How to Prepare Your Own SPCC Plan:
A Step-by-Step Guide for Tier 1 Qualified Facilities
Using the US EPA Tier I SPCC Template

MODULE V
Inspections, Testing, Recordkeeping, Personnel Training
(28 slides + quiz)

Page 5

6-5: Inspections, Testing, Recordkeeping & Personnel Training
1. Affirmation of an inspection & testing program
2. Required narrative description of the facility's inspection and testing program for bulk tanks/containers & piping
3. Requirement for written inspection & testing procedures
4. Recordkeeping requirements
5. Training Requirements

Inspections & Testing Detail

Table G-8 Inspections, Testing, Recordkeeping and Personnel Training
An inspection and testing program is required for all aboveground bulk storage containers and piping at the facility. (40 CFR 122.7(a))

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Narrative</th>
<th>Evidence of Compliance</th>
</tr>
</thead>
<tbody>
<tr>
<td>- inspections, testing and personnel training</td>
<td>- required</td>
<td>- evidence of compliance</td>
</tr>
<tr>
<td>- written procedures for inspections, testing and personnel training</td>
<td>- narrative</td>
<td>- evidence of compliance</td>
</tr>
</tbody>
</table>

Must have a written inspection/testing program in place
1.Narratively describe the program (see next slide)
Inspection & Testing Requirements

In addition to the Page 5, Table G-5 inspection/testing requirements...

Section A, Page 9, Table G-10 contains several additional requirements for bulk tank/container inspections & testing.

Section A, Page 10, Table G-10 contains additional requirements for:

- Testing liquid level sensing (overfill prevention) devices
- Inspections of piping, valves and appurtenances
- Inspection/testing of buried piping (if it is exposed)

Attachment 3.2, Page 17, Table G-17 contains US EPA’s minimum required inspection schedule for bulk storage containers & tanks for Tier I qualified facilities.

Written Inspection/Testing Program

and Procedures

Example next... but in summary:

- Applies only to tanks & containers
- Not oil filled equipment
- Make sure the inspection program description includes all tanks & containers
  - If the inspections are different for different tanks or containers (e.g. waste vs product) - then state so in the description

Description must include:
1. Reference to the industry inspection standard(s) used
2. Scope of the inspection program (i.e. what conditions or items are being inspected and what tanks, containers & equipment, etc.)
3. Schedule of inspections (how frequently are they being done)
4. Methods of inspection or test (how are the inspections conducted)
5. Person conducting inspections or testing (who will perform the inspections and what are their qualifications)
6. Records (describe the inspection recordkeeping)

Sample

Your program may be different!

The narrative description must be specific to your facility

... And obviously: Implement as described!
Additional requirements for inspection & testing of bulk tanks & containers are specified in Section A Table G-10. The Page 5 Table G-5 inspection and testing program & written procedures should include/incorporate the requirements specified here in Table G-10. The Section A requirements do not apply to oil filled equipment, loading/unloading areas, oil handling areas.

Page 9 & 10 Section A, Table G-10 Detail

Each aboveground bulk container is tested or inspected for integrity on a regular schedule and whenever material repairs are made. Scope and frequency of the inspections and inspection qualifications are in accordance with industry standards. Container supports and foundations are regularly inspected. [See Inspection Log and Schedule and Bulk Storage Container Inspection Schedule in Appendices 3.1 and 3.2 (12/12/09) and 3.12 (12/12/09)]

The vessels are examined visually, for rusting, corrosion, and stress, for the presence of oil, or accumulation of oil in remote disconnected areas. [See Inspection Log and Schedule in Attachment 3.1 (12/12/09) and 3/12/09]

For bulk storage containers that are insulated to 21 C/F (70 C) which are shop-fabricated, constructed of anode-cathode coating, or are located in remote areas not exposed to severe environmental influences, visual inspection is conducted on a regular schedule. Approximate qualifications for person performance in the inspection program, [See Inspection Log and Schedule and Bulk Storage Container Inspection Models in Appendices 3.1 and 3.2 (12/12/09)]

There are 300 series stainless steel tanks used in facilities processing food for human consumption.

