) Report the release to the department within 24 hours.
e) Immediately initiate removal of a hazardous substance that is in a liquid phase that is not dissolved in water.
f) Determine the nature and extent of the release at the facility.
g) Diligently pursue response activities to achieve the cleanup criteria.

If the owner or operator of an environmentally contaminated property is not liable, then he or she may still have certain **Due Care** obligations to address as specified under R 299.51001, et. seq. Due Care protects persons on the contaminated property from exposure to hazardous and toxic substances.

In cases where the release is large or where there have been documented adverse environmental effects (i.e., fish kills, other resource impacts, etc.), a **Natural Resources Damage Assessment** (NRDA) to evaluate and assess natural resource damage(s) and cost(s) may be required. A NRDA is usually difficult and expensive to do. A request from EGLE for a NRDA may be avoided by either good pollution prevention planning or by responding to releases soon after they occur on a property. If the activity that resulted in a release is regulated under Part 213 (Leaking Underground Storage Tanks), Part 111 (Hazardous Waste Management), or other specific authority, those laws may require other specific requirements for environmental investigations, cleanups, etc. For activities regulated under the regulations, contact EGLE for assistance in determining the correct environmental investigation requirements.

An environmental investigation may need to be conducted to define the horizontal and vertical extent of environmental contamination so that appropriate remedial action or cleanup measures can be planned and implemented. This kind of environmental investigation, often referred to as a "**remedial investigation**" or "RI," may include testing of soil, sediment, groundwater, surface water, and air quality. The key to conducting an effective RI is to gather enough environmental information to make the necessary decisions about further cleanup needs. You will need the services of an experienced environmental professional to carry out an RI.

An RI is a different process than a **Baseline Environmental Assessment** (BEA), which is described in Chapter 7.2.2. A BEA is a state "liability" protection tool and is not designed to identify cleanup needs. Federal environmental investigation guidance documents may be obtained from the U.S. EPA Web site at clu-in.org and the American Society for Testing and Materials (ASTM) Web site at www.astm.org. The ASTM guidance includes information about Phase I and II Environmental

Assessments (EAs). EAs are commonly performed on parcels of industrial or commercial properties to determine the extent of existing environmental contamination. The ASTM Phase I and II EA processes are often used to determine the environmental condition of a property to be purchased, but much of the ASTM guidance is useful for other site characterization purposes as well.

Information about cleanup requirements, applicable cleanup criteria, establishing "background" concentrations, and other technical issues is available at **Michigan.gov/EGLERemediation** under Resource Materials.

6.4.2 DOCUMENTING PLANS FOR CLEANUP

If you are conducting a cleanup under Part 201 of Act 451, there may be other state/federal regulations to address. A Remedial Action Plan (RAP) is used to document how environmental contamination will be cleaned up. If cleanup actions will be conducted in phases, each phase is generally referred to as an Interim Response (IR). A series of IRs may go together to become a remedial action. A RAP is intended to comprehensively address all contamination problems at a "Facility," while IRs can be used to address individual releases of hazardous and/or toxic substances or aspects of those releases.

A RAP is generally prepared after a site IR is complete and a course of action can be developed to remediate or cleanup the site as a whole. In many instances, it is appropriate to conduct RAP activities in a phased approach. IR activities allow for time-critical actions to be planned and implemented addressing high-risk contamination areas first, with subsequent IRs to tackle more widespread contamination. Examples of IR activities include removing soil contamination "hot spots," or point sources and abandoned containers containing hazardous substances.

6.4.3 CLEANUP CRITERIA

EGLE has adopted a risk-based or generic criteria approach to environmental cleanups. Risk-based cleanup criteria are based on the designated or allowable land-use because land-use determines what type of site-specific activity and exposure will occur at each property. Cleanup criteria are integral in determining the scope and adequacy of remedial activities.

EGLE has calculated "generic" cleanup criteria for soil and water media that apply to the following types of land use categories: residential, commercial, and industrial. Occasionally, the environmental consultant may find that it is more appropriate to use site specific cleanup criteria to address the contamination. The consultant can develop the site-specific variables with oversight from EGLE. If the cleanup is based on site specific variables, then the property deed would have to be restricted. The deed restriction will inform the future property owners about land uses that are prohibited, and about the remaining contamination. EGLE approval is required for a cleanup that depends on land use restrictions. Please contact your **EGLE District Office** for assistance in determining which cleanup criteria to apply at your site.

