

HOW TO PREPARE AND COMPLY WITH AN SPCC PLAN March 17, 2021

G-3/17
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23rd California Unified Program Annual
Training Conference
February 2 – March 18, 2021

POLL TIME #1!

- Have you taken one of Steve's "How to Prepare an SPCC Plan" class previously?
 - A. Yeah! It was great!
 - B. Yeah. It was... yeah, I took it.
 - C. Don't recall. All these classes blur together.
 - D. Nope. But I'm looking forward to it!
 - E. Nope. Wait... isn't Mark Howard teaching this? Nuts!





What's this class? SPCC Plan Development &

Compliance Tips

Class Objectives:

- > Provide facility owners & operators relatively simple methodology to develop (or have developed) decent SPCC Plans & determine if the Plan:
 - Is being implemented,
 - Could pass a CUPA inspection, and
 - Meets the intended oil spill prevention goal.





POLL TIME #2!

> Are you a:

- A. Regulated facility(ies)?
- B. Consultant?
- C. UPA APSA regulator or inspector?
- D. State/Fed (OSFM, CalEPA, US EPA)?
- E. Just sitting though this to get Uncle Steve's Irish Whisky recommendations





Introductions...





> Steve Lichten, ESCI EnviroServices, Inc.:

- 26 years in consulting (air, HW, water/ wastewater, emergency planning, etc.); SPCC Rule & Plan writer, auditor & trainer
- 13 years in industry (Hughes Aircraft EDSG, Hunt Wessson)

> Assistance/input from US EPA:

- Mark Howard: Office of Emergency Management HQ
- Janice Witul: Region IX Oil Program
- Pete Reich: Region IX Oil Program











CONSULTING

IF YOU'RE NOT A PART OF THE SOLUTION,
THERE'S GOOD MONEY TO BE MADE IN PROLONGING THE PROBLEM.

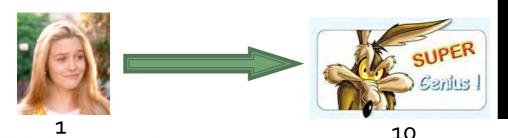
Class (my) Assumptions

- > You guys have already determined (or were told) that an SPCC Plan is required...and
- > You're either going to write the thing yourself
 - and/or want insight into assuring ongoing compliance
- > Or are going to hire a consultant to write it or otherwise help you comply
- > Or are a consultant and want to write better plans
 - Promising not to steal my clients or potential clients ©
- > Or are an inspector and want better insight into (APSA) Plan compliance



POLL TIME #3!

On a 1 to 10 scale —what's your experience with/ knowledge of SPCC rule and Plan requirements





EXPERIENCE

Is what people like to call their mistakes



POLL TIME #4

(choose all that apply)

- > I have written one or more of the following SPCC Plans:
 - A. USEPA Tier 1 template plan
 - B. OSFM Tier 2 template plan
 - C. Full non-qualified (PE certified) plan
 - D. Only the imaginary ones the voices in my head tell me to write



Helpful Tools

- > These can be a HUGE help in writing compliant Plans and ensuring compliance
- > On OSFM APSA web page:
 - CUPA Aboveground Storage Tank Inspection Checklists
 - Tier I, Tier II and Non-Qualified Facilities
- > UPA APSA inspection checklists
- > On USEPA web page:
 - SPCC Field Inspection Checklist for Onshore
 Facilities





$T \cdot O \cdot O \cdot L \cdot S$

THE ONLY TWO TOOLS YOU NEED ARE DUCT TAPE AND WD4O.

IF IT DOESN'T MOVE AND IT SHOULD, USE THE LUBE,

IF IT MOVES AND IT SHOULDN'T, USE THE TAPE

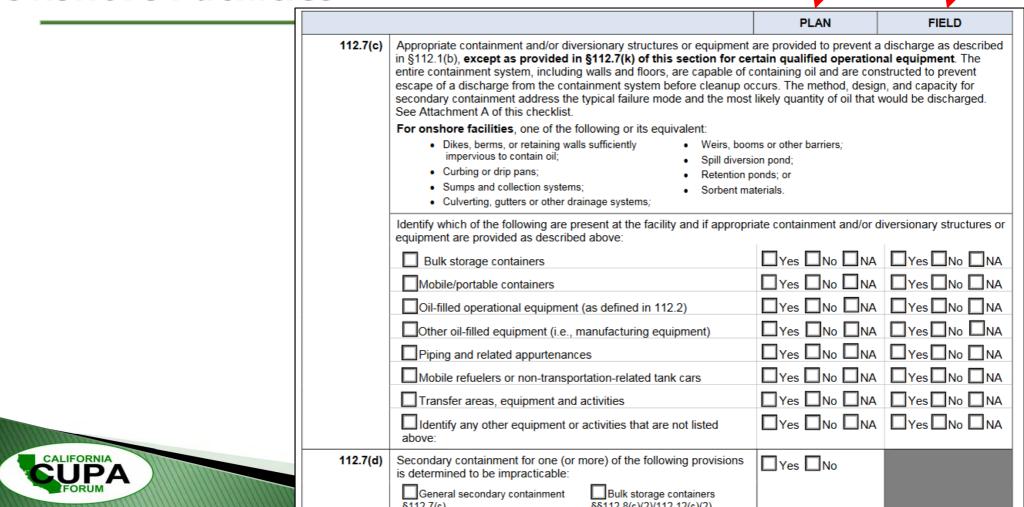
OSFM CUPA Aboveground Storage Tank Inspection Checklists

PA Addre PA City/S A Phone N	tate/ZIP]					N		Non	round Storage Tank Program i-Qualified Inspection Report MPLY/NOTICE OF VIOLATION
siness Name	2:							Date:	
dress Name								Inspecto	or Name:
pection Type	e: Routine							Report	Final
	olation Observed OUT = Or cted On Site RPT = Repeat			plian	ce l	1A =	Not A	pplicabl	e UD = Undetermined
Violation No	Program Requirement	NVO	TUO	NA	9	cos	RPT	Degree of Violation	Comments
	Requirem	ent t	o Pre	pare	and	Impl	emen	t (40 CFF	R 112.3)
4010003	Professional engineer has reviewed and properly certified the SPCC Plan - 40 CFR 112.3(d); HSC 6.67 25270.4.5(a)								
4010008	SPCC maintained onsite (If facility staffed 4 hrs/day) - 40 CFR 112.3(e)(1); HSC 6.67 25270.4.5(a)							None	
4010035	Facility meets the Tier I/II requirements - 40 CFR 112.3(g); HSC 6.67 25270.4.5(a)								
4010001	SPCC has been prepared and implemented - 40 CFR 112.3; HSC 6.67 25270.4.5(a)							None	
		SPC	C Am	end	ment	s (40	CFR	112.5)	
4010010	Facility has amended SPCC as necessary - 40 CFR 112.5(a); HSC 6.67 25270.4.5(a)							None	
4010009	5 year review performed on SPCC - 40 CFR 112.5(b); HSC 6.67 25270.4.5(a)							None	
	Gene	ral S	PCC	Req	uiren	ents	(40	CFR 112	.5 & 112.7)
4010014	Alternative environmental equivalence discussed in SPCC - 40 CFR 112.5(c), 112.7(a)(2); HSC 6.67 25270.4.5(a)							None	

Violation No	Program Requirement	NVO	DOUT	NA	g	cos	RPT	Degree of Violation	Comments
SPCC Requirements for Onshore Facilities (40 CFR 112.8)									
4010027	Facility draining adequately discussed - 40 CFR 112.8(b); HSC 6.67 25270.4.5(a)							None	
4030005	Valves used for drainage controlled to prevent a discharge - 40 CFR 112.8(b)(2); HSC 6.67 25270.4.5(a)							None	
4030008	Drainage from undiked areas or diversion systems designed to retain final discharge to facility - 40 CFR 112.8(b)(3), 112.8(b)(4); HSC 6.67 25270.4.5(a)							None	
4030009	Two lift pumps provided for more than one treatment unit - 40 CFR 112.8(b)(5); HSC 6.67 25270.4.5(a)							None	
4010029	Adequate discussion regarding bulk storage tanks located at the facility - 40 CFR 112.8(c); HSC 6.67 25270.4.5(a)							None	
4030012	Material and construction of all containers are compatible with the material stored - 40 CFR 112.8(o)(1); HSC 6.67 25270.4.5(a)							None	
4030010	Adequate secondary containment provided and maintained - 40 CFR 112.8(c)(2); HSC 6.67 25270.4.5(a)							None	
4030013	Containment systems are sufficiently impervious to contain oil - 40 CFR 112.8(c)(2); HSC 6.67 25270.4.5(a)							None	
4030011	Containment bypass valves closed when not draining rainwater - 40 CFR 112.8(c)(3)(i); HSC 6.67 25270.4.5(a)							None	
4030006	Run-off rainwater for diked areas is inspected - 40 CFR 112.8(c)(3)(ii); HSC 6.67 25270.4.5(a)							None	



USEPA SPCC Field Inspection Checklist for Onshore Facilities



		PLAN	FIELD			
(7)	Leakage through defective internal heating coils controlled:					
	 Steam returns and exhaust lines from internal heating coils that discharge into an open watercourse are monitored for contamination, <u>OR</u> 	Yes No NA	Yes No NA			
	 Steam returns and exhaust lines pass through a settling tank, skimmer, or other separation or retention system 	□Yes □No □NA	□Yes□No □NA			
(8)	Each container is equipped with at least one of the following for liquid level sensing:	□Yes □No □NA				
	signal at a constantly attended operation or and pumping stati surveillance station, or audible air vent in smaller • Fast response sys	code signal communication between container gauger ion; stem for determining liquid level (such as digital ulse, or direct vision gauges) and a person present to				
	High liquid level pump cutoff devices set to stop monitor gauges a	nd overall filling of bulk containers; or iid level sensing devices to ensure proper operation.				
(9)	Effluent treatment facilities observed frequently enough to detect possible system upsets that could cause a discharge as described in §112.1(b)	Yes No NA	Yes No NA			
(10)	Visible discharges which result in a loss of oil from the container, including but not limited to seams, gaskets, piping, pumps, valves, rivets, and bolts are promptly corrected and oil in diked areas is promptly removed	□Yes □No □NA	□Yes □No □NA			
(11)	Mobile or portable containers positioned to prevent a discharge as described in §112.1(b).	Yes No NA	Yes No NA			
	Mobile or portable containers (excluding mobile refuelers and other non-transportation-related tank trucks) have secondary containment with sufficient capacity to contain the largest single compartment or container and sufficient freeboard to contain precipitation	Yes No NA	Yes No NA			
112.8(d)/112.12	(d)Facility transfer operations, pumping, and facility process					
(1)	Buried piping installed or replaced on or after August 16, 2002 has protective wrapping or coating	Yes No NA	Yes No NA			
	Buried piping installed or replaced on or after August 16, 2002 is also cathodically protected or otherwise satisfies corrosion protection standards for piping in 40 CFR part 280 or 281	☐Yes ☐No ☐NA	Yes No NA			
	Buried piping exposed for any reason is inspected for deterioration; corrosion damage is examined; and corrective action is taken	□Yes □No □NA	□Yes □No □NA			

POLL TIME #5!

A. SPCC & APSA compliance means:

- Complying with the detailed rule requirements
- 2. Writing the descriptive facilityspecific SPCC Plan per the rule
- Assuring that the written Plan is consistent with field conditions at the facility
- 4. Implementing the Plan as written
- 5. All of the above... and then CDCDCDCDCDCDCDCDCDCCCC (& sometimes 1 & 2 again)



A Good SPCC Plan and APSA/SPCC Compliance Means...

- 1. Complying with the detailed rule requirements
 - Read the SPCC rule and APSA statute
 - Read the various guidance, FAQs, listen to CUPA classes if needed
 - Make sure you understand the requirements
- 2. Writing the descriptive facility-specific SPCC Plan per the rule
 - Write/read the Plan carefully (against a checklist helps)
 - Be sure the Plan:
 - a) Is complete
 - b) Addresses all relevant rule requirements
 - c) Is sufficiently detailed (to allow understanding and verification) and
 - d) Accurately matches the facility (tanks, containers, equipment, areas, operations, oils, etc.

A Good SPCC Plan and APSA/SPCC Compliance Means...

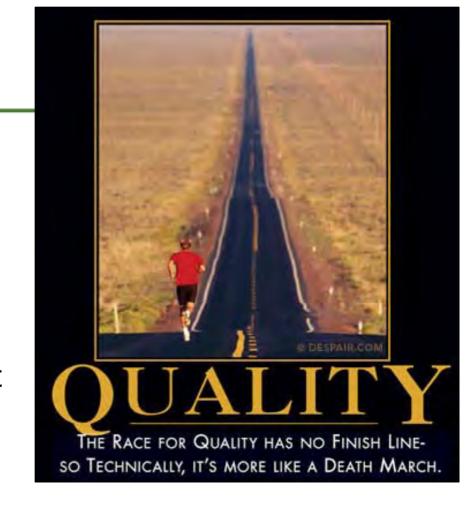
- 3. Assuring that the Plan is consistent with field conditions
 - Field verify that the Plan and the facility (areas, tanks, containers, locations, capacities, descriptions, measurements, etc. etc.) are consistent and current
- 4. Implementing the Plan as written
 - Periodically:
 - a) Field verify compliance with rule requirements and the Plan
 - b) Review training and inspections
 - c) Keep the Plan up to date



...Then Repeat

Rinse & repeat: keep doing
 34343434343434343434
 . (& sometimes 1 & 2 again)

THAT'S how you make sure you get a good SPCC Plan and assure ongoing compliance





Quick Note on Inspections & (gasp!!) Violations

- > Lots of specific requirements
 - Lots of potential compliance issues
- > Assume the facility will get inspected
- > Be prepared
 - Do your own Plan + implementation inspections
 - Not just tank inspections
 - Understand what violations have been found elsewhere



From the CalCUPA.org>about>what is a CUPA?
At page bottom are 6 videos, including the cool
"The SPCC Plan" video







CERS Business

Unified Program Violation Library

CERS Data Registry >> Unified Program Violation Library

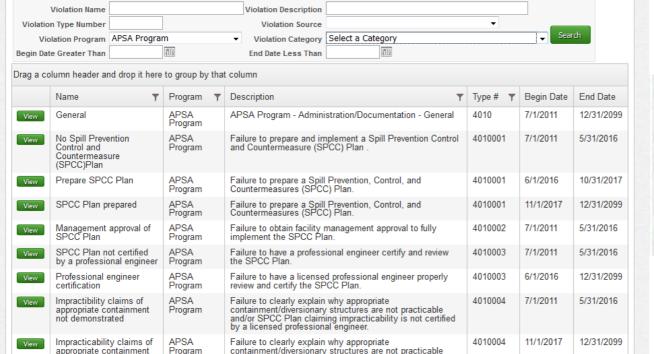


The Unified Program Violation Library is a repository of standard violation descriptions Unified Program Agencies (UPAs) may use in their field inspections, and must be used by Unified Program Agencies (UPA) when reporting violation detail data to the California Environmental Reporting System (CERS). UPAs must either report violation information directly into the CERS user interface or via machine-to-machine electronic data transfer (EDT). The violation library is reviewed and modified as

necessary on an annual basis, using the change management process. For more information about the Unified Program Violation Library please contact CalEPA Unified Program at CUPA@calepa.

The Unified Program Violation Library serves as a compilation of common violations for consistent reporting purposes only. The Unified Program Violation Library is not an exhaustive list of all violations and the inclusion, or non-inclusion, of any specific violation implies nothing and shall be construed as a policy statement, interpretation or guidance from CalEPA or any of its Boards. Departments or Offices. The Unified Program Violation Library is not a legal document containing any advice, and under no circumstances shall the State of California be liable for any actions taken or omissions made from reliance on any information contained herein

CERS Central Home Page



260 separate APSA violation 'types' listed

(can use this library as a compliance aid...though it's unwieldy for that)

View	Inadequate containment	APSA Program	Failure to provide appropriate secondary containment and/or diversionary structures or equipment for the following: bulk storage containers, mobile or portable containers, oil-filled equipment, piping	4030037	6/1/2016	10/31/2017
View	General containment	APSA Program	Failure to provide appropriate secondary containment and/or diversionary structures or equipment for the following bulk storage containers, mobile or portable containers, oil-filled equipment, piping	4030037	11/1/2017	12/31/2099
View	Implementation of SPCC Plan	APSA Program	Failure to implement the SPCC Plan	4030038	11/1/2017	12/31/2099
View	Implement SPCC Plan	APSA Program	Failure to implement the SPCC Plan	4030038	6/1/2016	10/31/2017
View	Implement SPCC Plan amendments	APSA Program	Failure to implement SPCC plan amendments within 6 months.	4030039	6/1/2016	10/31/2017
View	Implementation of SPCC Plan amendments	APSA Program	Failure to implement SPCC Plan amendments within 6 months.	4030039	11/1/2017	12/31/2099
Vierr	Spill prevention briefings	APSA Program	Failure to conduct spill prevention briefing for oil-handling personnel at least once a year to assure adequate understanding of the SPCC Plan.	4030040	11/1/2017	8/31/2019
Ven	Conducting spill prevention briefings	APSA Program	Failure to conduct spill prevention briefing for oil-handling personnel at least once a year to assure adequate understanding of the SPCC Plan.	4030040	6/1/2016	10/31/2017
Vew	Tier I - Bulk storage container sized secondary containment	APSA Program	Failure to provide bulk storage containers with adequate secondary containment large enough to contain the entire capacity of the largest container plus additional capacity to	4030041	11/1/2017	12/31/2099





Common APSA Violations

Presented by:

Sande Facinelli, San Diego County CUPA Devra Lewis, Contra Costa County CUPA

February 10, 2021



23rd California Unified Program Annual Training Conference February 2 – March 18, 2021



UPA APSA Inspection

- Determine if facility is in APSA Program
 - Facility required to have an SPCC Plan
- Has an SPCC Plan been prepared
- Does SPCC Plan meet requirements
- Is SPCC Plan implemented
- Has the SPCC Plan been updated to reflect changes



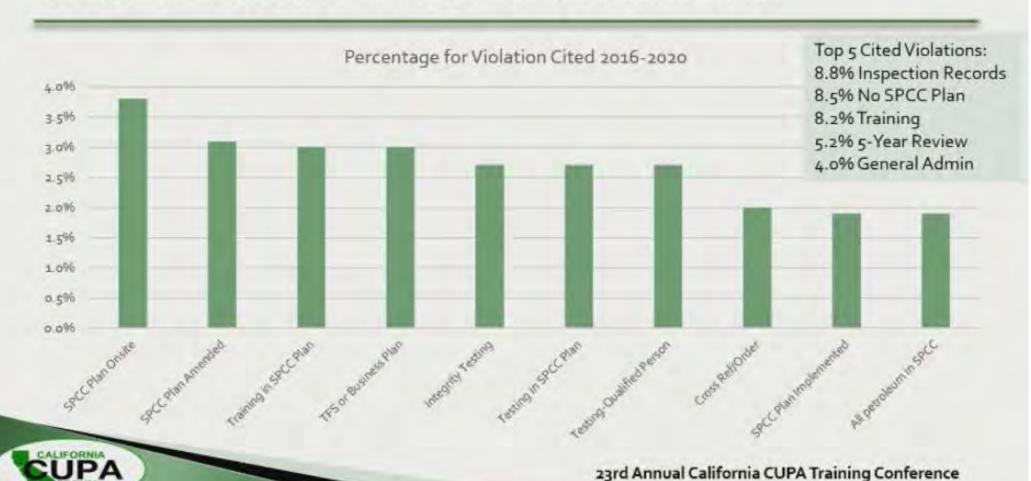
Top 5 APSA Violations Cited 2013-2020





February-March 2021

Other Common Cited Violations



POLL TIME #6

> I'm pretty confident regarding what category of SPCC Plan my (or subject) facility requires (Tier 1, 2

or PE-certified, etc.)