Page 17 Bulk Storage Container Inspection Schedule (Attachment 3.2, Table G-17)

ATTACHMENT 3.2 – Bulk Storage Container Inspection Schedule – onshore facilities (excluding production): Inspect and test bulk storage containers, inspect and test bulk storage container or a regular schedule in accordance with a recognized container inspection standard based on the minimum requirements in the following table:

<table>
<thead>
<tr>
<th>Container Size and Design Specification</th>
<th>Inspection requirement</th>
</tr>
</thead>
<tbody>
<tr>
<td>55 to 1,100 gallons with secondary containment</td>
<td>Usually inspect monthly for signs of deterioration (e.g., rust or accumulation of oil in remote areas)</td>
</tr>
<tr>
<td>1,101 to 5,000 gallons with secondary containment and removal of easily detected leaks</td>
<td>Usually inspect monthly for signs of deterioration, discharge, or accumulation of oil in remote areas plus any annual inspection elements per industry standards</td>
</tr>
<tr>
<td>5,001 to 30,000 gallons with secondary containment and removal of easily detected leaks</td>
<td>Usually inspect monthly for signs of deterioration, discharge, or accumulation of oil in remote areas, plus any annual inspection elements per industry standards</td>
</tr>
</tbody>
</table>

Examples of tests include, but are not limited to, double-walled tanks and coated containers where a leak can be visually observed.
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Page 16 Inspection Log and Schedule
(Attachment 3.1, Table G-16)

- Inspections must be documented
  - This log is provided for your use
  - But you can use your own more detailed facility / tank specific inspection log
  - Examples follow

If you use your own inspection forms – check this box.

Having written procedures is important!

Following them properly is, too!

INSTRUCTIONS
Even NASA needs them.

CONSISTENCY
It's only a virtue if you're not a screwup.
Good inspection checklists/logs also incorporate inspection items or criteria and can serve as the required written inspection procedure.

### Monthly/Yearly Maintenance/Inspection/Item Inspection Checklist

<table>
<thead>
<tr>
<th>Task</th>
<th>#1</th>
<th>#2</th>
<th>#3</th>
<th>#4</th>
<th>#5</th>
<th>#6</th>
<th>#7</th>
<th>#8</th>
<th>#9</th>
<th>#10</th>
</tr>
</thead>
<tbody>
<tr>
<td>Task Description</td>
<td>Task Name</td>
<td>Task Frequency</td>
<td>Task Objectives</td>
<td>Task Methodology</td>
<td>Task Resources</td>
<td>Task Responsibilities</td>
<td>Task Supervision</td>
<td>Task Report</td>
<td>Task Approval</td>
<td>Task Follow-Up</td>
</tr>
<tr>
<td>Task Implementation</td>
<td>Task Implementation Plan</td>
<td>Task Implementation Summary</td>
<td>Task Implementation Status</td>
<td>Task Implementation Progress</td>
<td>Task Implementation Date</td>
<td>Task Implementation Locations</td>
<td>Task Implementation Responsibilities</td>
<td>Task Implementation Contacts</td>
<td>Task Implementation Approval</td>
<td>Task Implementation Follow-Up</td>
</tr>
</tbody>
</table>

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**Turbo-Tec Oil Conditioner (Model 183):** Turbo-Tec pumps, injectors, valves, and filters should be in good working order and free of water or debris or other contaminants. These should be inspected to ensure proper function and operation. The system should be checked for proper functioning and any necessary repairs should be made. The filter should be replaced as needed and the oil level should be checked. Any leaks or spills should be addressed immediately.

