

# CONTINGENCY PLAN AND EMERGENCY PROCEDURES FOR LARGE QUANTITY GENERATORS

GUIDANCE

#### INTRODUCTION

The following is a summary of the regulations for contingency planning and emergency response procedures for large quantity hazardous waste generators. Large quantity hazardous waste generators may also be subject to other regulations that require emergency planning and preparedness. There are also additional hazardous waste management requirements large quantity generators must meet when handling hazardous waste. For more information on those requirements and common hazardous waste generator violations, see Chapters 2, 4, and 6 of the Michigan Guide to Environmental Regulations available online at Michigan.gov/EHSGuide. The Michigan Department of Environment, Great Lakes, and Energy (EGLE) also has additional emergency response planning information available at Michigan.gov/ChemRelease.

Michigan large quantity hazardous waste generators are regulated under Part 111, Hazardous Waste Management, (Part 111), of Michigan's Natural Resources and Environmental Protection Act, 1994 PA 451, as amended, Michigan Compiled Laws (MCL) 324.11101 et seq., and the administrative rules promulgated pursuant to Part 111 (Part 111 Rules).

Rule (R) 105(h), of the Part 111 Rules, identifies that a facility that generates over 1000 kilograms (2200 lbs.) of non-acute hazardous waste, 1 kilogram (2.2 lbs.) of acute or severely toxic hazardous waste, or over 100 kilograms (220 lbs.) of any residue or contaminated soil, water, or other debris resulting from the cleanup of a spill, into or on any land or water, of any acute or severely toxic hazardous waste in a calendar month, is a large quantity hazardous waste generator.

R 307(1)(c) requires that large quantity hazardous waste generators prepare a contingency plan, maintain it on file, train staff to implement the plan and emergency procedures in the event of an emergency, and share the plan and procedures with local emergency responders so they can familiarize themselves with the site-specific hazards and emergency details. R 305(4) also specifies that large quantity generator satellite container areas must be addressed in the contingency plan, and R 305(5) adopts Title 40 of the Code of Federal Regulations (CFR), Part 262, Subpart M, into the Part 111 Rules. Generators are encouraged to review 40 CFR, Part 262, Subpart M to get a complete understanding of the contingency planning and training requirements.

As of August 3, 2020, the effective date of the revised Part 111 Rules, large quantity generator contingency plans must include a quick reference guide to help local emergency responders quickly understand site-specific details when preparing to respond to an emergency.

# **CONTINENCY PLAN IMPLEMENTATION**

In the event of a fire, explosion, or other release of hazardous waste or hazardous waste constituents that could threaten human health or the environment, or if the large quantity generator has knowledge that a spill has reached surface water or groundwater, the large quantity generator is required to immediately notify EGLE by calling the Pollution Emergency Alert System at 800-292-4706 with the following information:

- 1. The name and telephone number of the person who is reporting the incident.
- 2. The name, address, telephone number, and site identification number of the large quantity generator.
- 3. The date, time, and type of incident.
- 4. The name and quantity of the material or materials involved and released.
- 5. The extent of injuries if any.
- 6. An estimated quantity and disposition of recovered materials that resulted from the incident, if any.
- 7. An assessment of actual or potential hazards to human health or the environment.
- 8. A description of the immediate response action taken.

# QUICK REFERENCE GUIDE

The contingency plan quick reference guide must:

- ✓ 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).
- ✓ Identify the maximum amount of each hazardous waste that may be present at any one time.
- ✓ Identify any hazardous wastes where exposure would require unique or special treatment by medical or hospital staff.
- ✓ Include a site map showing where hazardous wastes are generated, accumulated, and treated, along with routes to access them.
- ✓ 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.
- ✓ Identify on-site notification system capabilities (e.g. fire alarm that rings off site, smoke alarms, speakers, etc.) used to notify of an emergency.
- ✓ Identify the names and phone numbers of emergency coordinators.

See the United States Environmental Protection Agency (U.S. EPA), Region 7 example of a quick guide at the end of this document for help developing a contingency plan quick guide.

## ARRANGEMENTS WITH LOCAL EMERGENCY SERVICES

Large quantity generators must attempt to familiarize local police, fire departments, and local and state emergency response teams¹ with the layout of the site, the properties of the hazardous waste handled at the site and associated waste hazards, places where site personnel would normally be working, entrances to roads inside the site and designated evacuation routes, as well as types of injuries or illness which could result from fires, explosions, or releases at the site. Where more than one police and fire department might respond to an emergency, the large quantity generator must attempt to make arrangements designating the primary emergency authority to a specific fire or police department, and arrangements with any others to provide support to the primary emergency authority. If outside contractors are used to respond to emergencies, arrangements must be made with emergency response contractors and emergency response suppliers. Large quantity generators are also required to familiarize local hospitals with the properties of hazardous waste handled at the facility and the types of injuries or illnesses that could result from fires, explosions, or releases at the facility.