A. Yep

B. Nope

C. I thought I was





Nest Major Chunk o' Class

- Plan/Facility 'Type' Refresher
- 2. SPCC Rule Summary
- 3. SPCC Plan Element/Content Summary

> Ton of photos & examples of good/bad Plan contents, etc.



First Things First

APSA Applicability

4010001 SPCC has been prepared and implemented - 40 CFR 112.3; HSC 6.67 25270.4.5(a)							
--	--	--	--	--	--	--	--

> Determine if you *need* an SPCC Plan (APSA-req'd):

You are a 'Tank Facility'... i.e. one or more aboveground tanks (or containers) \geq 55 gal. capacity storing petroleum (includes tanks in underground areas) AND

1. Are subject to the 40 CFR 112 oil spill prevention rule (for petroleum)

- Stores, processes, transfers, distributes, uses, or consumes, etc. oil and oil products; and
- Is non-transportation-related (i.e. facility is not exclusively covered by DOI or DOT); and
- Can reasonably be expected to discharge oil in quantities that may be harmful
 into or upon the navigable waters of the U.S. or adjoining shorelines; and
- Meets capacity thresholds (aboveground storage > 1,320 gal. aggregate (containers > 55 gal.); or Completely buried > 42,000 gal.



APSA Applicability (2)

OR...the Tank Facility:

- 2. Has a total storage capacity of 1,320 gallons or more of petroleum
 - Aggregate total of all aboveground storage tanks (including TIUGAs)
 with a <u>shell</u> capacity of 55 gallons or more of <u>petroleum</u>
 - Include tanks, containers & oil-filled equipment (and tiny TIUGAs < 55 gallon capacity not meeting tiny TIUGA exemption conditions)
- > APSA exempt/excluded tanks
 - Exempt tanks are not CUPA regulated under APSA
 - Do not count for APSA facility petroleum capacity



APSA Applicability (3)

OR...the Tank Facility:

- 3. Has a total storage capacity of LESS than 1,320 gallons of petroleum AND has one or more TIUGAs
 - Except for exempt TIUGAs
 - Portable (e.g. drums)
 - Hydraulic system tanks
 - Heating oil tanks
 - Sump, separator, etc.
 - Exempt "tiny" TIUGAs (< 55 gal.)
 - Secondary containment,
 Monthly inspections with re-
 - Monthly inspections with records





Three 'Types' of APSA Facilities:

Tier I & Tier II Qualified Facilities... and Non-Qualified

> Type of Plan and some compliance requirements vary

1. Tier I Qualified Facilities

- Can use the US EPA SPCC Plan template to prepare their site-specific SPCC Plan, with self-certification by facility
 - Enhanced compliance flexibility... but engineering restrictions

2. Tier II Qualified Facilities

- Prepare 'regular' site-specific SPCC Plan or can use the OSFM Tier II Template, both with self-certification by facility
 - Some compliance flexibility... but engineering restrictions

3. Non-Qualified Facilities

Prepare 'regular' site-specific SPCC Plan, with Registered Professional Engineer
review & certification

Tier I & II Initial Criteria

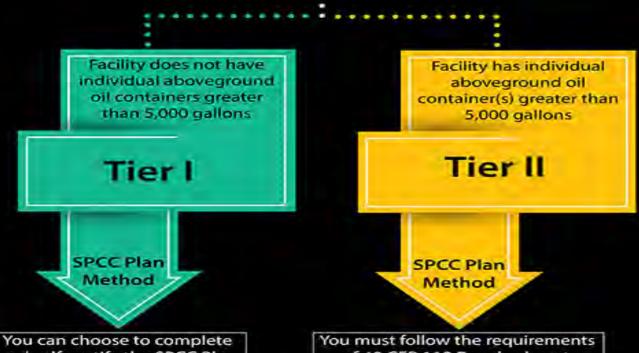
Facilities total aboveground oil storage is <10,000 gallons.

AND

Niether of the following events have occured at facility within prior 3 years:

1 discharge of oil to navigable waters or adjoining shorelines > 1,000 gallons
OR

2 discharges of oil to navigable waters or adjoining shorelines each > 42 gallons within any 12-month period.



and self-certify the SPCC Plan template found in Appendix G of the SPCC rule.* ou must follow the requirements of 40 CFR 112.7 and subparts B or C of the SPCC rule, but you can self-certify the plan.*

*NOTE: Please note that some states do not allow self-certification.



SPCC rule, and have the SPCC Plan certified by a

Professional Engineer

40 CFR 112 Structure and Provisions Applicable to APSA Tank Facilities

Regulation	Topics					
Subpart A 40 CFR 112.1 - 112.7	Applicability, definitions, and general requirements for all facilities, and SPCC Plan elements					
Subpart B 40 CFR 112.8 40 CFR 112.911	Requirements at on-shore non-oil productionbulk storage facilities, on-and off-shore oil production, drilling, etc. facilities and non-petroleum oils, except those covered in Subpart C					
Subpart C 40 CFR 112.12	Requirements for animal fats and oils and greases, and fish and marine mammal oils; and vegetable oils, including oils from seeds, nuts, fruits, and kernels					
Subpart D 40 CFR 112.20	Response requirements (FRP rule)					

Sections relevant to APSA: 40 CFR 112.1 through 112.8, and 112.20(e)



40 CFR 112 Structure (as applicable to APSA)

(container = tank)

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General applicability of the rule
§112.1
          Definitions of terms used in the rule
§112.2
          Requirement to prepare an SPCC Plan
§112.3
          Amendment of SPCC Plan by EPA Regional Administrator
§112.4
          Amendment of SPCC Plan by owner or operator
§112.5
§112.6
          Qualified Facilities [Tier 1 and Tier 2] – (2006 amendment)
§112.7
          General requirements of all facilities
§112.8 - .12 Additional specific requirements for 'bulk containers'
          and certain bulk container facilities
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SPCC 101



40 CFR Part 112 Short Course

2/24/2021 8-12 PST

2021 CUPA Annual

Training Conference

Mark W. Howard-HQ

Janice Witul-R9

Peter Reich-R9

USEPA







Guidance — Very helpful for deeper rule understanding

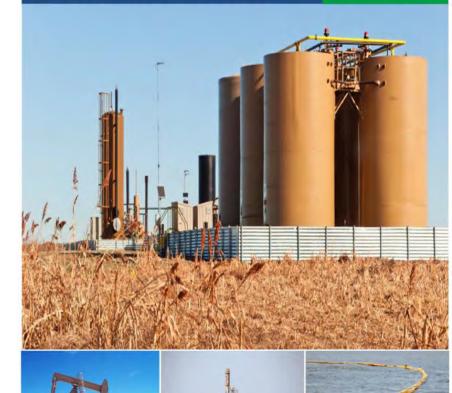
USEPA SPCC Guidance for Regional Inspectors

- Examples/scenarios, references, tables, explanations, etc.
- Much more comprehensive appendices and references
- A must read!
- ...and OSFM APSA FAQ and other info
 - See the 2021 APSA Refresher course



Office of Emergency Management

December 16, 2013





SPCC Rule vs SPCC Plan







- > Federal SPCC rule is applicable to California facilities
 - The rule (40 CFR 112.1 112.8) contains "performance-oriented" and some prescriptive requirements & specifications for:
 - 1. <u>Engineering</u>-based spill prevention
 - > Containment, discharge controls/valves, overfill prevention, etc.
 - 2. <u>Procedure-based spill prevention/response</u>
 - > Inspections, overfill prevention, containment drainage, leak correction, spill response, etc.
 - 3. Administrative-based spill prevention
 - > Training, management review & certification, recordkeeping, etc.



Plan Writing

- > The plan<u>ning</u> is a critical part of SPCC Plan compliance
- The state of the s
- Whether the Plan is self-written or turfed out to a consultant
 - Facility personnel MUST be closely involved in the Plan development
- For all of the following rule requirements, the Plan should clearly (and accurately) describe <u>how</u> the facility is meeting each requirement
- Even the QF template Plans...they need to represent thought and knowledge of facility tanks/containers, operations and maintenance programs



1. Engineering-based spill prevention (112.6, .7 & .8)

- Performance-oriented design requirements or options for most of the following
- > Secondary containment & containment impermeability
 - > Bulk storage containment: specification standard
 - > General containment: performance-oriented standard
- > Discharge controls (drainage valves)
- Compatibility with materials stored and conditions
- > Engineer or update each container installation in accordance with good engineering practice
- Security of oil handling equipment & areas







- > ...requirements & specifications for:
 - 2. Procedural-based spill prevention (112.6, .7 & .8)
 - Most are also performance-oriented
 - > Inspections of tanks, containers, piping, valves, and other oil handling areas (and written inspection frequency and procedures)
 - > Integrity testing of tanks and containers (and written testing frequency and procedures)
 - > Overfill prevention (written) procedures

TANK	(#AST#1	TYPE: UL-2015 Steel	PRODUCT STOR	ED: DI	esel l	Fuel	TANK CAPACITY: 8,000 gallons		
		Item	Statu	s			Item	Status	
1.0		(roof, shell, heads, bottom, tings, valves, etc.) free of visib	e DYes D	J No*	-	Is the containment/interstitial monitoring equipment in good working condition, and is the secondary containment free of any liquid? On the tank Veeder-Root panel on the extenor Biog. E wall across from the tank, open the weather box cress the "function" puttor until			
2.0	tank and insper	Il box on the southeast side of ct for accumulations of diesel. se clean and dry.		No*				2.00	
3.0 Is the tank exterior, and all exposed piping free of damage, distortion, corrosion?		of 🗆 Yes 🗆	No*	14.0	display shows *Louid Status*, then press *Print* button. If printout shows *Fuel Alarm* or *Sensor*		□ Yes □ No		
4.0	fittings, pumps,	ections to the tank (including v transitions to double-wall, etc? Note: If "No", identify location	ree containment space and is a sign that the primar		stainment space and is a sign that the primary is has leaked into the containment space, or b0 ter is present, or c) if 'Sensor Out', the leak				
5.0	Is the tank exterior free of visible signs of coating failures/degradation?		ing DYes D	No*		Press th	Is the primary tank free of water? Press the 'Print' button, Look at the printout, the printout		
6.0	supports and o	ounts, brackets, mounting bolt oncrete base/foundation free c ing, corrosion and in good con	□ Yes □	J No*	15.0	reading box. If a	v inches of water at the bollom of the tank, if any other than 'Water = 0.00 Inches', check the No water check has not been conducted this month that box.	☐ Water ohed	
7.0	damage, cracking, corrosion and in good condition? Is the tank liquid level gauge legible and in good working condition (check the Morrison clock gauge on the top of the tank; gauge indicates level of liquid in feet and inches)? The gauge reading should be consistent with the liquid height reading on the Veeder Root crinitout (see 15.0)		auge f □ Yes □ ding	J No*	16.0	show a or red a Functio	The Veeder Root control panel display should show a green power light and no amber warning or red alarm light. The displat should read "All Functions Normal" Press the RED ("Alarm" Teef button. The yellow and red lights should light.		
8.0	dispenser area containment di	and the tank and around loadir s (concrete and asphalt surfac ke, etc.) free of visible signs of any used absorbent been clear	es.	J No*	17.0	· Pre 'Ad hor	the overfill/high level alarm light and horn and to the left of the Veeder Root box), ses the Teet button on the right side of the knowledged box. Does it activate the audible in and light to confirm operation?	□ Yes □ No¹	
9.0	(NFPA, hazard	els and signs intact and reada wording, warnings, emergence d contact numbers etc.)?		No*	18.0	level at	Veeder Root monitoring panel and high- arm on Bldg. E exterior wall labels and stact and readable?	□ Yes □ No¹	
10.0	connections in	nd dispensers, and all break-a good condition, undamaged a nozzles up off the ground?		J No*	19.0	Assemble condition (absorbed DDE attalyments)		□ Yes □ No	
11.0	Look at visible high level and interstitial leak detection sensor wiring and connections on top of tank (N side): Are they in good condition & intact?			No*	20.0	vents o	osely at the two black, round emergency in top of the tank. Are they unobstructed e of debris (such as bird nests, etc.)?	☐ Yes ☐ No¹	
12.0		gs properly sealed? Caps and nctional fittings, hardware and	□ Yes □	J No*	21.0	and is t	a fire extinguisher in the immediate area, the inspection tag current (monthly check?)	☐ Yes ☐ No*	
13.0.	Are the two cor in good working	ncrete dike drain valves closed g condition?	and	J No*	22.0	address	re other conditions that should be sed for continued safe operation or that fect the site SPCC plan?	☐ Yes ☐ No	

SEE DEVEDSE FOR INSPECTION CHIDANCE

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-		







23rd Annual California C

- > ...requirements & specifications for:
 - 2. <u>Procedural</u>-based spill prevention (continued)
 - Most are also performance-oriented
 - Drainage of containment areas (and written procedures)
 - > Prompt correction of visible leaks and prompt removal of discharge accumulations
 - > Discharge notification and response
 - Countermeasures for discharge discovery,response and cleanup





> ...requirements & specifications for:

3. Administrative spill prevention

(112.3, .4, .5, .6, .7 & .8)

- > Regular, documented SPCC Plan review
 - And amendment if necessary within a specified timeframe
- Facility management review and certification of SPCC Plan
- > Training of oil handling personnel
- ➤ Maintaining records of containment drainage events, inspections and integrity tests
- Emergency contact lists (facility, agency and contractor)





Ten Minute Break!



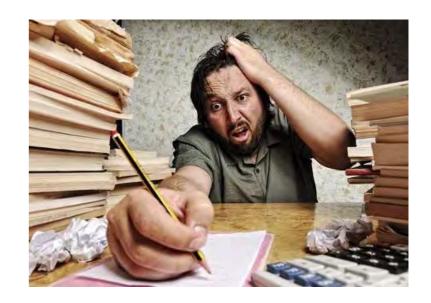


POLL TIME #7!

> Anybody (<u>any</u>body, regardless of qualifications or knowledge) may write/prepare an SPCC Plan

(template or full plan [though a PE must certify the full plan]).

- A. Fact
- B. Crap





I.N.O.M.

- > Standards for Plan authorship?
 - · Quality, clarity, detail, organization, etc.
- No <u>rule-required</u> pre-demonstration or proof of ability, achievability or feasibility
 - Have you *READ* your Plan?
- > The facility and its personnel must be able to comply with the rule and implement whatever is written into the Plan
 - Do you fully understand what's being required by the rule and the facility's Plan?
 - And the consequences of failure to implement (e.g. spill control)
 - Do not be afraid (or too cheap) to amend the Plan to better ensure ongoing compliance





Performance-Oriented, part deux

- Mostly up to the facility to determine the appropriate, site-specific means of rule compliance
 - Rule places faith in the certifying management or PE's judgment, compliance evaluations & determinations
 - Rule places responsibility for implementation and accuracy on the facility owner/operator
- > Say what you're gonna do
- > ...and be sure you can actually do what you say you're gonna do!
 - Don't just parrot the rule requirement without being able to comply
 - Same with blindly checking the affirmation check boxes on the template



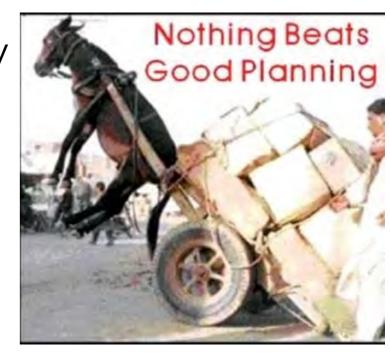
Sufficient Content & Detail in the Written SPCC Plan?

- > Rule requires certain content in the Plan
 - though the level of detail is somewhat subjective
- > Plan must <u>describe</u>
 - oil handling operations,
 - spill prevention practices,
 - containment,
 - discharge or drainage controls,
 - and the personnel, equipment and resources at the facility that are used to prevent oil spills from reaching navigable waters or adjoining shorelines
 - APSA...from impacting the environment/state resources



Sufficient Content & Detail in the Written SPCC Plan?

