

# Oil Spill Prevention, Control & Countermeasures

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# University of New Haven Oil SPCC Plan

- Complete oil storage container, tank and equipment inventory
- Site plan with locations of all tanks, container and equipment
- Procedures for bulk deliveries or transfers
- Oil spill emergency response procedures
- Further details refer to SPCC Plan on MyCharger
- Emergency contacts
- Spill reporting procedures
- Inspection schedule
- Description of employee training
- Self Certified Plan

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# Employee Training

Training is required annually for oil-handling personnel involved in the operation and maintenance of equipment to prevent the discharge of oil, and must include:

- Discharge procedure protocols
- Applicable pollution control laws, rules, and regulations
- General facility operations
- Contents of the SPCC Plan
- Known discharges
- Failures, malfunctioning components
- Recently developed precautionary measures

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# Oil SPCC Plan Employee Training

## **Oil-handling personnel**

Includes employees engaged in the operation and maintenance of oil storage containers or the operation of equipment related to storage containers, and emergency response personnel

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# What do you need to know?

- Oil SPCC Plans are required under the Clean Water Act
- Objective: To minimize the potential for releases to “waters of the U.S.”
- Your roles and responsibilities
- Oil spill prevention measures and practices
- Spill response and notification

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# What is regulated?

## Categories of Oil

### *Petroleum oils*

- Crude and refined petroleum products, asphalt, gasoline, fuel oils, mineral oils, naphtha, sludge, oil refuse, oil mixed with wastes

### *Animal fats and vegetable oils*

- Lard, tallow, cod liver oil, corn oil, grapeseed oil, coconut oil, palm oil, peanut oil

### *Other non-petroleum oils*

- Coal tar, silicon fluids, pine oil, turpentine, tall oils

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# Uses of Oil at the University

- Diesel fuel for emergency generators
- Diesel fuel for fire pumps
- Waste cooking kitchen oil
- Fuel oil (No.2)
- Hydraulic oil within elevator reservoirs

Product	Above Ground Storage (Gallons)	Under Ground Storage (Gallons)
Diesel Fuel (Generators)	1,080	0
Diesel Fuel (Fire Pump)	620	0
Fuel Oil	1,650-1,375	0
Hydraulic Oil	1,255	0
<b>Total (Gallons)</b>	<b>4,605 4,330</b>	<b>0</b>

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# Oil Storage Thresholds

**Based on containers or equipment with capacity 55 gallons or greater:**

- Underground Storage Tanks (USTs) - greater or equal to 42,000 gallons
- Aboveground Storage Tanks (ASTs) - greater or equal to 1,320 gallons

*All totals are aggregate amounts of oil onsite*

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# Appendix A: University of New Haven Site Plan



# Potential for Oil Releases/Spills

- Floor drains or sumps
- Doorways
- Storm drains
- Structural integrity
- Location
- Proximity to soils, surface waters
- Handling and storage practices



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# Appropriate Containment and Diversionary Structures

- Dikes, berms, retaining walls
- Curbing
- Culverting, gutters
- Weirs, booms
- Spill diversion ponds
- Retention ponds
- Sorbent materials



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# What's wrong here?



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# What's wrong here?



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**What's wrong here?**



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# University of New Haven Secondary Containment

- Double-walled tanks
- Dikes, berms and curbing
- Epoxy coated concrete
- Spill pallets for drums and smaller containers
- Impervious (concrete floor and wall joints)

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# Bulk Container Integrity Testing

- Visual inspection for *all* containers
- Bulk container integrity testing
  - 55 gallon drums: DOT Approved
  - 275 gallon tanks: No standards; develop tank replacement schedule
  - Bulk container standards: ANSI, API, ASTM, NACE, NFPA, UL, etc.
- USTs - liquid level indicators and/or vent whistles.
- ASTs - vent whistles; observation during filling.
- Drums and other containers - liquid level observation during filling.

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# Security

- Tanks and containers within secured buildings, and/or behind locked doors.
- Lighting around the campus provides a deterrent for tampering/vandalism.
- Prevent unauthorized access.
- Prevent tampering/vandalism.
- Accompany delivery drivers during fuel deliveries.