When transmitting the contingency plan to local response officials, the cover letter should explain why a copy of the plan is being sent, provide details of any arrangements made with local or contracted responders, and invite the response officials to tour the site with the emergency coordinator who can explain the site's expected emergency response. A copy of the cover letters used to share the contingency plan should be kept as an addendum to the contingency plan.

The large quantity generator must maintain records documenting the arrangements with the local fire department as well as any other organization necessary to respond to an emergency. This documentation must include documentation in the operating record that either confirms such arrangements actively exist or, in cases where no arrangements exist, confirms that attempts to make such arrangements were made. The plan must describe arrangements agreed to with the local police department, fire department, other emergency response teams, emergency response contractors, equipment suppliers, local hospitals or, if applicable, the Local Emergency Planning Committee. Whenever the plan is updated, the updated plan must be shared again with local response officials.

# CONTINGENCY PLAN AND EMERGENCY PROCEDURES

The contingency plan and emergency procedures must be designed to minimize hazards to human health or the environment from fires, explosions or any unplanned sudden or non-sudden releases of hazardous waste or hazardous waste constituents to air, soil, or surface water. The contingency plan must be carried out immediately whenever there is a fire, explosion, or release of hazardous waste or hazardous waste constituents, which could threaten human health or the environment. The contingency plan must describe the actions site personnel or contractors will take in response to fires, explosions, or any unplanned sudden or non-sudden release of hazardous waste or hazardous waste constituents to air, soil, or surface water at the site.

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<sup>&</sup>lt;sup>1</sup> At the time of this update, the State of Michigan does not have a state emergency response team to respond to individual site situations. Unless requested, contingency plans prepared by large quantity generators under these hazardous waste regulations do not need to be submitted to EGLE.

The plan must list the names and emergency telephone numbers of all persons qualified to act as an emergency coordinator. At least one primary and one alternate emergency coordinator must be identified to ensure someone is available at all times to respond to emergencies, including weekends, evenings, and holidays. The emergency coordinators must be able to reach the facility within a short period of time and must be thoroughly familiar with all aspects of the contingency plan. Emergency coordinators must have the authority to carry out all aspects of the plan. If emergency response contractors are used, the plan must list the name(s) of the emergency contractors and their emergency telephone numbers, and site personnel specifically authorized to engage their services and the site personnel's' emergency telephone numbers.

The plan must include a list of all emergency equipment at the site (such as fire extinguishing systems, spill control equipment, communication, or alarm systems – internal and external, and decontamination equipment), where the equipment is required. This list must be kept up to date. In addition, the plan must include the equipment location, a physical description of each item on the list, and a brief outline of its capabilities. In addition to providing a narrative description of the location and number of emergency devices and/or kits, the quick guide map should include details on the location of emergency equipment as depicted in the U.S. EPA, Region 7, Quick Guide Example found on pages 6 - 8 of this guide. Include symbols with a key so the map is easy to quickly read and understand.

The contingency plan must include an evacuation plan. The evacuation plan must describe the signal(s) to be used to begin evacuation, evacuation routes, and alternate evacuation routes in cases where the emergency incident blocks a primary evacuation route. The primary and secondary evacuation routes must be clearly marked on the map described above. Evacuation routes should include two outside areas where evacuees can assemble. This allows the emergency coordinator to designate an area upwind of the facility during an emergency.

The narrative description of the evacuation plan must identify the communication system to be used to communicate with evacuees after evacuation begins. The plan should also identify how the emergency coordinator will determine if all people in the site have been evacuated. Once evacuated, a physical count of evacuees should be compared to the list of employees (timecard data or staff list) and guests (from guest book or guest sign in sheets) obtained by key staff during any evacuation. One of the first questions emergency coordinators will be asked by emergency responders after an evacuation is how many people are still in the site, and where they are likely to be located.

The contingency plan must include the emergency procedures and equipment as mandated under R 307(1)(c), and the corresponding federal regulations under 40 CFR, Part 262, Subpart M. Copies of the contingency plan must be current (updated to reflect staffing changes), be available on-site, and made available to EGLE staff upon request. This plan must be amended whenever the regulations change, the plan fails in an emergency, the site changes, in design, operation, maintenance, or any other way that increases the potential for fires, explosions, or releases of hazardous waste or hazardous waste constituents, or changes the response necessary in an emergency, the emergency coordinator changes, or the emergency equipment changes.

# **QUICK REFERENCE GUIDE EXAMPLE**

This example was created by U.S. EPA Region 7 to be used as a guide to assist the regulated community with compliance.

This example does not substitute for or replace any regulatory requirements.