- In other words: Completely describe the measures in place at that facility to comply with <u>each</u> 40 CFR 112 rule requirement
- > For the Qualified Facility template plans:
 - Pre-printed summary description of compliance requirements and associated check-the-box compliance affirmations
 - Fill-in-the-blank narrative sections
 - Fill-in-the-table tables





Example from Tier 1 Template

- G-5: Inspections, Testing, Recordkeeping& Personnel Training
 - Affirmation of inspection & testing program
 - Required description of the inspection and testing program for bulk tanks/containers & piping
 - Requirement for written inspection & testing procedures
 - Recordkeeping requirements
 - Training requirements
 - Required name/title



	.12(c)(6) and (d)(4)):	
An inspection and/or testing this facility. [§§112.8(c)(6) are The following is a description	G-5 Inspections, Testing, Recordkeeping and Personnel Training program is implemented for all aboveground bulk storage containers and piping at $nd(a)(4)$, $112.9(c)(3)$, $112.12(c)(6)$ and $(a)(4)$] no of the inspection and/or testing program (e.g. reference to industry standard thirzed inspection or test, and person conducting the inspection for all all veground bulk st	torag
→		
Records of inspections and t this paragraph. [§112.7(e)]	ds are conducted in accordance with written procedures developed for the facility. tests kept under usual and customary business practices will suffice for purposes of	С
Records of inspections and t this paragraph. [§112.7(e)] A record of the inspections a		
Records of inspections and t this paragraph. [§112.7(e)] A record of the inspections a [§112.7(e)] [See Inspection Inspections and tests are sig	tests kept under usual and customary business practices will suffice for purposes of and tests are kept at the facility or with the SPCC Plan for a period of three years. Log and Schedule in Attachment 3.1] and by the appropriate supervisor or inspector. [§112.7(e)]	
Records of inspections and to this paragraph. (§112.7(e)) A record of the inspections a (§112.7(e)) [See Inspection Inspections and tests are sig Personnel, training, and di Oil-handling personnel are tr discharge procedure protoco	tests kept under usual and customary business practices will suffice for purposes of and tests are kept at the facility or with the SPCC Plan for a period of three years. Log and Schedule in Attachment 3.1] and by the appropriate supervisor or inspector. [§112.7(e)] scharge prevention procedures [§112.7(f)] ained in the operation and maintenance of equipment to prevent discharges; applicable pollution control laws, rules, and regulations; general facility	
Records of inspections and this paragraph. [§112.7(e)] A record of the inspections a [§112.7(e)] [See Inspection Inspections and tests are sig Personnel, training, and di Oil-handling personnel are tr discharge procedure protoco operations; and, the contents	tests kept under usual and customary business practices will suffice for purposes of and tests are kept at the facility or with the SPCC Plan for a period of three years. Log and Schedule in Attachment 3.1] and by the appropriate supervisor or inspector. [§112.7(e)] ischarge prevention procedures [§112.7(f)] ained in the operation and maintenance of equipment to prevent discharges;	[
Records of inspections and this paragraph. [§112.7(e)] A record of the inspections a [§112.7(e)] [See Inspection Inspections and tests are sig Personnel, training, and di Oil-handling personnel are tr discharge procedure protoco operations; and, the contents A person who reports to facil	tests kept under usual and customary business practices will suffice for purposes of and tests are kept at the facility or with the SPCC Plan for a period of three years. Log and Schedule in Attachment 3.1] gned by the appropriate supervisor or inspector. [§112.7(e)] ischarge prevention procedures [§112.7(f)] aimed in the operation and maintenance of equipment to prevent discharges; obs; applicable pollution control laws, rules, and regulations; general facility is of the facility SPCC Plan. [§112.7(f)]	

Whether Writing the Plan, or Verifying the Plan is Complete

- > Side by side comparison with the rule and the appropriate checklist
- > Required
 - Plan follows sequence of 40 CR 112 rule OR must have rule vs Plan cross reference (cross walk)
- Recommended (by Uncle Steve)
 - Detailed Table o' Contents
 - Similar section headings as the rule...and include the rule cite
 - Make sure you can locate in your Plan where it addresses ALL relevant rule requirements
 - Rule/checklist then finding it in the Plan body & appendices
 - Not just rule/checklist then just looking at a Plan Table o' Content (i.e. don't assume)



Tier Template Completeness?

- Make sure all the applicable checkboxes are checked
- Make sure the narrative sections and Tables are completed
 - Same note re details and rule specifics apply!
 - Narrative sections need to include the rule-required (and instructionsspecified) content



Table G-5 Inspections, Testing, Recordkeeping and Personnel Training	
An inspection and/or testing program is implemented for all aboveground bulk storage containers and piping at this facility. [SS112.8(c)(6) and (d)(4), 112.9(c)(3), 112.12(c)(6) and (d)(4)]	V
The following is a description of the inspection and/or testing program (e.g. reference to industry standard utilize scope, frequency, method of inspection or test, and person conducting the inspection) for all aboveground bulk containers and piping at this facility:	
Industry Standard Reference:	
Steel Tank Institute SP-001 (integrated into US EPA's Tier I SPCC Plan Template).	
Scope:	
Inspection of the following for damage, deterioration, corrosion, or visible oil discharges/accumulations: > Tank/container exterior surfaces; supports & foundations; visible fittings, seams, valves and/or closures; co	
visible piping and fittings/supports; visible secondary containment areas (or via containment monitor); overfill pre (liquid level sensing) devices or systems; containment drainage valves (for proper closure).	evention
Schedule:	
> Weekly for hazardous waste oil drums	
> Monthly for all other tanks and drums	
> Within 7 days following any material repairs to tanks	
Method of Inspection or Test:	
Visual inspection by trained facility personnel using detailed inspection log sheet.	
Person Conducting Inspections or Testing:	
Designated facility personnel trained in the SPCC Plan; inspection/testing procedures, methods and scope; corr action requirements; general recordkeeping and inspection record requirements.	ective
Records:	
Records. Records of inspections and testing are signed by the inspector or supervisor and retained in facility files for at le	not 3
years.	351.0
Inspections, tests, and records are conducted in accordance with written procedures developed for the facility. Records of inspections and tests kept under usual and customary business practices will suffice for purposes of this paragraph. [§112.7(e)]	7
A record of the inspections and tests are kept at the facility or with the SPCC Plan for a period of three years. [§112.7(e)] [See Inspection Log and Schedule in Attachment 3.1]	V
Inspections and tests are signed by the appropriate supervisor or inspector. [§112.7(e)]	V
Personnel, training, and discharge prevention procedures [§112.7(f)]	1
Oil-handling personnel are trained in the operation and maintenance of equipment to prevent discharges, discharge procedure prepared in the operation and maintenance of equipment to prevent discharges, discharge procedure prepared in the operation and maintenance of equipment to prevent discharges, discharge procedure prepared in the operation and maintenance of equipment to prevent discharges, discharge procedure prevent discharges, discharges procedure procedu	V
operations; and, the co Sample for Class	V
A person who reports to maining management to designate a and accountable for discharge prevention.	17.
A person who reports t o ratinity management is designated and accountable for disonarge prevention. [§112.7(f)]	100
[§112.7(f)]	V

ISee Oil-handling Personnel Training and Briefing Log in Attachment 3.

Key Elements of SPCC Plans

- Facility diagram and description of the facility and oil tanks,
 oil-filled equipment, handling/transfer areas
 - Tier 1 template has a table for listing stuff and no diagram required
- > Oil discharge predictions (failure analysis)
- > Description of the secondary containment or diversionary structures or equipment, and discharge/drainage controls
 - Tier 1 template has a check-box affirmationSized for bulk containers/tanks
 - General for all other oil handling/using equipment, systems, handling
 & transfer areas



Key Elements of <u>SPCC Plans</u>

- Description of facility drainage/ discharge and drainage controls
 - Tier 1 checkbox; ; Tier 2 template needs a narrative
- Description of site/oil area security
- Procedures & schedules for tank & equipment inspections and integrity testing
- > Description of overfill prevention systems and methods
 - Teir 1 & 2 checkbox
- Procedures for routine oil handling & transfers



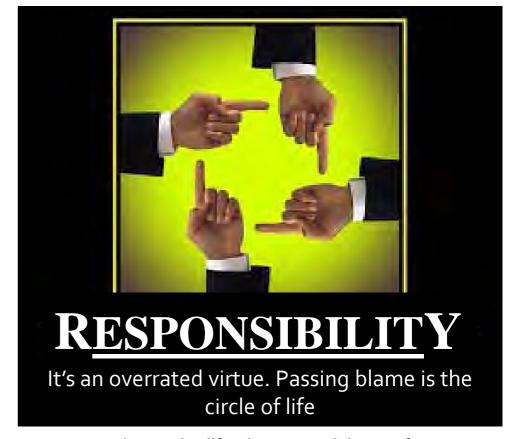
Key Elements of SPCC Plans

- Description of and procedures for tank car & tank truck loading/unloading racks
- Description of personnel training and annual oil discharge prevention briefings
 - Tier 1 & 2 checkboxes
- > Description of how required records will be kept
 - Tier 1 & 2 checkboxes
- > Description of the required five-year Plan review by facility
 - Tier 1 & 2 checkboxes



Key Elements of SPCC Plans

- Management approval and commitment
- Plan certification by a
 Professional Engineer (PE) or facility O/O (for Qualified Facilities)





Plan Complete?? > This Plan is VERY short on

■		/ 11115 1 Tall 15 V E1X 1 51101 C 511		
TABLE OF CONTENTS	detail and does not have			
I. Introduction	1	specific elements required		
II. Professional Engineer Certification	2	by the rule		
III. Facility Identification	3	by the role		
IV. Oil Spill History				
V. Fuel Storage Equipment.	INSPECT	IONS		
VI. Containment Conformance	As part of	the ongoing administration of the SPCC Plan, an inspection of the faci	lity's fu	
VII Spill Prevention	Checklist	k system must be conducted on a monthly basis using the Facility I provided in Appendix A. A written copy of this inspection checklist	nspectio	
VIII Inspection and Training	maintained	with the plan at the facility for a period of three years.	must	
IX SPCC Plan Revisions		1 Property of the second of th		
Appendix A: Facility Inspection Checklist	10			
Appendix B: Facility Maps	Appropri	ate qualifications for personnel performing tests and	No	
Figure 1 - Topographic Map Figure 2 - Facility Drawing		ns are identified in the Plan and have been assessed lance with industry standards		
Appendix C: Spill Response Procedures		uency and type of testing and inspections are	No	
Appendix D: Spill Response Contact List		nted, are in accordance with industry standards and		
Appendix E: Certification of the Applicability of Substantial Harm	take into	account the container size, configuration and design		
Appendix F: Rainwater Inspection And Drainage Report	17			

More Complete (and easier to compare to rule and checklists)

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February-March 2021	
i Ebioaiy-Maich 2021	

Complete (and narrative text contains the specific descriptions/content

required by the rule)

Relevant Industry Standards

The bulk containers Wind Farm subject to integrity testing are all shop-fabricated tanks, are of maximum 350 gallon capacity, and equipped with secondary containment and continuous release detection means. None are partially buried. The portable containers are constructed of steel, and equipped with secondary containment and continuous release detection means.

After taking into account the size, configuration, and design of the bulk tanks and containers, the reviewing/certifying professional engineer and Wind Farm has determined that most relevant industry standard for integrity testing of the steel tanks and containers is the Steel Tank Institute (STI) "Standard for the Inspection of Aboveground Storage Tanks" SP001, 5th Edition.

Qualifications for Personnel Performing Tests and Inspections

As required STI SP001 Sections 6.2 and 4.1, the F Vind Farm personnel performing the inspections (the 'tank owner's inspector') possess the following qualifications:

- Knowledge of storage facility operations;
- Knowledge/familiarity of the types of containers and tanks and their associated components; and
- The characteristics of the liquids stored.

Additionally, inspection personnel also possess knowledge of inspection procedures, inspection criteria and corrective action requirements. Facility inspection personnel have received training in inspection requirements.



Read the Rule... don't skim

> Some sections direct you to discuss, describe or 'address' your facility's compliance:

§112.7 General requirements for Spill Prevention, Control, and Countermeasure Plans.

paragraphs, and must explain separately the details of installation and operational start-up. As detailed elsewhere in this section, you must also:

(a)(1) Include a discussion of your facility's conformance with the requirements listed in this part.

(3) Describe in your Plan the physical layo

You must also address in your Plan:

- (ii) Discharge prevention measures including procedures for routine handling of products (loading, unloading, and facility transfers, etc.);
- (iii) Discharge or drainage controls such as secondary containment around containers and other structures, equipment, and procedures for the control of a discharge;

Read the Rule... don't skim

Some sections direct you to comply (but doesn't explicitly tell you to describe or discuss): §112.8 Spill Prevention, Control, and Countermeasure Plan requirements for onshore facilities (excluding production facilities).

If you are the owner or operator of an onshore facility (excluding a production facility), you must:

- (2) Construct all bulk storage tank installations (except mobile refuelers and other non-transportation-related tank trucks) so that you provide a secondary means of containment for the entire capacity of the largest single container and sufficient freeboard to contain precipitation. You must ensure that diked areas are sufficiently impervious to contain discharged oil. Dikes, containment curbs, and pits are commonly employed for this purpose. You may also use an
 - But... 112.7 does require that "You must prepare the Plan in writing"
 - The implied requirement is that you write out in the Plan how you are complying.



Shell Capacity (gallons) *

2,000 (SW) 500 (SW) 300 (DW) 55 ea (15 drums max)

55 ea (10 drums max)

X

III. Plan Requirements

1. Oil Storage Containers (§112.7(a)(3)(i)):

	Table G-2 Oil St	orage Containers and Capacities					
	tanks ^b) with capacity of 55 U.S. gallons or more, ur	This table includes a complete list of all oil storage containers (aboveground containers ^a and complete anks ^b) with capacity of 55 U.S. gallons or more, unless otherwise exempt from the rule. For mobile/containers, an estimated number of containers, types of oil, and anticipated capacities are provided.					
Cordority, wa	Oil Storage Container (indicate whether aboveground (A) or completely buried (B))	Type of Oil	Shell Capacity (ga				
For clarity, we	Mobile Refueler - Jet A (Truck 77) - (A)	Jet A (kerosene)	2,000 (SW)				
simply added	Mobile Refueler - AvGas 100LL - (A)	Aviation gasoline	500 (SW)				
• •	Used Oil Tank - (A)	Used oils	300 (DW)				
SW or DW to	Fuel/Oil Drums - Maintenance Bay Interior - (A)	New/waste kerosene & misc. oils	55 ea (15 drums n				
	Fuel/Oil Drums - Maintenance Bay Exterior - (A)	New/waste kerosene, diesel & oils	55 ea (10 drums r				
the Tier 1	LAALIOT (D)		40.000 (5)41				
	Jet A UST - (B)	Jet A	12,000 (DW)				
template	AvGas 100LL UST - (B)	Aviation gasoline	12,000 (DW)				
table							
Lable							

No.	CALIFORNIA	3
1	CUPA	
	FORUM	1
1111		

SW = Single wall container DW = Double walled container

Total Completely Buried Storage Capacity Facility Total Oil Storage Capacity

Table G-2 Oil Storage Containers and Capacities

Total Aboveground Storage Capacity ^c 4,175 gallons 24.000 gallons 28,175 gallons

We added SW or DW to the Tier 2 template table also

2. Oil Storage Containers (§112.7(a)(3)(i)):

Table G-3 Oil Storage Containers and Capacities

This table includes a complete list of all oil storage containers (aboveground containers^b and completely buried tanks^c) with capacity of 55 U.S. gallons or more, unless otherwise exempt from the rule. For mobile/portable containers, an estimated number of containers, types of oil, and anticipated capacities are provided.



Include bulk tanks and containers (-stationary and portable), oil-filled equipment, and oil-filled electrical

equipment.			
Oil Storage Container (indicate whether aboveground (A) or completely buried (B))	Type of Oil	ID Code (from Table G-2)	Shell Capacity (gallons)
Jet A Mobile Refueler 421- (A)	Jet A	421	10,000 (SW)
Jet A Mobile Refueler 422- (A)	Jet A	422	10,000 (SW)
Jet A Mobile Refueler 530- (A)	Jet A	750	5,000 (SW)
Gasoline Mobile Refueler 95- (A)	Gasoline	95	2,000 (SW)
Gasoline Truck Bed Mobile Refueler - (A)	Gasoline	Truck Bed	115 (SW)
Diesel Mobile Refueler 85 - (A)	Diesel fuel	85	1,500 (SW)
Diesel Mobile Refueler 750 gal - (A)	Diesel fuel	750 gal	750 (SW)
Used Oil AST - 1 - (A)	Used motor/lube oils	AST-1	500 (DW)
Product & Waste Fuel & Oil/Lubricant Drums - (A)	Jet A, gas, diesel,	Storage Container	10 max x 55 = 550
	lube, hydr. oils	A and B	
Jet Fuel Filters (OFE) - (A)	Jet A	JFF	~60 x 3 = 180
Slop/Waste Jet A UST - (B)	Waste Jet A	Fueling Rack	500 (DW)
Jet A UST - (B)	Jet A	Fueling Rack	20,000 x 3 (DW)
Gasoline UST - (B)	Gasoline	Fueling Rack	12,000 (DW)



SW = Single wall container
DW = Double walled container

Diesel fuel UST - (B)

r T

Total Aboveground Oil Storage Capacity 31,145

Total Completely Buried Oil Storage Capacity 84,500

Facility Total Oil Storage Capacity 115,645

Fueling Rack

12,000

gallons

gallons

gallons

(DW)

Diesel fuel

tanks, containers and equipment (additional details regarding capacity, construction, containment and overfill protection are presented in Section 5.0, Table 5-1):

- Bulk Tanks/Containers Fixed-Stationary
 - Sized secondary containment is provided for all of the following aboveground stationary bulk tanks/containers.
 - Total facility capacity: 73,193 gallons
 - Units 1-4 utilize two 6,450 gallon single wall steel tanks containing lube/turbine oil used to lubricate the generating unit turbines. Both tanks are used for Clean Oil (which is piped as-needed to the four lube oil reservoir systems). A third steel tank, capacity 10,293 gallons is used to store "dirty" oil (which is cleaned/conditioned on site and returned back to service). The three tanks are located within a sized concrete floored, masonry walled secondary containment diked area. Distribution of oil throughout the generating units is via steel pipelines within the floor drain/retention basin-protected unit structures.
 - Units 5-6 have two 25,000 gallon capacity single wall steel tanks containing lube/turbine oil used to lubricate the generating unit turbines. One tank is used for fresh (newly delivered) product (which is piped as-needed to the two lube oil reservoir systems) and one for in-use oil (i.e. a temporary holding tank for in-use oil to be reused). These tanks are co-located within a sized concrete floored, concrete masonry secondary containment dike area with a total capacity of 7,000 gallons and the containment area drains to a facility oil/water separator system and then to the approximately 750,000-gallon North Retention Basin. Distribution of this oil throughout the generating units is via steel pipelines within the floor drain/retention basin-protected unit structures.
- Bulk Tanks/Containers Portable Containers
 - Sized secondary containment is provided for all of the following portable bulk



steel pipelines within the floor drain/retention basin-protected unit structures.

