14.15. 304 Spill Response

Regulatory Review

Facility that uses hazardous chemicals or oil products at some point in time will be required to respond to a spill. A contingency plan is required if you are a small or large quantity generator of hazardous waste. A Spill Prevention Control and Countermeasure (SPCC) plan is required if your facility stores more than 1320 gallons of petroleum products in aggregate in 55 gallon drums and larger containers. Underground storage tanks are exempted from this requirement in quantities below 42,000 gallons. Underground storage tanks are regulated by the State Fire Marshal's Office. If you have one or both of these plans, become familiar with them so that you know everyone at the facility is aware of what their roll is in the case of a release. You will not have time to read the plan when the release occurs.

Facilities that are not required to have these plans will still need to plan on how they will respond to a spill of hazardous materials or oil products. There are several factors you need to keep in mind when planning how to respond to a release. The first priority is the safety of your employees and others if a release occurs. The second is how to contain a release. The third item is how to clean up the release. Once you have planned your response to a release, you will then have a good idea of how to prevent a release form occurring in the first place.

Management Plan

1. Each site should designate at someone as the primary Emergency Coordinator, and also designate a secondary Emergency Coordinator.

2. The Emergency Coordinator should determine what types and amounts of hazardous product and oils that you have on your site.

3. The Emergency Coordinator should determine what the reportable quantities are for each of these products that you have on your site.

4. The Emergency Coordinator and DSR should determine what type and level of emergency equipment is necessary for your facility.

5. The Emergency Coordinator and DSR should determine what size and type of incidental releases that can be handled safely by employees.

6. The Emergency Coordinator should develop an Emergency Call List.

7. Post that list near the telephones, and make employees aware of the list.

8. Inform the Employees of their responsibility to call the EMERGENCY COORDINATOR.

9. A. Notifications are to be made in the following order:

   - (911) Local Emergency (for major fire, explosion, or similar type of situation);
   - Emergency Coordinator
   - Facility Manager
   - National Response Center (NRC), 1(800)424-8802
     (For releases covered under 40 CFR 110, to cause a sheen upon or discoloration of the surface of a water body adjoining shorelines, etc. In addition, all releases of hazardous substances over CERCLA Reportable Quantities must be reported to the NRC.)
   - The Ohio Environmental Protection Agency, 1(800) 282-9378
     (Any other applicable numbers)
   - ODOT Office of Environmental Service

10. Remediation of a Spill

    An incidental release is a release of a hazardous substance which does not pose a significant safety or health hazard to employees in the immediate vicinity or to the employee cleaning it up, nor does it have the potential to become an emergency within a short time frame. Incidental releases are limited in quantity, exposure potential, or toxicity and present minor safety or health hazards to employees in the immediate work area or those assigned to clean them up. An incidental spill may be safely cleaned up by employees who are familiar with the hazards of the chemicals with which they are working.

    The properties of hazardous substances include: toxicity, flammability, reactive, and corrosivity. Hazards can be created by the particular circumstances of the release itself, such as quantity, confined space considerations, ventilation, etc. All of these factors will have an impact on what employees can handle safely and what procedures should be followed. Additionally, there are other factors that may mitigate the hazards associated with a release and its remediation. These factors include the knowledge of the employee in the immediate work area, the timelessness of the response and personal protective equipment (PPE) at hand. That why it is recommended to practice the pre-established response procedures. There may be some engineering control measures that will mitigate the release

provided the employees have been trained and they can activate these controls to assist them in stopping the release.

These considerations (properties of the hazardous substance, the circumstances of the release, and the mitigating factors in the work area) combine to define the distinction between incidental releases and releases that require the facility to conduct an emergency response, or the need to seek the help of an emergency contractor. The distinctions are facility-specific. The person responsible for making this determination is the Emergency Coordinator.