The Cleanup Criteria Requirements for Response Activity are available on EGLE's Web site at **Michigan.gov/Remediation** under the "Other Useful Information." Select "Cleanup Criteria Requirements for Response Activity." If you need further information or assistance, please contact your **EGLE District Office** to determine what cleanup criteria can be used at your site of environmental contamination or call 800-662-9278 for assistance.

6.4.3.a Ground Cleanup

Even if a release is not large enough to require reporting, it still must be cleaned up, regardless of the release volume or whether it occurred on a paved outdoor surface or dirt surface. Quick response to a release is important since contamination from the release can spread further, making the cleanup more difficult and expensive. Use an inert absorbent material, such as clay-based adsorbents (like cat litter), or specially formulated pads or powders, to soak up the liquid. Collect any released solid materials so they do not spread or get blown around. **THE RELEASED MATERIAL SHOULD NEVER BE FLUSHED DOWN THE DRAIN OR ONTO THE GROUND**. The act of flushing the release will spread the contamination into previously uncontaminated areas, increase the scope of the investigation, the time needed to clean up the contamination and exponentially increase the cost of the cleanup.

During the initial response to the spill and the cleanup, be very careful not to mix incompatible or reactive chemicals or wastes together (see Safety Data Sheets, or NIOSH at **siri.org/msds/index.php** and **phmsa.dot.gov/hazmat** for help). The containers used to store spent cleanup materials must be compatible with the released liquid and correctly capped and labeled. Once contained, the used cleanup materials must be disposed of properly based on the hazardous and/or toxic nature of the waste. If the used materials are going to a sanitary landfill, there can be no free-phase liquid present with the containerized materials. If the materials are characterized as hazardous and/or toxic waste, handle the waste in accordance with Chapter 2. For information about hazardous or solid waste characterization, please contact EGLE's Hazardous Waste Program at 517-284-6562 or go to **Michigan.gov/EGLEwaste**. For information about transporting requirements for hazardous materials including oils, gas, etc., please refer to the Michigan State Police, Commercial Vehicle Enforcement Division Web site at **Michigan.gov/MotorCarrier** and Chapter 4.4.

If a hazardous and/or toxic substance is released to the ground, you must determine if the affected soil is hazardous or solid waste. In either case, it must be properly characterized, removed, transported, treated, stored, or disposed of at the appropriate licensed landfill. If the soil is hazardous waste, you will need to meet the generator requirements discussed in Chapter 2.4. For small volumes of contaminated soil or waste, the easiest cleanup method is to excavate the soil and place it on polyethylene or put it into an acceptable container. The soil, either in the pile or container, must be covered to prevent precipitation from leaching through the soil and spreading contamination into the ground. Once contaminated soils are properly characterized and approved for disposal by the proper waste facility, it can be disposed of off-site. For larger volumes of contaminated soil, it may be cheaper to either treat the soil in place or dig it up for treatment

on-site. There are regulatory restrictions on the movement of contaminated soils on or off property and persons dealing with such materials during cleanup activities at sites of environmental contamination. If you need further information or assistance, please contact your nearest **EGLE District Office**.

EGLE developed a guidance document entitled, **"Statistics – Sampling Strategies and Statistics Training Materials for Part 201 Cleanup Criteria** (S3TM)**"** to help verify that soils containing hazardous and/or toxic substances are clean, or below the Part 201 of Act 451 generic residential cleanup criteria. The S3TM guidance has been:

- Applied to excavations to determine the number of samples needed to show that the remaining unexcavated soils are clean.
- Applied to waste piles that have undergone remediation technology.
- Used to characterize and verify that the waste soils have been remediated prior to placing the soils back into the excavation area(s) or landfilling.

If you need further information or assistance, please contact the EGLE Project Manager involved with your cleanup to determine whether S3TM can be applied to your environmental cleanup. The S3TM document is available from EGLE's Web site at **Michigan.gov/remediation** (select "Site Investigation and Cleanup" and "Cleanup Program Information").