- Bulk Tanks/Containers Portable Containers
 - Sized secondary containment is provided for all of the following portable bulk tanks/containers (with adequate freeboard for or other protection from precipitation), and all portable containers are positioned to prevent a discharge to navigable waters.
 - Total facility capacity: 6,160 gallons
 - An average of twenty-five (25) (with a maximum of fifty (50)) 55-gallon drums of lubricating and gear oils (and some hydraulic oils/fluids and other petroleum products) stored within enclosed fire-rated, steel secondary containment storage units located adjacent to Units 1-2.
 - A maximum of ten (10) 55 gallon drums containing lubricating oils and hydraulic fluid or other petroleum products stored under each of the three generating unit structures. These drum storage/dispensing areas are either equipped with curbed/bermed secondary containment, portable spill containment pallets, or containment via the facility unit drain system (oil collection sumps, and drainage lines leading to the appx. 750,000-gallon North Retention Basin).
 - A maximum of six (6) 55 gallon drums containing lubricating oils and hydraulic fluid or other petroleum products periodically used for short-term/temporary maintenance-related stored within plastic containment pallets or within existing
- Good, complete narrative descriptions aid in facility and inspector understanding
 - And sometimes technical change awareness for facility over time

Bulk Tanks/Containers – Fixed/Stationary

- Sized secondary containment is provided for all of the following bulk tanks/containers
- One (1) integral double-walled UL-2085 shop-fabricated steel AST containing diesel fuel with a capacity of 8,000 gallons located near the southwest corner of the facility (AST #1). This tank is used, in part, to refill via a hand-operated dispenser nozzle the portable equipment and other diesel-fueled vehicles. The tank is also directly piped via secondarily-contained and trenched piping to the double-walled 275-gallon day tank in the adjacent emergency generator building (Building F). The AST interstice is electronically monitored for leaks, and the tank electronically monitored for fuel level and overfills.
- One (1) integral double-walled UL-142 shop-fabricated steel AST containing diesel fuel with a capacity of 275 gallons located within the emergency generator building (Building F) near the southwest corner of the facility (AST #2). The tank, fed from the 8,000-gallon AST, serves a large emergency diesel generator which powers the overall facility in the event of a power outage. The AST interstice is electronically monitored for leaks, and the tank electronically monitored for fuel level and overfills. Piping to this tank in the building is located within a concrete containment trench.
- One (1) integral double-walled UL-listed shop-fabricated walled steel AST containing diesel fuel with a capacity of 125 gallons. The tank is a base tank integral to an emergency diesel electrical generator located outside the northwest corner of the Laboratory/Operations Building (Building A). This generator supplies power to this building in the evet of a power outage. The AST interstice is electronically monitored for leaks, and the tank electronically monitored for fuel level and overfills.

- Good, complete
 narrative descriptions
 aid in facility and
 inspector understanding
 - And sometimes technical change awareness over time

Bulk Tanks/Containers - Portable

- Sized secondary containment is provided for all of the following bulk tanks/containers, and all portable containers are positioned to prevent a discharge to navigable waters.
- Six portable diesel-fueled trailer-mounted water pumps, with single-walled fuel tanks ranging from approximately 56- to 159-gallon capacity (individual tank capacities are 56-, 80-, 90-, 117-, 125-, and 159-gallon). These trailers are parked within a large rising wall berm 'portable' secondary containment system located along the northeast end of the facility. Containment monitoring is via monthly visual inspection. The containment is sufficient for the capacity of the largest tank within plus 24 hours of a 25-year storm event.



Tank ID and Description	General Location	Oil Storage Capacity (gals) ⁵	Contents	Containment or Discharge/Drainage Control Type; Overfill Protection	Notes
			BULK TAI	NKS AND CONTAINERS	
AST #1 Diesel Tank Steel, double wall UL-2015 Stationary Mfr: Modern Welding March 2015	North of Generator Building F	8,000	Diesel fuel	 Containment Type: Sized (40 CFR 112.8(c)(2)). Containment Description: Integral double wall. Concrete curbing (piping/hose general containment): 12'x30'x0.75". Supply/return piping double walled from tank to Building F. Overfill Protection: Visual verification and communication ('fast response system') via Morrison clock gauge during filling activities. Tank also monitored via Veeder Root system - electronic inventory reading + visual and audible high level alarm (40 CFR 112.8(c)(8)) 	Leak Detection:
AST #2 Generator Diesel Day Tank Steel, double wall UL-listed Stationary Mfr: Simplex 2015	Inside Generator Building F	275	Diesel fuel	 Containment Type: Sized (40 CFR 112.8(c)(2)). Containment Description: Integral double wall. Supply/return piping to AST #2 and from AST #2 to generator in containment trench. Overfill Protection: Electronic level control system on tank (closed tank supply/retun system); back up visual verification via analog float type level gauge (40 CFR 112.8(c)(8)) 	Leak Detection:
Lab/Ops EDG Generator diesel base tank Steel, double wall UL-listed Stationary	100 kW Generator outside NW corner Laboratory/ Operations Building (Bldg A)	125	Diesel fuel	 Containment Type: Sized (40 CFR 112.8(c)(11). Containment Description: Integral double wall. Overfill Protection: Visual verification via analog gauge and communication during filling activities. (40 CFR 112.8(c)(8)) 	Leak Detection:

Tank ID and Description	General Location	Oil Storage Capacity (gals) ⁵	Contents	Containment or Discharge/Drainage Control Type; Overfill Protection	Notes
Mfr: Pryco 1995					
Water Pump (Pioneer) (Asset #5133) Trailer-mounted diesel fueled water pump Steel, single wall	Portable Equipment Parking Area 1 (PEPA 1) Northeast end of facility	125	Diesel fuel	 Containment Type: Sized (40 CFR 112.8(c)(11). Containment Description: Portable, rising-wall containment berm appx. 10'x50'x1' = 3,740 gallons. Overfill Protection: Visual verification via analog gauge and communication during filling activities (40 CFR 112.8(c)(8)) 	Leak Detection: • Electronic monitor
New Wash-down Pump (Premier) (Asset #5143) Trailer-mounted diesel fueled water pump Steel, single wall	Portable Equipment Parking Area 1 (PEPA 1) Northeast end of facility	80	Diesel fuel	 Containment Type: Sized (40 CFR 112.8(c)(11). Containment Description: Portable, rising-wall containment berm appx. 10'x50'x1' = 3,740 gallons. Overfill Protection: Visual verification via analog gauge and communication during filling activities (40 CFR 112.8(c)(8)) 	Leak Detection: Visual into open containment
Water Pump (Peerless) (Asset #4888) Trailer-mounted diesel fueled water pump Steel, single wall	Portable Equipment Parking Area 1 (PEPA 1) Northeast end of facility	56	Diesel fuel	 Containment Type: Sized (40 CFR 112.8(c)(11). Containment Description: Portable, rising-wall containment berm appx. 10'x50'x1' = 3,740 gallons. Overfill Protection: Visual verification via analog gauge and communication during filling activities (40 CFR 112.8(c)(8)) 	Leak Detection: Visual into open containment
Trailer-mounted diesel tank and dispensing system Steel, single wall	Portable Equipment Parking Area 1 (PEPA 1) Northeast end of facility	180	Diesel fuel	 Containment Type: Sized (40 CFR 112.8(c)(11). Containment Description: Portable, rising-wall containment berm appx. 10'x50'x1' = 3,740 gallons. Overfill Protection: Visual verification via analog gauge and communication during filling activities (40 	Leak Detection: Visual into open containment

POLL TIME #8!

- A facility has a site-specific SPCC Plan, written just for that facility by someone that knows how to write a good SPCC Plan. That facility now has assurance that they will be in compliance with APSA and the SPCC rule?
 - A. Fact
 - B. Crap





Plans Must Be:

> Implementable

- Can you actually <u>do</u> what the Plan is committing you to do?
 - In the specific manner in which the Plan states?

and

- > Implemented
 - Are you actually doing it?
 - Consistently and correctly?







<u>Unique</u>

JUST BECAUSE YOU ARE UNIQUE DOES NOT MEAN YOU ARE USEFUL

Written Plan or Implementation Issues (may or may not

be cited by the UPA as a violation [most are]... but still indicates substandard Plan or compliance)

- > No Plan at all or various implementation failures
 - A very general, all-encompassing violation
- > Names and phone numbers out of date
- > SPCC Plan not maintained at the facility (or it can't be located)
- > No procedures (or reference to or summary of) for routine oil handling, loading/unloading or transfers
- > 5 year Plan review not done or not documented



- > Current?
- ➤ Is there a (gasp!)

 management of
 change process
 or system
 - 'Link' to CERS?
 - Or whenever CalOES changes names again



EMERGENCY TELEPHONE NUMBERS - OIL SPILL:

Designated Staff Person Responsible for Oil

Spill Prevention (implementation/administration):

Director of Maintenance & Operations

Alternate:

Director of Transportation

Facility Emergency Coordinator Director of Maintenance & Operations	24h/Cell
Alternate Emergency Coordinator Director of Transportation	24h/Cell
Outside Emergency Response – for fire, medical, emergency spill response, or releases that reach a storm drain or off-site/off-property	9-1-1
California Emergency Management Agency – State Warning Center (if release poses significant threat to health, safety, property or environment)	(800) 862-7550 or (916) 262-1621
CUPA [Certified Unified Program Agency] Regulatory Notification (if threat to health, safety, property or environment): County of Riverside, Dept. of Environmental Health - Hazardous Materials Division	Riverside Office: (951) 358-5055 or Hemet Office: (951) 756- 6524
Regional Water Quality Control Board - Santa Ana Region (if spill/release poses threat to water or groundwater)	(951) 782-4130
National Response Center (if any amount of oil, fuel or other petroleum reaches a storm drain, flood channel or the Santa Ana River)	(800) 424-8802

- We made a "SPCC Plan Facility Review and Update Checklist" for our clients. Can use for:
 - 5-year review
 - Annual review (not required... but we recommend)



SPCC Plan Facility Review and Update Checklist

(for required 5-year facility review)

	Facility:
struc	ctions: At least every five years from the Plan certification date, the responsible facility management must complete a review and evaluation of the SPCC Plan (40 CFR 112.5(b)). This review does not need to be done by the Plan certifying PE. ESC EnviroServices recommends that this review be conducted at least annually.
	This form/checklist is a guide to that review. The Plan Section numbers refer to the section numbers in Plans prepared by ESCI EnviroServices.
	Facility management responsible for Plan implantation should first read the Plan to become familiar with its contents obtain the implementation files (completed tank/container inspection checklists/ forms, training records, current CER emergency contacts and contingency plan), and be familiar with the facility. This review checklist can then be completed, and the Plan updated as necessary.
	Administrative Review / Changes These changes do not require any type of PE review or re-certification.
is i	eview the list of emergency contacts (names, titles and phone numbers) on page i and/or ii [if there is a page ii] (ti identical to the Section 4 Emergency Contacts Table), and make any necessary changes. Handwritten changes are ceptable. Make the changes on the Section 4 Emergency Contacts Table as well. Note: these emergency contacts should be consistent with the facility's most recent Owner/Operator page submitted CERS.
На	ave the listed emergency contacts changed? Yes: make the necessary changes) No:
ls t	anagement Certification (Section 2.2 and Section 4.0 Table 4-1) the name, title and phone number of the management-level individual certifying the Plan current? If not, make seessary changes to the Table, and a new signed management certification page will be needed.
На	as the certifying management changed? Yes: (make the necessary change and obtain a new signature) No:
•	rson accountable/responsible for SPCC Plan implementation/administration [and oil spill prevention] (Page i, ection 4.0 Table 4-1 and Section 5.8)
	the name, title and phone number of the listed individual current – and is that person still responsible for Plan

implementation/administration? If not, make necessary changes, Note that an individual must be listed - not simply a

Has the listed responsible individual changed? Yes: (make the necessary changes) No:

job or position title.

Implementation Review / Changes

These changes typically do not require any type of PE review or re-certification. However, if the actual tank/container inspection frequency or inspection checklists used are different from that described/contained in the SPCC Plan – those changes may require a review by a PE and possibly Plan re-certification, and may pose a compliance issue until the Plan is amended.

	compliance issue until the Plan is amended.
1) Inspect	ions, Tests & Records + Integrity Testing (Sections 5.7, 6.3 and Plan Appendix)
•	The Plan describes the periodic inspections and tests which must be done, the schedule/frequency required by the Plan and the records which must be kept. There should be sample inspection forms/instructions in the Plan appendix.

Review a representative number of completed inspections forms (for each of the facility's tanks and container areas listed in the Plan). It is suggested the review look at the last year or two of completed inspections records.

Are all inspections listed/described in the Plan being conducted 1) on all Plan-listed tanks and contained areas, and 2) at the specified frequency?
Yes: No (explain the specific differences):
Note: The differences between actual and what is listed in the Plan are what will determine if a PE review, Plan revision and PE re-certification is needed.

Yes: ____ No (explain why not): _____

B) Are the inspection forms contained in the Plan appendix being used?

Yes: ____ No (explain why not and what forms are being used): _____

- 2) Training and Annual Spill Prevention Briefings (Section 5.8)
 - The Plan describes the initial training required for 'oil-handling' employees. These are typically those employees with
 responsibility for operation and oversight of any oil or fuel tanks and associated equipment, the filling or emptying of
 these tanks and tank inspections, and management and inspections of container areas. Annual 'spill prevention briefings'
 are also required for these employees.
 - A) Have all 'oil-handling' employees received initial SPCC training (see the listed training topic bullets under 112.7(f)(1) in the Plan – these topics are required for initial training – not just a general hazmat or environmental training)

Yes: _____ No: ____ (this is a compliance issue. Employees should receive this training within 3 months)

B) Have all 'oil-handling' employees received an annual 'spill prevention briefing' (see 112.7(f)(3) in the

- Plan)?

 Yes: ____ No: ____ (this is a compliance issue. Employees should receive this briefing within one to two months)
- Yes: _____ No: _____ (this is a compliance issue.)
- 3) Emergency Response Plans/Procedures (Section 5.3 subsection for Countermeasures for Discharge Discovery, Response and Clean-up [112.7(a)(3)(iv)])

C) Are training and annual briefing records being maintained for at least three years?

• The Plan summarizes the facility's procedures for responding to an oil or fuel spill or release. This section is fairly generic

1) Plan Amendment and Facility [tank/container] Information (Sections 3.3, 4.1, and 5.3 Table 5-1 [if present])

 The Plan describes what types of changes trigger a 'technical' Plan amendment and re-certification (Section 3.3) and the Plan narratively describes the various tanks, containers/container areas, and oil-filled equipment that are captured by the SPCC Rule at the facility.

<u>It is critical</u> that the Plan reviewer read these sections carefully, become familiar with what the Plan is describing and compare that to what is actually in place at the facility. The following only applies to tanks, containers, oil-filled equipment with 55 gallons capacity or greater oil/fuel storage capacity.

A) Have th	ere been any:
------------------------------	---------------

1.	Additions of aboveground oil or fuel tanks, containers (e.g. more than the number of containers listed
	in the Plan), oil filled electrical or operating equipment other than those identified in this Plan?

No:	Yes (describe/list): _		

Removal or closure of aboveground oil or fuel tanks, container areas, systems, oil filled electrical or operating equipment other than those identified in this Plan?

No:	Yes (describe/list):	

6.	Construction or demolition that might alter secondary containment or discharge prevention/retention structures or systems (e.g. increasing or decreasing the containment area or containment wall height, installation or removal of storm drain barriers, etc.)?
	No: Yes (describe/list):
7.	Changes in products or services that impacts the likelihood of a discharge (e.g. significantly changing the oil/fuel in the tank as listed in the Plan [gasoline vs. diesel, soluble oil vs. petroleum oil, etc.], conducting refueling from a tank where that activity is not listed in the Plan, etc.)?
	No: Yes (describe/list):
8.	Significant revision of standard operating or maintenance procedures that impacts the likelihood of discharge (e.g. changing from internal maintenance or tank operations to an outside contractor)?
	No: Yes (describe/list):
	No: Yes (describe/list):
).	Have secondary containment/interstitial space (in double walled tanks) monitoring systems been installed or upgraded (e.g. installation of interstitial space leak gauges, leak monitoring systems, etc.)
	No: Yes (describe/list):

		FUEL UNLOADING PROCEDURE CHECKLI	ST
tat	ion Nar	ne:	
ate	e:	Tank:	
W	S Rep:	Supplier:	
X	Item	Description	
		The following six items must be completed BEFORE fuel unloading	ng.
	1	Ensure the audible high-level alarm system and automatic shutoff valve are functioning properly.	
	2	Determine the available capacity (ullage) of the above ground storage tanks (AST) by converting the reading on the fuel gauge to gallons (See Appendix A, Page A-1). This ullage should then be marked in the fueling log and communicated to the tank truck unloading contractor.	
	_	Move spill containment equipment such as booms or spill barriers into the	

Place drip pans under all pump hose fittings (if applicable) after the hose is

Ensure the fill nozzle is in place in the appropriate AST appurtenance. In this case, the fill nozzle is placed in the fill pipe connected to the round spill

Monitor the gauges on the AST and the truck continuously to ensure the

ullage is not exceeded. If the audible high-level alarm sounds, stop the

Record the amount of fuel unloaded in the log (Appendix 1, page A-1).

on the fill pipe into the AST (if it has the capacity) or dispose of appropriately (describe how it was disposed of, if applicable)

Before removing the fill hose from the AST, ensure that it is drained and that

Pour any fuel in the drip pans, tank truck containment pool, or spill container

Inspect the tank truck before removing the blocks to ensure the lines have

Place a copy of this fuel-unloading checklist in the SPCC Plan folder

The following two items must be completed DURING fuel unloading. Ensure that the NWS representative and the tank truck operator remain with

The following six items must be completed AFTER fuel unloading.

APPENDIX A-2

Written procedures for routine transfers, loading, unloading



This procedure applies to the following activities associated with the handling of 55 gallon drums and 220 - 375 gallon Intermediate Bulk Containers (totes) of oils, lubricants and solvents:

- Receipt of drums into the loading dock or roll-up doors; Movement and transfer of the drums and totes through the warehouse:
- Storage of drums and totes
- · Staging of excess drums within cargo semi-trailer outside the northeast roll-up door; and
- Loading of drums onto cargo trailers for external distribution.

