Spill Prevention, Control and Countermeasure Plans

SPCCs - COMMON ISSUES/ CONCERNS

- The Nuts and Bolts
  - Plans
  - Spill Reporting
  - Tanks/Controls, etc.
    - Discharge definition
    - Loadouts
    - Tank Inspections/Integrity Testing
    - Level Controls
- What's new - Technology
- What's new - Regulatory
- Common regulatory concerns

SPCC Plans

- Reporting
- Awareness
- Training
- Response
- Common Sense

Reporting

- NRC
  - Report to the NRC any “harmful” quantity to water. Harmful quantity is a quantity that violates State quality standards or causes a sheen.
- EPA
  - > 1,000 gallons
  - > 42 gallons in two separate incidents

State Programs

- SPCC Program is a Federal Program
- Some states have their own AST programs
  - New York, So. Dakota, Minnesota, California, etc.
  - Some programs require Plans, reporting, etc.
- States have emergency reporting requirements
  - SPCC Plan should define whom to call, when

Awareness

- Awareness of the regulation
- Whom to contact
- First spill response responsibilities
- Liability concern
- Documentation

Training

- Awareness
- Spill Kits - use, supply
- Response Safety - protect human health first
- Identifying potential problems - routine inspections
- Security

Response

- Response procedures must be in place
- Training
- Health and Safety considerations
- Materials handling
- Response Contractors, fire department
- Notification is part of response

Common Sense

- Security
  - Fencing - vandalism, theft
  - Hose protection/maintenance
  - Rust is not our friend
- SOPs - loadout observation
- Berm maintenance
  - Berm drain valve - CLOSED!
  - Earthen berms - ladders/bridges
  - Draining - clean water only

Discharge of Oil – "Sheen Rule"

- Any facility or vessel is subject to these reporting requirements if it discharges a harmful quantity of oil to U.S. navigable waters, adjoining shorelines, or the contiguous zone
- Harmful quantity of discharged oil
  - Violates state water quality standards
  - Causes a film or sheen on the water's surface
  - Leaves sludge or emulsion beneath the surface.
- Not based on amount of oil discharged, but instead on the presence of a sheen, sludge, or emulsion

Discharge

- Is a release within a bermed area still a release?
  - SPCC – the short answer is no
  - EPCRA – yes
  - States – varies by state
  - County/Fire Department - ??

Loadouts

- Loadout should contain drips, should drain easily to a sump to avoid ponding
  - "general site containment" applies, i.e., the facility needs to contain the loadout incident
    - Curb or retention around the facility, stormwater valve, eyebrow retention
  - Different rules apply to large tanks or systems with loadout racks
  - Booms or other sorbents may also be used as loadout containment

Level Control

- Regulation specifies electronic or floating device
- Administrative controls
  - Constant observation during filling
  - Inventory records
  - BUT, documentation is important
- Direct vision gauges/engineered device – some form of visual measurement
- PE input

Tank Inspections/ Integrity Testing

- SPCC rules state that visual PLUS another method is required
  - API – generally for large tanks
  - Underwriters Laboratories
  - Steel Tank Institute – more appropriate
    - SP001-04 is a new guidance document
      - Methods vary based on tank size, use, and whether they rest directly on the ground
    - Method must be in place, and administratively recognized
    - Anything in the Plan must be implemented
  - Saddle tanks – equivalent env. protection

Integrity Testing, continued

- Equivalent Env. Protection
  - <30,000 gallons
    - Elevated tanks for full visual inspection
    - Visual plus barrier to collect and make leaks obvious
    - Visual inspection consistent with industry standards
    - Consistency, training, documentation, awareness

Containment Technology

Petro-Pipe™ Outlet Drain

- **Petro-Pipes**™ are used when a vertical drain is not an option. A berm or curb can be installed to hold back rainwater that might also contain oil. Installing several **Petro-Pipes**™ through the berm or curb, or through a wall, will allow water to pass through while trapping the oil. As with the **Petro-Plug®, *oil cannot get through the Petro-Pipe***™.