6.4.3.b Groundwater Cleanup

If the groundwater becomes contaminated by a release, overfill, leaking underground storage tank, etc., you are required to clean up the contamination. You may need to hire a qualified environmental professional to complete a hydro geological investigation to determine the specific groundwater remedy needed to clean up your site. You should discuss all available treatment options and the timeframe for the cleanup with the environmental consultant to ensure that the most appropriate cleanup method is chosen.

Whenever environmental treatment systems are proposed to clean up contamination, the Best Available Technology (BAT) is required for remediation where treated groundwater will be discharged to groundwater or surface water. Best Available Control Technology for Toxics (T-BACT) is required to control the emission of toxic air contaminants. After the application of T-BACT, the emissions of any toxic air contaminants cannot result in maximum ambient concentrations which exceed the applicable health-based screening levels. For more information about T-BACT, see Chapter 1.2.4 "Air Toxics Regulations."

EGLE encourages the use of innovative environmental treatment technologies or remedies that minimize waste; i.e., electrical power consumption, secondary waste material generation, etc. For pollution prevention information, go to **michigan.gov/EGLEp2**.

Permits may be required for air, groundwater, and surface water discharges from a cleanup site. Each permit has requirements for operation, maintenance, monitoring, testing and reporting on the discharge of the treatment system:

- If you use air stripping, you are subject to air quality regulations and may need to obtain a Permit to Install from the Air Quality Division (AQD) to meet T-BACT requirements prior to discharge. For further information or assistance, contact your AQD **EGLE District Office**.
- If treated groundwater is discharged to surface water, you need to obtain a National Pollutant Discharge Elimination System (NPDES) Permit from EGLE that meets BAT requirements prior to discharge **(see Chapter 3.2.3)**.
- If treated groundwater will be discharged back to the groundwater, you may need to obtain a state groundwater discharge permit, or an exemption prior to discharge (see **Chapter 3.2.4**) from EGLE. In some areas, the water will not infiltrate or seep back into the ground fast enough to make groundwater discharge a feasible option.

When contaminated groundwater is venting or discharging (i.e., flowing naturally) into surface water, the Part 201 of Act 451 groundwater/surface water interface (GSI) cleanup criteria or screening levels must be met. If the GSI criteria are exceeded, further investigation and possibly remediation of the surface water will likely be required. If groundwater contamination concentrations will exceed the GSI generic cleanup criteria at the point where contaminated groundwater vents to surface water, a more detailed site-specific evaluation will be required to determine if a "mixing zone" can be allowed or whether contaminated groundwater can be allowed to legally discharge into "waters of the state" (i.e., lakes, rivers, creeks, wetlands, drains, etc.) and still ensure protection of human health and the environment. Information about the "mixing zone" **evaluation process** can be found at **Michigan.gov/Remediation** (select **Operational Memoranda, Cleanup Requirements, Forms, and Cleanup Program Information** under "Other Useful Information.") The GSI cleanup criteria apply to groundwater sampled from a GSI monitor well, and not to surface water. To view the Part 201 GSI cleanup criteria, go to the Web site above.

6.4.3.c Surface Water Cleanup

Cleanup procedures for releases to state waters may be difficult and may vary depending on the uses being made of the receiving waters. A discharge to water that causes impairment to any of the following is a violation of Section 3109 of Part 31 (Water Resources Protection) of Act 451:

1. Public health, safety, or welfare.
2. Domestic, commercial, industrial, agricultural, recreational, or other uses being made of the water.
3. The value of the riparian land.
4. Livestock, wild animals, birds, fish aquatic life, or plants and the value of fish and game.

Of these water uses, major public health concerns exist if the discharge could impact downstream recreational beaches or surface water drinking water supply intake systems.

EGLE requires that all appropriate and reasonable steps be taken to clean up and prevent further pollution in consideration of existing conditions of state waters. Remember, in the event of a release to state waters, including releases to public storm sewers and drains, immediately contact:

- Your **EGLE District Office** or the Pollution Emergency Alerting System (PEAS) hotline at 800-292-4706 (in state) or 517-373-7660 (out-of-state).
- Your primary public answering service, or 911.