This procedure is intended to prevent damage to containers and spills of oils, and to ensure compliance with the Spill Prevention, Control and Countermeasures (SPCC) Plan.

Receipt of drums and tote containers:

- Whenever possible, deliveries of oil drums and totes should not take place during rain events. Spillage at the loading dock or roll-up doors during rain events are much more difficult to control and prevent releases of oils into
 - O If deliveries during the rain event cannot be rescheduled or delayed, additional caution must be used. whenever unloading the trailer/truck and moving the drums. Personnel should remain aware and ready to contain the spill in the truck well or at the roll-up door if any accident or drum release occurs.
- Receiving personnel should look to verify the presence and clear access to spill supplies and verify that the dock drain pump switch is locked in the OFF position.
- ☐ The delivery driver must back as tight as possible to the loading dock rams to minimize gaps between the
- warehouse and the truck. Wheel chocks and brakes must be applied.

O For drums located further into the cargo area, this inspection should occur after the drums in front are

- Immediately upon the truck cargo door being opened or stake-bed back removed, personnel should inspect the drums and totes while still in the vehicle to look for signs of leakage or spills, damaged containers and proper and tight factory seals. This inspection must occur before moving the drums to the warehouse storage drum area.
- inspected and moved out of the truck.
- O Drums which appear damaged, unsealed, or leaking should NOT be unloaded from the vehicle. Call for
- supervision for instructions.
- The truck should be loaded or unloaded by GoldenWest employees. If the delivery driver loads or unloads any.
- drums, a GoldenWest employee must be in the immediate area and be supervising the driver's actions.
- ☐ Drums should be relocated/moved to their storage location as soon as possible after delivery and initial inspection

Movement and transfer of the drums and totes:

- - Secure drums to each other and/or the pallet when necessary to minimize chance of tipping.

When moving drums and totes, personnel must assure that the drums and totes are safely and securely

- placed/located on the pallet or forklift to minimize possibility of falling or tipping.
 - Personnel moving the drums or totes should verify that the drums or totes tightly closed and undamaged

Additional Comments Below:

unloading area.

Block the wheels of the tank truck

hooked up to the AST and before unloading.

the vehicle at all times during unloading.

all drain valves are closed (if applicable).

Remove the blocks from the tank truck wheels

been disconnected from the AST

unloading of fuel immediately.

Comments

- > Readable?
- > Oversight of vendors?

FUEL SYSTEM - BULK TANK FILLING AND REFUELER LOADING PROCEDURES Procedimiento para llenar el reabastecero:

- 1. Pare el camión por el lado de la rampa de descarga Apague el motor y las ruedas "chuch"
- 2. Abra la puerta de la bomba de la rampa de descarga de combustible, peque el cable de tierra al camide
- 4. Examine al "Veeder Root" del tanque que va dispensar tible para verificar que contiene el con
- 5. Examine los tanques localizados sobre la tierra y la tuberia que no este goleando cuando entre usted a la cona de represa
- 6. Abra la válvula de dispensa de 10° en el tanque que piensa
- 7. Examine la posicion de "Floating suction" en el tanque y
- 8. Proceda a la percha utilizada para cargar al camino
- 9. Pegus el "Liberty hi level system" y verifica que las luces de en sistema esten verdes indicando que el sistema esta listo.
- 10. Examine la medidora per un lado del reahastacero que mética que el tanque tiene espacio disponible para recibir
- 11. Peque el braze de cargo de 4" y por medio visual examina si esta goteando. Si esta geteando, pare si proceso hasta que
- 12. Repenga el metro que lea "00000"
- 13. Abra las valvetas de la rampa de descarga de combustible
- 14. Receja el mango de "Electronic Deadman" y hage que
- combustible deja de funcionas. Si en el caso, suelte la valvula y sign llenando de combustible. Si el combustible na para de circular con el sistema "precheck", deje de llenario con el "Electronic Deadman" y solicite reparación por la gerencia. No utilize el reabastecero hasta que sea reparad-
- ilenando el reabastecero hasta que el cargo deseado es
- 17. Ya completado el cargo de condustible, repoliga el
- 16. Cierre las valvulas manuales en la rampa de descarga. Descenecte el brazo de carga y almaçanela en un loca
- 19. Desconecte al "Liberty hi level control" y regreselo a su
- 20. Preceda al encierro de tanques sobre la tierra y examine si estan goteando los tamques, cierre la válvula de descorgo de 10° que abrie anteriormente.
- 21. Anote la posicion del "Floating Suction Indicator", debe indicar un rebajo de nivel en el tanque. Si el indicador no ha cambiado, hable a la gerencia y solicite reparación del "Floatio
- 22. Regrese al realizatecero y termine de llenar sua papeles
- 23. Desconecto el cable de peir estatico
- 24. Cierre la puerta de la rampa de descarga de combustible
- 25. Levente las ruedas "chuck" y guardelas sobre el
- edor del reabsstocero y examine si esta geteande e si hay algun problema de seguridad. Si no se secuentran problemas, proceda a la rampa de cargo de la nave

grande volumen:

- 1. Acompañe el camión de entrego de combustible al campo de aviación, verificando que la puerta de xeguridad esta cerrada
- 2. El camión de entrega debe extecionarse por un lado de la
- 3. El operador del sistema de combustible debe abrir la puerta de la rampa de descarga y debe pegar el cable de tierra y el
- 4. Abre la puerte de la zona de contención de tanques.
- 5. Examine el "Veeder Root" para verificar que el tanque que se va llenar tiene el espacio adequado para recibir la carga de
- 6. Examine los tanques colocados sobre la tierra y la tuberia cuando entre la zona de represa para verificar que no está-
- 7. Abra la vătvula de 6º del tanque que piensa utitilizar para
- S. Examine is posición del "Floating Suction" en el tanque y anótelo para usar como referencia
- S. Procede a la percha usada para descargar les camions
- 10. Tome una muestra del combustible y pruebe la gravitación. Disponga del combustible en un muestrario de circuita carrado si es que la muestra esta agitada. Liame e la gerencia si el ible no esta dentro de toleranci
- 11. Si el combustible exta agitado, pegus la manguera de descarga. Abra las válvulas en el rempa de descarga del
- 12. Levante si "Electric Deadman" y comience la bomba. Combustible daha circular
- 13. Examine haber si esta goteando y examine el "Differential Gage" en la rampa de descarga de combustible, el "Differential" debe medir entre 2 paid y 14 paid, si es el case continu llenando el tanque. Si llega a 14 pold. Ilame a la parencia y
- 14. Mientras se esta descargando el camión, entre a la zona de contención de tanques y examine si hay goteos, proceda al tanque que se esta llenando y jale el "Magnatrol test cable" debe sonar una alarma y la bomba debe parar. Proceda al camión que esta sobre la rampa de descarga y verifique que li bomba esta parada. Si la bomba sigue circulando, liame a la perencia y pare de llenar el tanque.
- Si la bomba paro y la alarma sonó continué descargando el
- la rampa de descarga y pare la bomba, reponga el "Electric
- 16. Desconecte la manguera que entrege el combustible y
- 17. Proceda a la zona de contención de tanques y examine al seta goteando, cierro la vársula de 6° en el tanque que estaba
- 18. Examine la medida del "Veeder Root" de el tanque para verificar la cantidad y compararlo con al boleto de ent
- shierto durante el proceso de llenario.
- 20. Desconecte les cables de tierra y de unir y cierra la puerta del camión de la rampa de descarga. Cierro con llave.
- descarge buscande problemas de seguridad.
- 22. Acompaño el camión del campo de avisción y examine que

Refueler loading procedure

- 1. Stop truck next to refueler loading skid. Shut att engine and chuck wheels
- 2. Unlock gete to fuel pump skid attached grounding cable
- 3. Unlock gate to tank containment area.
- 4. Check Veeder Root for tank to be dispensed from has
- 5. Check above ground tanks and piping for leaks as you enter the dike area
- 6. Open 10" dispensing valve on the one tank you plan to
- 7. Check position of Floating suction on tank and note tor
- S. Proceed to truck leading rack.
- 9. Attach liberty system hi level control and verify system lights go to green indicating system is ready to operate.
- 11. Attach 4" load arm and visually inspect for leaks. If Leaks are present step procedure until system is repaired
- 13. Open valves on fuel skid to allow fuel to flow to
- 14. Pick up Electric Deadman handle and start pump running. Fuel should flow
- 15. Onen Proucherik value on Baluniar and you that their stops feeling. If feel stops release pre-check and resumfilling. If Fuel does not also with pre-check system. Since by management do not use equipment until refueler to
- 16. If system is operating correctly continue to fill refusion until required fuel lead is reached
- 18. Close manual valves on fuel skid. Disconnect load arm
- 19. Disconnect Liberty hi layer control and store on storage
- 20. Proceed to above ground tank anciosure and inspect
- call management for repair of Floating Syction Undicated
- 22. Nature to refusier finish filling out maper work
- 23. Disconnect static bunding cable.
- 24. Close gate on refusier loading skid
- 25. Pick up wheel chucks and store on refuele
- 26. Walk around refueler and check for leaks and safety

Bulk Tank filling procedure

- 1. Excert fuel deliver truck on to sirfield after verifying
- 2. Delivery truck to park next to truck unleading skid and
- 3. Fuel system operator to unlock gate to unloading skid and attach grounding and bonding cable.
- 5. Check Vender Root for adequate room in tank to be
- 6. Check above ground tanks and piging for leaks as you
- 7. Open 6" valve on the tank you plan to fill with fuel. 6. Check precision of Financing section on tank and note for
- 9. Proceed to truck unleading race.
- 10. Take fuel sample and test specific gravity. Dispose of fuel in close circuit sample if sample is enceptable. Call for management if fuel is not with in tolerances.
- 11. If fuel is exceptable attach unloading lose. Open valves
- 13.Fick up Electric Deadman and start pump. Fuel should
- 13. Check for leaks and check Differential gage on foel shid differential should be between 2 psi and 14 psi if an continue filling tank. If 14 psi call management and reques
- Ld. While unleading truck pater tank Containment area and check for leaks proceed to tank being filled and pull on Manuatrol test cable places should sound and pump should stop. Proceed to truck unloading skid and verify pump stopped. If pump did not stop call for Management and stop filling tank. If pump stopped and alarm sounded continue unloading truck.
- 15. Once truck is unloaded close sulves on feel skid and stop pump and replace Electric Deutinan on storag
- 17. Proceed to tank Containment area and check for leaks close 6" valve on tank opened during filling procedure.
- 18. Charle Vandrer Sout tank level gage to verify que shock equinst delivery ticket
- 15. Finish delivery paper work.
- 20. Disconnect ground and bonding cable and close gate to
- 21. Remove wheel chucks and walk around delivery truck
- 22. Excert the truck from the Airfield and check that the



VIDEO TIME!

> Importance of following procedures

Assume that the facility shown IS an SPCC-regulated facility that also has SPCC-exempt USTs

Recall: Transfers from one SPCC-exempt tank to another SPCC-exempt tank at an otherwise regulated facility IS an SPCC-regulated activity



RUNTHETAPE

POLL TIME #9!

Choose all that apply)

- > Never mind that the truck's internal valve-brake interlock wasn't working...:
 - A. The driver followed proper procedure by immediately trying to stop the truck
 - B. The driver should have followed proper procedure by immediately shutting off the fuel transfer at the first sign of something going wrong
 - C. The facility has no responsibility or liability for this incident, as this is a DOT regulated (fuel delivery truck) activity
 - D. The facility should periodically review emergency procedures with vendor delivery drivers prior to fuel transfer





CAUTION

CHECK FOR OIL CONTAMINATION BEFORE OPENING DRAIN VALVE

RECORD ALL VALVE OPERATIONS IN OPERATIONS LOGBOOK

CLOSE VALVE AFTER DRAINING

Written Plan or Implementation Issues (may or may not

be cited by the UPA as a violation [most are]... but still indicates substandard Plan or compliance)

> Environmental Equivalence asserted without:

- Stating the reasons for each non-conformance
 - Or used for lack of secondary contain. (vs impracticability determination)
- Describing in detail the alternative compliance measures
- Actually implementing the alternative measures
- > Facility diagram (not applicable to Tier 1 template Plans):
 - Missing
 - Does not include all regulated containers, OFE, loading/ unloading areas, connecting piping, USTs, portable container areas



Facility Diagram

- > e.g. simple diagram
- > This plan incudes tank & equipment photos showing/calling out piping
 - And notes that detailed piping plans are in facility files





Written Plan or Implementation Issues (may or may not

be cited by the UPA as a violation [most are]... but still indicates substandard Plan or compliance)

Spill/discharge prediction

- Simply states 'no history of spills...'
- Only includes 'catastrophic or complete failure' of the container as the type of failure (and not including piping or connection failures, overfills)
- General containment or diversionary means (for attended containers, oil filled equipment, transfers/loading, piping, and all other facility areas where oil can be discharged)
 - Not addressing or describing these areas/operations/equipment at all
 - Doesn't give any facility specifics
 - Has no relation to what's in place at the facility (e.g. spill kits, ability to respond)



Area/Container	Type of Failure/Discharge Scenario	Potential Discharge Volume (gallons)	Flow Rate (g/min)	Direction of Flow (uncontained discharge)	Secondary Containment Method	Secondary Containment Capacity (gallons)
Bulk	Storage Containers & Portable Cor	ntainers (including	g associated pipin	g & transfer systems, tank loadin	g & unloading areas and hand	lling areas)
	Failure of AST (collapse or puncture below liquid level)	500	Gradual to instantaneous	South and east across ramp area (and loading gen. containment area) to airport roadway and street and Spill response supplies & Containment area Spill response supplies & Containment area		>500 DW tank
Used Oil Tank AST-1	Tank overfill	5 (manual pour at fill box)	5 gal/min			UST Up to 30 – 50 for spill supplies/response
	Unloading hose or connection failure during tank unloading by waste vendor	20	60 gal/min	South across ramp/roadway to vegetated/grass area	p/roadway to response (diking to prevent	
Mobile Refuelers staged at /near	Failure of AST (collapse or puncture below liquid level)	115 to 10,000 (depending on vehicle)	Gradual to instantaneous	South and east across ramp area (and loading gen. containment area) to airport roadway and street	General loading area sloped to 500 gal. slop UST	~300 – 500 for slop UST Up to 30 – 50 for spill
loading	Cargo tank overfill	50	<200 gal/min	and	0.:11	supplies/response (diking to prevent
area/Fueling Rack	Loading hose or connection failure during tank loading	50	<200 gal/min	South across ramp/roadway to vegetated/grass area	Spill response supplies & response	spread until vendor cleanup)
Mobile Refuelers	Failure of AST (collapse or puncture below liquid level)	2,000 to 10,000 (depending on vehicle)	Gradual to instantaneous	South and east across ramp area to airport roadway and	Oil-only sorbent booms across downslope sides of staging area	Up to 30 – 50 for spill supplies/response (diking to prevent
staged on airport tarmac	Aircraft fueling overfill	30	<150 gal/min	vegetated/grass area		spread until vendor
an por curring	Loading hose or connection failure during aircraft fueling	Spill response supplies & response		cleanup)		

and the secondary containment method a	Table G-4 Containers with Pot	ential for an Oi	Die Juarge		and the same of th	
Area	Type of failure (discharge scenario)	Potential discharge volume (gallons)	Direction of flow for uncontained discharge	Secondary containment method ^a	Secondary containment capacity (gallons)	
Bulk Storage Containers and Mobile	/Portable Containers ^b	1 10			. 10	
Oil-filled Operational Equipment (e.g	., hydraulic equipment, transformers) ^c					
			/			
Piping, Valves, etc.						
,						
	Then co	mnlete t	he rest	of the table.		
Product Transfer Areas (location wh		inploid i	110 1 05 1	of the table.		
Froduct Transfer Areas (location with	ere on is loc				_	
	Can state: 'spill k	its/resp	onse me	asures' or 'colle	ection	
				etc. for gener		
					ai	
Other Oil-Handling Areas or Oil-Fille	d Equipmei Con	tainmen	t if appli	cable	_	
		1.4009/				
	Remember: nee	2d 100%	sized coi	ntainment for	bulk	
^a Use one of the following methods of sec gutters, or other drainage systems; (4) We		tanks &	containe	rs	tir	ng,
For storage tanks and bulk storage cont			, J	,	ail	nfall
or other precipitation. ° For oil-filled operational equipment. Doc	ument in the table above if alternative measures to	secondary contain	ment (as describ	ad in \$112.7(k)) are implement	ed at the facility	
i oi oii-iiiled operational equipment. Doc	ument in the table above it alternative measures to	secondary contain	inent (as describi	sum 3112.7(k)) are implement	ed at the lacility.	
Facility Name:	Page 4	4		Tier I Out	alified Facility SPC0	C Plan

Ver. 1-L-pdf-3-18-10

Fuel tank T-1	Complete failure of tank	1 – 2,000	South	Double wall tank	> 2,000
Fuel tank T-2	Complete failure of tank	1 – 1,500	South	Double wall tank	> 1,500
Lube tank T-3	Complete failure of tank	1 – 950	Southwest	Concrete dike	1,100
Lube tank T-4	Complete failure of tank	1 – 800	Southwest	Concrete dike	950
Drums in DSA-1	Complete rupture of drum	1 – 55	North	Concrete dike	1,000
Drums in DSA-2	Complete rupture of drum	1 – 55	North	Containment pallets	62 each pallet
Drums in HW-1	Complete rupture of drum	1 – 55	East	Concrete dike	800
Drums in GSDS-1	Complete rupture of drum	1 – 55	Northeast	Containment pallets	62 each pallet
Oil-filled Operational Equipment (e.g., hyd	draulic equipment, transformers)c				
Hydraulic presses	Hydraulic hose leak or fitting rupture	< 5	South	Active spill response with oil sorbents	Appx. 25
Machining equipment	Oil hose/fitting leak or rupture	< 5	South	Steel spill tray	15
Piping, Valves, etc.					
Product Transfer Areas (location where or	il is loaded to or from a container, nine o	or other piece of	equinment)		
Fuel tank T-1 and T-2 loading areas	Tank overfill	1 – 60	South	Drain cover & spill sorbents	At least 60
Fuel tank T-1 and T-2 loading areas	Tanker loading hose rupture	1 – 60	South	Drain cover & spill sorbents	At least 60
Lube tank T-3 loading/transfer area	Tank overfill	1 – 30	Southwest	Drain cover & spill sorbents	At least 30
Lube tank T-3 loading/transfer area	Tanker loading hose rupture	1 – 30	Southwest	Drain cover & spill sorbents	At least 30
Lube tank T-4 loading/transfer area	Tank overfill	1 – 30	East	Drain cover & spill sorbents	At least 30
Lube tank T-4 loading/transfer area	Tanker loading hose rupture	1 – 30	East	Drain cover & spill sorbents	At least 30
Hazardous waste drum area HW-1	Spill during drum filling	1-5	East	Concrete dike	800
Other Oil-Handling Areas or Oil-Filled Equ	uipment (e.g. flow-through process vess	els at an oil pro	duction facility)		

Potential

discharge

volume

(gallons)

Type of failure (discharge

scenario)

Area

Bulk Storage Containers and Mobile/Portable Containers^b

Direction of

flow for

uncontained

discharge

Secondary

containment methoda

Secondary

containment

capacity

(gallons)



Oil (petroleum) handling and transfer areas Containment for most likely/typical failure (general containment) reqd. Passive or active measures ?: Spill kit and facility response OK?





















