

Session Th-J6 LESSONS LEARNED AT OIL FACILITIES NATIONAL PERSPECTIVES



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An ounce of prevention is worth a pound of cure

- Benjamin Franklin

During a visit to Boston in 1733, Franklin was impressed with the city's fire prevention methods. He tried to bring some of these practices to the city of Philadelphia, where he lived.

Supposedly, Franklin sent an unsigned letter to his own newspaper The Pennsylvania Gazette. Published on February 4, 1735, his letter -- "Protection of Towns from Fire" -- began with the expression "an ounce of prevention is worth a pound of cure." Then he wrote about how a city should prepare itself for a fire

Areas of Focus



Housekeeping
&
General
Operations



Secondary
Containment



Tanks,
Inspections
&
Overfill
Prevention



Piping,
Transfer Areas,
Loading Racks
and Transfer
Operations



Training, Drills
Preparedness
&
Planning

Housekeeping & General Operations

Industry Perspectives

Regulatory Perspectives



Housekeeping & General Operations

- If the facility is clean and tidy, it is easy to see when you have an issue
- If the facility isn't, sometimes it is hard to tell that you have a problem
- I have seen seals on pumps leaking for so long and so bad, you couldn't tell when the situation had gotten much worse
- If you can't get to the response equipment, that is not a good sign
- If you can't read the label on a spill drum, that is a not a good sign



Housekeeping & General Operations



- Initial impressions are important from a regulator's point of view
- Open buckets of oil
- Leaking tanks, valves, piping and appurtenances
- Observations of transfer operations
- Discussion of transfer procedures
- Walk arounds and inspections
- What is your role under the SPCC/what is the SPCC plan?
- What to do if there is a discharge?









Improper Tank Patching

Wooden twig
used in the
bottom of a
tank



Secondary Containment

Industry Perspectives

Regulatory Perspectives





Secondary Containment

- Do you have secondary containment?
- Are there holes or piping through the dikes?
- I have seen jersey barriers used as secondary containment, next to a body of water, not a good idea
- Dirt and gravel dikes tend to wash into the containment over time; lowers height of dike and raises level of containment, a double whammy

Secondary Containment



- What is the requirement Sized vs General?
 - Design (Active vs Passive)
 - Capacity or Sizing
 - Freeboard
- Inspection and Maintenance
- Use of Oil Water Separators
- Water Management
- Double Walled Tanks
- Piping
- Impracticability and Contingency Plans





Excessive Vegetation











Tanks, Inspections & Overfill Prevention

Industry Perspectives

Regulatory Perspectives



Tanks, Inspections & Overfill Prevention

- I could spend the next hour telling stories of overfills, but I won't
- People makes mistakes and 99.999% of procedures are inadequate
- A few quick examples:
 - 14 truck loads where only 12 would fit
 - Overfill alarm installed 6" above overfill level
 - Transfer during a power outage



Tanks, Inspections & Overfill Prevention

- What is the requirement formal vs informal?
 - Formal on a routine basis by a qualified person
 - Initial data or baseline
 - Next inspection
 - Table in the SPCC plan is useful
 - Informal on a routine basis by a qualified person
 - Monthly
 - Yearly
- Inspection records (no record no program)
- Overfill device is operational, accurate and tested/maintained on a regular interval
- Transfer operations are documented, trained and NOT worked around
- Don't forget there is a piping inspection/appurtenance inspection requirement

Piping, Transfer Areas, Loading Racks and Transfer Operations

Industry Perspectives

Regulatory Perspectives



Piping, Transfer Areas, Loading Racks and Transfer Operations

- Leaks at flanges
- Corrosion under insulation (CUI)
- Leaking arms
- Leaking valves, both internal and external



