



Section 6

Inspection, Evaluation and Testing

*(as applicable to APSA tank
facilities)*

Inspections and Testing Summary



Two primary requirements for inspecting and testing, and associated recordkeeping

1. Applicable to all SPCC regulated facilities (40 CFR 112.7(e)):
 - **Conduct inspections and tests required by 40 CFR 112 in accordance with written procedures developed for the facility by the owner/operator or the certifying engineer**
 - Generic: Does not specify any particular standard, but references any testing/inspecting required by the rule
 - Mandates written procedures for those tests/inspections
 - **The written procedures and a record of the inspections and tests must be kept for 3 yrs**
 - Records must be signed by the supervisor or inspector
 - Usual and customary business recordkeeping practices is OK

Inspections and Testing Summary

- ❖ Applicable to all SPCC regulated facilities (40 CFR 112.7(e)):
 - **Examples of inspections and tests required by 40 CFR 112**
 - Test or inspect each aboveground container for integrity on a regular schedule and whenever you make material repairs **112.7(c)(6)**
 - Prior to filling and departure of any tank car or tank truck, closely inspect for discharges the lowermost drain and all outlets of such vehicles... **112.7(h)(3)**
 - Regularly test (overflow prevention) liquid level sensing devices to ensure proper operation **112.7(c)(8)(v)**
 - Inspect the condition of the accumulation (in dikes) before starting, to ensure no oil will be discharged **112.8(b)(1)**
 - Inspect and may drain uncontaminated retained stormwater **112.8(b)(2)**
 - Observe effluent treatment facilities frequently enough to detect possible system upsets that could cause a harmful navigable water discharge **112.8(c)(9)**
 - Regularly inspect all aboveground valves, piping, and appurtenances **112.8(d)(4)**

Inspections and Testing Summary

Two primary requirements for inspecting and testing, and associated recordkeeping

2. Applicable to on-shore facilities (40 CFR 112.8(c)(6)):

- This would include all APSA tank facilities
- Test or inspect each aboveground container for integrity on a regular schedule and whenever you make material repairs
- Must determine, in accordance with industry standards:
 - The appropriate qualifications for personnel performing tests and inspections
 - The frequency and type of testing and inspections, which take into account container size, configuration, and design
- Examples of integrity tests include: visual inspection, hydrostatic testing, radiographic testing, ultrasonic testing, acoustic emissions testing, or other systems of non-destructive testing
- Need to specify the above for each tank or group of tanks in the Plan

Inspections and Testing Summary



Two primary requirements for inspecting and testing, and associated recordkeeping

2. Applicable to on-shore (and all APSA) facilities (continued):

- **Must keep comparison records**
 - May need to keep for more than 3 years
- **Must also inspect the container's supports and foundations**
- **Must frequently inspect the outside of the container for signs of deterioration, discharges, or accumulation of oil inside diked areas**
- **Records of inspections and tests kept under usual and customary business practices are OK**



*NOT the approved
recordkeeping method*

Inspections and Testing Summary

- The inspection and testing program and procedures must be written/described in the Plan:
 - For Tier I qualified facilities, Table G-5 in the Template must be completed
 - ❖ The specific industry standards used must be referenced
 - Plans can still include 'environmentally equivalent' measures if determined/approved/certified by a PE
 - ❖ Scope, frequency and methods of inspections or testing
 - ❖ Personnel to carry out the inspections/testing and the qualifications required of them

Periodic, Scheduled Inspections & Integrity Testing

- Intended to prevent, predict, and detect discharges
- Somewhat flexible, but must be in accordance with industry standards
 - So... unless an environmental equivalence determination is made – there is a limit to this flexibility
 - Type, scope & frequency of inspections depend on tank or container type, containment configuration, and industry reference standard selected or considered
 - Could range from periodic visual inspections by facility personnel to detailed internal and external physical testing (e.g. radiographic or ultrasonic plus tank entry) by certified/qualified outside specialists
 - Visual inspections-only are often all that would be required
- Performed on a 'regular schedule', as well as whenever material repairs are made

Frequent Visual Inspection

(40 CFR 112.8(c)(6))

Applies to:

- ❖ Bulk storage containers & tanks, oil-filled equipment, associated piping, valves, appurtenances, etc., and other components that could be a source or cause of an oil release
 - **Bulk storage tanks and containers**
 - Includes mobile/portable tanks, containers, drums, totes, non-transportation related tanker trucks
- ❖ Piping connected to these tanks and containers



Frequent Visual Inspection

(40 CFR 112.8(c)(6))

- ❏ Intended to be a routine (though sufficiently detailed) walk-around by the owner/operator... typically conducted by properly trained facility personnel
 - ❖ Can be used to meet certain industry standard integrity testing requirements (e.g. STI SP001)
- ❏ Must occur frequently to detect signs of deterioration, discharges, or accumulations of oil inside diked areas
- ❏ Records for integrity tests and frequent visual inspections – usual and customary business practices will suffice
 - ❖ Retain for at least 3 years, though
 - ❖ Must be signed by inspector or supervisor
 - ❖ Template contains a (cruddy) log and schedule form in Attachment 3.1 (Table G-16)

Inspections

Description must be consistent with practice

- ❖ Forms and details must match, too
- ❖ Must now reference and be consistent with the relevant industry standard

Spill Prevention, Control, and Countermeasure Plan

Periodic Integrity Testing

Tank testing will be performed when reasonable suspicion is raised by deficiencies identified during inspections, review of maintenance records, or age or design life; but no less frequently than every ten years.

The testing methods used will consider the tank system design (i.e., tank, piping, supports) and may incorporate hydrostatic, visual, shell thickness measurement, or other non-destructive techniques. During testing, attention will be directed to seams, welds, inlet and outlet piping connections, and gaskets, as applicable. Deficiencies which could create a potential spill source will be repaired prior to placing the tank in service.

Unless there is physical evidence to indicate that another type of testing is warranted, intends to perform a visual examination in lieu of the integrity testing. believes that the visual examination provides equivalent environmental protection as other types of integrity tests in this situation due to the following:

- All bulk tanks have secondary containment;
- All sides of the bulk tanks are visible for inspection; and
- All bulk tanks (all < 3,000 gallons) are elevated, or on containment pads; and are of single use (i.e., motor oil, diesel, and gasoline) such that there is minimal risk of failure due to corrosion.

All bulk tanks are periodically and annually inspected.

Spill Prevention, Control, and Countermeasure Plan

Table 4-2: Inspection and Testing Program

Facility Component	Action	Frequency/Circumstances
Aboveground container	Inspect outside of container for signs of deterioration and discharges.	Weekly, Monthly (documented) and Annually (documented), during scheduled inspections, and whenever material repairs are made. (Appendix C contains Forms)
Container supports and foundation	Inspect container for supports and foundations	Weekly, Monthly (documented) and Annually (documented), during scheduled inspections, and whenever material repairs are made. (Appendix C contains Forms)
Lowermost drain and all outlets of tank truck	Visually inspect	Prior to filling and departure
All aboveground valves, piping, and appurtenances	Assess general condition of items such as flange joints, expansion joints, valve glands and bodies, catch pans, pipeline supports, locking valves, and metal surfaces.	Weekly, Monthly (documented) and Annually (documented), during scheduled inspections, and whenever material repairs are made. (Appendix C contains Forms)

4.6.1 Weekly Inspection

Facility personnel will conduct a visual weekly inspection of each container and containment listed in Table 3-1, *Petroleum Containers (55 gallons or larger)*.

These inspections need not be documented. However any sign of a release, drips, or staining outside of the containment must be promptly addressed. If equipment is replaced or repaired, Section 2.4.1 of this Plan should be reviewed to determine if Plan revisions are required.

4.6.2 Monthly Inspection

Facility personnel will conduct a monthly inspection of each container or containment listed in Table 3-1, *Petroleum Containers (55 gallons or larger)*.

The results of each monthly inspection must be recorded on the *Monthly Facility Inspection Checklist* (blank form may be found in Appendix C) and completed reports should be retained for a minimum of three years in Appendix I of this Plan.

Monthly inspection records are to be signed by the Environmental Coordinator.

4.6.3 Annual Inspection

Facility personnel perform a comprehensive inspection of facility equipment on an annual basis. The parameters of the annual inspection in clued the monthly checklist and an Annual tank inspection Form that is completed for each tank or fuel truck. Inspection parameters are detailed in the *Annual Facility Inspection Checklist* presented in Appendix C. Annual inspections are typically performed in October of each year.

Inspections... examples

ANNUAL FACILITY INSPECTION CHECKLIST

[The Annual Inspection includes completion of this form plus an *Annual Tank Inspection Report* form for each Tank and/or Fuel Truck]

Date: _____

Time: _____

Inspector: _____

Reviewed by: _____

Environmental Coordinator

X = Satisfactory
NA = Not Applicable
0 = Repair or Adjustment Required
C = See comment under Remarks / Recommendations

Drainage

- ___ Any noticeable oil sheen on runoff.
- ___ Containment drainage valves are closed/locked.
- ___ Oil/water separator systems working properly.
- ___ Effluent from oil/water separator inspected.
- ___ No visible oil sheen in containment area.
- ___ No standing water in containment area.

ASTs

- ___ Tank surfaces checked for signs of leakage.
- ___ Tank condition good (no rusting, corrosion).
- ___ Bolts, rivets, or seams are not damaged.
- ___ Tank foundation intact.
- ___ Level gauges and alarms working properly.
- ___ Vents are not obstructed.
- ___ Valves, flanges, and gaskets are free from leaks.
- ___ Containment is in good repair.

Pipelines

- ___ No corrosion or damage to pipelines or supports.
- ___ Buried pipelines are not exposed.
- ___ Out-of-service pipes capped.
- ___ Signs/barriers to protect pipelines are in place.
- ___ No leaks at valves, flanged, or other fittings.

Truck Loading/Unloading Area

- ___ No standing water in rack area.
- ___ Warning signs posted.
- ___ No leaks in hoses.
- ___ Drip pans not overflowing.
- ___ Catch basins free of contamination.
- ___ Containment curbing or trenches intact.
- ___ Connections are capped or blank flanged.

Security

- ___ Fence and gates intact around entire perimeter.
- ___ Gates have locks.
- ___ ASTs locked when not in use.
- ___ Pump starter controls locked, when not in use.
- ___ Lighting is working properly.

Training

- ___ Spill prevention briefing held.
- ___ Staff has rec'd training in past 12 months.
- ___ Training records are in order.

Response Equipment (Appendix F)

- ___ Inventory checked and present.

Annual Tank Inspection Form

[Complete one form for each Tank or Fuel Truck]

Tank / Truck No.: _____ Tank Name: _____

Tank Contents: _____ Tank Capacity: _____ U.S. Gallons

1. Hoses & Piping
 - a. General appearance of hoses _____
 - b. Any leaks? _____ If so, explain _____
 - c. Aboveground piping free of leaks? _____
2. Corrosion Control:
 - a. Note general appearance of paint on shell, and structural members: _____
 - b. Is rusting or pitting occurring on any of the above? _____
If yes, explain where and if repairs are needed immediately. _____
 - c. Are all ground and/or anode straps in place? _____
If missing or damaged, indicate location on drawing and explain repairs needed: _____
3. Are high-level (overfill) alarms present? _____ Functioning properly? _____
Tested to verify? _____
4. Pressure / vacuum gauges present? _____ Functioning properly? _____
5. Contamination:
 - a. Is the containment free of oil and water? _____
 - b. Is there any evidence of oil outside the containment (i.e. free liquid, staining)? _____
If so, attached a sketch indicating the location, extent and amount of the release.
6. Observations:
 - a. Note all observations regarding the presence of contamination, the condition of the tank (any damage), the containment and/or piping / hoses requiring attention: _____

Subpage _____ of _____ 2 of 2

SPCC/CWA and RCRA WEEKLY INSPECTION SHEET

<p>NOTE: Completed inspection sheets must be kept on file for at least three years</p>	<p>Inspector: _____ Date: _____</p>
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Note regarding draining rain water from containment berms: Due to rare heavy/frequent rainfall, containment berms should rarely require draining. If draining is required, the berm's contents must be carefully examined to verify that only unpolluted rainwater will be discharged (i.e. no oil sheen). Contact Environmental Coordinator/Mgr if any question of possible retained water contamination exists prior to draining. Environmental will provide Forms to document proper (SPCC or Storm Water) containment drainage if draining is needed.