Containment? Oil area and container security? Everything listed/addressed in SPCC Plan?

Written Plan or Implementation Issues (may or may not

be cited by the UPA as a violation [most are]... but still indicates substandard Plan or compliance)

Containment Impracticability Determination made

- Without being properly, clearly demonstrated and described in the Plan (can't just say it's expensive)
- Without including a 40 CFR 109
 OSCP or 112.20 FRP or written commitments for manpower, etc.
 - NOT the CERS CCP



Five Minute Break!







INSPECTION

NO ONE IS ABOVE SUSPICION

Written Plan or Implementation Issues (may or may not

be cited by the UPA as a violation [most are]... but still indicates substandard Plan or compliance)

> Inspections or checklists are present (or not)...

- But do not have written procedures for those inspections
- Inspections even in the ballpark of industry standards
- Wrong industry standard used
- Inspection records are not kept or signed
- Issues not being observed or noted







Equipment	Inspection Results
Satellite HAZ WASTE accumulation site	with HSC 25270 4 5(a
Oily Waste Sump	





Some double walled generator base tanks have interstitial space leak sensors... and some of those are not connected \odot

Monthly Fuel and Oil Product Tank/Container Inspection Checklist and Procedure Name: Signature:

Inspection Procedure and Criteria Tank surfaces, fittings, piping, hoses and valves free of signs of oil or diesel leakage?	ОК			ATF Tank T-3		Lube/Motor Oil Tank T-4		Lube/Motor Oil Tank T-5		Diesel Generator Fuel Tank T-6		Oil Drums or Totes	
		No*	OK	No *	ОК	No*	ок	No*	ок	No*	ОК	No*	
 If tank surfaces or containments are oily or stained, cleaning and tightening/repairing will be required prior to reinspection 													
Outer tank or container shell (visible surfaces – including top), tank mounts/supports/base, fittings & closures, piping and valves free of signs of corrosion, blistered paint, damage, distortion or deterioration?													
 Any such damage or deterioration must be evaluated by facility management to determine course of action. 													
Drum or tote secondary containment (inside containment pallet or area) free of liquid and sorbents; containment floor, pallet free of cracking or damage?													
Fill ports or fill boxes undamaged, clean and free of accumulated liquids; fill box lids & or tank caps on securely; ground area around fill ports/boxes free of oily residues?													
 If these areas are oily or stained, or have accumulated liquids, liquid removal and cleaning will be required prior to reinspection 													
Tank level gauges, high level alarm or depth gauge/sticks leak free and operable?													
Bulk tank annular containment space (space between the gasoline, oil and diesel tank double walls) free of liquid? If so: corrective action must be taken. 1. Observe the leak gauge on top of T-3 & T-5. If indicator glass shows any color: 2. Pull out the steel containment indicator rod from the top front of tank T-4. If rod indicates any liquid at bottom: 3. Observe the sight plug in the generator diesel tank front edge. If any liquid is showing in this clear plug: 4. On the gasoline tank Veeder-Root panel in the office, press the "Function" button until display shows 'Liquid Status', then press 'Print' button. If printout shows 'Fuel Alarm' or 'Sensor Out': • These indications indicates presence of liquid in the containment space and is a sign that the primary tank has leaked into the containment space (or the leak sensor is not functioning)													
Gasoline or oil truck unloading area adjacent to the fuel tanks, and oil room clean and free of signs of leaks or spills?					OK:				No*:				
Gasoline fuel piping, dispensers, nozzles, hoses and hose & piping mounts/supports free of signs of leaks, damage, settling/distortion, corrosion, peeling paint?													
Oil tank hoses and piping, dispensing pumps and hose / piping mounts/supports free of signs of leaks, damage, settling/distortion, corrosion, peeling paint?													
Emergency / spill response supplies well stocked and immediately available near the fuel tanks and oil tank room?					OK:				No*:				

Inspection Procedure: At least monthly, carefully inspect each designated area for the indicated conditions. Explain any conditions marked 'No' and indicate corrective action needed (and estimated completion date). Completed, signed forms must be kept on file for minimum 3 years.

MONTHLY TANK INSPECTION CHECKLIST: Riverside Coun

AST #T-1 (12,000-gal. Gasoline)

(developed by certifying P.E. to be equivalent to STI SP-001 checklist)

INSTRUCTIONS: See Inspection Guidance on reverse. On this side, fill in ALL applicable data. A copy or electronic scan of this completed form shall be kept in Water Department or Fleet Services Department files, and made available for inspection by the Long Beach Fire Dept/CUPA upon request.

Palm Desert Sheriff Station – Fueling facility, 73705 Gerald Ford Drive, Palm Desert, CA 92211 (operated by Riverside County Fleet

		The contract of the second			222.0	2.74		Zittere (Crestavine and Torri		
TANK	(#AST #1	TYPE: UL-2085 Steel	PROD	JCT STO	RED; U	nlead	ed Gasoline	TANK CAPACITY: 12,000 gallons		
-		Item		Sta	tus			Item	Status	
1.0	Is tank exterior (roof, shell, heads, bottom, connections, fittings, valves, etc.) free of visible leaks?			□Yes □No*			Is the contain equipment in the secondar			
2.0	tank and inspe	ill box on the northwest side of oct for accumulations of diesel. be clean and dry.		□ Yes	□ No*	14.0	building: P	 On the tank Veeder-Root panel inside the adjacent building: Press the "Function" button until display shows "Liquid Status", then press "Print" button. If 		
3.0		rior, and all exposed piping fre rtion, corrosion?	e of	☐ Yes	□ No*	(Y)	printout sh Indicates a	□ Yes □ No		
4.0	fittings, pumps	ections to the tank (including v , etc.) free of visible leaks? No ocation and describe leak.		□ Yes	□ No*		space and leaked into present, or functioning			
5.0	Is the tank external failures/degrad	erior free of visible signs of coa dation?	ating	□Yes	□ No*	ĹΪ	Is the primar Press the 'Print	☐ Yes ☐ No ³ ☐ Water check not conducted		
6.0	supports and o	ounts, brackets, mounting bolt concrete base/foundation free ring, corrosion and in good cor	of	□Yes	□ No*	15.0	will show inches of water at the bottom of the tank. If any reading other than "Water = 0.00 inches", check the No box. If a water check has not been conducted this month — check that box.			
7.0	dispenser area containment di	around the tank and around loading and reas (concrete and asphalt surfaces, t dike, etc.) free of visible signs of as any used absorbent been cleaned		□Yes	□ No*	16.0	The Veeder Root control panel display should show a green power light and no amber warning or red alarm light. The display should read "All Functions Normal" Press the RED 'Alarm_Test' button. The yellow and red lights should light.		□ Yes □ No	
8.0	(NFPA, hazard	els and signs intact and reada I wording, warnings, emergend d contact numbers etc.)?		□Yes	□ No*		Are spill supplies (absorbent, PPE, etc.) nearby, labeled and properly stocked?		□Yes □No	
9.0	connections in leak-free? Are	and dispensers, and all break- good condition, undamaged a nozzles up off the ground?		□Yes	□ No*	18.0	Look closely at the two black, round emergency vents on top of the tank. Are they unobstructed and free of debris (such as bird nests, etc.)?		□ Yes □ No	
10.0	detection sens	high level and interstitial leak or wiring and connections on t in good condition & intact?	op of	□Yes	□ No*	19.0	Is there a fire extinguisher in the immediate area, and is the inspection tag current (monthly check?)		□Yes □No	
11.0	covers have fu gaskets?	openings properly sealed? Ca notional fittings, hardware and		□ Yes	□ No*	20.0	Are there other conditions that should be addressed for continued safe operation or that may affect the site SPCC plan?		□Yes □No	
12.0	working condit			□Yes	□ No*	ΕÌ				
13.0	(panel on the o	rfill/high level alarm light and h anopy support). utton on the right side of the box. Does it activate the audible ho peration?		☐ Yes	□ No*					

SEE BELOW FOR ANY (No *) STATUS SEE REVERSE FOR INSPECTION GUIDANCE

Condition or Status Notes/Comments:

Inspector Name & Signature

Date of Inspection:

Inspection Guidance/Results:

- Inspectors shall be knowledgeable of the purpose of each piece of equipment, method of operation, characteristics of liquids stored, and if applicable, the manufacturers maintenance, inspection, testing requirements, and instructions.
- This Inspection is intended for monitoring the external AST condition and its containment structure. This visual inspection does not require a certified inspector. It shall be performed by an owner's designated inspector who is familiar with the site and can identify changes and developing problems.
- For equipment not included in the STI SP001 standard, follow the inspection, maintenance, and testing schedules and procedures as recommended by the manufacturer.
- Upon discovery of water in the primary tank, secondary containment area, interstice, or spill container, remove promptly or take other corrective action. Before discharge to the environment, inspect the liquid for regulated products or other contaminants and dispose of it properly.
- (*) designates an item in a non-conformance status. This indicates that action is required to address a
 problem. Document corrective actions in the comment section on the front side of this form.
- Non-conforming items important to tank or containment integrity (cracks, tank or containment deformation, etc.) require evaluation by an engineer experienced in AST design, a certified inspector, or a tank manufacturer who will determine the corrective action. Note the non-conformance and corresponding corrective action in the comment section.
- Retain the completed checklists for 36 months. The completed inspection form may be kept in hard copy in facility files, or may be scanned or otherwise kept electronically.

In the event of maintenance (such as painting) that could affect the operation of critical components (normal and emergency vents, valves), an inspection of these components is required immediately following the event.

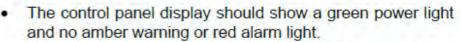
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Sample Inspection Procedures in the Plan

- Also summarized on the tankspecific inspection checklist
 - Vs "Any leaks? Yes or No"

Personnel also check for leaks into secondary containment:

- Monitored containment: via sensor reading of leak monitors or indicators monitoring the interstitial space of double walled tanks for indication of spills or leakage into the interstice.
 - AST #1 is monitored via the Veeder Root system and the control/monitor panel is located on the west exterior wall of Building E wall directly across from AST #1. For the monthly inspection, the panel weather box should be opened and:



- Press the RED 'Alarm _ Test' button. The yellow and red lights should light.
- The presence of water in the tank should be checked.
 Water (which, if present, would be at the bottom of the tank) will eventually result in internal corrosion and possibly leaks.
 - Press the Print button. This will print out an inventory report. The printout will show the inches of water in the tank:

```
VOLUME = 8771 GALS
HEIGHT = 54.98 INCHES
HATER = 0.00 INCHES
TIMP = 87.1 DEC F
```

Any water should be removed on a minimum quarterly to semi-annual basis.

- The secondary containment/interstice leak sensor should be queried as followed:
 - Press the Function button several times slowly until the display reads "Liquid Status".
 - Press the Step button. The display should read "Sensor Normal". If a record is needed, press the Print button.
 - If the display reads "Liquid" or "Sensor Out" there is either a liquid (diesel) in the containment or there is a problem with the sensor. Either requires immediate action.
- The leak status of the below ground double walled supply and return piping should also be queried via the Veeder Root panel (line leak test function).



Sample Inspection Procedures in the Plan

- AST #2 is monitored by an electronic monitoring system; the alarm/status panel is located on top of the tank. The panel can be directly viewed; the following lights indicate proper condition:
 - The green Power Available light should be on
 - The green Normal Operating Range light should be on.
 - A red Tank Leak (indicating a leak into the containment interstice) or a red High Level alarm requires an immediate response.
- Lab/Ops Bldg. Emergency Generator is monitored by an electronic monitoring system; the alarm/status panel is located on the control panel inside the generator enclosure. The panel can be directly viewed.
 - The Lamp Test rocker button should be depressed, and all
 of the adjacent warning lights should illuminate (pay
 particular attention to the "Basin" light and verify it lights up
 when the test button is pressed).

- Once the lamp test is completed, if the "Basin" light is still illuminated, that indicated a leak into the secondary containment and an immediate response is required.
- If the "Basin" lamp does not illuminate upon test, either the lamp is out or there is a problem with the leak sensor. Either condition must be immediately addressed.

Non-monitored containment:

- Open portable rising wall berms: Visual inspection around each contained piece of equipment, looking for leaks, and overall for condition (damage, deterioration), proper placement of equipment within, and all rising berm walls are clear/unobstructed and able to rise with any liquids. Verify that any drainage ports, plugs or caps are tightly closed.
- The 233-gallon Hi Power Portable Generator spill containment basin: Visual inspection of the open spill containment basin integral to the fuel tank inside the generator enclosure.
 - The generator enclosure doors should all be opened, and using a flashlight the interior carefully examined, looking for indications of liquid (fuel) in the open basin surrounding the fuel tank).
- Drum Storage Areas (DRDA 1 in Building H and Building F Drum Storage Area): Visual inspection of the storage area containment floors (and for Building F the piping trench) looking for leaks, and overall for condition (oil staining, damage, deterioration).

During the inspection, overfill protection or prevention devices (as applicable) are checked for proper operation and damage; overfill alarm test functions (test buttons, etc.) must be used were present to verify proper operation of the visual and/or audible alarm (e.g. the push-to-test button on the right side of the small AST #1 high level alarm acknowledgement box mounted immediately to the left of the Veeder Root control panel. Visible exterior surfaces of hoses, piping and fittings as well as all drains and outlets are checked for leakage or signs of potential failure, and any evidence of overfills or spills is checked. Fueling and dispensing hoses and nozzles are checked for condition

A more detailed inspection, consistent with the Steel Tank Institute SP-001 standard is conducted annually of ASTs #1 and #2.

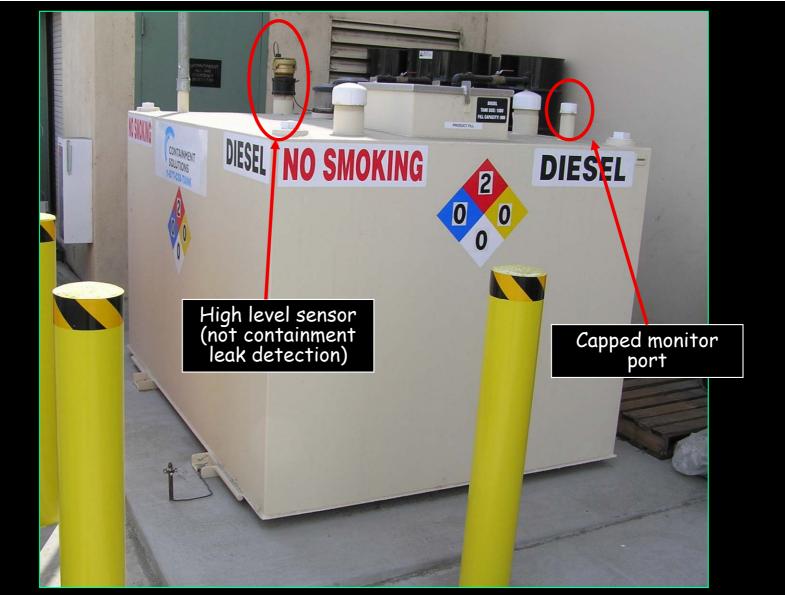


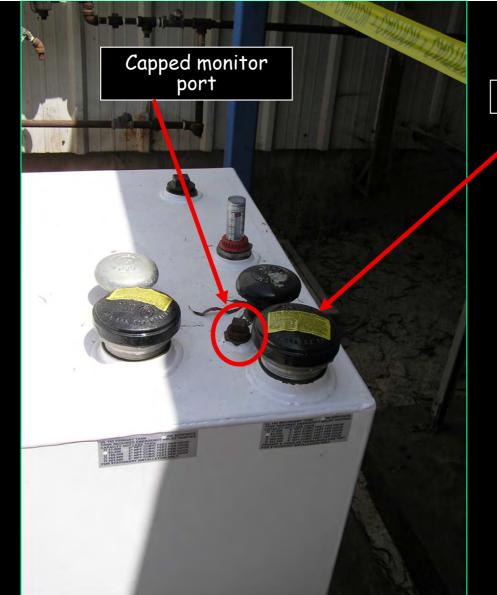
Written Plan or Implementation Issues (may or may not

be cited by the UPA as a violation [most are]... but still indicates substandard Plan or compliance)

- ➤ Is anyone actually:
 - Reviewing the inspection reports
 - Or just filing them
 - Verifying proper inspection practices
 - Shadow or oversight inspections
 - Assuring repairs are done promptly
 - Same issues being found?







