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# Contractor Spill Prevention and Response

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Contractors perform many functions at Penn State, often storing or using equipment that contains petroleum products or chemicals that can cause pollution if spilled or released. Some projects may generate chemical waste or waste oils. For larger or long-term projects, fuel tanks may be brought to job sites. All of these have the potential to spill or release to the environment. Penn State requires that contractors ensure that spills or releases to our property are minimized by good storage and handling practices for these materials.

While there are procedures that can help reduce the potential for releases of fuels, oils, and chemicals into the environment, spills and releases do occur. Spills that are promptly attended to generally have lesser environmental impacts. Therefore, if contractors have equipment on hand to handle spills/releases and the knowledge of how to respond to them, they can minimize the damage. Additionally, there are regulatory requirements for spills and releases that must be adhered to by contractors. This document outlines responsibilities, preparedness, storage and handling, spill and release response, and reporting requirements.

## Responsibilities

* *Contractors* have the primary responsibility for spill prevention and response. Using good handling procedures, they can minimize their risk. If they have spills or other releases, they are responsible for reporting them to Penn State and to the proper regulatory agencies. And they have ultimate responsibility for environmental clean-up, which must meet the regulatory requirements.
* *Penn State’s Design and Construction personnel* protect the University’s interests during a construction project. They review storage locations and ensure preventative practices are being carried out. They are alert for signs of releases such as soil staining or odors. They ensure that contractors perform the required clean-ups for spills and releases and that they are reported to Environmental Health and Safety (EHS).
* *Environmental Health and Safety* can be requested to review job sites, but do not perform regular inspections of construction sites. EHS must be called when spills and releases occur to provide guidance for contractor spill clean-up. EHS has spill control materials available that can be used if a spill or release cannot be controlled by the absorbent materials on hand at the site.

## Preparedness

* *Spill Kits* – To attend to spills expeditiously, all contractors that have equipment that contains petroleum products, such as hydraulic equipment, must have a spill kit on site. This is also required for projects that store and use chemicals, or that generate chemical waste. A spill kit must be able to contain a spill or release of the single largest container at the project or 60 gallons, whichever is smaller. The type of spill kit that comes in a 95-gallon overpack drum is usually sufficient.
* *Loose Absorbent* – In addition to the spill kit, there needs to be at least two 40-pound bags of loose absorbent such as Oil-Dri, a broom and a shovel. Many companies sell loose absorbent. To contain the used absorbents, there should also be a supply of heavy-duty plastic bags or open top drums.
* *Trained Personnel* – During work, there must always be personnel on site that are trained to respond to spills and releases. They should understand the necessity of keeping chemicals and oils out of storm water drains and be prepared to take actions to prevent this. In addition, they must know how to use the spill kit and loose absorbent to properly remediate a spill or release.

## Storage and Handling

* *Secondary Containment for Chemicals, Petroleum Products, Oil, and Chemical Waste* – All materials that have the possibility of causing pollution if they were released into the environment that are in containers of 55-gallons or greater must have secondary containment. In addition, all chemical waste and waste oils, no matter the size of the container, must have secondary containment. These materials should not be stored outdoors in the weather.

Secondary containment is a means to capture a release or spill from the material’s primary container. There are several ways to provide it. A secondary containment pallet is designed to sit the containers on top of or into it so that it captures the releases. There are secondary containment sheds which hold two to four 55-gallon drums that are enclosed and have the containment built into the floor. Diking can be used to surround the storage area, building a containment area within the diking. Temporary dikes must be able to be attached to the flooring and removable when the project is complete. For smaller containers of chemical material, 5-gallon buckets may be sufficient. The secondary containment must be able to hold 110% of the single largest container on or in the containment area.

* *Use of Skid Tanks* – Contractors that store fuel on-site generally use skid tanks for fuel storage. The tank must be level and secure, and double-walled tanks provide secondary containment. As spills to paved or concrete surfaces are easier to clean-up, it is preferred that tanks are located on these types of surfaces. The PA Department of Labor and Industry requires that skid tanks be located at least 40 feet from a building and be conspicuously marked in letters not less than three inches high with the name of the product and the words “INFLAMMABLE – KEEP 40 FEET FROM BUILDINGS.” The NFPA diamonds should also be on the tank, visible from 2 sides of the tank.