Piping, Transfer Areas, Loading Racks and Transfer Operations

- What are the requirements for piping?
 - Containment, inspections, & proper support
 - Testing, corrective actions, buried piping (corrosion prev.)
- What is the requirement (transfer area vs rack)?
 - Loading racks (is it actually a loading rack?)
 - Sized cont., vehicle departure prevention, inspections prior to filling and departure
 - Transfer area (is it actually a transfer area?)
 - General cont. , active vs passive, oil water separators
- Transfer Operations
 - Focus for inspectors
 - Documented in the plan per 40 CFR 112.7(a)(3)(ii) and implemented in the field
 - Training on the procedures

Training, Drills, Preparedness & Planning

Industry Perspectives

Regulatory Perspectives



Training, Drills, Preparedness & Planning

- I have participated in many drills and actual events in my career
- I have been a "gopher", Logistics, Operations, and Incident Commander, among my roles
- Don't investigate on Friday afternoon
- You need to feed people; not always easy to accomplish
- Don't drill on a body of water bordering different States without contacting both States
- I think I have the distinction of having the only drill "Federalized"



Training, Drills, Preparedness & Planning

- Oil-handling personnel training requirements (40 CFR 112.7(f))?
 - Initial onboard training
 - Includes the operation and maintenance of equipment to prevent discharges; discharge procedure protocols; applicable pollution control laws, rules, and regulations; general facility operations; and, the contents of the facility **SPCC Plan**.
 - Identification of a person at each applicable facility who is accountable for discharge prevention and who reports to facility management.
 - Yearly (once every 365 days) oil briefings
 - Must highlight and describe known discharges as described in § 112.1(b) or failures, malfunctioning components, and any recently developed precautionary measures
 - No record no program
- The mini FRP portions of an SPCC plan (40 CFR 112.7(a)(3)(ii)-(vi) and 40 CFR 112.7(a)(4))
 - Transfer procedures, discharge/drainage controls, spill response (OSRO), discharge discovery, disposal, Contact list and phone numbers for the facility response coordinator, NRC, OSRO, receptors and all appropriate Federal, State, Tribal and local agencies.
 - Procedures in your Plan to enable a person or reporting a discharge to relate information on the exact address or location and phone number of the facility; the date and time of the discharge, the type of material discharged; estimates of the total quantity discharged; estimates of the quantity discharged; the source of the discharge; a description of all affected media; the cause of the discharge; any damages or injuries caused by the discharge; actions being used to stop, remove, and mitigate the effects of the discharge; whether an evacuation may be needed; and, the names of individuals and/or organizations who have also been contacted.

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Leadership and learning are indispensable
to each other.

- JFK

Remarks Prepared for Delivery at the Trade Mart in
Dallas, Texas, November 22, 1963

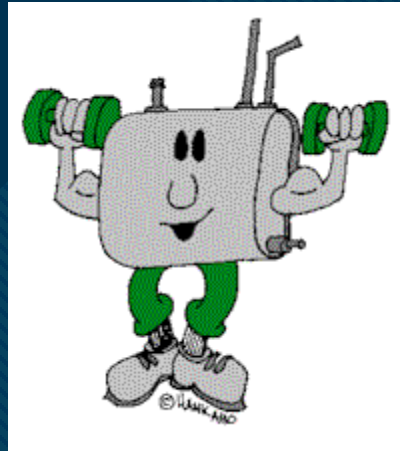
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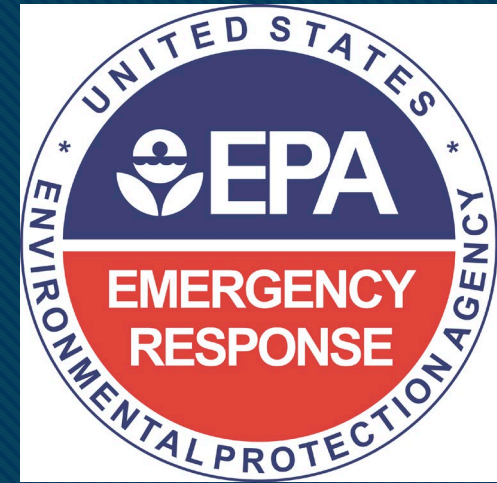
Questions



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