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**Lube Oil Reservoirs (Units 1-8):** Lube oil reservoirs should be filled to the correct level and inspected for signs of water or debris. The reservoirs should be checked for proper functioning and any necessary repairs should be made. The oil level should be checked and any needed adjustments should be made. Any leaks or spills should be addressed immediately.

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**Good inspection checklists/logs also incorporate inspection items or criteria and can serve as the required written inspection procedure.**
Visual Inspection of Double Walled Tanks for Leaks?

1. How would a facility inspect a double wall tank to see if the primary tank is leaking?
   - Or inspect the containment for accumulation of oil?
2. The outside you see here is the outside of the secondary containment
   - Not the outside of the primary tank

Visual Inspection of Integral Double Walled Tanks for Leaks?

- Most double wall tanks have provisions for the use of interstitial space leak detection or monitoring
  - Some tanks are already equipped with leak detectors
    - Manufacturer or supplier optional equipment
    - Mechanical or electronic systems
      - The indicator can be at/on the tank or may send a signal to a remote alarm panel
  - Most tanks are not so equipped
    - Facilities usually assume that visually inspecting the outside of the tank (the outside surface) is sufficient... but it's not
      - A likely potential compliance issue (2002 US EPA memo raised the issue)

IS Your Double Wall Tank Monitored?

- In SPCC Plan
  - Plan should describe if interstitial space is monitored
- Is it?
  - Look at tank top for 'monitor port' or other sensor/ detector port
  - Is it just capped... or is there a sensor or monitor?
  - Capped monitor port - no leak detection
  - High level sensor (not containment leak detection)
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Capped monitor port – no leak detection

Capped monitor port – no leak detection

Manual Leak Detection?

1. Can you just unscrew the monitor port and "stick" the tank during your inspection?
   - e.g. using a stick with an absorbent end lowered to the bottom of the tank through the port to test for presence of oil at the bottom of the interstitial space
   - Yes... but if the port cap is not securely and properly replaced: significant risk of moisture intrusion and corrosion of primary tank
Leak detection system-equipped monitor port

Personnel, Training & Procedures Detail

- Training must be provided to oil-handling personnel at least once
  - With specific required subject coverage
- Spill prevention briefings must be conducted annually
  - Specific topics, as well
- This person could be you

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### Required Training & Annual Briefings

**Two types of training is required by 40 CFR 112.7(f):**

1. **Relatively detailed training of oil handling personnel:** SPCC Plan and its implementation
   - No specified frequency
   - Specific subject content requirements
2. **Spill prevention briefings**
   - Annual frequency
   - Specific subject content requirements

### Required Training

1. **Must train oil-handling personnel**
   - (40 CFR 112.7(f)(1))
   - Training for oil-handling employees (and those with oil spill prevention responsibilities)
   - At a minimum, this training must include:
     1. Applicable pollution control laws and regulations
     2. Operation & maintenance of oil discharge prevention systems/equipment
     3. Discharge procedures protocols
     4. General facility operations
     5. Contents of the SPCC Plan
   - No training frequency specified in 40 CFR 112.7(f)(1)

### Required Annual Briefings

2. **Must schedule and conduct annual discharge prevention briefings for oil-handling personnel**
   - (40 CFR 112.7(f)(3))
   - ...to assure adequate understanding of the SPCC Plan for the facility
   - Briefings must highlight and describe:
     - Known (harmful) discharges to navigable waters
     - Failures, malfunctioning components, and
     - Any recently developed precautionary measures
   - As long as training or briefings meet the topical coverage... Training and annual briefings can be integrated with other trainings
### Make sure:

1. **Description / Scope** contains the required content (see the Page 5 detail)
   - Write it in the space each time

2. **Or use your own training sign in sheet**
   - Make sure it details the training session description or scope
   - And it meets the subject requirements (for training or annual briefings)

### Table 3.4, Table G-19: Oil-Handling Personnel Training & Briefing Log

<table>
<thead>
<tr>
<th>Date</th>
<th>Description</th>
<th>Attendees</th>
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