These are vents







Tank ID and Description	General Location	Oil Storage Capacity (gals)	Contents	Containment or Discharge/Drainage Control Type; Overfill Protection	Notes
RO-T 5 Recyclable Oil Tank Polypropylene, single wall	Oil Recycling & Storage Area (south east portion)	1,900	Used recyclable machining / cutting oils	Containment Type: Sized (40 CFR 112.8(c)(2)) Containment Description: Concrete curbing 10°10"x27"5"x16.5" (3,000 gal. capacity). Covered. Overfill Protection: Visual verification and communication ('fast response system') during filling activities. (40 CFR 112.8(c)(8))	
UO-T 2 Used Oil Tank Fiberglass- reinforced polypropylene, single wall	Oil Recycling & Storage Area (north west portion)	935	Used lubricating/ machining oil	Containment Type: Sized (40 CFR 112.8(c)(2)) Containment Description: Concrete curbing 9'8"x11'2"x24" (1,615 gal. capacity). Covered. Overfill Protection: Visual verification and communication (fast response system') during filling activities. (40 CFR 112.8(c)(8))	
OCTS -1 Oil Containing Liquid Tote Storage IBC/tote	Oil Recycling & Storage Area (northern portion)	330 max. ea (appx. 660 max total (2 totes))	Oil containing liquids (soaps, waste water)	Containment Type: Sized (40 CFR 112.8(c)(11). Containment Description: Concrete curbing 6'9"x10'10"x22" (1,002 gal. capacity). Overfill Protection: Visual verification gauge and communication during filling activities. (40 CFR 112.8(c)(8))	
CODS-2 Machine, Lube and Cutting Oil Storage and Dispensing Areas 55 gallon steel drums	Oil Recycling & Storage Area (northern portion)	55 ea. (appx. max. total 550 (10) drums)	Machine lubricating and cutting oils	Containment Type: Sized (40 CFR 112.8(c)(11). Containment Description: >800 gal containment in overall area and storm water sump system. Covered. Overfill Protection: Visual verification if drums to be filled. (40 CFR 112.8(c)(8))	Area not currently used. Identified in the Plan for operational flexibility
CODS-1 Machine, Lube and Cutting Oil Storage	Oil Recycling & Storage Area (northeast portion)	55 ea. (appx. max. total 1,100 max. (20	Machine, lubricating and cutting oils	Containment Type: Sized (40 CFR 112.8(c)(11). Containment Description: Concrete curbing	

Recall Plan Compliance Dates



Facility not yet APSA-regulated, but installing a new tank that brings them ≥1,320 gal. of petroleum:

SPCC Plan must be written & implemented before starting operation (filling tank)

Facility <u>already</u> APSA regulated (and has an SPCC Plan), but installing <u>an additional or replacement</u> tank:

Must amend their SPCC Plan (& PE re-certified if nec.) within 6 months after new tank is installed...



nference

06.21.2011 11

Technical Amendments?







Portable Diesel Generators

- > Are they listed in the Plan?
- How long are they on-site?
 - For initial Plan: any time period
 - Existing Plan: < or > 6 months?
 - Is that being tracked or documented?





Options (include flexibility to avoid technical amendment entanglements [portable containers – not fixed tanks])

- > Plan #1:
 - Four 55-gal. drums of Mobile 10-50 oil
 - One 55-gal. drum of Mobile DTE
 - Three 55-gal. drums of LE hydraulic oil 564A
- ➤ Plan #2:
 - An average of ten and a maximum of fifteen 55-gal. drums of various lubricating, gear, machine and hydraulic oils



Written Plan or Implementation Issues (may or may not

be cited by the UPA as a violation [most are]... but still indicates substandard Plan or compliance)

- No description of integrity testing of bulk containers (distinct from 'inspections')
 - Not addressing regularly scheduled integrity testing
 - Referencing an 'obvious' wrong industry standard (e.g. API 653 for a 1,500 gal. steel shop tank (vs STI SP001))
 - Insufficient detail when referring standards or not addressing qualifications
 - No schedule...past due date (and no baseline)

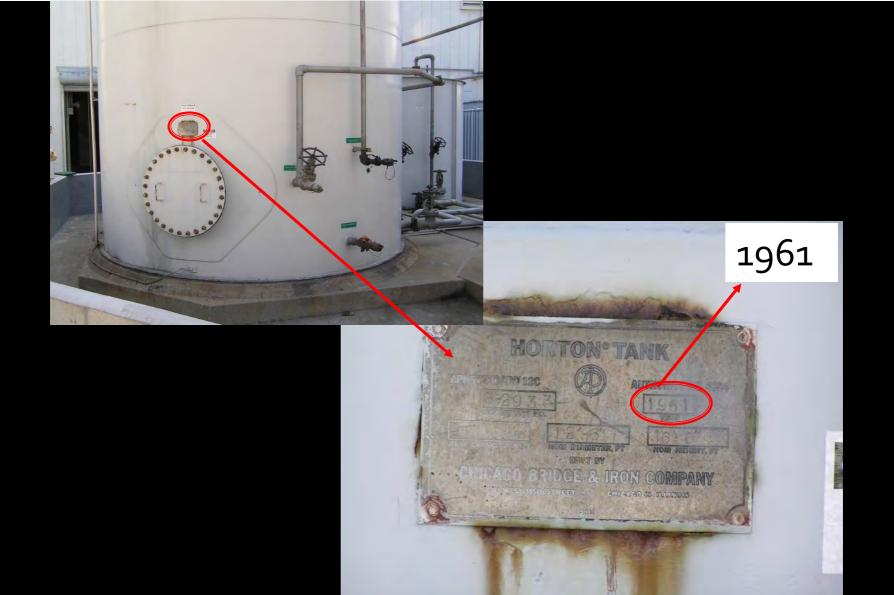


	Refer to Secti	ion 6	(by	(by trained 'owner's inspector')				
5.5.2 E – Formal external inspection by certified inspector								
5.5.3	Refer to Section 7 I – Formal internal inspection by certified inspector							
5.5.4	Refer to Section 8							
	Refer to Section 9							
5.5.5	5.5.5 () indicates maximum inspection interval in years. For example, E (5) indicates formal external inspection every 5 years.							
		TABLE 5.5 TABLE OF I	NSPECTION S CHE	EDULES				
AST Type and Size (U.S. gallons) Category 1 Category 2 Category 3								
	51 Type and S	size (0.3. galions)	Category 1	Category 2	Category 3			
		0 – 1100 (0-4164 liters)	P	Р	P, E&L(10)			
Shop Eabrid	Fabricated ASTs	1101 - 5,000 (4168-18,927 liters)	Р	P, E&L(10)	[P, E&L(5), I(10)] or [P, L(2), E(5)]			
Shop-rabile		5,001 - 30,000 (18,931-113,562 liters)	D E(20)	[P, E(10), I(20)]	[P, E&L(5), I(10)]			
			P, E(20)	or [P, E(5), L(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			Р	Р	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								

In Table 5.5 Use The Following Designations:
P — Periodic AST inspection ◀

5.5 5.5.1





STI SPoo1... not API653

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g Conference y-March 2021



>> For Mobile Refuelers OMR-1 & -2, GMR-1 & FMR-1: Minimum weekly to monthly (may use the Air Transport Association (ATA) Specification 103 "Standard for Jet Fuel Quality Control at Airports", as the associated inspection procedures and forms. the specific cargo tank certifications/inspections specified in 49 CFR 180.407 et seq. are required (appx. every 2 - 3 years), and serve as the relevant industry standard for integrity testing these mobile tanks.

Written Plan or Implementation Issues (may or may not

be cited by the UPA as a violation [most are]... but still indicates substandard Plan or compliance)

- > Overfill prevention not addressed or described
- > Inspections of piping valves & appurtenances not addressed
- > Outdated PE certification attestation language
- > 'Conditional' PE certifications
- > Certifying Plans at facilities using old USTs as ASTs
- > ONLY including petroleum and/or APSA tanks
 - vs ALL oils and APSA-exempt, 40 FR 112 non-exempt stuff



Written Plan Issues in Cruddy Plans

(not always citable as a violation... but still indicates a substandard Plan)

- > Omitting non-transportation mobile containers or using them for storage
 - Assuming they are transportation-related only
- > For Qualified Facility plans:
 - Using environmental equivalence provisions or containment impracticability without PE certification
 - Certifying management never having visited the facility







A. Onshore Facilities (excluding production) (§§112.8(b) through (d), 112.12(b) through (d)):

The owner or operator must meet the general rule requirements as well as requirements under this section. Note that not all provisions may be applicable to all owners/operators. For example, a facility may not maintain completely buried metallic storage tanks installed after January 10, 1974, and thus would not have to abide by requirements in §§112.8(c)(4) and 112.12(c)(4), listed below. In cases where a provision is not applicable, write "N/A".

	Table G-18 General Rule Requirements for Onshore Facilities		N/A		
	Facility Drainage Requirements				
	Drainage from diked storage areas is restrained by valves to prevent a discharge into the drainage system or facility effluent treatment system, except where facility systems are designed to control such discharge. Diked areas may be emptied by pumps or ejectors that must be manually activated after inspecting the condition of the accumulation to ensure no oil will be discharged. [§§112.8(b)(1) and 112.12(b)(1)]	\boxtimes			
	/alves of manual, open-and-closed design are used for the drainage of diked areas. [§§112.8(b)(2) and [12.12(b)(2)] facility drainage systems from undiked areas with a potential for a discharge are designed to flow into londs, lagoons, or catchment basins to retain oil or return it to the facility. Catchment basins are not located in areas subject to periodic flooding. [§112.8(b)(3) and 112.12(b)(3)] facility drainage is not engineered as in (b)(3) above, the facility will equip the final discharge of all litches inside the facility with a diversion system that would, in the event of an uncontrolled discharge, etain oil in the facility. [§112.8(b)(4) and 112.12(b)(4)] Where drainage waters are treated in more than one treatment unit and such treatment is continuous, and pump transfer is needed, two "lift" pumps are provided and at least one of the pumps is permanently inscharge as described in §112.1(b) in case there is an equipment failure or human error at the facility. [§112.8(b)(5) and 112.12(b)(5)]				
	Bulk Storage Container Requirements				
	The containers at the facility are compatible with materials stored and conditions of storage such as pressure and temperature. [§§112.8(c)(1) and 112.12(c)(1)]				
	All facility bulk storage tank installations (including mobile or portable oil storage containers) provide a secondary means of containment for the entire capacity of the largest single container and sufficient freeboard to contain precipitation. Diked areas are sufficiently impervious to contain discharged oil. [§112.8(c)(2) & (c)(11)] NOTE: Drive-over containment berms at roll-up doors and curb drain plug to be installed by 9/15/2015	\boxtimes			
	An alternative containment system has been provided consisting of a drainage trench enclosure arranged so that any discharge will terminate and be safely confined in a facility catchment basin or holding pond. [§112.8(c)(2)] NOTE: This is the loading dock drainage sump with locked, manual pump.	×			
	Mobile refuelers and/or other non-transportation related tank trucks are provided with general containment or other diversionary structures or equipment meeting §112.7(c) (see Table G-10). [§112.8(c)(11)]		\boxtimes		
	Mobile or portable oil storage containers are positioned to prevent a discharge as described in §112.1(b). [§112.8(c)(11)]				
	Diked Area Drainage				
	If uncontaminated rainwater from diked areas drains into a storm drain or open watercourse (bypassing any facility effluent treatment system) the following procedures will be implemented at the facility: $[\S\S112.8(c)(3)(i-iv)]$ and $112.12(c)(3)(i-iv)]$				
	 Bypass valve is normally sealed closed NOTE: Curb drain plug to be installed by 9/15/2015 Retained rainwater is inspected to ensure that its presence will not cause a discharge to navigable waters or adjoining shorelines Bypass valve is opened and resealed following drainage under responsible supervision Adequate records of drainage are kept [See Dike Drainage Log in Attachment 3.3] 	X X X			

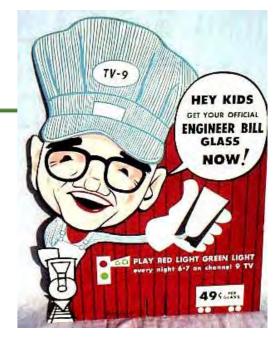
- > Checking the template boxes without understanding that the boxes are certified affirmations of compliance
 - Actually complying?

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PE Attestation: Five required attestations

- > In the certification, the PE attests that:
 - He (she) is familiar with the rule requirements
 - 2. He or his agent visited and examined the facility
 - 3. The Plan has been prepared in accordance with good engineering practice, including the consideration of applicable industry standards, and with the requirements of 40 CFR part 112
 - 4. Procedures for required inspections and testing have been established
 - 5. The Plan is adequate for the facility





1.0 CERTIFICATIONS AND AMENDMENT LOG

SPILL PREVENTION, CONTROL, AND COUNTERMEASURE PLAN (SPCC Plan)
FOR

, CALIFORNIA

July 2007

Designated Person Accountable for Spill Prevention:

Director of

MANAGEMENT APPROVAL

Division, is committed to the prevention of discharges of oil to navigable waters and the environment, and maintains the highest standards for spill prevention control and countermeasures through regular review, updating, and implementation of this SPCC Plan for the Division, is committed to supplying the manpower, equipment and materials required to expeditiously control and remove any quantity of oil discharged that may be harmful. A complete copy of this SPCC Plan will be maintained at the facility and be available to the EPA Regional Administrator for on-site review.

Signature

Date 8 27 67

PROFESSIONAL ENGINEER CERTIFICATION

I hereby certify that: (1) I am familiar with the provisions of Title 40 CFR, Part 112; (2) I or my agent visited and examined this facility; (3) this Spill Prevention, Control and Countermeasure Plan has been prepared in accordance with good engineering practices; (4) procedures for required inspections and testing have been established; and (5) this Plan is adequate for this facility. THIS SPCC PLAN IS NOT FULLY CERTIFIED UNTIL THE REQUIREMENTS SET FORTH IN SECTION 6 (REQUIRED FACILITY CORRECTIONS) OF THIS SPCC PLAN ARE ACHIEVED. FAILURE TO IMPLEMENT THE REQUIRED FACILITY CORRECTIONS WILL RESULT IN NON-COMPLIANCE WITH THE PROVISIONS OF TITLE 40, CFR, PART 112.

Engineer:	-	-	Seal
Signature:			

Registration:

Date:

8/21/0





Conditional PE
certification/attestation?
Wassup with the conditions?
Should be addressed as a 112.7
discussion, explanation &
schedule

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PE Attestation: An outdated attestation

- Newer Plan but old certification language?
 - Likely indicates Plan written/certified by someone not current with regulations
 - What else in the Plan is based on old rules?

CERTIFICATION

I hereby certify that I, or my agent, have examined the facility, and being familiar with the provisions of Title 40 of the Code of Federal Regulations Part 112, I attest that this Spill Prevention, Control, and Countermeasure (SPCC) plan has been prepared in accordance with good engineering practices.



Printed Name of Professional Registered Engineer

Signature of Registered Professional Engineer

Registration No. 35840

tate:

No PE recertification required for the 5-year review (or after the PE license expires)





Field Condition Consistency, Accuracy & Implementation

> Having a good written Plan is only the beginning...



NOT the correct way to implement an SPCC Plan

CALIFORNIA



CONSISTENCY

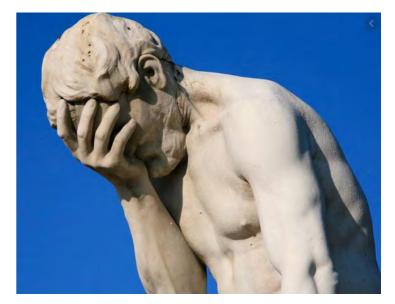
It'S ONLY A VIRTUE IF YOU'RE NOT A SCREWUP.

Frequent Consistency & Implementation Issues

- > Containment
 - Too small
 - Valve not closed
 - Not clean or dry
 - Damaged
- > Inspections
 - Not done
 - Not done properly or consistently
 - Corrections not made

- > Facility diagram
 - Not consistent with the facility
- Training/Briefings
 - Not done
 - Not remembered

- > Portable containers
 - Not positioned properly
 - Numbers don't match







CONTAINMENT



PREVENTING ESCAPE OF PROBLEMS SINCE 1790

Written Plan or Implementation Issues (may or may not

be cited by the UPA as a violation [most are]... but still indicates substandard Plan or compliance)

> Description or listing of sized secondary containment...

 Does not state containment volume or provide dimensions/ calculations

Not required... but very helpful to easily demonstrate/document

volume compliance

- Inaccurate
- Does not address precipitation freeboard
- Has insufficient capacity











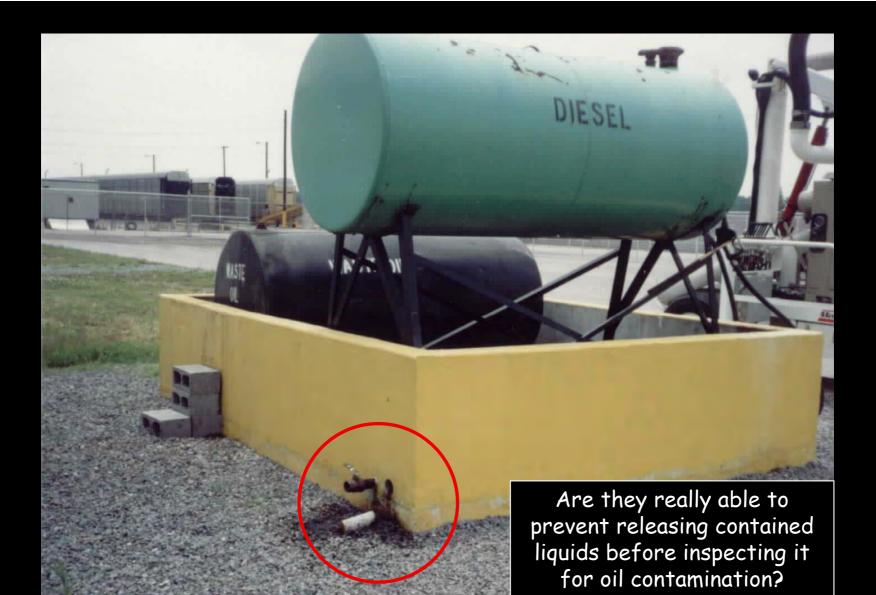


The black containment pallets appear to have sufficient capacity for more than 6 inches of rain (plus the 55 gallon drum capacity).