  Plan to install the **Petro-Pipes**™ at a downward angle to obtain at least some amount of gravity "pressure". A 25 degree minimum slope from inlet to discharge is recommended for flow rates of 2.5 to 3 gls. per minute.

Petro-Pipe™

Petro-Plug™

December 2006 Amendments

- Final Rule published December 26, 2006
- Final Rule effective February 26, 2007
- Deadlines moved back
- Provides streamlined, alternative methods for compliance with oil spill prevention requirements

What's New?

New Compliance Dates

- Non-farm facilities
  - Pre-8.16.02 - Maintain existing plan, implement the new plan 7.1.09
  - Between 8.16.02 and 7.1.09 - Prepare a plan by 7.1.09
  - After 7.1.09 - Prepare and implement a plan before startup
- Farm facilities - wait for guidance

New Streamlined Requirements

- Facilities with an oil storage capacity of 10,000 gallons or less (“qualified facilities”)
- Oil-filled operational equipment
- Mobile refuelers

Qualified Facilities Eligibility Criteria

- Facility must have 10,000 gallons or less in aggregate aboveground oil storage capacity
- Spill-free for 3 years:
  - A single discharge of oil to navigable waters exceeding 1,000 U.S. gallons, or
  - Two discharges of oil to navigable waters each exceeding 42 U.S. gallons within any 12-month period

Self-Certification

- Owner/operator attests that he/she is familiar with the rule and has visited and examined the facility
- Owner/operator also certifies that:
  - The Plan has been prepared in accordance with accepted and sound industry practices and standards and with the rule requirements
  - Procedures for required inspections and testing have been established
  - The Plan is being fully implemented
  - The facility meets the qualifying criteria
  - The Plan does not deviate from rule requirements except as allowed and as certified by a PE
  - Management approves the Plan and has committed resources to implement it (EPA Factsheet 12/06)

Self-Certification, continued Alternative Measures

- May use environmentally equivalent measures and make impracticability determinations
  - if reviewed and certified by a PE
- Rule provides alternative requirements for integrity testing and security
  - do not need to be reviewed and certified by a PE

Self-Certification, continued

- Liability questions
- Insurance
- Audit/Inspection
  - On-site personnel responsible for understanding the regulation, implementing the plan
- Advantage - Awareness

Mobile Refuelers: Definition

- Bulk storage onboard or towed used for refueling, relocating to other storage
- Applicability - fueling special applicators

Mobile Refuelers, continued

- No longer require sized containment
- Still require general site containment
- Active containment measures may be appropriate
  - Generally for accidents that will occur during “manned” hours
  - Other measures may be approved by the engineer

Mobile Refuelers, continued

- Stationary containers (drums, railcars, totes require) not under direct supervision of personnel require sized containment
- When a mobile fuel tank no longer becomes mobile, above applies

General Secondary Containment Requirements

- General Secondary Containment is a means to prevent loadout spill migration and other equipment not required to have specific containment structures
- General secondary containment should be designed to address the most likely discharge from the container
  - Prevents discharge to waters of the State
  - Allows for the use of certain types of active containment measures

Compliance Dates – Farms

- Farm: A facility on a tract of land devoted to the production of crops or raising of animals, including fish, which produced and sold, or normally would have produced and sold $1,000 or more of agricultural products during a year
- There is no capacity limitation associated with eligibility for the extension
- The compliance date is delayed until the effective date of a rule addressing farms
- EPA will announce the new compliance date in the Federal Register
- Farms subject to SPCC requirements on or before August 16, 2002 must maintain their Plans (EPA)

Hoffman Consulting, Inc.

- SPCC Program Development/Plan Preparation
- Environmental Compliance/Business Solutions
- Chemical and Port Facility Security
- Groundwater Characterization and Remediation

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