Equipment / Products/Conditions	Inspection Results	
<i>Where there is some question as to whether an observed condition is normal or abnormal and requiring corrective action, the inspector should note the condition as abnormal and request the Environmental Coordinator/Manager to make a further evaluation</i>		
	Time / Initials	Normal / Abnormal

1	<p>Sumps: Check levels water and oil levels, run pumps as needed with care not to discharge oil layer to retention basin, if/after pumping check retention basin for excessive oil (more than the typical ~3-6 feet of thin/sheen layer across the downwind width). Contact CO & Environmental if excessive oil is observed in sumps (as it may indicate an oil spill or leak upstream of sump).</p>				
2	<p>General Purpose Retention Basin: Look for excessive oil, basin should contain no significant foreign objects, have at least 2' of freeboard and liner should show no damage. (Re-assess basin conditions if/after a sump discharge has taken place)</p>				
3	<p>Alternate (southeast) Retention Basin: (same inspection criteria as above)</p>				
4	<p>Intake Structures: Check for proper positioning of primary screens, excessive/obstructive debris in main intake, check for overfilling of rotating screen conveyor bin and screen flush water basket.</p>				

5	<p>Hazardous Waste Storage Area (Between 1&2 and 3&4 bldgs): Check that all drums are: securely sealed, not leaking and in good condition, on pallets and have completed and dated labels (2 dates for waste drum, 1 date for an empty). Check that the containment flooring is clean and in good physical condition. Empty drums must be labeled/marked and dated as as 'Empty'. Containers must be stored with adequate aisle space between rows. Check for proper operation/condition of eyewash, emergency alarm and the presence of fire extinguisher and adequate spill supplies.</p>				
6	<p>Hazardous Waste Satellite Accumulation Area #1 (adjacent Bldg 1&2's "AUX." Haz. Mat./Product Storage Area). Area should have: -- no more than one 55-gal drum per waste stream/type, --drums should be sealed and secure/no leakage, -- secondary containment should be intact with ample capacity - and free of accumulated liquids, --drums must have labels with waste description, and date of 1st waste insertion (legible);- 1st waste insertion date must be less than 270 days (9 months) old, -- fire extinguisher and spill supplies present with clear access.</p>				

8	Hazardous Waste Satellite Accumulation Area #3 (adjacent Unit 1&2's Smoke Stack): Area should have:-- no more than one 55-gal drum per waste stream/type, --drums should be sealed and secure/no leakage, --secondary containment should be intact with ample capacity, and free of accumulated liquids, --drums must have labels with waste description and date of 1st waste addition (legible), -- 1st waste insertion date less than 270 days (9 months) old.				
9	Chemical Product/Hazardous Material Storage #1 (adjacent and within Bldg. 1&2's "AUX." Haz. Mat./Product Storage Area): All drums of product should be/have - non-leaking, --sealed (spigots -OK) --identifiable contents via markings, --All buckets/pour cans and draw tubes should be clean/dry or placed above a containment tray. No more than four (4) drums of Ammonium Hydroxide at a time in Area. Floor surface free of evidence of spills.				
10	Chemical Product/Hazardous Material Storage #2 (adjacent northeast corner in Bldg. 1&2): All drums of product should be/have:-- non-leaking, --sealed (spigots -OK) --identifiable contents via markings. No more than four (4) drums of Ammonium Hydroxide at a time in Area. One(1) Hydrazine tote acceptable. Floor surface free of evidence of spills.				
11	Chemical Product/Hazardous Material Storage #3 (outside Bldg. 3&4 near Hydrazine tote): All drums of product should be/have:-- non-leaking, --sealed (spigots -OK) --identifiable contents via markings. No more than four (4) drums of Ammonium Hydroxide at a time in Area. Floor surface free of evidence of spills.				
12	UREA Reactor and Tank (south of Bldg. 1&2): Check for piping and vessel leaks, secure secondary containment, tank levels, gauges and instruments registering normal values. Urea pellet spills cleaned up promptly.				
13	UREA Tank (south of Bldg. 3&4): Check for piping and vessel leaks, secure secondary containment, tank levels, gauges and instruments registering normal values. Urea pellet spills cleaned up promptly.				
14	Hydrazine IBCs (totes), both for Bldgs 1&2 and 3&4: IBCs must have secure secondary containment with no combustible debris within/near the containment, all tubing, valves free of leaks and in good working order. Containment valves fully closed.				
15	New and In-Use Lube Oil Tanks and Containment: Tanks, piping, valves, fittings/flanges and containment should be in good working order and free of corrosion or damage. Areas showing more than minor rusting may need to be scraped clean, inspected for structural integrity, repaired if necessary, and repainted. There should be no active leaks or areas of 'wet' oil residues. The floor of the secondary containment should have no evidence of oil spills or leaks. The containment drain valve(s) should be fully closed or capped.				
16	Lube Oil Reservoirs (Units 1 - 5): (same inspection criteria as above)				
17	Turbo-Toc Oil Conditioner (Bldg 1&2): Turbo-Toc, piping, hoses, valves, and fittings/flanges should be in good working order and free of corrosion or damage. There should be no active leaks or areas of 'wet' oil residues. Hose fittings should be tight and non leaking. The floor around the unit should have no evidence of active oil spills or leaks. Minor oil drips can be managed with spill pads - but the spill pads must be disposed of as haz. waste and replaced before becoming saturated.				
18	Hypochlorite Tank: Tank and piping system should be free of leakage and all levels and sensors within normal operating ranges. Containment should be free of debris and only contain rainwater.				

FUEL TANK DAILY INSPECTION LOG

INSPECTIONS ARE IN COMPLIANCE WITH 40 CFR 112.7, CALIFORNIA ABOVEGROUND PETROLEUM STORAGE ACT (HSC CH 6.67), AND
 _____'S SPILL PREVENTION, CONTROL, AND COUNTERMEASURE PLAN (SPCC)

NUMBER OF TANKS: (1) 4000-GALLON ABOVEGROUND TANK
 (1) 2500-GALLON ABOVEGROUND TANK

PRODUCT STORED: (1) 4000-GALLON TANK OF _____ GASOLINE
 (1) 2500-GALLON TANK OF _____ GASOLINE

WRITE IN DATE OF INSPECTION AND CIRCLE YES (Y) OR NO (N) FOR ALL QUESTIONS.

DAY	MONDAY		TUESDAY		WEDNESDAY		THURSDAY		FRIDAY	
DATE										
Is piping and electrical conduit to aboveground tanks in good condition (no cracks or deterioration)?	Y	N	Y	N	Y	N	Y	N	Y	N
Are spill buckets underneath delivery line connections in good condition (no cracks or holes) and clean (no drips)?	Y	N	Y	N	Y	N	Y	N	Y	N
Are piping and valves from spill buckets in good condition (no cracks or deterioration) with valve caps in place & secured?	Y	N	Y	N	Y	N	Y	N	Y	N
Are grounding cable hook-ups attached to tank and in good condition?	Y	N	Y	N	Y	N	Y	N	Y	N
Are aboveground fuel tank ladders unobstructed and in good condition?	Y	N	Y	N	Y	N	Y	N	Y	N
Is leak detection system in good working order with no unattended alarms (check alarm panel)?	Y	N	Y	N	Y	N	Y	N	Y	N
Are exterior walls of fuel tanks in good condition (no rust, cracks, dents, or visible signs of damage)?	Y	N	Y	N	Y	N	Y	N	Y	N
Is secondary containment of fuel tanks clean and free of liquids (water or gasoline)?	Y	N	Y	N	Y	N	Y	N	Y	N
Are spill control and clean up supplies present and in good condition?	Y	N	Y	N	Y	N	Y	N	Y	N
Is area around aboveground storage tank free from debris and obstructions?	Y	N	Y	N	Y	N	Y	N	Y	N

DESCRIBE ANY OBSERVATIONS FOR ITEMS CHECKED "NO":

DESCRIBE CORRECTIVE ACTION TAKEN FOR ITEMS CHECKED "NO":

**SUBMIT INSPECTION LOG TO FACILITY SUPERVISOR WEEKLY.
 INSPECTION RECORDS SHALL BE MAINTAINED FOR AT LEAST THREE (3) YEARS**

MONTHLY BULK DIESEL ABOVEGROUND TANK INSPECTION CHECKLIST
Royalbal Comprehensive Health Center: 1,500 gal. diesel tank

Inspector Name: _____ Signature: _____ Date: _____

	YES	NO*	N/A
1. Is the tank system free of visual signs of damage (cracks, dents, corrosion or leakage):			
a. Tank exterior – including small cracks in concrete exterior or rusting on steel components?	<input type="checkbox"/>	<input type="checkbox"/>	
b. Piping, hoses, valves, fittings or connections?	<input type="checkbox"/>	<input type="checkbox"/>	
c. Tank and piping mounts (also check under tank if possible)?	<input type="checkbox"/>	<input type="checkbox"/>	
2. Is the secondary containment leak detection system alarm horn and light properly operating? (test the alarm panel)	<input type="checkbox"/>	<input type="checkbox"/>	
3. Is equipment functioning properly (test if possible)			
a. Pumps, valves and connections?	<input type="checkbox"/>	<input type="checkbox"/>	
b. High-level alarm (at the tank and at fill port area) and the tanks' fuel level gauge?	<input type="checkbox"/>	<input type="checkbox"/>	
4. Is tank area (and entire security fenced area) clean and free of leaves, trash or other debris?	<input type="checkbox"/>	<input type="checkbox"/>	
5. Is the tank and immediate area free of oil/fuel spill residues or other indications of leakage/spillage?	<input type="checkbox"/>	<input type="checkbox"/>	
6. Is tank clearly and legibly signed/labeled: NFPA numbered warning sign, No Smoking, Contents, etc.	<input type="checkbox"/>	<input type="checkbox"/>	
7. Is the tank secured from vandalism/gate locked?	<input type="checkbox"/>	<input type="checkbox"/>	
8. Day tank system free of visual signs of damage or leakage?	<input type="checkbox"/>	<input type="checkbox"/>	
9. Is the tank fill port up the driveway ramp secured and closed?	<input type="checkbox"/>	<input type="checkbox"/>	
10. Day tank system (including piping, gauges and fittings) free of visual signs of damage or leakage?	<input type="checkbox"/>	<input type="checkbox"/>	
11. Are the spill control supplies present and well stocked?	<input type="checkbox"/>	<input type="checkbox"/>	
12. Is the containment berm around the storm drain in the generator area properly in place (or, if equipped with safe drain valve – the valve closed)??	<input type="checkbox"/>	<input type="checkbox"/>	

***Describe any observations for items checked "NO":**

***Corrective actions required or taken for observations for items checked "NO":**

Due Date: _____ Follow-Up Date: _____

Field Conditions Consistent with Inspections?

3.5.1 Inspections

The following contains general inspection guidelines employed as part of the inspection program. More specific inspection criteria is presented on the SPCC Inspection Form provided in Appendix I.


- All storage tanks and oil-containing equipment will be examined for leaks from seams, rivets, bolts, and gaskets and for signs of deterioration (e.g., discoloration, corrosion, cracks) of the tank vessel, aboveground foundation and tank structure supports;
- All associated piping will be checked for dripping, loose joints, damage to supports, and pipe deflection;
- All connections will be checked for leakage, drainage, tightness, and appropriate capping;
- All pumps will be checked for evidence of leakage, proper operation, and damage;
- All storage areas and containment systems will be inspected for integrity and the accumulation of stored product. If oil or petroleum product is observed in the containment system, the source of the oil or petroleum product will be determined.
- The security of the tanks will be checked (e.g., applicable tank valves and equipment locked and secured, applicable doors to tank or container storage areas locked).

If a problem is detected during an inspection, notification will be made to the appropriate SPCC Management Coordinator. The SPCC Management Coordinator will be responsible for initiating and implementing corrective action to mitigate the problem. The SPCC Technical Coordinator or designee may be consulted and provide assistance, as required.

ANIMAL RESOURCE CENTER SPCC PLAN WEEKLY INSPECTION REPORT				
Date of Inspection:				
Name of Inspector:				
Initials of Inspector:				
Diesel Fuel ASTs				
Are there signs of leakage from the container, piping, or equipment?				
Are there signs of corrosion/ deterioration on the container, piping, or equipment?				
Is there evidence of spills or releases on the ground?				
Is spill cleanup equipment not accessible?				
Boiler AST				
Are there signs of leakage from the container, piping, or equipment?				
Are there signs of corrosion/ deterioration on the container, piping, or equipment?				
Is there evidence of spills or releases on the ground?				
Is spill cleanup equipment not accessible?				
Emergency Generator ASTs				
Are there signs of leakage from the container, piping, or equipment?				
Are there signs of corrosion/ deterioration on the container, piping, or equipment?				
Is there evidence of spills or releases on the ground?				
Is spill cleanup equipment not accessible?				
Yes responses require written explanation of corrective actions.				
Corrective Actions:				



**Inspections/Testing at Tier I
 Qualified Facilities**

 Must either use the EPA SPCC Plan Template or fully comply with the 'regular' integrity testing requirements of 40 CFR 112.8(c)(6)

- ❖ Template requirements based on 112.8(c)(6) and STI SP-001 4th Ed.