Release response is chemical-, location-, and action-specific. Some hazardous substances are water-soluble and mix immediately with the surface water. When water-soluble substances are released, a reasonable course of action may require large quantities of contaminated water to be captured, removed, contained, and properly treated and/or disposed. Large releases requiring the use of floating booms, skimmers, storm sewer plugs, etc. will likely require a release response contractor, whereas small releases may travel downstream before any response can contain them. The longer the released substance remains in the water, even if contained by booms, the more contamination diffuses or mixes with the surface water, which may result in increased environmental harm and liability. Therefore, release prevention instead of cleanup can yield tremendous cost savings.

Release prevention includes having a response plan in place, with trained responders and equipment easily available, for immediate containment of any release. Some generic release response equipment to keep on-site may include absorbent booms and pads, thick plastic bags, sandbags, cat litter, portable emergency pumping and containment equipment, protective clothing, and safety gear suitable for on-site materials and hazardous chemical exposure conditions. It is also recommended that you know the route of your storm sewer system and appropriate areas (such as the last storm water catch basin on your site) to catch and contain releases. Consider how to respond if a spill should occur during either dry or wet weather, and how to divert storm water from a spill that occurs during wet weather. Talk with an environmental response consultant or EGLE about which containment and cleanup methods may be best for your business. To research environmental innovative treatment technology options, go to **EPA Clu-In** at **http://clu-in.org/**.

When contaminated groundwater is venting or discharging (i.e., flowing naturally) into surface waters, the Part 201 of Act 451 GSI Cleanup Criteria must be applied (see Chapter 6.4.3.b - Groundwater Cleanup).

6.4.3.d PCB Clean Up

Polychlorinated biphenyls (PCBs) are **hazardous substances- Part 201** that must be addressed under the federal and/or state corrective or remedial action process and, in some cases, in coordination with the U.S. EPA Region 5. Part 201 of Act 451 Cleanup Criteria have been developed for PCBs on the basis of media (i.e., air, soil or water) exposure pathway, land-use-specific, and must be applied for corrective action, pursuant to R 299.9629 of Part 111 (Hazardous Waste Management) of Act 451. However, to address exposures via the soil direct-contact pathway, the applicability of the Toxic Substances Control Act (TSCA), at 40 CFR 761 must be determined and applied appropriately (see Part 201 of Act 451 Cleanup Criteria tables, footnote [T]). The Part 201 of Act 451 Cleanup Criteria can be found at

Michigan.gov/Remediation under the "Other Useful Information" heading, select "Cleanup Criteria Requirements for Response Activity." If TSCA is determined to apply to an area with PCB contamination, all TSCA obligations must be addressed in coordination with the U.S. EPA Region 5. A state Remedial Action Plan cannot be considered complete without a demonstration of compliance with all TSCA obligations. If you need further information or assistance, please contact the Remediation Division in your **EGLE District Office**. See Chapter 4.5 for specific details on TSCA obligation related to remediation waste.

WHERE TO GO FOR HELP

Websites, program contacts, and publications/resources for common environmental emergency topics

SARA Title III Program
517-284-SARA (284-7272) | EGLE-sara@michigan.gov
Michigan.gov/SARA | Michigan.gov/ChemRelease | Michigan.gov/EGLEEmergencyPlan

- Michigan Facilities' Guide to SARA Title III, Emergency Planning and Release Reporting

Emergency response planning and training
Michigan State Police, Emergency Management and Homeland Security Division
517-284-3727 | Michigan.gov/emhsd-training

- Critical Incident Protocol — A Public and Private Partnership

Pollution Incident Prevention Plans (PIPP)
EGLE, Part 5 Rules Program, District Staff: www.michigan.gov/part5

- PIPP and Part 5 Rules Informational Packet
- PIPP Completion Checklist
- Part 5 Rules Operational Guidance (POG) clarifying oil requirements

Oil Pollution Prevention: Facility Response Plans (FRP) and Spill Prevention, Control, and Countermeasures (SPCC) Plans
U.S. EPA Region 5, Office of Emergency Management
epa.gov/oil-spills-prevention-and-preparedness-regulations

Risk Management Plans
U.S. EPA Region 5, Office of Emergency Management
www.epa.gov/emergencies/content/rmp

Storm water pollution prevention plans (SWPPP) and surface water cleanup
EGLE, Storm Water Program: 517-284-5567 | Michigan.gov/IndustrialStormwater

- SWPPP Template (Word), SWPPP Template (PDF)
- SWPPP sample
- SWPPP Checklist (Word)