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# **Designated University Personnel Accountable for Oil Spill Prevention**

## **Primary:**

Lou Annino – Associate Vice President for Facilities

## **Alternates:**

Rich Rutherford – Director of Facilities

Ron Quagliani – Associate Vice President of Public Safety and Administrative Services

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# Fuel Oil Delivery Guidelines

- Any contracted oil vendor will provide their loading/unloading SOP's for approval and comply with the *University of New Haven's* SPCC.
- Ensure that the trailer is accurately spotted at the proper unloading area.
- Tank trailer will be secured with parking brake, interlocks, and wheel chocks while the driver remains with the vehicle during the entire unloading period.
- Unloading of trailers will be done during daylight hours except under emergency conditions.
- Prior to unloading, all hoses and connections will be checked for leaks and wet spots. Cell phones will be turned off to prevent static discharge.
- Determine that sufficient space is available in the receiving storage tank to receive the contents of the tank trailer. A preset gallon's order can be found on each delivery ticket which is entered in the tank trailer's meter.

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# Fuel Oil Delivery Guidelines

- When loading, the driver will keep internal and external valves on the receiving storage tank open along with the pressure relief valve for ventilation.
- The driver will monitor the liquid level in the receiving tank to prevent overflow.
- For any combustible or flammable material (diesel fuel, etc.), attach a ground strap from the building to the bumper of the trailer.
- Ensure that all hoses are connected tightly and that a collection bucket is placed under the trailer-unloading valve.
- Once unloading or loading has ceased, the hoses will be disconnected so that any material in the lines will gravity drain to the tank.
- In the event of a leak or spill, attending personnel will safely stop the discharge, contain the spill and contact an Emergency Coordinator who will ensure the material is removed and disposed of in accordance with Section 13.0 of the plan.

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# University Monthly Inspections

- Visual inspections are conducted monthly to identify leaks, spills, or other deficiencies.
- Deficiencies are documented and reported to Director of Facilities
- Corrective measures are taken ASAP.
- Corrective measures are documented.
- Records are maintained for 3 years.
- Completed inspection checklists are submitted and reviewed by the Director of Facilities.

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# Oil Leaks

- Tank seams, gaskets, rivets and bolts.
- Must be noted and promptly corrected.
- Request/issue work orders immediately.
- Maintain spill control equipment.



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# Emergency Contact List

- Emergency Coordinators – Lou, Rich and/or Ron
- Spill Response Contractors
- Federal EPA / National Response Center
- CT DEEP
- West Haven POTW
- City of West Haven Fire Department
- West Haven Police Department

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# Hazardous Materials Emergency Response

## Upon discovery of a spill or leak:

- Step 1
- Step 2
- .....
- Stop the discharge to the extent possible (consider health and safety issues).
- Take immediate measures to contain the spill (spill pillows/booms) in the immediate area.
- Prevent spill from reaching floor drain, storm drains, waters of the U.S.

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# Large Scale Spill Reporting Information

- Exact address and location
- Name and phone numbers of facility and contact person
- Date and time of release
- Estimate of total quantity released
- Source of the release
- Cause of the release
- Description of affected media
- Any damages or injuries
- Actions taken to stop, remove, mitigate
- If evacuation is needed
- Emergency responders contacted
- Agencies contacted
- Potential environmental impact

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# Release Reporting Requirements

## CT DEEP

- Reportable Quantity - All
- Report within 2 hours
- Release Notification Form must be filed within 60 calendar days

## EPA Reporting:

- If more than 2 discharges of 42 gallons or greater into a waterway (within 12 months)

## Record Keeping:

- Calls related to releases of oil to be logged at the Facilities Department.
- Incident Reports must be maintained in the SPCC Plan.

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# Incident Reporting Criteria and Review

- Description of incident
- Determine if SPCC Plan was implemented and followed as written
- Evaluate plan effectiveness
- Identify plan deviations
- Document

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# Questions?

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