### The use of a secondary containment “tub” or berm around a single-walled tank can serve to catch any fuel releases that may occur. However, the containment, which must be 110% of the tank volume, will also capture rainfall, which must be released. It is unlawful to release water with a fuel sheen on it and therefore the fuel should first be absorbed with “oil only” absorbent pads or socks prior to release (these pads will not absorb water). THE USE OF A SINGLE-WALLED TANK MUST BE APPROVED BY EHS.

* *Tank Inspections* – Contractors should inspect their tanks regularly. A tank inspection should include:
* Check for deterioration of tank, hoses, ancillary equipment, and safety equipment
* Check vent pipes for restrictions; inspect pipes for damage
* Check for malfunctions of equipment such as pumps, overfill prevention devices, etc.
* Check for evidence of a fuel release from the tank
* Check for spill kit availability and appropriate contents
* Check for fire extinguisher
* Check for conditions that may be a fire, environmental, or safety hazard
* *Tank Filling Operations* – Tanks cannot be filled by fuel companies without a trained representative of the contractor present who is prepared to respond to spills. The contractor must be aware of all storm drain inlets nearby and inform the fuel provider of the locations. Tanks should be filled no more than 90-95%, as they can easily overflow from fuel expansion during hot weather. No smoking is permitted during tank filling and any spills that occur must be promptly cleaned up.
* *Vehicle/Machinery Refueling* – When fueling machinery and vehicles, it is important to prevent overfills. Equipment/vehicles must be turned off, and no smoking is permitted during filling operations.
* *Inspecting Equipment* – Inspections and preventive maintenance should be performed on all machinery used on-site. As hydraulic hoses are especially prone to rupture, attention to these should be stressed. Equipment that is leaking may not be used without repairs.

## Spill and Release Response

* *Emergency Spill/Release Procedures* – Large spills, spills of any size that enter surface waters or stormwater drainage systems, and spills or releases that create an emergency due to possible fire, explosion, or threat to the environment or the health and safety of people, **must be reported to 911**. This will activate an emergency response. If the emergency occurs at University Park, a follow-up phone call should be made to University Police at 814-863-1111.

After the emergency is addressed, the contractor can select a spill response company of their choosing to perform the clean-up. The Pennsylvania Emergency Management Agency provides a [map](https://www.pema.pa.gov/Preparedness/Hazardous-Material/Documents/Hazardous-Materials-Response-Teams.pdf) showing the [Hazardous Material Response Teams](https://www.pema.pa.gov/Preparedness/Hazardous-Material/Documents/Hazardous-Materials-Response-Teams.pdf) located throughout the state. Please note that some of the responders listed at the website are the county HazMat teams, which respond to the emergency and provide hazard mitigation, but do not perform clean-up. Other sources for local emergency contractors are the county emergency management agencies and the local Pennsylvania Department of Environmental Protection (PADEP) office (see [Reporting Resources](#_Reporting_Resources) below).

### Non-Emergency Spill/Release Response – Most spills and releases are not emergencies. Spill clean-up is most effective when done as quickly as possible after a spill occurs. If the spill is to a paved surface, it is crucial to attempt to keep the spilled material on the pavement and out of drains. If the spill is to soil, all attempts should be made to keep it from reaching waterways. Absorbent socks contained in the spill kit can be used either to direct the spill around a drain or to confine the spill area. Absorbent materials should be used to absorb as much free product as possible.

If a spill clean-up at University Park requires more absorbent materials than a contractor has on hand, contact EHS (814-865-6391). EHS has various spill response materials available. Material costs will be the responsibility of the contractor.

Once the spilled/released product has been absorbed, spills to soil should be excavated as soon as possible. Contractors should dig out all the impacted soil (identified visually and by odor) and place it on a tarp or plastic. Remember that some excavations will require notification to PA One-Call. The excavated soil pile must be kept covered while on-site.

