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TO: Design and Construction Personnel

SUBJECT: Fuel Handling Practices, Spill Response, and Responsibilities for Contractors

Contractors perform many functions at Penn State, often using equipment that contains petroleum products. For larger or long-term projects, fuel tanks may be brought to job sites. All of these have the potential to release petroleum products (including hydraulic oils) to the environment through normal use or through a lack of attention. Penn State requires that contractors ensure that spills or releases to our property are minimized by good fuel handling practices.

While there are procedures that can help reduce the potential for releases of petroleum products 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 and the knowledge of how to respond to spills, they can minimize the damage caused by spills. Additionally, there are regulatory requirements for petroleum spills that must be adhered to by contractors. This document outlines responsibilities, fuel handling techniques, spill awareness, response, and reporting requirements.

Responsibilities

Contractors have the primary responsibility for spill prevention and clean-up. Through the use of good fuel handling procedures, they can minimize their risk. If they have spills or other releases, they are responsible for reporting them 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 look out for the University's interests during a construction project. They review tank locations and ensure good practices are being carried out. They are alert for signs of fuel releases such as soil staining or fuel odors. They ensure that contractors perform the required clean-ups for spills and releases.

Environmental Health and Safety can be requested to review problem areas at job sites, but do not perform regular inspections of construction sites. EHS must be called when spills occur to provide guidance for contractor spill clean-up. EHS has spill control materials available that can

be used in the event that a spill or release can not be controlled by the absorbent materials on hand at the site.

Good Fuel Handling Procedures

The use of good fuel handling procedures, as well as inspections of tanks and preventive maintenance on equipment, can reduce both the frequency and the severity of fuel spills and releases. Contractors that store fuel on-site generally use skid tanks for fuel storage. The use of a secondary containment “tub” or berm around the tank can serve to catch any fuel releases that may occur. However, if these tanks are uncovered, as they generally will be at work sites, the containment will also capture rainfall. Therefore, there must be a method of releasing the captured rainfall. It is important to note that it is unlawful to release water with a fuel sheen on it. The fuel should first be absorbed with “oil only” absorbent pads or socks prior to release (these pads will not absorb water). If skid tanks are used without secondary containment, consideration should be given to their placement. The tank should be level and secure. As spills to paved or concrete surfaces are easier to clean-up (see below), it is preferred that tanks are located on these types of surfaces. The PA Department of Labor and Industry requires that these tanks be located at least 40 feet from a building. They also require that they be conspicuously marked in letters not less than 3 inches high with the name of the product and the words “INFLAMMABLE – KEEP 40 FEET FROM BUILDINGS”.

Contractors should inspect their tanks on a regular basis. A tank inspection should include:

- Check for deterioration of tank, hoses, ancillary equipment, foundation, and safety equipment
- Check vent pipes for restrictions such as bird or wasp nests; inspect pipes for damage
- Check for operational malfunctions of ancillary equipment such as pumps, overflow 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 or safety hazard

Tank filling operations should be supervised by a representative of the contractor. Tanks should be filled no more than 90-95%, as they can easily overflow from fuel expansion during hot weather. Any spills that occur during fueling must be promptly cleaned up and contaminated soil/gravel disposed of properly.

Vehicle/machinery fill-ups should always be done carefully to prevent overfills. No smoking is permitted during vehicle filling operations.

Inspections and preventive maintenance should be performed on all machinery used on-site. As hydraulic hoses are especially prone to rupture, causing most of the releases at Penn State, attention to these should be stressed.

In order to attend to spills expeditiously, all contractors that have equipment that contains petroleum products should have a spill kit on-site. The spill kit should contain absorbent pads, socks, and pillows. In addition, it is useful to have a couple of bags of loose absorbent such as

Oil-Dri. Many companies sell spill kits. For work areas that have no fuel tanks, a 20-gallon sized spill kit is sufficient, whereas construction sites with fuel tanks need a spill kit of at least the 30-gallon size. The spill kit should contain absorbent socks, pads, and pillows.

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 situation 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 Services, at 814-863-1111.

The contractor can choose an emergency response company of their choosing to perform the clean-up. The Pennsylvania Emergency Management Agency provides a listing of certified Hazmat teams at their website: www.pema.state.pa.us/pema/cwp/view.asp?A=200&Q=248496. 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 (listed in the blue pages of the phone book and accessible through 911 after normal working hours) and the local DEP office (see below).

Regulatory Requirements

Spills of materials that can cause pollution to the waters of the Commonwealth (streams, drainage ditches, storm water drains, ground water, etc.) are required to be reported to the DEP immediately:

DEP 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 DEP Office, Meadville
 800/332-6945
 800/373-3398 (evenings and weekends)

Southwest Regional DEP Office, Pittsburgh
 412/442-4000

Northcentral Regional DEP Office, Williamsport
 570/327-3636

Southcentral Regional DEP Office, Harrisburg
717/705-4741
877/333-1904 (*evenings and weekends*)

Northeast Regional DEP Office, Wilkes-Barre
570/826-2511

Southeast Regional DEP Office, Norristown
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

In addition, all spills 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).

When to Report

When deciding whether a spill must be reported to the regulators listed above, the first consideration is whether the spill can reach the waters of the Commonwealth (this includes ground water). A spill that has been contained to paved/concrete surfaces, and has been cleaned up is not necessary to report, as it can not reach the waters of the Commonwealth. The second consideration for reporting is the quantity spilled. For spills of petroleum products to soil of less than one quart that do not enter waterways, reporting is generally not required, although this in no way impacts the requirement for clean-up. Call the local DEP office to determine if the spill is reportable. Any amount spilled that enters surface waters must be reported to the regulators listed above. PSU's Department of Environmental Health and Safety is available to help with the determination of when and how to report.

What to Report

When reporting a spill, the following information is needed:

- name and title of 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 of land, water, or air, if known (e.g., bodies of water)

Clean-Up

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. The absorbent socks 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, he/she should contact EHS (814-865-6391). EHS has many spill response materials available. Material costs will be the responsibility of the contractor.

Once the free product has been absorbed, spills to soil should be excavated as soon as possible. Contractors should dig out all of the impacted soil (identified visually and by odor) and place it on a tarp or plastic. The soil pile must be kept covered while on-site. Disposal of the soil must be done properly through a landfill permitted to accept the material.

DEP will direct the required actions for the spill. Generally, larger spills or spills of more mobile pollutants (i.e., gasoline versus hydraulic oil) require sampling and reports to show that the spilled material was adequately cleaned up. 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 material/impacted soil was properly disposed. Copies of the report are to be directed to EHS at the address shown on this letterhead. For smaller spills, DEP may be satisfied by knowing that all impacted soil was promptly excavated. On occasion, they may come to the spill site to observe the clean-up. EHS may also be on-site to ensure that the clean-up is done properly. Spill clean-up costs are the responsibility of the contractor.