SPCC: Spill Prevention, Control, and Countermeasure Plan

Annual Training

04/2020
Why are we here?

- CFR Title 40, Part 112
- The regulation requires owners or operators of governed facilities to implement and maintain a Spill Prevention Control and Countermeasure Plan.
- The Plan must be reviewed and evaluated every 5 years.
- Ours was written in November of 2016 and we will need to prepare a new one next year.
Can anyone amend the plan?

- It has to be a professional engineer or P.E.
Where is the plan kept?

- It must be kept at the facility unless the facility experiences one of the following:
  - A single oil spill of more than 1000 gallons into natural waterways or adjoining shorelines OR
  - Two oil discharges, more than 42 gallons each, which occur within any consecutive 12 month period.

- If either of these events occur, the facility must report the triggering event to the applicable local, State, and Federal Regulators along with a copy of the plan within 60 days.

- The plan and a spill report should be sent to EPA Region VII in Atlanta, GA if this occurs.
Purpose of the SPCC Rules

- To develop plans designed to prevent Oil Discharges from reaching the navigable waters of the U.S. and adjoining shorelines.
For the purpose of the plan, oil is . . .

- Petroleum and non-petroleum based oils
- Crude Oil
- Refined Products
- Animal Fats
- Vegetable Oils
How does the regulation determine volume of oil?

- The applicability of the regulation is determined by oil storage capacity – not the actual inventory.
- Only containers of oil with a capacity of 55 gallons or greater are counted.
- Equipment oil reservoirs are not counted unless the capacity is greater than 55 gallons.
Intent of the Standard

- It’s never wrong to go ahead and report to OEHS or even the regulators. But keep in mind the intent of the standard – to prevent oil spills and to be prepared for effective action if spillage does occur.

- In short, it’s more important to stop the oil from spreading and get it cleaned up than anything else. Go ahead and block any storm drains or other access to water first, then call.
What is a Navigable Waterway?

- Loaded question.
- Surface waterways – streams, creeks, river, lakes
- Wetlands adjacent to a navigable waterway
- Can be intermittent streams. Must flow at least seasonally.
- Defined flow pathway to truly navigable waters of the U.S. is a good start in the determination – don’t assume.
Applicable to UAH

- UAH is a non-transportation related, onshore facility engaged in storing and consuming oil and oil products, which due to its location could reasonably be expected to discharge oil in quantities that may be harmful, into or upon the navigable waters of the U.S. or that may affect natural resources belonging to the U.S.
- More than 1,320 gallons are stored above ground.
- There is 42,000 gallons capacity for storage underground.
Site Plan, Facility Drainage, and Potential Pollution Sources

Facility Location Map
Facility Security and Lighting

- The UAH campus is generally open to the public.
- All areas where valves, pumps, or other control devices are located are secured by doors or gates that are kept locked when not in use by authorized personnel.
- Sufficient lighting is provided throughout the facility to allow for the visual discovery of spills that could occur at any time during any 24-hour period.
Bulk Storage Container Design

- Above ground bulk liquid storage containers at this facility consist of painted steel tanks containing diesel fuel.
- The materials and construction of the liquid storage containers are compatible with the materials stored and the conditions of storage such as temperature and pressure.
General Facility Data

- All bulk storage containers at the facility are manually filled and continually visually monitored during filling operations.
- This procedure is used in lieu of a high level alarm or high level liquid pump cutoff devices.
Bulk Storage Container Testing Procedures

- Visual Inspection
  - Visual inspections are part of regular safety housekeeping inspections.
  - Student Workers perform visual checks using the checklists in the SPCC Exhibits.
  - When any modifications are done to the tanks, integrity and leak testing is required.
Bulk Storage Container Testing Procedures (continued)

- Bulk Container Testing
  - In addition to visual inspection, another testing technique is required.
  - All regulated aboveground bulk storage tanks should be tested at least once every 3 years for integrity.
  - Inventory control will be utilized to provide leak detection for all underground storage tanks.

- Valves and Piping should undergo visual inspection for corrosion and leaks.
  - Other content of loss control measures should include inventory records.
History of On-site Spill Incidents within last 3 years

- Spill at Central Plant by truck unloading diesel
  - New system for fuel transfer was installed which prevents the same type of spill from occurring.

- A Front-end loader leaked hydraulic fuel onto the parking area
  - Corrective action would be to park the vehicle as soon as the leak is noticed and use spill absorbent materials to isolate spill using a catch basin if available.
Potential Spill Sources

- USTs
- ASTs
- Transformers
- Elevators
- Heavy Equipment
Drainage and Runoff Data

- Runoff from UAH campus is received by drainage ditches or the underground storm water collection system.
- The storm water is directed to the pond on the west side of the campus and is eventually received by McDonald Creek.
- Should a release occur, it could most likely be held within the pond before leaving the site.
Contingency Plan

- When to report outside—Anything that can reach surface water no matter the quantity
- When to report inside—If it exceeds one quart
- All spills less than one quart must be cleaned up immediately.
- If the spill or release cannot be readily handled by the facility or department, contact UAH PD at 6911 to initiate a response action. Leave someone near the scene to communicate with responders.
What will be asked?

- Date and time of spill
- Area where spill occurred
- Estimated volume of spill (rationale for estimate)
- Did any spill leave the property?
- If so, where was it discharged?
- Water into which the spill has entered
- Suspected failure that caused the spill
- Assessment of imminent danger to personnel or property
- Damage and injuries caused by the spill
- Actions taken to contain, stop, remove, or cleanup spill
- Identification of any local emergency units contacted
If the spill is into any body of water...

- UAH Policy is to immediately inform ADEM of the location of the spill and as much as is known of the extent of the situation. OEHS and UAH PD will work together on the reporting required for this plan.
Where are the spill cleanup materials?

- In the yellow flammable cabinet beside the gas pumps.
- In the “Clean Shed” behind JRC.
- In the garage.
Review: What should the employee who discovers the spill do?

- Contact 6911 if anyone is injured.
- Locate the source of the spill if safe to do so.
- Try to stop and/or contain the spill using absorbents if safe to do so.
- Always, notify the appropriate supervisor. If the appropriate supervisor cannot be reached, call 256-824-2170 or 2171.
- Once the supervisor has the cleanup operations in progress, he/she shall then notify the Emergency Coordinator to provide info on what has happened and what actions are in progress.
- Participate in incident investigation to help prevent future spills of a similar nature.
Spill Prevention

- Don’t pour oil or fuel onto the ground or into a storm drain.
- If you have large amounts of waste material and do not have a specified waste stream, please contact OEHS to develop an appropriate waste stream.
To complete this training you must take the Quiz.