When a release of a hazardous substance occurs, the following conditions, or similar conditions, may develop into an emergency situations requiring outside emergency response effort:

High concentrations of toxic substances

Situation that is life or injury threatening

Imminent Danger to Life and Health (IDLH) environments

Situation that presents an oxygen deficient atmosphere

Condition that poses a fire or explosion hazard

Situation that required an evacuation of the area

A situation that requires immediate attention because of the danger posed to employees in the area.

Incidental releases that can be handled safely by employees in the immediate area, without the aid of a coordinated response effort from employees outside the area, would not be considered an emergency incident under 29 CFR 1910.120.

The intent of the standard is to protect employees from exposure to the health and physical hazards of hazardous substances associated with hazardous waste operations and emergency response activities. Absent testing data on the mixture as a whole, the hazards of a mixture containing hazardous substances would be expected to be treated as a hazardous substance for compliance purposes.

The determination of how much of a solvent mixture spill (containing 10-100 ppm of benzene) would represent an emergency is dependent upon many

factors. In general, a theoretical concentration for each component part can be calculated based on the quantity of solvent spilled, the percentage by weight of volume of each component, and the size of the spill area. In the event the components of a mixture pose an additive effect, the TLV for the mixture can be calculated. Dependent upon the quantity of a solvent expected to be released and the size of the spill area, a determination could then be made as to whether or not such a concentration would result.

When the concentration of the mixture as a whole or the concentration of the component parts poses a condition previously described, an emergency situation would be anticipated requiring an outside emergency response. The calculations should be conducted by the District Safety Personnel to give you some general guidelines on the size and type of incidental releases that can be handled safely by employees.

11. The reportable quantity for the discharge of oil including crude oil into or upon navigable waters is any amount which causes a film or sheen upon or discoloration of the surface of the waters or cause a sludge or emulsion to be deposited beneath the surface of the waters.

    Record the reportable quantities for the chemicals and products used at your site. A list of reportable quantities can be found at the US EPA web site in 40 CFR Section 302.4. Some examples include:

Spill Response Plan

Product	Reportable Quantity	Response	Disposal
Calcium Chloride	None	Contain & absorb	Solid Waste
Brine	None	Contain & absorb	Solid Waste
TCE	10 gallons	Contain & absorb	Hazardous Waste
Oil/fuels	25 gallons	Contain & absorb	Solid Waste
Gasoline	25 gallons	Contain & absorb	Evaluate
Naphthalene / Parts washer fluid	10.5 gallons	Contain & absorb	Evaluate
Antifreeze New	533 gallons	Contain & absorb	Solid Waste
Antifreeze D008	1 gallons	Contain & absorb	Hazardous Waste
Ignitable Waste D001	11 gallons	Contain & absorb	Evaluate
Corrosive Waste D002	100 pounds	Contain & absorb	Evaluate
Paint waste F003/F005	10 Gallons	Contain & absorb	Hazardous Waste

Written Follow-up Requirements

After the release or discharge, written follow-up emergency notice must be submitted within 30 days to the Ohio EPA Emergency Response Section and the local planning committee of the planning district(s) in which release or discharge occurred. This follow-up emergency notice is ODOT's opportunity to explain in its own words the circumstances and actions relating to the release of pollutants to the environment. Your written emergency notice should follow the questions sequence as indicated below. If any of the questions are not applicable to your incident, indicate N/A (not applicable) for that item.