Hazardous Waste Operations and Emergency Response (HAZWOPER) requirements
MIOSHA: 517-322-1608 | Michigan.gov/miosha

Hazardous/non-hazardous waste characterization and disposal information
EGLE, Hazardous Waste Program: 800-662-9278 | EGLE District Office
Hazardous and Liquid Industrial By-product Management at Michigan.gov/EGLEwaste

- Waste Webinar Series
- Hazardous Waste Emergency Information (EQP 3472) poster for Small Quantity Generators
- Contingency Plan and Emergency Procedures for Large Quantity Generators
- Personnel Training Requirements for Fully Regulated Generators of Hazardous Waste

Release of hazardous materials during transportation
U.S. Department of Transportation (US DOT): 800-467-4922 | phmsa.dot.gov/hazmat

- USDOT Hazardous Materials Incident Report
- Incident Report - Gas Distribution System (RSPA F 7100.1)
- Incident Report - Gas Transmission and Gathering Systems (RSPA F 7100.2)
- Accident Report - Hazardous Liquid Pipeline Systems (DOT Form 7000-1)

Releases from oil and gas production fields
EGLE, Oil, Gas, and Minerals Division: 517-284-6823 | Michigan.gov/EGLEOilGasMinerals

- Report of Loss or Spill (EQP 7233)

Report of discharge of untreated sewage
EGLE District Office | Michigan.gov/ChemRelease

- Report of Discharges of Untreated or Partially Treated Sewage (EQP 5857)

Releases from leaking underground storage tanks
LARA, Storage Tank Program: 517-241-8847 | Michigan.gov/StorageTanks

Environmental Investigation, Cleanup, Release Reporting
EGLE, Remediation and Redevelopment Division: 517-284-5099 | District Offices
Michigan.gov/EGLERemediation

- Release Reporting Forms

Federal environmental investigation guidance including information about Phase I and II environmental site assessments (ESAs)
U.S. EPA | http://clu-in.org
American Society for Testing and Materials (ASTM) | www.astm.org

APPENDIX 6-A: SUMMARY OF COMMON ENVIRONMENTAL RELEASE PREVENTION AND RESPONSE PLANS

DETAIL	Hazardous Waste Contingency Plan (Chapter 6.2.1)	Pollution Incident Prevention Plan (Chapter 6.2.2)	Spill PCC (Chapter 6.2.3)	SWPPP (Chapter 6.2.4)	Emergency Action Plan (Chapter 6.2.6)	Risk Management Plan (Chapter 6.2.5)
Regulated Substance or Activity	Hazardous waste	Salt and Polluting Materials listed in R 324.2009 See SPCC for oils	Oil-EPA (PCBs see 6.2.3)	Companies with a storm water discharge permit	Flammable and combustible liquids	Substances listed in **Section 112(r)** of CAA[5]
Regulation	40 CFR 265.50-.56 Part 111 of Act 451 R 299.9306 (generators)	Part 31 of Act 451 R 324.2001-2009	40 CFR 112	40 CFR 122-124 Part 31 of Act 451 R 323.2161	FL/CL Rules **R 29.5201 - 29.5255** and adopted NFPA pamphlet number 30 2000 edition Chapter 5	Section 112(r) of Clean Air Act 40 CFR 68 (requirements vary depending on the program subject to).
Administering Agency	EGLE, HWP[7]	EGLE, WRD	U.S. EPA, Chemical Emergency Preparedness & Prevention Section	EGLE WRD	EGLE	U.S. EPA
Who Must Prepare	Large quantity generators of hazardous waste must submit a written plan. Small Quantity generators are to post information. Hazardous waste transporters and treatment, storage, & disposal facilities have other planning requirements.	Companies with **salt** or other **polluting materials** that meet or exceed threshold planning quantities & don't meet listed exemptions. When EGLE deems necessary.	If a release could potentially reach navigable waters or shorelines *and* facility has capacity storage of oil that: • exceeds 1,320 gal. for all above ground storage, or exceeds 42,000 gal. for underground storage tank	Companies required to have a storm water discharge permit	Companies that have flammable and combustible liquids that are not exempted	Facilities with a substance identified in **Section 112(r)** of the CAA at or above a specific threshold quantity. Listed substances are located on the **"List of Lists"**