ATTACHMENT 3 – Inspections, Dike Drainage and Personnel Training Logs

ATTACHMENT 3.1 – Inspection Log and Schedule

Table G-16 Inspection Log and Schedule

This log is intended to document compliance with §§112.6(a)(3)(iii), 112.8(c)(6), 112.8(d)(4), 112.9(b)(2), 112.9(c)(3), 112.9(d)(1), 112.9(d)(4), 112.12.(c)(6), and 112.12(d)(4), as applicable.

Date of Inspection	Container / Piping / Equipment	Describe Scope (or cite Industry Standard)	Observations	Name/ Signature of Inspector	Records maintained separately ^a
					<input type="checkbox"/>
					<input type="checkbox"/>
					<input type="checkbox"/>
					<input type="checkbox"/>
					<input type="checkbox"/>

^a Indicate in the table above if records of facility inspections are maintained separately at this facility.

ATTACHMENT 3.2 – Bulk Storage Container Inspection Schedule – onshore facilities (excluding production):

To comply with integrity inspection requirement for bulk storage containers, inspect/test each shop-built aboveground bulk storage container on a regular schedule in accordance with a recognized container inspection standard based on the minimum requirements in the following table.

Table G-17 Bulk Storage Container Inspection Schedule

Container Size and Design Specification	Inspection requirement
Portable containers (including drums, totes, and intermodal bulk containers (IBC))	Visually inspect monthly for signs of deterioration, discharges or accumulation of oil inside diked areas
55 to 1,100 gallons with sized secondary containment	Visually inspect monthly for signs of deterioration, discharges or accumulation of oil inside diked areas plus any annual inspection elements per industry inspection standards
1,101 to 5,000 gallons with sized secondary containment and a means of leak detection ^a	
1,101 to 5,000 gallons with sized secondary containment and no method of leak detection ^a	Visually inspect monthly for signs of deterioration, discharges or accumulation of oil inside diked areas, plus any annual inspection elements and other specific integrity tests that may be required per industry inspection standards

^a Examples of leak detection include, but are not limited to, double-walled tanks and elevated containers where a leak can be visually identified.

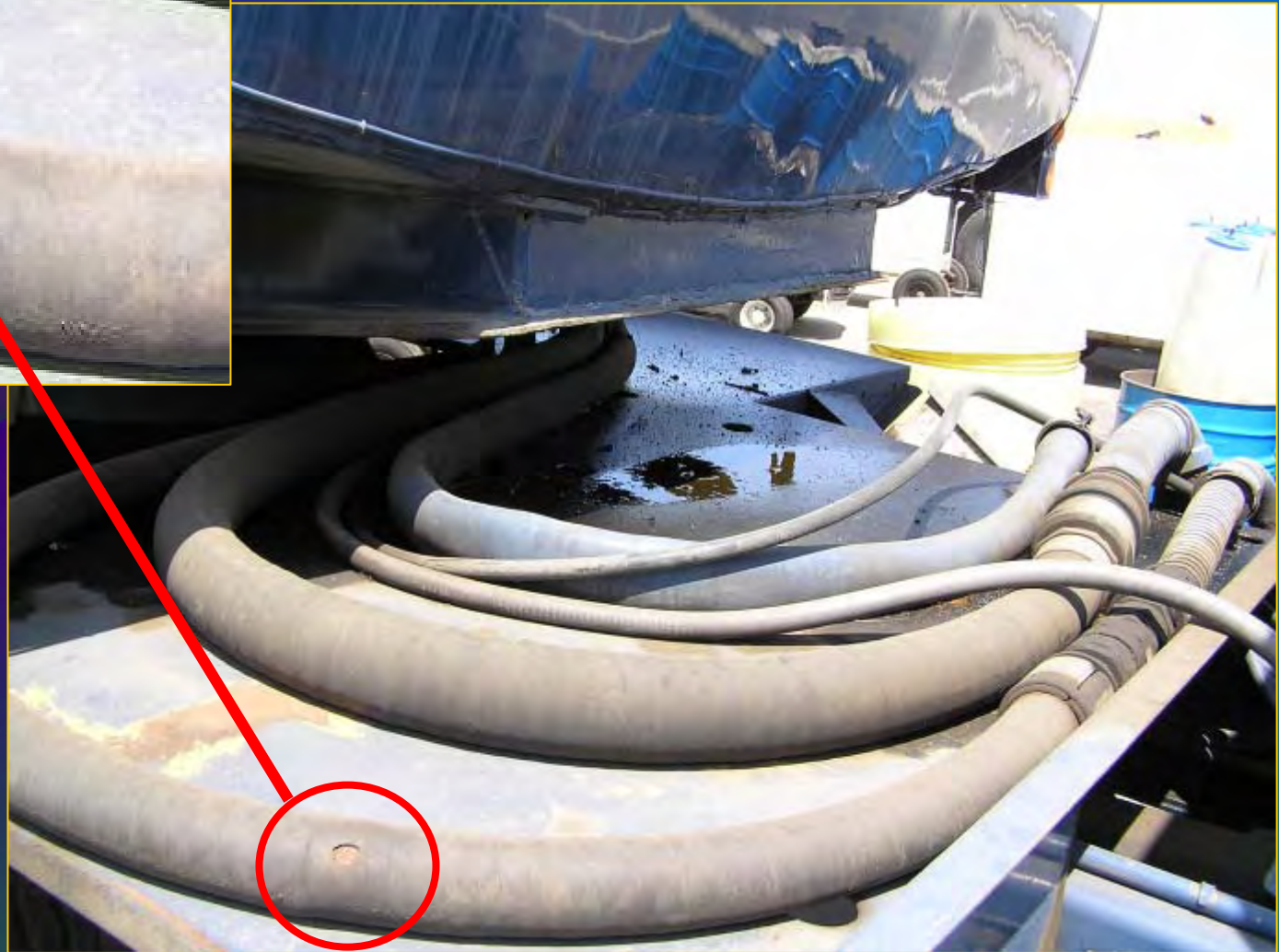
ATTACHMENT 3.3 – Dike Drainage Log

More Inspection Examples





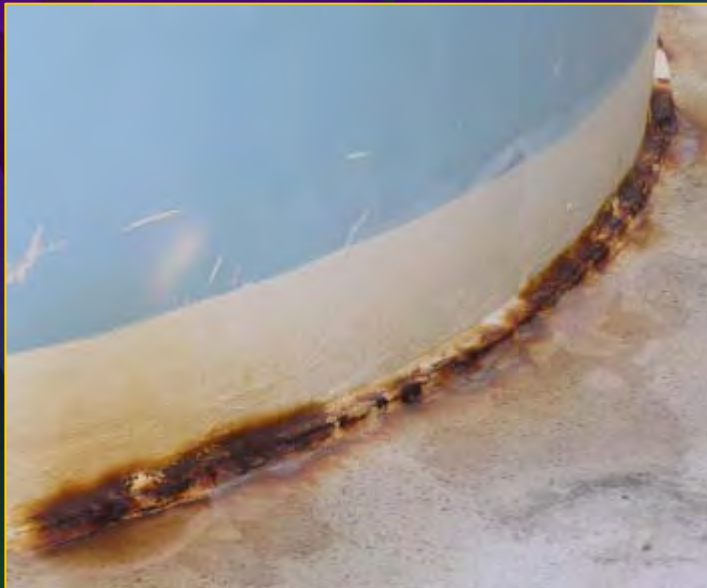
Inspections





 Don't forget tank supports and foundations!

Inspections





19 12:19 PM

Inspections



CAUTION

**CHECK FOR OIL
CONTAMINATION BEFORE
OPENING DRAIN VALVE**

RECORD ALL VALVE OPERATIONS
IN OPERATIONS LOGBOOK

CLOSE VALVE AFTER DRAINING





Inspections



Regularly Scheduled Integrity Testing

Applies to:

- Non-qualified and Tier II qualified facilities
- ❖ Large (field-constructed or field-erected) aboveground storage containers
- ❖ Medium (shop built, field-erected or combo) aboveground storage containers
- ❖ Small (shop-built) aboveground bulk storage containers
- ❖ Aboveground bulk storage containers on, partially in (partially buried, bunkered, or vaulted tanks) and off the ground wherever located
- ❖ Aboveground bulk storage containers storing any type of oil
 - Examples: mobile/portable containers, drums, totes

Potentially Relevant Industry Standards -

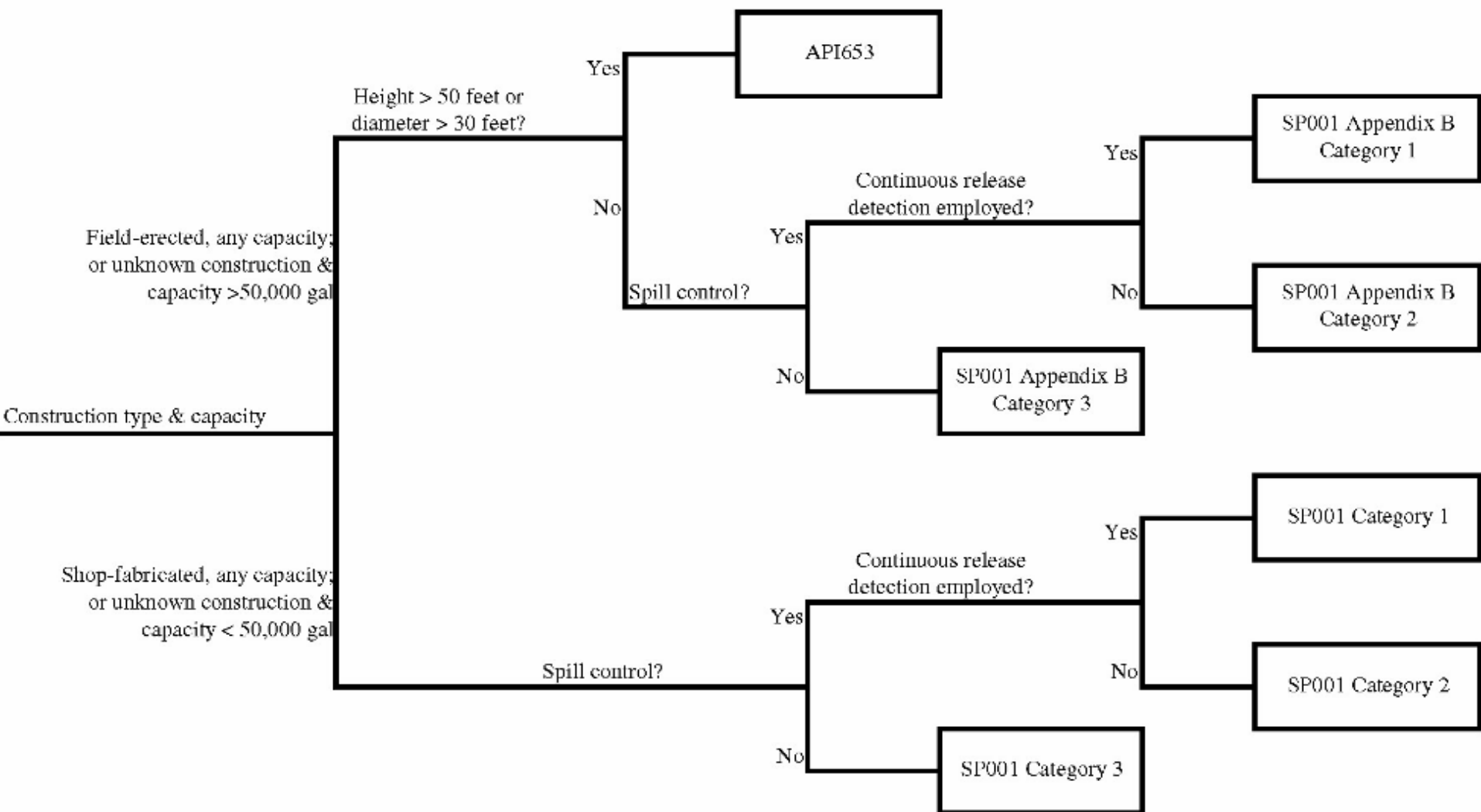
Visual Inspections &/or Integrity Testing

Facility Component(s) Covered in Standard or Recommended Practice	API 653	STI SP001	API 570	API RP* 575	API RP* 574	API 12R1	API 1110	ASME B31.3	ASME B31.4
New equipment						✓	✓	✓	✓
Equipment that has been in service	✓	✓	✓	✓	✓	✓	✓		✓
Shop-built AST	✓	✓		✓		✓			
Field-erected AST	✓	✓		✓		✓			
Plastic tanks		✓							
Container supports or foundation	✓	✓		✓		✓			
Diked area		✓							
Aboveground valves, piping, and appurtenances		✓	✓	✓	✓		✓	✓	✓
Underground piping			✓		✓				
Offshore valves, piping, and appurtenances									✓

Table 7-2. Summary of industry standards and recommended practices (RP) for ASTs.