OHIO SPILL REPORTING FORM The following information should be supplied within 30 days of the release or discharge event for which reporting is required under Ohio Regulation 3750. This notice should follow the questions sequence as indicated below. If any of the questions are not applicable to your incident, indicate N/A (not applicable) for that item.	
1. When	
(a) Actual time, date, and duration of the discharge or release.	
(b) Actual time and date of discovery of the release or discharge.	
(c) Actions taken to respond to and contain the release or discharge.	
(d) Indicate the spill number assigned by Ohio EPA. (If you do not know this number, call a duty office during business hours and ask. The telephone number is 614-644-3194). If the National Response Center was notified, please provide their assigned case number.	
2. Location	
(a) Location of facility from which the release or discharge occurred.	
(b) Location of release: county, township, and city.	
(c) Longitude and latitude of the release, if known.	
(d) Distance and direction from nearest intersection or milepost if it was a transportation related release or discharge.	
(e) Name of the owner and operator of the facility.	Ohio Department of Transportation
(f) The Facility EPA ID Number	
3. Product Release	
(a) Common and/or technical name(s) of the material(s) released or discharged and CAS Numbers(s).	
(b) What was the quantity and duration of the discharge? Indicate volume(s) in gallons or pounds.	
(c) Maximum storage or handling capacity of the facility and normal daily throughput.	
4. Environmental Impact	
(a) Name of the environmental medium or media affected (i.e. navigable waters, land, and/or air). If navigable waters, please identify.	
(b) What was the length of area of the navigable waterway affected?	

OHIO SPILL REPORTING FORM The following information should be supplied within 30 days of the release or discharge event for which reporting is required under Ohio Regulation 3750. This notice should follow the questions sequence as indicated below. If any of the questions are not applicable to your incident, indicate N/A (not applicable) for that item.	
(c) What was the ground surface area (square feet or yards) and depth of soil contamination?	
(d) To the extent information is available, identify damage to wildlife and/or vegetation.	
(e) To the extent information is available, identify impact to human health and safety (i.e. evacuations, exposure, etc..)	
(f) Where appropriate, identify medical advice provided for exposed individuals and or local medical personnel.	
5. Monitoring and Detection	
(a) If the release or discharge was monitored, indicate the method of detection and concentrations detected.	
(b) If the release was air-borne, how was the wind direction and speed determined?	
(c) Was the public warned, and if so, how?	
6. Mitigation, Containment Action	
(a) How much product or waste was recovered or neutralized?	
(b) How was the material recovered or neutralized?	
(c) Were any other actions taken to reduce the impact of the discharge (containment, adsorbents, on-site treatment, etc.)?	
7. Prevention Measures	
Provide plans to prevent recurrence of the discharge or release which may occur at this specific source. This may include: employee training, replacement of equipment, construction, or security measures such as lighting, fencing or locks.	
8. Health Risks	
List known or anticipated acute and chronic health risks of exposure associated with the substances which were released.	
9. Permit Numbers	
(a) Indicate any air, water, or other permit numbers which may be pertinent to this incident (voluntary information).	
(b) If this is a NPDES/air permit, please enclose a copy of your current effluent/emission limitations.	
10. Chronology	

OHIO SPILL REPORTING FORM The following information should be supplied within 30 days of the release or discharge event for which reporting is required under Ohio Regulation 3750. This notice should follow the questions sequence as indicated below. If any of the questions are not applicable to your incident, indicate N/A (not applicable) for that item.	
Provide a chronological review of the incident. Include a chronology of communications with state and local government.	
11. Documentation	
Provide any reports or other documents which pertain to the incident (e.g. accident reports, manifest, bills of lading, laboratory analyses).	
12. Causes	
Describe any extenuating circumstances which caused the discharge.	
13. Economic Impact (Voluntary)	
(a) Estimate the dollar value, if any, of the spilled product.	
(b) What was the equipment damage cost (estimate)?	
(c) What was the cost of spill cleanup (estimate)?	
(d) What are the estimated costs of spill prevention to eliminate possible reoccurrence of this event?	
This information is required pursuant to ORC Section 3750.06(D) and OAC Rule 3750-25-25(A)(2). The written emergency notice must be submitted within 30 days of the release or discharge to:	
Ohio EPA Lazarus Government Center Attention: ER Records Management 50 West Town Street, Suite 700 P. O. Box 1049 Columbus, Ohio 43215-1049	Local EMA Dir. The appropriate County LEPC Emergency Coordinator

Sampling Analysis

Start at Table 1:
ODOT Waste stream and Testing Method

Best Management Practices

Effective: June 2008
Up Dated: December 2015