**Penn State University**

# Environmental Emergency Plans



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Penn State has a variety of plans that address facilities that store fuels, oils, and hazardous materials.  The purpose of these plans is to describe measures to prevent spills and releases from occurring and to prepare for an effective, safe, and timely response to mitigate the impacts of a spill/release.

In addition to fulfilling regulatory requirements, these plans serve as a reference for oil and hazardous materials storage requirements, as a tool to communicate practices on preventing and responding to spills/discharges with employees, as a guide for inspections, and as a resource during emergency response.

## Regulatory Requirements

Environmental emergency plans are required by county, state, and federal agencies. A summary of the plan requirements is given below.

### Preparedness, Prevention, and Contingency Plan Requirements

Title 25 of the Pennsylvania Code and the “Guidelines for the Development and Implementation of Environmental Emergency Response Plans” provide requirements for Preparedness, Prevention, and Contingency (PPC) Plans.

 Facilities that meet the following conditions are required to have a PPC Plan:

* The facility is an industrial or commercial installation that has the potential for causing accidental pollution of the air, land, or water, or the endangerment of public health and safety;
* The facility has a National Pollutant Discharge Elimination System (NPDES) stormwater permit; or
* The facility is a manufacturing or commercial installation that generates hazardous waste.

PPC regulations require that the PPC Plan be periodically reviewed and updated, if necessary. At a minimum this must occur when:

* Applicable Department regulations are revised;
* The Plan fails in an emergency;
* The installation changes in design, construction, operation, maintenance, or other circumstances, in a manner that increases the potential for fires, explosions or releases of toxic or hazardous constituents; or which changes the response necessary in an emergency;
* The emergency coordinator changes;
* The list of emergency equipment changes; or
* As otherwise required by the Pennsylvania Department of Environmental Protection (PADEP).

### Spill Prevention, Control, and Countermeasures Plan Requirements

The Code of Federal Regulations, 40 CFR Part 112 provides requirements for Spill Prevention, Control and Countermeasure (SPCC) Plans. The SPCC Plan addresses storage tanks, piping, and equipment that are used for oil, as defined in 40 CFR §112.2.

Facilities that meet the following conditions are required to have an SPCC Plan:

* The facility could reasonably be expected to discharge oil in quantities that may be harmful into or upon the navigable waters of the United States or that may affect natural resources;
* The facility has oil in aboveground containers, completely buried tanks, and temporary storage containers of 55-gallons or greater; and
* The facility has completely buried storage capacity of more than 42,000-gallons of oil in tanks that are not regulated under 40 CFR 280 or 281, or the facility has an aggregate aboveground storage capacity greater than 1,320-gallons.

If either of the following occurs, the Plan is to be submitted to the EPA Regional Administrator:

* The facility discharges more than 1,000 gallons of oil into or upon the navigable waters of the U.S. or adjoining shorelines in a single spill event, or
* The facility discharges oil in quantity greater than 42 gallons in each of two spill events within any 12-month period.

This Plan is updated when a change in the facility design, construction, operation, or maintenance occurs that materially affects the potential for discharge. The changes are made to the plan within six months of those changes taking place and implemented as soon as possible, but no later than six months following preparation of the amendment.

Notwithstanding the requirements in the previous paragraph, the Plan is reviewed and evaluated at least once every five years. As a result of this review and evaluation, the plan will be amended within six months to include more effective prevention and control technology if the technology has been field proven at the time of the review and will significantly reduce the likelihood of a discharge from the facility. The amendment will be implemented as soon as practical, but no later than six months following preparation of the amendment.

Following any technical changes, the Plan will be certified by a Professional Engineer (P.E.).

The Plan is updated annually to reflect any administrative changes that are applicable such as personnel changes, revisions to contact information, etc. These changes are documented in the Plan but do not need to be certified by a P.E.

### Spill Prevention Response Plan Requirements

Title 25, Chapter 245 of the Pennsylvania Code, the Storage Tank and Spill Prevention Act and the “Guidelines for the Development and Implementation of Environmental Emergency Response Plans” have requirements for Spill Prevention and Response (SPR) Plan.

Facilities that meet the following conditions are required to have an SPR Plan:

* The facility has an aggregate aboveground storage capacity greater than 21,000 gallons.

SPR Plan regulations require that the SPR Plan must be revised if any of the following occur:

* There is a substantial modification in design, construction, operation, maintenance of the storage tank or tank facility or associated equipment or other circumstances that increase the potential for fires, explosions, or releases of regulated substances;
* There is a substantial modification of emergency equipment at the facility;
* There are substantial changes in tank facility emergency organization;
* Applicable Department regulations are revised;
* The Plan fails in an emergency;
* The removal or addition of any storage tank or storage tanks;
* Other circumstances occur of which the Pennsylvania Department of Environmental Protection (PADEP) requests an update.

### Comprehensive Emergency Response/Off-Site Response Plan Requirements

The Environmental Protection Agency’s Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA) as amended by the Superfund Amendments and Reauthorization Act of 1986 (SARA) Title III and the Pennsylvania Hazardous Material Emergency Planning and Response Act of 1990 (PA HazMat Act) both have requirements for emergency plans. CERCLA refers to this plan as a Comprehensive Emergency Response Plan. The Pennsylvania requirements reference the CERCLA requirements and require the County Local Emergency Planning Committee (LEPC) to prepare the plan. In Pennsylvania this is known as the Off-Site Response Plan.