	API 653	STI SP-001	API RP 575	API RP 12R1
Equipment covered	Field-fabricated, welded, or riveted ASTs operating at atmospheric pressure and built according to API 650.	ASTs including shop-fabricated and field-erected tanks and portable containers and containment systems.	Atmospheric and low-pressure ASTs.	Atmospheric ASTs employed in oil and gas production, treating, and processing.
Scope	Inspection and design; fitness for service; risk.	Determined by the type of material stored within the tank and the operating temperature. Inspection of tanks by the owner/ operator and certified inspectors.	Inspection and repair of tanks.	Setting, connecting, maintaining, operating, inspecting, and repairing tanks.
Inspection interval	<i>Certified inspections:</i> Dependent on tank's service history. Intervals from 5 to 20 years. <i>Owner inspections:</i> monthly.	<i>Certified inspections:</i> Inspection intervals and scope based on tank size and configuration. <i>Owner inspections:</i> monthly, quarterly, and yearly.	Same as API 653.	Scheduled and unscheduled internal and external inspections conducted as per Table 1 of the Recommended Practice.
Inspection performed by	Certified inspector, tank owner.	Certified inspector, either by API or STI.	Same as API 653.	Competent person or qualified inspector, as defined in recommended practice.
Applicable section of this document	Section 7.5.1	Section 7.5.2	Section 7.5.3	Section 7.5.4

Categorization Logic Chart for Aboveground Storage Tank Inspection & Integrity Test Standards






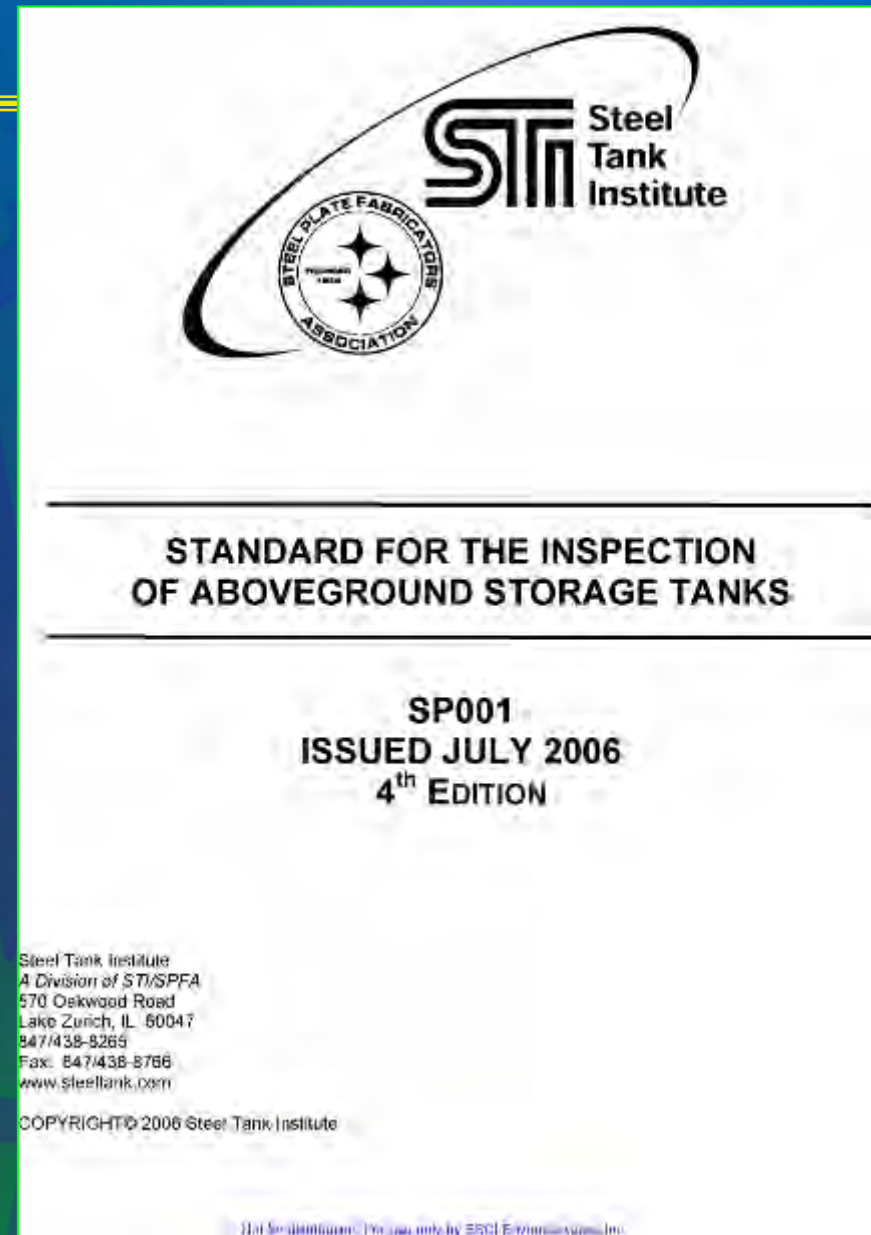
Notes:

API653 refers to American Petroleum Institute (API) Standard 653: Tank Inspection, Repair, Alteration and Reconstruction (Third Edition, December 2001)





SP001 refers to Steel Tank Institute (STI) SP001: Standard for Inspection of Aboveground Storage Tanks (Fourth Edition, July 2006)

STI SP-001 Scope

-  Aboveground storage tanks
-  Stable, flammable, & combustible liquids
-  Covers:
 - ❖ Shop-fabricated tanks
 - ❖ Portable containers
 - ❖ Field-erected tanks (up to 30' diameter & 50' high only, shell thickness less than ½")
 - Covered in Appendix B of the Standard



Types of SP001 Inspections

-  **Periodic AST Inspection (P)**
 - ❖ Performed by owner
 - ❖ Monthly basis
 - ❖ Example checklist provided in SP-001 standard
 - ❖ Records maintained for at least 3 years
-  **Formal external inspection (E)**
 - ❖ Performed by STI certified inspector
 - ❖ Records retained for life of the tank
-  **Formal internal inspection (I)**
 - ❖ Performed by certified inspector
 - ❖ Records retained for life of the tank
-  **Leak test (L)**
 - ❖ Performed by owner or his/her designee

5.0 INSPECTION SCHEDULE

5.1 The owner shall use the AST's type, size, and type of installation, corrosion rate and previous inspection history, if any, to develop a schedule of applicable types of inspections for each AST per Table 5.5.

5.2 Owners who have an inspection plan shall use this standard to establish the inspection criteria for ASTs described in this standard using the AST type, size, and previous inspection history, type of installation and corrosion rate.

5.3 Certified inspectors using this standard to conduct inspections, shall use the AST type, size, previous inspection history, type of installation, corrosion rate and the schedule determined by the owner, so long as the information is correct and in accordance with the requirements of this standard.

5.4 **AST CATEGORIES USED IN TABLE 5.5**

5.4.1 Category 1 - ASTs with spill control, and with CRDM

5.4.2 Category 2 - ASTs with spill control and without CRDM

5.4.3 Category 3 - ASTs without spill control and without CRDM

5.4.4 Table 5.3 shows some typical tank types and their corresponding AST category

TABLE 5.4 EXAMPLE TANK CONFIGURATION AND AST CATEGORY

TANK CONFIGURATION	TANK HAS CRDM?	AST CATEGORY
AST in contact with ground	no	2 or 3
Elevated tank with no part of AST in contact with ground (includes concrete encased tanks)	yes	1
Vertical tank with RPB and spill control	yes	1
Vertical tank with double bottom and spill control	yes	1
Vertical tank with RPB under tank and spill control	yes	1
Double-wall AST	yes	1
AST with secondary containment dike/berm	yes	1

IN TABLE 5.5 USE THE FOLLOWING DESIGNATIONS:

- 5.5 P – Periodic AST inspection ← (by 'owner's inspector')
- 5.5.1 Refer to Section 6
- 5.5.2 E – Formal external inspection by certified inspector
Refer to Section 7
- 5.5.3 I – Formal internal inspection by certified inspector
Refer to Section 8
- 5.5.4 L – leak test by owner or owner's designee
Refer to Section 9
- 5.5.5 () indicates maximum inspection interval in years. For example, E (5) indicates formal external inspection every 5 years.

TABLE 5.5 TABLE OF INSPECTION SCHEDULES

AST Type and Size (U.S. gallons)		Category 1	Category 2	Category 3
Shop-Fabricated ASTs	0 – 1100 (0-4164 liters)	P	P	P, E&L(10)
	1101 - 5,000 (4168-18,927 liters)	P	P, E&L(10)	[P, E&L(5), I(10)] or [P, L(2), E(5)]
	5,001 - 30,000 (18,931-113,562 liters)	P, E(20)	[P, E(10), I(20)] or [P, E(5), L(10)]	[P, E&L(5), I(10)] or [P, L(1), E(5)]
	30,001 - 50,000 (113,566-189,271 liters)	P, E(20)	P, E&L(5), I(15)	P, E&L(5), I(10)
Portable Containers		P	P	P**

** Owner shall either discontinue use of portable container for storage or have the portable container DOT (Department of Transportation) tested and recertified per the following schedule (refer to Section 9.0):

- Plastic portable container - every 7 years
- Steel portable container - every 12 years
- Stainless Steel portable container - every 17 years

For Tier I Qualified Facilities

The Plan Template specifies the visual inspections (it's based on STI SP001)

ATTACHMENT 3.2 – Bulk Storage Container Inspection Schedule – onshore facilities (excluding production):

To comply with integrity inspection requirement for bulk storage containers, inspect/test each shop-built aboveground bulk storage container on a regular schedule in accordance with a recognized container inspection standard based on the minimum requirements in the following table.

Table G-17 Bulk Storage Container Inspection Schedule	
Container Size and Design Specification	Inspection requirement
Portable containers (including drums, totes, and intermodal bulk containers (IBC))	Visually inspect monthly for signs of deterioration, discharges or accumulation of oil inside diked areas
55 to 1,100 gallons with sized secondary containment	Visually inspect monthly for signs of deterioration, discharges or accumulation of oil inside diked areas plus any annual inspection elements per industry inspection standards
1,101 to 5,000 gallons with sized secondary containment and a means of leak detection ^a	
1,101 to 5,000 gallons with sized secondary containment and no method of leak detection ^a	Visually inspect monthly for signs of deterioration, discharges or accumulation of oil inside diked areas, plus any annual inspection elements and other specific integrity tests that may be required per industry inspection standards

^a Examples of leak detection include, but are not limited to, double-walled tanks and elevated containers where a leak can be visually identified.

Inspector Qualifications per STI SP001

4.0 AST INSPECTOR QUALIFICATIONS

4.1 OWNER'S INSPECTOR QUALIFICATIONS

4.1.1 Periodic inspections are to be performed by an owner's inspector.

4.1.2 The personnel performing these inspections shall be knowledgeable of storage facility operations, the type of AST and its associated components, and characteristics of the liquid stored.

4.2 CERTIFIED INSPECTOR QUALIFICATIONS

4.2.1 Formal external and formal internal tank inspections are to be performed by a certified inspector.

4.2.2 A Certified inspector shall be certified by one or more of the following:

4.2.2.1 American Petroleum Institute (API) Standard 653 Authorized Inspector Certification with STI SP001 Adjunct Certification.

4.2.2.2 Steel Tank Institute (STI) Certified SP001 AST Tank System Inspector

4.2.2.3 Additional certifications as may be required by individual states or other governing bodies.



Example STI SP001 Report

ER-AIR TRAVEL & ASSOCIATES-EAST PORT-USA-TANK # 1-MARCH/2006

Environmental Inspection Services

757-----/Office 757-----/Fax

www.

STI SP001

Engineering Report – Tank # 1



Prepared for

Air Travel & Associates
East Port, USA

March 28, 2006

Signatures:

Jason B, STI Inspector, Cert No. 604-03

Review:

Benyam B, Mechanical Engineer, AWS# 05030364

ER-AIR TRAVEL & ASSOCIATES-EAST PORT-USA-TANK # 1-MARCH/2006

CERTIFICATION

The following certification pertains to the inspection of tank # 1 located at Air Travel & Associates in East Port, USA on March 27, 2006.