If the spill or release requires reporting to PADEP (see [Reporting Requirements](#_Reporting_Requirements) below), they will direct the required actions for the cleanup. For smaller spills, PADEP may be satisfied by knowing that all impacted soil/gravel was promptly excavated. On occasion, they may come to the spill site to observe the clean-up, EHS should be notified if PADEP visits the site. Generally, larger spills require sampling and reports to show that the spilled material was adequately cleaned up. EHS may review the spill/release cleanup to ensure it is complete. Spill clean-up costs are the responsibility of the contractor.

### Disposal – Spill cleanup materials and contaminated soil/gravel that has been excavated in most cases must be disposed of at a permitted landfill or by a hazardous waste vendor. The contractor’s proposed disposition of the material must be discussed with EHS when the spill is reported. Documentation that the material was properly disposed of will be required to be provided to EHS (see below). In some cases, EHS may dispose of the material through our contracted vendor and charge this back to the contractor/project.

## Reporting Requirements

Spills of materials that can cause pollution to the waters of the Commonwealth (streams, drainage ditches, storm water drains, ground water, etc.), fuel/oil spills to soils of one quart or more, and all hazardous material/waste spills are required to be reported to the PADEP immediately – the Section below titled Reporting Resources provides contact information for the PADEP.

In addition, all spills/releases must be reported by the contractor to the Penn State’s Design and Construction project personnel and to Penn State’s Department of Environmental Health and Safety (814-865-6391). Note that if Penn State Design and Construction personnel report to EHS, an additional report by the contractor is not necessary.

When reporting a spill, the following information is needed:

* Name and title or person reporting incident
* Name and location of facility (address, phone number, township or municipality, and county)
* Phone number where the person reporting the spill can be reached
* Date, time, and location of the incident
* Brief description of the incident, nature of the materials involved, estimated quantity of the materials spilled, possible hazards to human health or the environment, and type of containment and clean-up actions taken
* Extent of contamination, if known (e.g., bodies of water, soil, pavement, etc.)

## Documentation

At the completion of the incident, a report must be prepared that documents the spill/release. At a minimum, the report shall include the material spilled/released, how the spill/release occurred, the volume, and the location. Actions taken to address the spill should be included along with the name(s) and company(s) of the responding personnel. The reports must include a site map that clearly shows the location of the spill. In addition, these reports must include waste manifests that show the spilled/released material/impacted soil was properly disposed. Copies of the report are to be directed to Penn State’s Design and Construction personnel and EHS.

## Reporting Resources

The table below provides a list of Penn State locations and the appropriate PADEP Regional office for each. Below the table are the phone numbers to be contacted.

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| PADEP Region | Penn State Campus/Facility |
| Northwest | Behrend-Erie, Lake Erie Regional Grape Research and Extension Center, Shenango |
| Southwest | Beaver, Fayette, McKeesport, New Kensington |
| Northcentral | DuBois, University Park, WPSX Transmitter |
| Southcentral | Altoona, Berks, Biglerville Fruit Research and Extension Center, Dickinson School of Law, Harrisburg, Hershey Medical Center, Mont Alto, Southeast Field Research and Extension Center, Stone Valley, York |
| Northeast | Hazleton, Lehigh Valley, Schuylkill, Wilkes-Barre, Worthington Scranton |
| Southeast | Abington, Delaware County, Great Valley |

* Northwest Regional PADEP Office, 800/332-6945; 800/373-3398 (evenings and weekends)
* Southwest Regional PADEP Office, *412/442-4000*
* Northcentral Regional PADEP Office, *570/327-3636*
* Southcentral Regional PADEP Office, 717/705-4741, 877/333-1904 (evenings and weekends)
* Northeast Regional PADEP Office, *570/826-2511*
* Southeast Regional PADEP Office, *484/250-5900*

For spills that result in discharge to the waters (surface) of the United States/Commonwealth, the following additional agencies must be contacted:

* National Response Center (NRC), 800/424-8802
* Pennsylvania Emergency Management Agency (PEMA), 800/424-7362
* Local Emergency Planning Committee (LEPC), 911
* PA Fish & Boat Commission, Bellefonte, 814/359-5250

## Record of Revision

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| --- | --- |
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