Facilities that meet the following conditions are required to have an Off-Site Response Plan:

* The facility has an “extremely hazardous substance” at or above the “threshold planning quantity” established by the EPA for that substance.

CERCLA and the PA HazMat Act regulations require notification to the LEPC and State Emergency Response Commission (PEMA) if any of the following occur:

* An extremely hazardous substance not previously identified is present at or above the threshold planning quantity;
* An extremely hazardous substance is no longer present at the facility at or above the threshold planning quantity.

In addition, an annual update to the Off-Site Response Plan is required.

### Emergency Response Plan Requirements

The Occupational Health and Safety Administration requires under 7 CFR §1910.120 (q) that an Emergency Response Plan be developed for emergency response operations for releases of, or substantial threats of releases of, hazardous substances without regard to the location of the hazard. An emergency response of this nature could occur at any location at Penn State. These plans address the preplanning requirements and provides easily accessible information that emergency responders can use during an emergency response. In addition, the University has prepared Emergency Evacuation Plans, which provide employees at all locations with information on how and when to evacuate their building during an emergency.

## Environmental Hazards Emergency Response Plan

In an effort to unify all of the regulatory requirements for Environmental Emergency Plans, the Environmental Health and Safety office is migrating these plans to a comprehensive plan known as the Environmental Hazards Emergency Response Plan.

## Facility Definition

Many of the requirements, emergency structure, and spill/release response procedures are the same throughout each Penn State campus or other location. However, due to the size of most of the campuses, a spill or release in one building for example, may have no impact to the balance of the campus.

The term “facility” is used in many of the plan requirements discussed above. These definitions address the ownership and operation of the facility. All of the lands and buildings within the Penn state system share ownership; however, there are many different entities that operate these facilities. In addition, even though two facilities may be operated by the same entity, their locations may not be contiguous and therefore an emergency at one will have no impact to the other.

For the purposes of the above Plan requirements, a facility is a building or group of adjacent buildings which store hazardous materials or oil above threshold quantities that are operated by the same entity. Each facility has a plan which is specific to the facility and which indicates which regulatory plan requirements apply.

## Responsibilities

Penn State is committed to preventing discharges of oil and hazardous materials to soil, air, and water and to maintaining the highest standards for spill/release prevention. The Environmental Emergency Plans have the full approval of management. At Penn State University, the Associate Vice President of Physical Plant, has been designated as the person responsible for spill prevention.

The Director of Environmental Health & Safety is responsible to ensure the protection of health and safety of persons and the environment for all University facilities and is responsible for the overall implementation of this Plan. The Director has the full approval of management to commit the necessary resources to implement the measures described in these Plans.

The Assistant Director of Environmental Health and Safety and the Environmental Compliance Engineer, have joint responsibility for the hazardous materials and oil portions of the Plans, respectively. They are responsible for writing the plans with facility input and annual editing facility changes. They establish spill prevention and reporting procedures, audit the effectiveness of the Plans, and implement changes to the Plans, as necessary. In conjunction with the facility managers, they review past incidents and spills and countermeasures utilized, and integrate new construction changes into the Plans. They are responsible develop training materials for Facility Managers on the proper handling of suspect spills or leaks and spill events.

Administrative units in conjunction with Facility Managers are responsible to identify to EHS existing and planned storage containers and equipment that hold 55-gallons or more of any type of oil, fuel or chemical.

Each location that has an Environmental Emergency Plan has an Emergency Coordinator. Whenever there is an imminent or actual emergency situation the Emergency Coordinator activates facility alarms or communications systems, to notify facility personnel and notifies local emergency response and other regulatory agencies when necessary. Whenever there is a large or high-impact spill or discharge, the Emergency Coordinator must immediately identify the character, exact source, amount, and extent of emitted or discharged materials. Concurrently, the Emergency Coordinator must assess possible hazards to human health or the environment that may result from the spill or discharge. This assessment must consider both direct and indirect effects. If the Emergency Coordinator determines that there has been an emission, discharge, fire, or explosion that threatens human health or the environment, she/he must immediately notify the applicable local authorities.

Each hazardous materials and oil storage location designated in a Plan has a Facility Manager and alternate. The Facility Manager is responsible for implementation of this site-specific section of the Plan (inspections, recordkeeping, training, etc.) and for reporting incidents. Annually, the Facility Manager completes a review of their section of the Plan for completeness and accuracy and reports changes/updates at the facility, in writing, to the Emergency Coordinator, who will ensure that the Plan for the facility is revised. The review must identify any new sources, past incidents and spills, and countermeasures utilized. The Facility Manager must ensure that the training requirements are fulfilled and that emergency response equipment is complete and available at all times. The Facility Manager must promptly report to EHS any problems with storage containers that cannot be readily corrected by facility personnel, must ensure all spills/releases are properly cleaned up, and must document and investigate all incidents in accordance with the Plan. An alternate is provided for each Facility Manager.

## Employee Training

Employees (including Facility Managers and Alternates) who are involved with hazardous materials/oil handling are required to be trained on the contents of their Plan as it relates to their facility upon initial hire and annually. The training includes a review of their Plan, operations and maintenance of equipment to prevent discharges, review of possible spill scenarios, spill response, and newly developed prevention measures, as well as changes in the regulations as appropriate. Releases and spills, if any, are discussed. Documentation of training is maintained at each facility with copies at EHS.