"I certify under penalty of law that this document and all attachments were prepared by me. The information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fines and imprisonment for knowing violations."

Jason B. STI Inspector – # 604-03

4.0 INSPECTION

4.1 Results:

4.1.1 Containment: The tank sits in a concrete containment. The containment was evaluated during the inspection. Minor to moderate cracks are present in the containment walls and floor. The containment is equipped with a drain which drains into an oily water separator. The truck fill area is graded to drain into the oily water separator.

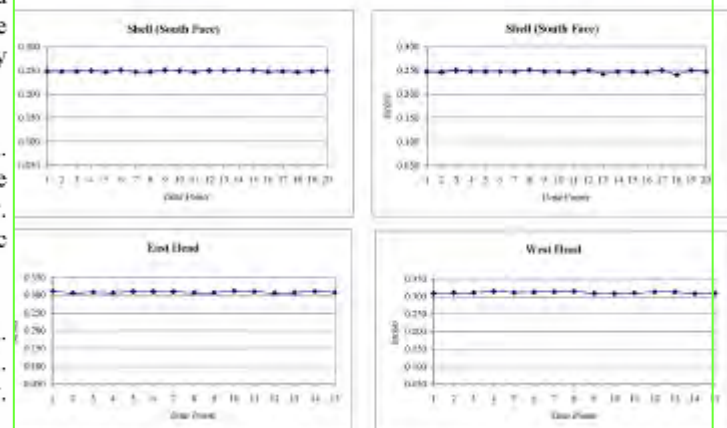
4.1.2 Foundation: The tank sits on two (2) steel saddles bolted to concrete piers. The saddles and concrete piers were evaluated during the inspection. No structural discrepancies are present on the steel saddles. The saddles are seal welded to the tank shell. The welds were evaluated during the inspection. The welds are in satisfactory condition. No cracks are present in the concrete piers. The concrete piers and the steel saddles are structurally sound and in satisfactory condition.

4.1.3 Ends: The tank ends are butt welded. The welds were evaluated during the inspection. The welds are in satisfactory condition and are structurally sound. No structural discrepancies are present on the tank ends. The tank ends were evaluated utilizing ultrasonic technology. Ultrasonic thickness measurements are listed in the engineering data in Appendix A. Ultrasonic thickness measurements show the tank ends to be structurally sound and in satisfactory condition.

4.1.4 Shell: The tank shell is butt welded. The welds were evaluated during the inspection. The welds are in satisfactory condition. No structural discrepancies are present on the tank shell. The tank shell was evaluated for remaining metal thickness utilizing ultrasonic technology. Thickness measurements are listed in the engineering data in Appendix A.

4.1.5 Shell Appurtenances: The nozzles were evaluated in accordance with UL-142 & NFPA-30. All containment and associated product piping was evaluated during the inspection. The piping is satisfactory and it is properly supported. The product issue and tank fill lines are equipped with fusible link valves. The valves are in satisfactory condition. The tank is equipped with two (2) vapor recovery vents. The vents were evaluated and are in satisfactory condition. The top of the tank is accessible via welded on ladder rungs on the northwest end of the tank. The ladder was evaluated and it is structurally sound. The tank is equipped with an ATG to gauge the product level in the tank. The ATG was evaluated and is in satisfactory condition. The tank has a 24" manway on top of the tank. An 8" emergency vent is present on the manway. Per UL-142 section 8.0 the 8" emergency vent presently in use does not provide adequate means of emergency ventilation. The minimum required for a 20,000 gallon with a wetted surface of 918 ft² tank is 10" in diameter and 524,000 CFH in capacity. The tank is grounded via grounding straps.

4.1.6 Paint/Insulation: Over the course of the inspection the coating on the tank and associated piping was evaluated. The tank and piping coating is in satisfactory condition.



Integrity Testing of Other Tank Types



Fiberglass Reinforced Plastic Tank Inspections

- FTPI-2005-2 "Standard for In-service Inspections of Aboveground Atmospheric Fiberglass Reinforced Plastic Tanks and Vessels"
- Visual inspection in accordance with ASTM D 2563 "Standard Test Method for Classifying Visual Defects in Glass-Reinforced Plastic Laminate Parts."
- Periodic inspection of the inside of the tank is important when assessing performance
 - ❖ Once a year is a good frequency for aggressive service conditions
 - ❖ Every two years in less aggressive service (such as water, non-high temp oils, etc)

Rotationally Molded Polyethylene Tanks





Section 7

Training & Procedures *(as applicable to APSA tank facilities)*

Procedural-Related Compliance Requirements

- ❖ Facility must have in place/implement:
 - ❖ Procedures for routine handling of oil
 - Loading, unloading, movement and facility transfers, key maintenance, etc.
 - ❖ Procedures for overfill prevention and discharge control
 - ❖ Procedures for inspections and periodic testing
 - ❖ Procedures for inspecting and discharging contained or accumulated stormwater
- ❖ Significant flexibility
 - ❖ Must be 'adequate' for the facility
- ❖ Reference and describe in Plan
 - ❖ Not addressed in the Template (doh!)

Procedures



In Plan:

- ❖ Just reference or summarize



In practice?

- ❖ Criteria for good procedures:
 - Complete/adequate
 - Appropriately communicated and well known
 - Verifiable
 - Accessible at time of need
 - Implemented consistently

4.3 Facility Loading and Unloading Operations (§112.7 (h), (§112.8 (d))

Section 112.7(h) of the SPCC rules specifies a secondary containment system for tank car and tank truck loading and unloading racks. To insure that no petroleum products, hazardous material or oil will be released to the environment, a secondary containment system will be designed and constructed to hold at least the maximum capacity of any single compartment of a tank car or tank truck loaded or unloaded at the facility.

A summary of the petroleum products, hazardous material or oil loading/unloading operations include:

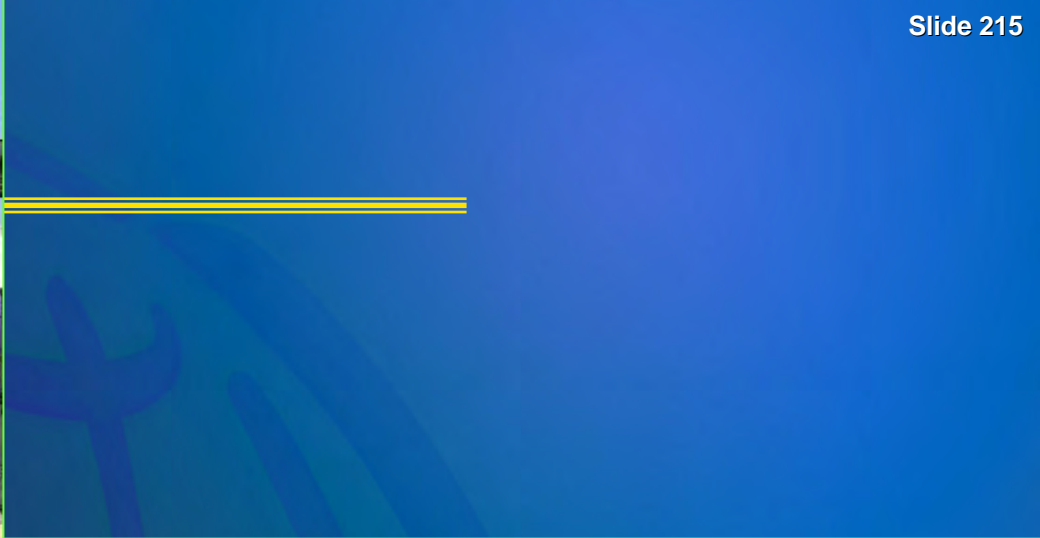
- Truck will be placed in contained loading/unloading location.
- Trailer wheels will be air-locked.
- Proper spillage container will be placed under trailer outlet.
- Transfer line will be connected from truck to tank.
- The transfer will be monitored by the Job Site Environmental Coordinator (JSEC) or the delivery truck driver via a direct vision gauge. *(Note: Automated systems meet this requirement as well, including high level alarms and high level pump cutoffs) (§112.8 (c)(8))*
- Lines, hoses and valves will be routinely checked during transfer.
- Tank and truck valves will be confirmed to be closed before disconnecting hose.
- A sign will be posted at the diesel transfer location reminding drivers to confirm complete disconnection of flexible or fixed transfer line prior to departing.
- Material collected in spill containers will be added to the material AST.

4.4 Facility Drainage (§112.7 (a)(3), §112.8(b))

Discharge valves in containment structures will normally be closed. Stormwater collected in the structurally sound containment areas will be visually examined. If the materials stored in the secondary containment area will produce non-visible contamination in stormwater, water samples will be taken. If visual and/or sampling data indicates it is free of pollutants it will be discharged to the surrounding area. Records of these discharges will be kept with the SPCC plan (Appendix B).

If the stormwater appears to be contaminated, it will be pumped from the containment area and disposed at an appropriate facility.







CONSISTENCY

IT'S ONLY A VIRTUE IF YOU'RE NOT A SCREWUP.

What you say vs what you do



Procedures

4.9 Truck Loading/Unloading Requirements (40 CFR 112.7(h))

Fuels and lubricants are stored in the Fuels Area immediately adjacent to the maintenance shop. The proximity of the shop to the Fuels Area allows for close oversight of loading/unloading operations and rapid response should a release occur. Most fill and dispensing connections are located within secondary containment areas, which minimize the opportunity for releases. Where such design is impractical, loading / unloading areas must be bermed to avoid releases. Spill kits (sorbent materials) are located at various locations throughout the site to allow quick response to any release.

4.9.1 Secondary Containment (40 CFR 112.7(h)(1))

The Fuels Area (largest tank 3000 gallon) and the Form Oil tank (400-gallon) are the regulated bulk storage tanks on-site. Neither currently has a loading pad, a catchment basin or a treatment system for the fueling truck. BMP 2: Fuels Loading/Unloading Procedure addresses the alternate procedures outlined in 40 CFR 112.7(h)(2), such as inspections and chocking of fueling vehicles to avoid accidental releases.

Regulated tanks, totes, and drums are located on secondary containment to minimize the potential for releases to the environment. Containment structures are inspected monthly and annually to maintain their integrity. Additionally, spill kits (sorbent materials) are located at various locations throughout the site to allow for quick response to any release.

4.9.2 Loading/Unloading Procedures (40 CFR 112.7(h)(2) and (3))

Vehicles used to transport fuels and petroleum products regulated by the SPCC rule, at the site meet applicable Department of Transportation (DOT) requirements. A employee is typically present during loading/unloading operations to verify product delivery, assure proper connections, safeguard against spills caused by poor connections or premature departure while fill hoses are connected, and facilitate response actions or spill cleanup, if a spill should occur.

17

SPCC PLAN – BEST MANAGEMENT PRACTICE

BMP No. 2: Tank LOADING / UNLOADING PROCEDURE

PRIOR TO UNLOADING

- If a spill containment apron is present the truck must be inside the containment.
- Visually check all hoses for leaks and wet spots.
- Gauge the tank and record on form (clipboard maintained in Maintenance Shop) to ensure that there is sufficient volume in the storage tank.
- Lock in the closed position any drainage valves for the secondary containment structure.
- Secure the tank vehicle with chocks and inter locks.
- Ensure the vehicle's parking brake is set.
- Verify proper alignment of valves and proper functioning of the pumping system.
- Establish adequate bonding/grounding prior to connecting to the fuel transfer point.
- Turn off cell phone.

DURING UNLOADING

- Driver must stay with the vehicle at all times during unloading activities.
- Periodically inspect all systems, hoses, and connections.
- Ensure that no leaks are detected by sight, sound or smell during fuel unloading.
- When loading, keep internal and external valves on the receiving tank open along with the pressure relief valves.
- When making a connection, shut off the engine. When transferring Class 3 materials, shut off the vehicle engine unless it is used to operate a pump.
- Monitor the liquid level in the receiving tank to prevent overflow.
- Monitor flow meters to determine rate of flow.
- When topping off the tank, reduce flow rate to prevent overflow.
- Report and clean up any spills according to SPCC Plan.
- Call Br 74 to report any spills.

AFTER UNLOADING

- Make sure the transfer is complete.
- Close all tank and loading valves before disconnecting.
- Securely close all vehicle internal, external and dome cover valves before disconnecting.
- Secure all hatches.
- Disconnect grounding/bonding wires.
- Make sure the hoses are drained to remove the remaining fuel before moving them away from the connection. Use a drip pan.
- Cap the end of the hose and other connecting devices before moving them to prevent uncontrolled leakage.
- Remove wheel chocks and interlocks.
- Inspect the lowermost drain and all outlets on the tank truck prior to departure. If necessary tighten, adjust, or replace caps, valves, or other equipment to prevent fuel leakage while in transit.