ABC Facility: 1000 SW Main Street. Anytown, Michigan

## **Facility Contacts:**

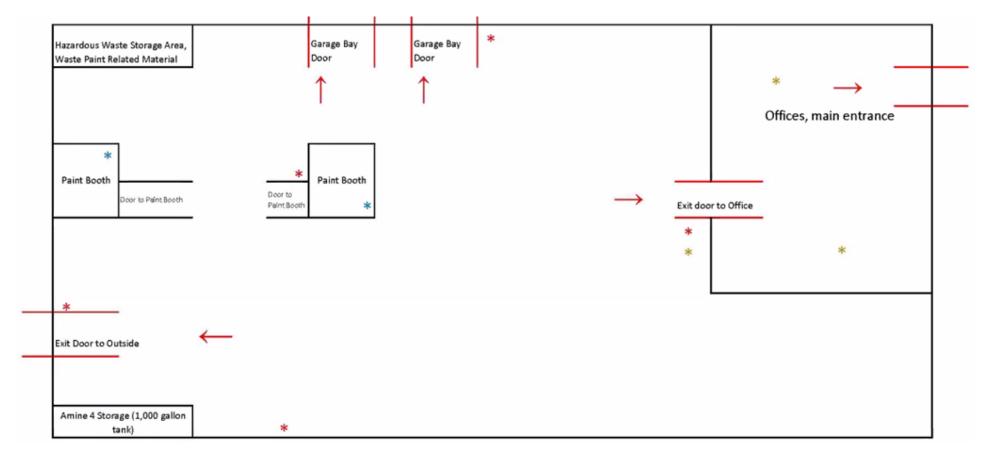
Primary Emergency Coordinator: George Washington - Mobile Number (24/7): 515-555-0000 Secondary Emergency Coordinator: Abraham Lincoln - Mobile Number (24/7): 515-555-0001 Tertiary Emergency Coordinator: Martha Washington - Mobile Number (24/7): 515-555-0002

**Note:** ABC Facility operates 3 shift, 24/7, but the order of contact during an emergency is listed above.

#### **HAZARDOUS WASTE INFORMATION:**

| Name of Waste  | Waste Codes/Hazards  | Location<br>Accumulated  | Maximum Amounts Present   | Response Notes   | Hospital/Treatment personnel  |
|--|--|--|---|--|---|
| Paint Related Wastes<br>(liquid)   | D001 (ignitability, flash<br>point <140 °F); F003,<br>F005 (Benzene, Methyl<br>Ethyl Ketone, Toluene,<br>Toxicity) | NW corner of<br>Warehouse,<br>hazardous waste<br>storage area                      | Five, 55-gallon<br>drums (2,065<br>pounds)  | If personnel come into direct contact with material, decontamination at the hospital may be required prior to treatment.                                   | None  |
| Paint Related Wastes<br>(liquid)   | D001 (ignitability, flash<br>point <140 °F); F003,<br>F005 (Benzene, Methyl<br>Ethyl Ketone, Toluene,<br>Toxicity) | Two Satellite Accumulation Areas as noted with blue asterisks on the attached map. | One, 55-gallon<br>drum (440 pounds)   | If personnel come into direct contact with material, Decontamination at the hospital may be required prior to treatment.                                   | None  |
| Off-specification 2, 4-D, an herbicide, (brand name is Amine 4) (liquid) | D016 (toxicity);<br>Flashpoint 190 °F.   | SW corner of warehouse near new product storage of Amine 4.                        | Off-Spec-1 tank,<br>1,000 gallons<br>New product - 1<br>tank (same tank as<br>off-Spec), 1,000<br>gallons | Use PPE to prevent contact with skin and eyes. Immediately prevent spills from entering drains and waterways. Prevent sources of ignition and open flames. | Contact Chemtrac for<br>emergency medical<br>treatment information<br>at 800-424-9300.<br>If in eyes, wash eyes<br>for several minutes. |

Special Notes to



- \* Satellite Accumulation Area for Paint Related Waste Material (D001, F003, F005)
- \* Fire Alarms (ring on-site only, there are no fire alarms that notify off-site personnel)
- \* Telephone for off-site notification of emergency
- Indicates evacuation route out of the building.

**Note 1:** Hazardous waste (paint-related waste) is generated and accumulated inside each of the two paint booths, and is accumulated in the hazardous waste storage area. Amine 4 can be a hazardous waste if it is off-specification. It is generated and accumulated in the SW corner at the Amine 4 tank.

**Note 2:** Smoke detectors are located throughout the office and main warehouse on the ceiling, in a grid about every 25 feet. Smoke detectors are connected to an automatic sprinkler system.

# STREET MAP



This publication is intended for guidance only and may be impacted by changes in legislation, rules, policies, and procedures adopted after the date of publication. Although this publication makes every effort to teach users how to meet applicable compliance obligations, use of this publication does not constitute the rendering of legal advice.

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