PROCEDURE FOR TANK FILL FROM REMOTE FILL PUMP

1. CONNECT TRUCK GROUND TO GROUNDED OUTLET.
2. CONNECT VAPOR RECOVERY AND PRODUCT HOSES.
3. UNLOCK PRODUCT BALL VALVE AND KEY SWITCH COVER FOR PRODUCT TO BE RECEIVED
 - RED VALVE** – PREMIUM GRADE
 - BLUE VALVE** – REGULAR GRADE
4. OPEN PRODUCT BALL VALVE AT THE SOUTHEAST CORNER OF THE TANK FARM.
5. CHECK VEEDER ROOT MONITORING SYSTEM TO CONFIRM THAT TANKS HAVE THE ABILITY TO RECEIVE THE VOLUME OF PRODUCT TO BE DELIVERED.
6. OPEN PUMP OUTLET BALL VALVE AND APPROPRIATE PRODUCT VALVE AT THE PUMP MANIFOLD.
7. OPEN PUMP INLET BALL VALVE SLOWLY OPEN PUMP INLET BUTTERFLY VALVE.
8. AFTER OPENING BOTH INLET VALVES, WAIT APPROXIMATELY SIXTY (60) SECONDS TO ALLOW PRODUCT TO ENTER PUMP BEFORE STARTING THE PUMP.
9. TO START PUMP:
 - REGULAR – CHOOSE TANK TO BE PUMPED INTO BY TURNING KEY SWITCH TO THE RESPECTIVE TANK, i.e. TANK 1 OR TANK 2
 - PREMIUM – TURN KEY SWITCH TO THE PUMP RUN POSITION, PUSH PUMP START BUTTON.
10. WATCH THE INDICATOR LIGHTS FOR THE TANK IN WHICH THE PRODUCT IS BEING PUMPED INTO.
 - GREEN** – PUMP RUNNING, TANK LEVEL BELOW 80%
 - YELLOW** – PUMP RUNNING, TANK LEVEL BETWEEN 80% AND 90%
 - RED** – PUMP STOPPED, TANK LEVEL ABOVE 90%
11. SHOULD THE RED INDICATOR LIGHT ILLUMINATE AND THE PUMP STOP RUNNING DURING UNLOADING OPERATION, DO THE FOLLOWING:
 - REGULAR TANK – CHANGE KEY POSITION AND PUMP BALANCE OF LOAD INTO THE OTHER TANK.
 - PREMIUM – CEASE UNLOADING – CHECK WITH [REDACTED] OIA REPRESENTATIVE FOR FURTHER INSTRUCTION.
12. WHEN THE TRUCK COMPARTMENT BEING LOADED IS EMPTY, CLOSE PUMP INLET VALVE, PUSH STOP BUTTON, DISCONNECT AND RECONNECT HOSES FOR THE NEXT COMPARTMENT.
13. AT THE CONCLUSION OF THE OFF LOADING OPERATION, CLOSE PUMP INLET BUTTERFLY AND BALL VALVE DISCONNECT HOSES, CLOSE PRODUCT VALVES AT THE TANK FARM, CLOSE PUMP OUTLET VALVE, CLOSE AND LOCK PRODUCT VALVES AND THE KEY SWITCH, DISCONNECT GROUND CABLE.

NOTE: PLEASE NOTIFY THE ENVIRONMENTAL AFFAIRS OFFICE TO REPORT ANY SPILL OR LEAKS.
 PHONES NUMBER [REDACTED]

Fuel Storage Tank Delivery and Fuel Filtering Procedure and Checklist:

Royal Comprehensive Health Center

This procedure applies to the refueling of the 1,500 gallon above ground fuel storage tank (AST) located at the Royal Comprehensive Health Center. It is also applicable to the filtering of the fuel via vendor truck. The procedure is intended to prevent overfills of the tank, spillage as a result of fueling activities, and to ensure compliance with the Spill Prevention, Control and Countermeasures (SPCC) Plan.

Prior to fueling:

- The county employee escort and the delivery driver shall confirm the ullage in the tank (*ullage refers to the available space remaining in the tank*). For this tank, this can be done by:
 - Checking the tank level monitor on the top of the tank; or
 - Sounding (sticking) the tank with the designated measuring stick (the measuring sticks are tank-specific and must be used in combination with the tank-specific inches to gallons conversion chart); ***The maximum fill volume of the tank is 90% capacity.***
- Prior to connecting any hoses to the tank or beginning any transfer:
 - The fuel truck parking brake must be firmly set;
 - The fuel truck wheels must be chocked;
 - Traffic warning cones or other traffic warning barriers must be properly placed behind the truck while it is parked along 3rd Street. The trucks' hazard warning lights must also be activated.
 - Traffic warning cones, gates or other traffic warning barriers must be placed in the employee driveway/ramp to prevent any vehicles from driving over the filling hose.
 - Check to be sure spill control supplies are stocked and readily available.
 - Inspect the fill hose for cracks, wear or damage prior to transfer. Also check the hose connections/fittings if more than one hose length are connected.
- Place a drip pan is placed under the hose connections to avoid potential drips on the ground.
 - A 5 gallon bucket should be used under the hose/truck connection;
 - Smaller pans can be used under the mid-hose connections.

During fueling or filtering:

- The operation must be constantly attended by the county employee escort and the delivery driver. In no event can the truck or the tank fill port be left unattended while the connections are in place or tank fill port open. **This may require two vendor personnel – one at the truck, one at the tank fill port.**
- Ensure that the tank level NEVER EXCEEDS 90% CAPACITY during the process by using the prior-to-fill readings from the gauge or tank sounding to determine the appropriate quantity of fuel to add.
 - If an overfill condition occurs (note the wall mounted high level alarm at the fill port), contact the Chief Engineer's Office and report status.
 - Sometimes, when using the truck mounted fuel transfer pump, the fuel will start foaming and activate the "high level alarm". If this occurs, slow down the transfer to avoid false alarms and monitor ullage.
- Always clean up any drips or incidental spills that may occur during refueling or fill hose retraction. If a major spill occurs, call the emergency operator at extension 111 or 323-227-0410 from any phone.

After fueling:

- The tank fill port must be securely closed, and verified by the county employee to be securely closed.



Training




Two types of training required by 40 CR 112.7(f)

- ❖ 'Detailed' SPCC Plan and implementation training
 - No specified frequency
- ❖ Spill prevention briefings
 - Annual

1. Detailed SPCC Training (40 CFR 112.7(f)(1))


- ❖ Training for oil-handling employees and those with oil spill prevention responsibilities. At a minimum, must include:
 - Applicable pollution control laws and regulations
 - Operation & maintenance of oil discharge prevention systems/equipment
 - Discharge prevention procedures and protocols
 - General facility operations
 - SPCC plan contents and understanding of the Plan

Training

2. Annual spill prevention briefings for oil handling personnel (40 CFR 112.7(f)(1))
- ❖ ...to assure adequate understanding of the SPCC Plan for the facility
 - ❖ Briefings must highlight and describe:
 - **Known discharges as described in §112.1(b) or**
 - **Failures, malfunctioning components, and**
 - **Any recently developed precautionary measures**
-  Should describe the training and briefing program in the Plan
- Plan template contains a training/briefing log as Attachment 3.4)
 - Records of training not specifically required non-qualified facilities or Tier II qualified facilities



Designated Accountable Person

 The facility must designate a person at the facility who is accountable for discharge prevention and who reports to facility management
40 CFR 112.7(f)(2)

- ❖ I identify name and title in Plan (or Table G-5 of Template)



Section 8

Spill Planning, Notifications, and Response

*(as applicable to APSA tank
facilities)*

Control/Response Measures or Procedures

Response provisions

- ❖ Must have a plan/procedures to respond to oil spills... generally describe them in the Plan (or Table G-7 in Template)
 - May consist of use of outside response agencies and contractors
 - Must include internal notification and communication
 - Table G-8 in Template
 - Must include outside agency notification
 - Tables G-9 & G-20 in Template (but that's federal only...)
 - Should include some interim control measures
 - Describe in Table G-7 in Template
 - Full secondary containment compliance eases contingency plan requirements

Control/Response Measures or Procedures

Response provisions

- ❖ Use of Business Emergency Plan?
 - OK...summarize in the Plan or Template and include the BEP as a reference...but
 - Must include sufficient detail (such as clean up, use of contractors, repair/ reinspection, EPA notification for navigable water spills, etc.)
 - Must also have 'management commitment' statement

Look! It's Kristen Reigel! We're saved! Oh Great Holy Smokin' Monkey, we're **SAVED!!!**





Control/Response Measures or Procedures

Countermeasures provisions

- ❖ Written management commitment of manpower, materials, equipment, \$\$ to control spills and assure cleanup



Importance of Secondary Containment

- Besides the obvious... If secondary containment and other diversionary means are determined by the PE to be 'impractical':
 - ❖ Impracticality determination must be detailed in the Plan
 - ❖ Must do integrity testing... and:
 - ❖ Plan must include a specific 'Oil Spill Contingency Plan'
 - **Must meet requirements of 40 CFR 109** (EPA guidance available):
 - Authorities, responsibilities, and duties of all persons, organizations, or agencies involved in oil removal operations
 - Notification procedures for the purpose of early detection and timely notification of an oil discharge
 - Provisions to ensure that full resource capability is known and can be committed during an oil discharge
 - Provisions for well-defined and specific actions to be taken after discovery and notification of an oil discharge
 - Procedures to facilitate recovery of damages and enforcement measures

40 CR 109

 NOT your simple BEP!

§ 109.5 Development and implementation criteria for State, local and regional oil removal contingency plans.

Criteria for the development and implementation of State, local and regional oil removal contingency plans are:

- (a) Definition of the authorities, responsibilities and duties of all persons, organizations or agencies which are to be involved or could be involved in planning or directing oil removal operations, with particular care to clearly define the authorities, responsibilities and duties of State and local governmental agencies to avoid unnecessary duplication of contingency planning activities and to minimize the potential for conflict and confusion that could be generated in an emergency situation as a result of such duplications.
- (b) Establishment of notification procedures for the purpose of early detection and timely notification of an oil discharge including:
 - (1) The identification of critical water use areas to facilitate the reporting of and response to oil discharges.
 - (2) A current list of names, telephone numbers and addresses of the responsible persons and alternates on call to receive notification of an oil discharge as well as the names, telephone numbers and addresses of the organizations and agencies to be notified when an oil discharge is discovered.
 - (3) Provisions for access to a reliable communications system for timely notification of an oil discharge and incorporation in the communications system of the capability for interconnection with the communications systems established under related oil removal contingency plans, particularly State and National plans.
 - (4) An established, prearranged procedure for requesting assistance during a major disaster or when the situation exceeds the response capability of the State, local or regional authority.
- (c) Provisions to assure that full re-source capability is known and can be committed during an oil discharge situation including:
 - (1) The identification and inventory of applicable equipment, materials and supplies which are available locally and regionally.
 - (2) An estimate of the equipment, materials and supplies which would be required to remove the maximum oil discharge to be anticipated.
 - (3) Development of agreements and arrangements in advance of an oil discharge for the acquisition of equipment, materials and supplies to be used in responding to such a discharge.
 - (d) Provisions for well defined and specific actions to be taken after discovery and notification of an oil discharge including:
 - (1) Specification of an oil discharge response operating team consisting of trained, prepared and available operating personnel.
 - (2) Predesignation of a properly qualified oil discharge response coordinator who is charged with the responsibility and delegated commensurate authority for directing and coordinating response operations and who knows how to request assistance from Federal authorities operating under existing national and regional contingency plans.
 - (3) A preplanned location for an oil discharge response operations center and a reliable communications system for directing the coordinated overall response operations.
 - (4) Provisions for varying degrees of response effort depending on the severity of the oil discharge.
 - (5) Specification of the order of priority in which the various water uses are to be protected where more than one water use may be adversely affected as a result of an oil discharge and where response operations may not be adequate to protect all uses.

Spill and Release Reporting

❖ In addition to any local & state reporting

 Two main federal oil discharge requirements:

1. Specific to SPCC facilities:

- Report to the EPA Regional Admin. discharges of:
 - More than 1,000 gallons of oil in a single discharge to navigable waters or adjoining shorelines
 - More than 42 gallons of oil in each of two discharges to navigable waters or adjoining shorelines within a rolling 12-month period
 - It's the amount of oil in gallons that reached the navigable waters
- Facility owner/operator must report to EPA within 60 days
 - Detailed report content - including failure analysis and corrective actions taken (make sure the Plan describes the report to be filed)

Spill and Release Reporting

2. General to oil discharges (from any facility):

- Report to the National Response Center *any amount* of oil discharge that:
 - Violates state water quality standards
 - Causes a film or sheen upon the water
 - Leaves sludge or emulsion beneath the surface
- Facility owner/operator must report to NRC immediately
 - Moderate report content (make sure the Plan describes the notification process, phone # [800-424-8802], etc.)
 - Penalties likely to accrue if report not made within 15 minutes of discovery



SPILL REPORT FORM

A copy of this Form must be completed and filed in Appendix L of this Plan for each Review Appendix E, BMP No. 6: Release / Spill Documentation & Notification Procedure to determine if the release must be reported.

Please fill out the form as completely as possible before calling the National Response Center at 1-800-424-6742. Fields in RED are mandatory entries.

IS THIS A DRILL REPORT? Yes/No YOUR E-MAIL ADDRESS:

REPORTING PARTY RESPONSIBLE PARTY

Phone 1: Type: (e.g. Primary/Cell/On-Scene/Pager/Other) Last Name:

Last Name: First Name:

First Name: Phone 1: Type: Prim

Phone 2: Type: (e.g. Primary/Cell/On-Scene/Pager/Other) Phone 2: Type: (e.g. Primary/Cell/On-Scene/Pager/Other)

Phone 3: Type: (e.g. Primary/Cell/On-Scene/Pager/Other) Phone 3: Type: (e.g. Primary/Cell/On-Scene/Pager/Other)

Company: Company:

Org Type: Org Type:

Address: Address:

City: City:

State: State:

Zip: Zip:

Does the caller wish to remain Confidential? (Yes/No)

Are you calling on behalf of responsible party? (Yes/No)

Are you or your company responsible for the Material released? (Yes/No)

INCIDENT DESCRIPTION

Description of Incident:

Incident Date Time AM/PM Occurred/Discovered/Planned (Choose one)

Type of Incident: STORAGE TANK

Describe Incident Cause (e.g. Transport Accident/Equipment Failure/Operator Error/Natural Phenomenon/Unknown/Other):

ACCIDENT LOCATION

Location Description:

Nearest City: Distance from Nearest City: miles Direction:

Township: Range: Section:

Latitude: Degrees: Minutes: Seconds: Quadrant:

Longitude: Degrees: Minutes: Seconds: Quadrant:

TANK/CONTAINER DETAILS

Tank/Container Description: Tank/Container ID:

Above/Below Ground: Transportable (Yes/No/Unknown)?

Regulated (Yes/No/Unknown)? Regulated by:

Tank/Container Capacity: Include Units (e.g. Gals/cu ft/liter/ton etc.) Amount in Tank: Include Units (e.g. Gals/cu ft/liter/ton etc.)

MATERIAL INVOLVED

Material	CHRIS Code	Release Amount	Units (i.e. Gals/cu ft/liter/ton etc.)

MATERIAL IN WATER INFORMATION

Amount in Water (Include Units): Body of Water Affected:

Offshore (Yes/No/Unknown) ? No River Mile Marker: Tributary of:

Water Supply Contaminated (Yes/No/Unknown) ? Water Temperature: (Fahrenheit/Celsius)

Wave Condition (e.g. Calm/Rough/Confused): N/A Speed: N/A (Knots/MPH) Direction: N/A

SHEEN INFORMATION

Sheen Length: Units: Sheen Width: Units:

Color: Direction of Movement:

Odor Description:

IMPACT INFORMATION

Medium Affected (Select one): Air/Land/Soil/Subsurface/Water/Rail Report/Ballast/Other/Unknown

Detailed Medium Information:

Fire? Yes/No/Unknown Fire Extinguished (Yes/No/Unknown) ?

Injuries? Yes/No/Unknown Number of Injuries?

Fatalities? Yes/No/Unknown Number of Fatalities?

Evacuations? Yes/No/Unknown Number of Evacuations?

Damages? Yes/No/Unknown Damage in Dollars:

Road Closed? Yes/No/Unknown Road:

Track Closed?	Yes/No/Unknown	Track:
Air Corridor Closed?	Yes/No/Unknown	Air Corridor:
Waterway Closed?	Yes/No/Unknown	Waterway:
Community Impact Due to Material? Yes/No/Unknown		Media Interest (High/Medium/Low/None):



A simpler form is in the Template as Attachment 4 (Table G-20)

WEATHER INFORMATION	
Weather Conditions (Describe):	Air Temperature: Fahrenheit/Celsius
Wind Speed: Unit: Knots/MPH	Wind Direction:
REMEDIAL ACTION INFORMATION	
Remedial Action Taken:	
Release Secured? Yes/No/Unknown	Duration of Release (Include Units e.g. Second/Minute/Week etc.):
Rate of Release?	Units: Per (Sec/Min/Hr/Day/Week etc.):
ADDITIONAL AGENCY INFORMATION	
Federal Agency Notified (name and time)	
State/Local Agency Notified (name and time):	
State/Local Agency On-Scene (name and time):	
Lead Agency's Report Number:	
ADDITIONAL INFORMATION	
Additional Information:	

Spill and Release Reporting

California Reporting

- ❖ Handler must, upon discovery, immediately report any release or threatened release of a hazardous material
 - Immediate reporting not be required if there is a reasonable belief that the release or threatened release poses no significant present or potential hazard to human health and safety, property, or the environment
- ❖ Must also report any amount of oil discharged to 'waters of the state'
- ❖ Report to:
 - CUPA
 - OES Warning Center
 - 911 (if necessary)



Spill and Release Reporting

California Reporting under APSA

- ❖ Spill or release of one bbl (≥ 42 gallons) of petroleum to 'waters of the state'
 - To OES and CUPA
- ❖ The regular Calif. Reporting should suffice.





Section 9

Tools and References

Cal/EPA APSA Fact Sheets and Info

www.calepa.ca.gov/CUPA/aboveground



**California Environmental
Protection Agency**
Unified Program
Fact Sheet
December 2007

Aboveground Petroleum Storage Act
Scope of CUPA Implementation

SUMMARY

The Unified Program Agencies (UPA's) have the responsibility and authority, to the extent provided by Chapter 6.67 and Sections 25404.1 and 25404.2 of the California Health and Safety Code, to implement and enforce the requirements of Chapter 6.67, the Aboveground Petroleum Storage Act (APSA). (*Health & Saf. Code § 25270.2*)

REQUIREMENTS OF APSA

1. Owner/Operator subject to Chapter shall: (*Health & Saf. Code § 25270.4.5(a)*)
 - A. Prepare a Spill Prevention Control and Countermeasure (SPCC) Plan in Accordance with U.S. Code of Federal Regulations, Title 40, Part 112 (40CFR112) (see Attachment 1 for SPCC plan requirements)
 - B. Conduct periodic inspections to assure compliance with 40CFR112 (Inspections, tests, and records)
 - C. Implement SPCC Plan in compliance with 40CFR112
2. An owner or operator of a tank facility that is exempt pursuant to subdivision 25270.4.5(b) shall take the following actions: (*Health & Saf. Code § 25270.4.5(b)*)
 - A. Conduct a daily visual inspection of any aboveground storage tank storing petroleum.
 - B. Allow the UPA to conduct a periodic inspection of the tank facility.
 - C. If the UPA determines installation of secondary containment is necessary for the protection of the waters of the state, install secondary means of containment for each tank or group of tanks where the secondary containment will, at a minimum, contain the entire contents of the largest tank protected by the secondary containment plus precipitation.
3. At least once every three years, the UPA shall inspect each storage tank or a representative sampling of the storage tanks at each tank facility that has a storage capacity of 10,000 gallons or more of petroleum. (*Health & Saf. Code § 25270.5*)
 - A. The purpose of the inspection shall be to determine whether the owner or operator is in compliance with the SPCC Plan requirements of the APSA.
 - B. The UPA may develop an alternative inspection and compliance plan, subject to approval by the Secretary for Environmental Protection (Secretary).

California Environmental Protection Agency
Unified Program Fact Sheet
Aboveground Petroleum Storage Act – Scope of CUPA Implementation

- C. An inspection conducted pursuant to this section does not require the oversight of a professional engineer.
- D. The person conducting the inspection shall meet both of the following requirements:
 - a. Complete an aboveground storage tank training program, which shall be established by the Secretary.
 - b. Satisfactorily pass an examination developed by the Secretary on the SPCC plan provisions and safety requirements for aboveground storage tank inspections.
4. On or before January 1, 2009, and on or before January 1 annually thereafter, each owner or operator of a tank facility subject to the APSA shall file with the UPA a tank facility statement. (*Health & Saf. Code § 25270.6(a)*)
 - A. An owner or operator of a tank facility that submits a business plan satisfies the requirement to file a tank facility statement.
5. Each year, commencing in calendar year 2010, each owner or operator of a tank facility who is subject to the requirements of subdivision 25270.6(a) shall pay a fee to the UPA, on or before a date specified by the UPA. (*Health & Saf. Code § 25270.6(b)*)
 - A. The governing body of the UPA shall establish a fee, as part of the single fee system implemented pursuant to Section 25404.5, at a level sufficient to pay the necessary and reasonable costs incurred by the UPA in administering the APSA, including, but not limited to, inspections, enforcement, and administrative costs.
 - B. The UPA shall also implement the fee accountability program established pursuant to subdivision (c) of Section 25404.5 and the regulations adopted to implement that program.
 - C. The UPA may provide a waiver of these fees when a state or local government agency submits a tank facility statement.
6. Each owner or operator of a tank facility shall immediately, upon discovery, notify the Governor's Office of Emergency Services and the UPA of the occurrence of a spill or other release of one barrel (42 gallons) or more of petroleum that is required to be reported pursuant to subdivision (a) of Section 13272 of the Water Code. (*Health & Saf. Code § 25270.8*)

CONTACT

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Guidance!



11-05 EPA Guidance

- ❖ Amended Feb & Mar 06
 - Will be updated in 2009 (?) to address 11-08 amendments
- ❖ A great compliance tool
- ❖ Includes sample SPCC Plans and Contingency Plans, etc.
 - Sample plans available in Word
 - www.epa.gov/oilspill
- ❖ Includes examples and diagrams
- ❖ On CD and at <http://www.epa.gov/emergencies/content/spcc/index.htm>



Office of Emergency Management
EPA 550-B-05-001



SPCC Guidance for Regional Inspectors

Version 1.0
November 28, 2005

U.S. Environmental Protection Agency
Office of Emergency Management
Regulation and Policy Development Division

The Oil Pollution Prevention regulation includes requirements for facilities to prepare, amend, and implement Spill Prevention, Control, and Countermeasure (SPCC) Plans to prevent discharges of oil to navigable waters and adjoining shorelines. The regulation allows flexibility in meeting some of the requirements. This document is designed to assist regional inspectors in implementing the SPCC program and in understanding its applicability.

TABLE OF CONTENTS

DISCLAIMER	vii
OIL PROGRAM CONTACTS	ix
ACRONYMS LIST	xiii
INTRODUCTION	1-1
1.1 SPCC Background	1-1
1.1.1 Purpose and Scope	1-1
1.1.2 Statutory Framework	1-2
1.2 Regulatory History	1-4
1.2.1 Initial Promulgation	1-4
1.2.2 SPCC Task Force and GAO Recommendations	1-5
1.2.3 Proposed Revisions	1-7
1.2.4 Final Rule Revision	1-8
1.2.5 Compliance Date Amendments	1-9
1.3 Revised Rule Provisions	1-9
1.3.1 Rule Organization	1-10
1.3.2 Summary of Major Revisions	1-11
1.4 Using This Guidance	1-12
APPLICABILITY OF THE SPCC RULE	2-1
2.1 Introduction	2-1
2.1.1 Summary of General Applicability	2-1
2.2 Definition of Oil and Activities Involving Oil	2-3
2.2.1 Animal Fats and Vegetable Oils	2-3
2.2.2 Synthetic Oils	2-3
2.2.3 Determination of "Oil" for Natural Gas and Hazardous Substances	2-4
2.2.4 Activities Involving Oil	2-5
2.3 "Non-transportation-related" Facilities – EPA/DOT Jurisdiction	2-6
2.3.1 Definition of Facility	2-6
2.3.2 Determination of Transportation-related and Non-transportation-related Facilities	2-8
2.3.3 EPA/DOT Jurisdiction Scenarios	2-9
2.4 Reasonable Expectation of Discharge to Navigable Waters in Quantities That May Be Harmful	2-12
2.4.1 Definition of "Discharge" and "Discharge as Described in §112.1(b)"	2-12
2.4.2 Reasonable Expectation of Discharge	2-13

2.4.3 Geographic Scope	2-14
2.4.4 Definition of "Navigable Waters"	2-15
2.5 Storage Capacity	2-16
2.5.1 Capacity Thresholds	2-16
2.5.2 Storage Capacity Calculation	2-16
2.5.3 Definition of Storage Capacity	2-17
2.5.4 Tank Re-rating	2-18
2.6 Exemptions to the Requirements of the SPCC Rule	2-18
2.6.1 Facilities Subject to Minerals Management Service Regulations	2-18
2.6.2 Underground Storage Tanks	2-19
2.6.3 Wastewater Treatment Facilities	2-20
2.7 Determination of Applicability by the Regional Administrator	2-21
2.8 SPCC Applicability for Different Types of Containers	2-23
2.8.1 Bulk Storage Container	2-23
2.8.2 Oil-filled Equipment	2-23
2.9 Determination of Applicability of Facility Response Plans	2-24
2.10 Role of the EPA Inspector	2-25

ENVIRONMENTAL EQUIVALENCE	3-1
3.1 Introduction	3-1
3.2 Substantive Requirements Subject to the Environmental Equivalence Provision	3-3
3.3 Policy Issues Addressed by Environmental Equivalence	3-4
3.3.1 Security	3-5
3.3.2 Facility Drainage	3-7
3.3.3 Corrosion Protection and Leak Testing of Completely Buried Metallic Storage Tanks	3-10
3.3.4 Overfill Prevention	3-11
3.3.5 Piping	3-12
3.3.6 Evaluation, Inspection, and Testing	3-15
3.4 Review of Environmental Equivalence	3-16
3.4.1 SPCC Plan Documentation	3-16
3.4.2 Role of the EPA Inspector	3-19

SECONDARY CONTAINMENT AND IMPRACTICABILITY DETERMINATIONS	4-1
4.1 Introduction	4-1
4.2 Overview of Secondary Containment Provisions	4-2
4.2.1 General Secondary Containment Requirement	4-8
4.2.2 Specific Secondary Containment Requirements	4-10
4.2.3 Role of the EPA Inspector in Evaluating Secondary Containment Methods	4-11
4.2.4 Sufficient Freeboard	4-12

4.2.5	Role of the EPA Inspector in Evaluating Sufficient Freeboard	4-16
4.2.6	Passive versus Active Measures of Secondary Containment	4-16
4.2.7	Role of the EPA Inspector in Evaluating the Use of Active Measures of Secondary Containment	4-20
4.2.8	"Sufficiently Impervious"	4-22
4.2.9	Role of the EPA Inspector in Evaluating "Sufficiently Impervious"	4-23
4.2.10	Facility Drainage (Onshore Facilities)	4-25
4.2.11	Role of the EPA Inspector in Evaluating Onshore Facility Drainage	4-27
4.3	Overview of the Impracticability Determination Provision	4-27
4.3.1	Meaning of "Impracticable"	4-28
4.4	Selected Issues Related to Secondary Containment and Impracticability Determinations	4-28
4.4.1	General Secondary Containment Requirements, §112.7(c)	4-29
4.4.2	Secondary Containment Requirements for Loading/Unloading Racks, §112.7(h)(1)	4-33
4.4.3	Secondary Containment Requirements for Onshore Bulk Storage Containers, §112.8(c)(2)	4-38
4.4.4	Secondary Containment Requirements for Mobile/Portable Containers, §112.8(c)(11)	4-39
4.4.5	Secondary Containment Requirements for Bulk Storage Containers at Production Facilities, §112.9(c)(2)	4-40
4.4.6	Secondary Containment Requirements for Onshore Drilling or Workover Equipment, §112.10(c)	4-41
4.5	Measures Required in Place of Secondary Containment	4-42
4.5.1	Integrity Testing of Bulk Storage Containers	4-42
4.5.2	Periodic Integrity and Leak Testing of the Valves and Piping	4-43
4.5.3	Oil Spill Contingency Plan and Written Commitment of Resources	4-43
4.5.4	Role of the EPA Inspector in Reviewing Impracticability Determinations	4-45
OIL/WATER SEPARATORS		5-1
5.1	Introduction	5-1
5.2	Overview of Provisions Applicable to Oil/Water Separators	5-2
5.3	Oil/Water Separators Used in Wastewater Treatment	5-5
5.3.1	Description of Oil/Water Separator Use in Wastewater Treatment	5-5
5.3.2	Applicability of the SPCC Rule to Oil/Water Separators Used for Wastewater Treatment	5-6
5.3.3	Wastewater Treatment Exemption Clarification for Dry Gas Production Facilities	5-8
5.4	Oil/Water Separators Used To Meet SPCC Secondary Containment Requirements	5-8
5.4.1	Description of Oil/Water Separators Used to Meet SPCC Secondary Containment Requirements	5-8
5.4.2	Applicability of the SPCC Rule to Oil/Water Separators Used to Meet Specific SPCC Secondary Containment Requirements	5-9
5.5	Oil/Water Separators Used in Oil Production	5-11

5.5.1	Description of Oil/Water Separators Used in Oil Production	5-11
5.5.2	Applicability of the SPCC Rule to Oil/Water Separators Used in Oil Production	5-13
5.6	Documentation Requirements and the Role of the EPA Inspector	5-15
5.6.1	Documentation by Owner/Operator	5-15
5.6.2	Role of the EPA Inspector	5-16

FACILITY DIAGRAMS

6.1	Introduction	6-1
6.1.1	Purpose	6-1
6.1.2	Requirements for a Facility Diagram	6-1
6.2	Preparing a Facility Diagram	6-2
6.2.1	Level of Detail	6-3
6.2.2	Facility Description	6-3
6.2.3	Oil Containers	6-3
6.2.4	Mobile or Portable Containers	6-4
6.2.5	Completely Buried Storage Tanks	6-4
6.2.6	Piping and Manufacturing Equipment	6-5
6.2.7	Use of State and Federal Diagrams	6-7
6.3	Facility Diagram Examples	6-7
6.3.1	Example #1: Bulk Storage and Distribution Facility	6-7
6.3.2	Example #2: Manufacturing Facility	6-11
6.3.3	Example #3: Oil Production Facility	6-13
6.4	Review of a Facility Diagram	6-16
6.4.1	Documentation by Owner/Operator	6-16
6.4.2	Role of the EPA Inspector	6-16

INSPECTION, EVALUATION, AND TESTING

7.1	Introduction	7-1
7.2	Inspection, Evaluation, and Testing Under the SPCC Rule	7-1
7.2.1	Summary of Inspection and Integrity Testing Requirements	7-2
7.2.2	Regularly Scheduled Integrity Testing and Frequent Visual Inspection of Aboveground Bulk Storage Containers	7-6
7.2.3	Brittle Fracture Evaluation of Field-Constructed Aboveground Containers	7-8
7.2.4	Inspections of Piping	7-9
7.2.5	Flowline Maintenance	7-10
7.2.6	Role of Industry Standards and Recommended Practices in Meeting SPCC Requirements	7-12
7.3	Specific Circumstances	7-16
7.3.1	Aboveground Bulk Storage Container for Which the Baseline Condition Is Known	7-16
7.3.2	Aboveground Bulk Storage Container for Which the Baseline Condition Is Not	

	Known	7-17
7.3.3	Deviation from Integrity Testing Requirements Based on Environmental Equivalence	7-19
7.3.4	Environmental Equivalence Scenarios for Shop-Built Containers	7-20
7.4	Documentation Requirements and Role of the EPA Inspector	7-22
7.5	Summary of Industry Standards and Regulations	7-24
7.5.1	API Standard 653 – Tank Inspection, Repair, Alteration, and Reconstruction	7-25
7.5.2	STI Standard SP-001 – Standard for the Inspection of Aboveground Storage Tanks	7-27
7.5.3	API Recommended Practice 575 – Inspection of Atmospheric and Low-Pressure Storage Tanks	7-29
7.5.4	API Recommended Practice 12R1 – Recommended Practice for Setting, Maintenance, Inspection, Operation, and Repair of Tanks in Production Service	7-30
7.5.5	API 570 – Piping Inspection Code: Inspection, Repair, Alteration, and Rerating of In-service Piping Systems	7-31
7.5.6	API Recommended Practice 574 – Inspection Practices for Piping System Components	7-32
7.5.7	API Recommended Practice 1110 – Pressure Testing of Liquid Petroleum Pipelines	7-33
7.5.8	API Recommended Practice 579, Fitness-For-Service, Section 3	7-33
7.5.9	API Standard 2610 – Design, Construction, Operation, Maintenance, and Inspection of Terminal & Tank Facilities	7-34
7.5.10	ASME B31.3 – Process Piping	7-35
7.5.11	ASME Code for Pressure Piping B31.4-2002 – Pipeline Transportation Systems for Liquid Hydrocarbons and Other Liquids	7-36
7.5.12	DOT 49 CFR 180.605 – Requirements for Periodic Testing, Inspection, and Repair of Portable Tanks and Other Portable Containers	7-37
7.5.13	FAA Advisory Circular 150/5230-4A – Aircraft Fuel Storage, Handling, and Dispensing on Airports	7-38
7.5.14	FAA Advisory Circular 150/5210-20 – Ground Vehicle Operations on Airports	7-38
7.5.15	Suggested Minimum Requirements for PE-Developed Site-Specific Integrity Testing Program (Hybrid Testing Program)	7-39

APPENDICES

Appendix A	Text of CWA 311(j)(1)(c)
Appendix B	Select Regulations - 40 CFR part 109, 110, and 112
Appendix C	Summary of Revised Rule Provisions
Appendix D	Sample Bulk Storage Facility SPCC Plan
Appendix E	Sample Production Facility SPCC Plan
Appendix F	Sample Contingency Plan
Appendix G	SPCC Inspection Checklists
Appendix H	Other Policy Documents

SPCC Plan Reminder

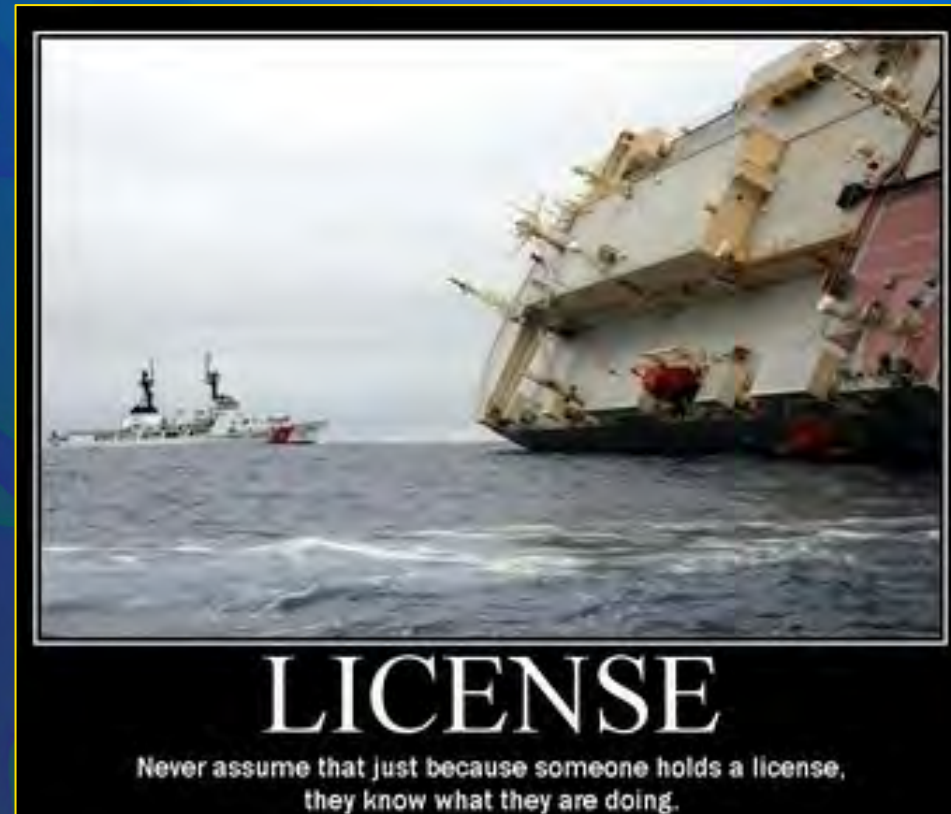
SPCC Plans are simply the documentation of compliance programs and procedures

- ❖ It's not just what you say... it's how you carry it out
- ❖ Operational personnel rarely read the Plan!

SPCC Plan has force of federal and Calif. regulations

The SPCC Plan is a living document

- ❖ The Plan and the SPCC program must be part of a Management of Change process



For the fourth year in a row, the Original Costume Contest at ESCI EnviroServices' annual Halloween party had no clear winner.