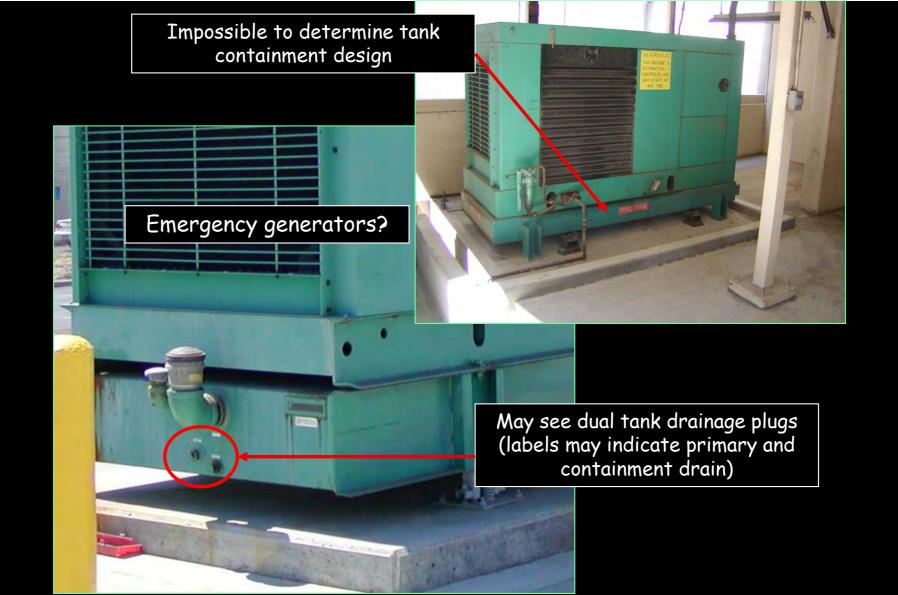
The yellow containment pallet would be sufficient for capacity of a 55 gallon drum - but has far less precipitation capacity. These yellow pallets may have been intended for inside use.











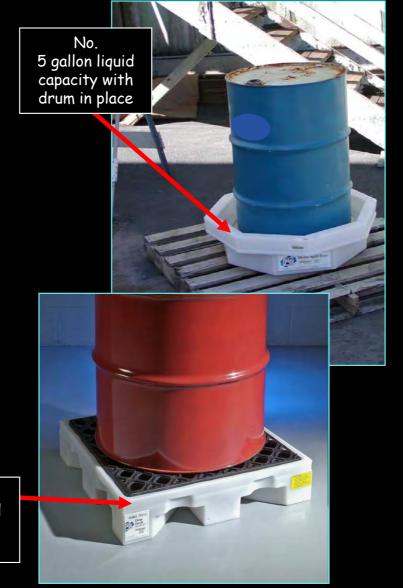


Are All Containment Pallets 112.8(c)(11) Compliant?



Yes. 61 gallon liquid capacity with drum in place

No. 11 gallon liquid capacity with drum in place

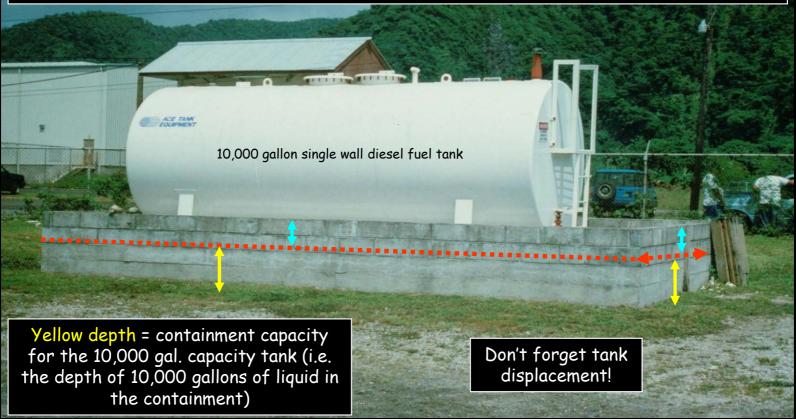




Freeboard = Containment Depth for Rainfall Accumulation

Blue depth = precipitation freeboard (i.e. depth of accumulated precipitation above the 10,000 gal. tank capacity liquid level).

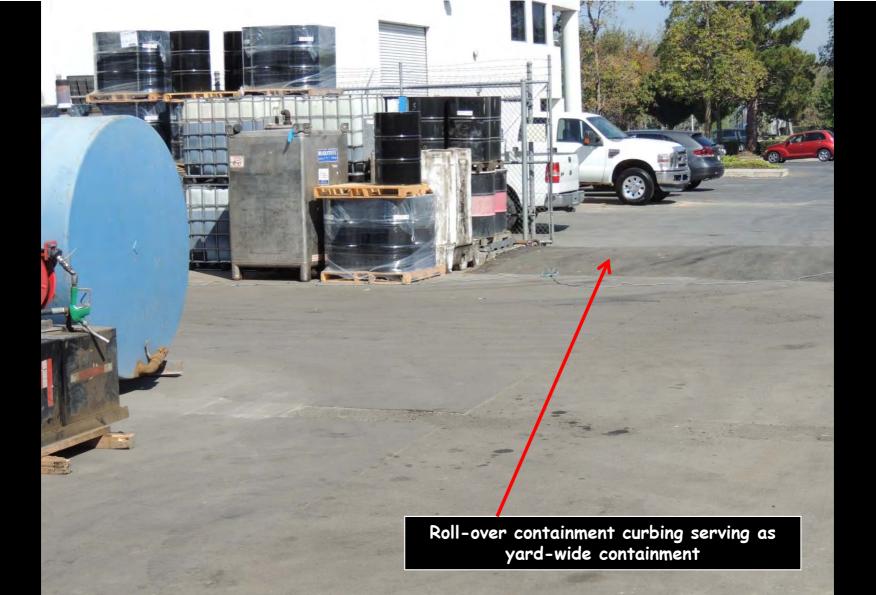
Determined by the facility or PE







Single wall ASTs in containment
Always verify integrity of containment
walls and check drain valves



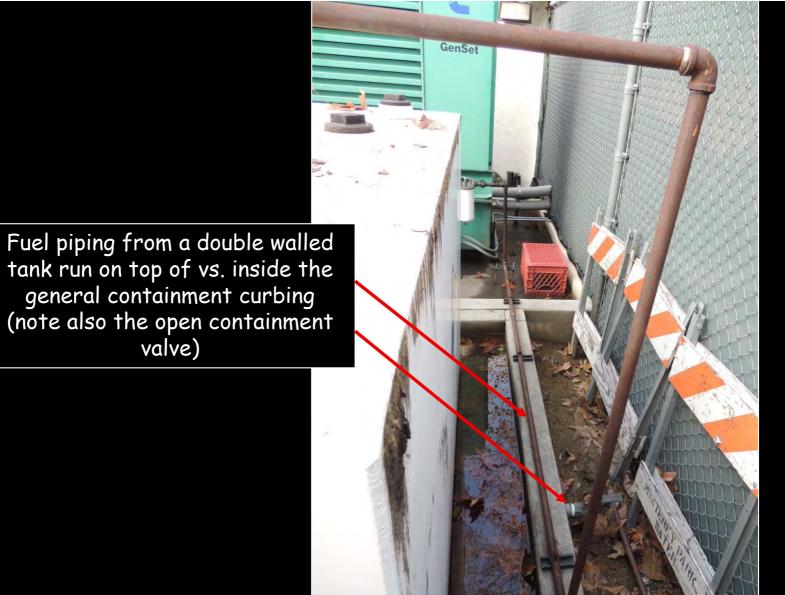


Drum storage areas... sometimes with containment... sometimes not









valve)



Containment? Oil area and container security? Everything listed/addressed in SPCC Plan?



This facility's SPCC Plan (PE certified) stated that this single wall stilted tank was located in sized secondary containment

But no calculations, drawings/diagrams, or other technical support

























Exercising the Contingency Plan?

And testing/validating the general containment assumptions



IN AN EMERGENCY

You are positively screwed.







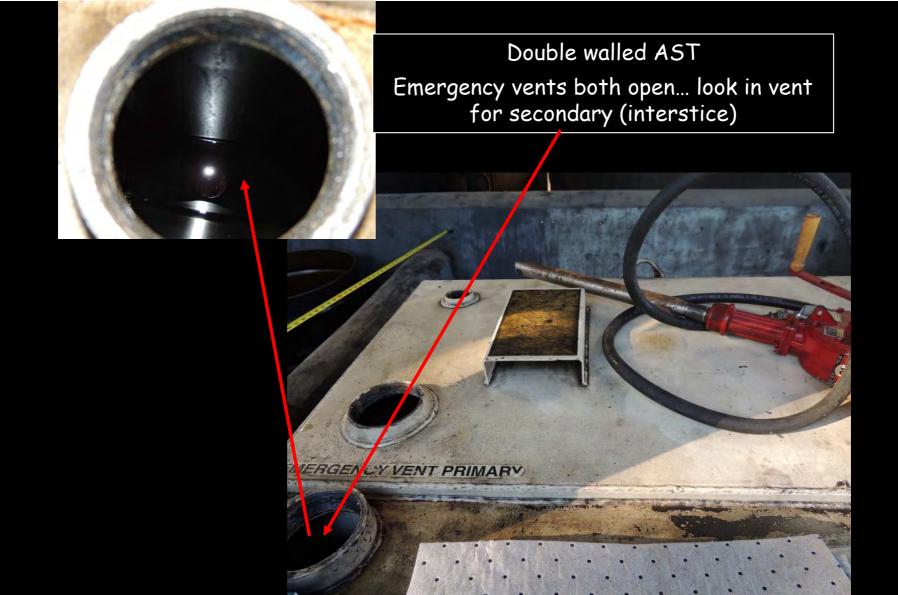




Accumulation of oil in secondary containment must be promptly removed and loses (leaks) of oil from the container promptly corrected

222 SES





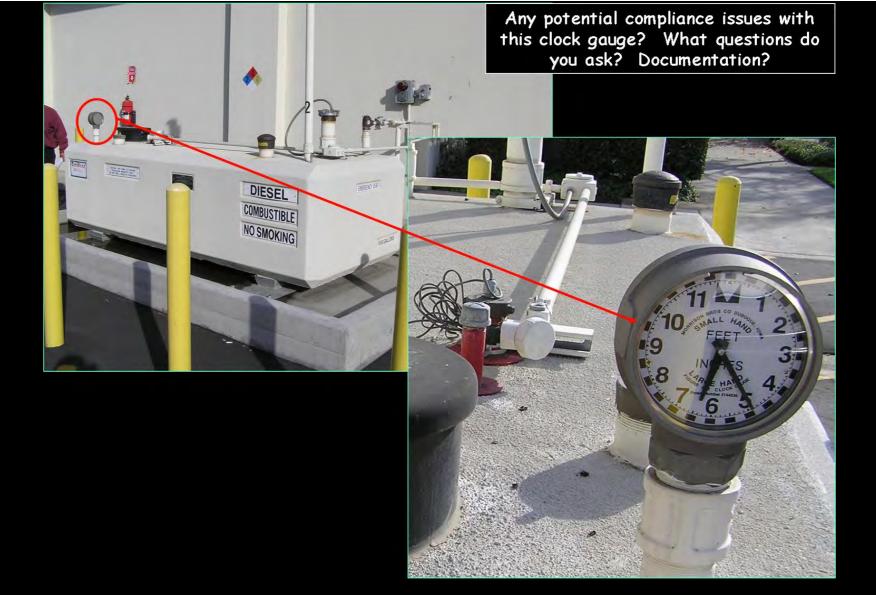


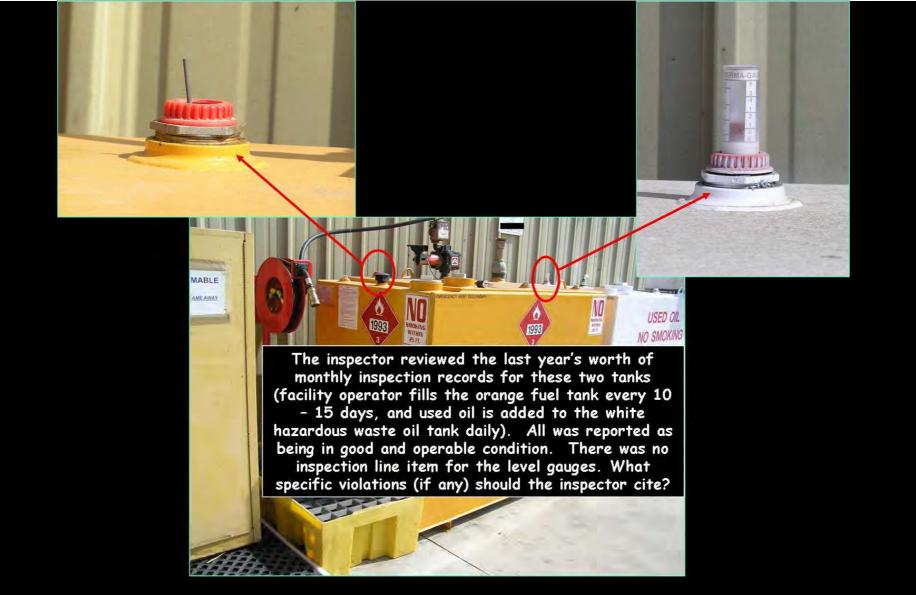




















Training?



Common APSA violation: Training not provided for oil handling personnel



Initial Spill Prevention, Control & Countermeasure (SPCC) Plan Training August 2015

- What is an SPCC Plan?
 - a. Requirement of the federal Oil Spill Prevention regulations (40 Code of Federal Regulations part 112) and California Aboveground Petroleum Storage Act (APSA - Cal. Health & Safety Code
 - b. Requirements apply to oil & oil product storage, use & handling
 - Oils¹ of any type and at any concentration (California/county inspectors have jurisdiction) over petroleum oils only)... including diesel fuel; gasoline; motor, lube, gear, hydraulic and other oils, waste oil; kitchen oil and grease, oil-based paints and solvents; etc. ii. All containers, tanks, oil-filled equipment with 55 gal, or greater capacity
 - 1. Facility capacity 1,320 gal, and greater 2. Excludes hydraulic equipment & reservoirs on mobile equipment and their on-board
 - For LASD facilities & stations: Any 55 gallon drums containing oils, greases or used
 - oils, aboveground gasoline and diesel fuel tanks, and emergency generator base tanks containing diesel fuel.
 - c. A 'Spill Prevention. Control and Countermeasure (SPCC) Plan is a detailed, site-specific descriptive (engineer and management certified) plan describing how the facility meets the federal
 - SPCC rules for: Oil spill prevention (through proper tank and container engineering and operation, overfill controls, implementation of operational procedures, rainwater drainage procedures and storm water controls, frequent inspections of containers and storage areas, integrity testing
 - of tanks and containers, training, etc.) ii. Oil spill control (through use of secondary containment and spill diversionary equipment, proper discharge valve design, emergency/discharge response procedures)
 - d. SPCC Plan and Plan implementation goal i. Prevent oil discharges from tanks, containers, storage areas and oil transfer, piping. loading/unloading, dispensing and handling areas
 - ii. Prevent any spill that does occur from reaching a 'navigable water' (i.e. any storm drain) 1. Reportable quantity? Enough oil to cause a sheen upon the water! i.e. - any
- SPCC Plans for LASD facilities and stations:
- SPCC Plans cannot simply sit on the shelf... they must be implemented (primarily inspections. procedures, equipment maintenance, spill control)
 - b. Must be reviewed at least every 5 years and updated if necessary (and within 6 months of any

1 The term 'oil' includes gasoline, diesel fuel and distillate solvents.

- f. Written procedures are required and are in place for routine/frequent inspections of tanks, oil containers and storage areas (see next).
 - Inspections and integrity testing of tanks and containers (Written procedures are in place and are part of the inspection form(s) (SPCC Plan Appendix C).
 - i. The SPCC Plan and inspection forms contain the required written inspection procedures
 - and schedule 1. Monthly for all aboveground tanks (and associated visible piping) and any oil drums
 - and totes; and any containment areas. Must keep written inspection records/logs for at least three years (the procedure IS the log) Must inspect all fuel tanks, tank containments, leak indicators, any oil drums/totes, storage
 - and staging areas, and the loading areas. iv. Inspections should address (i.e. look at):
 - Leaks or oil loss (spills and spill residues) on outer tank or container surfaces
 - Leaks or oil loss (spills and spill residues) inside containment (containment leak

gauge or leak sensor alarms/indicators)

- Corrosion
- Damage
- 5. Oil or fuel accumulation in containment areas or loading areas
- Tank foundations and supports, drum storage flooring
- Overfill prevention (high level) devices/systems (for damage and proper operation)
- 8. Visible valves/piping associated with tanks and containment areas (for damage [and proper closure for containment drain valves/caps1)
- a. If buried piping is uncovered: must inspect the exposed piping Fuel dispenser hoses and nozzles

Basic Loading/Unloading Procedures

Refer to and cover the various procedures in SPCC Plan Appendix H).

- 1) Assure sufficient ullage/space in the tank for the amount of oil/fuel to be transferred
 - a) Level gauges on top of fuel tanks or Veeder-Root monitoring & inventory gauging panel or gauge
- stick
- 2) Properly spot/stage the tanker vehicle
 - a) Set cones/warnings
 - b) Set brakes c) Chock wheels
- Inspect delivery/transfer hoses, connections, piping
 - a) Protected from traffic
 - b) Inspect for damage and tight connections



Training developed by:





·Ŧ

Environmental Training Attendance Record

Training Course: Spill Prevention, Control & Countermeasure Plan (Initial Training)

Course Date: Revision Number: 1

Instructor/Facilitator: Page: ____of ___

Topics Covered (based on Virgin Orbit – Mojave SPCC Training Outline):

Applicable oil pollution control laws
 Contents of the SPCC Plan

Review of operation and maintenance of equipment to prevent discharges

Discharge (spill response) procedure protocols

Known discharges or spills to navigable waters

Failures or malfunctioning components

Recently developed precautionary measures
 Instructors Signature:

Printed Name Signature Department / Function

	DIETO

Course Date:

Instructor:		Page:of	
Topics Covered: Overview of SPCC Plan and oil spill Review of facility-specific SPCC Plan Past spill events (if any in past year) Discussion of causes Discussion of corrective and Equipment or system failures or mal Recently developed precautionary of	n requirements (procedures, ir), including d preventive action Ifunctioning equipment (if any i	n past year)	
Printed Name (first, last)	Signature	Department / Function	

Environmental Training Attendance Record

(Annual Briefing)

Revision Number:

Training Course: Spill Prevention, Control & Countermeasure Plan



SECURITY

Sometimes you just gotta be sure











Containment dikes that might not be sufficiently impervious



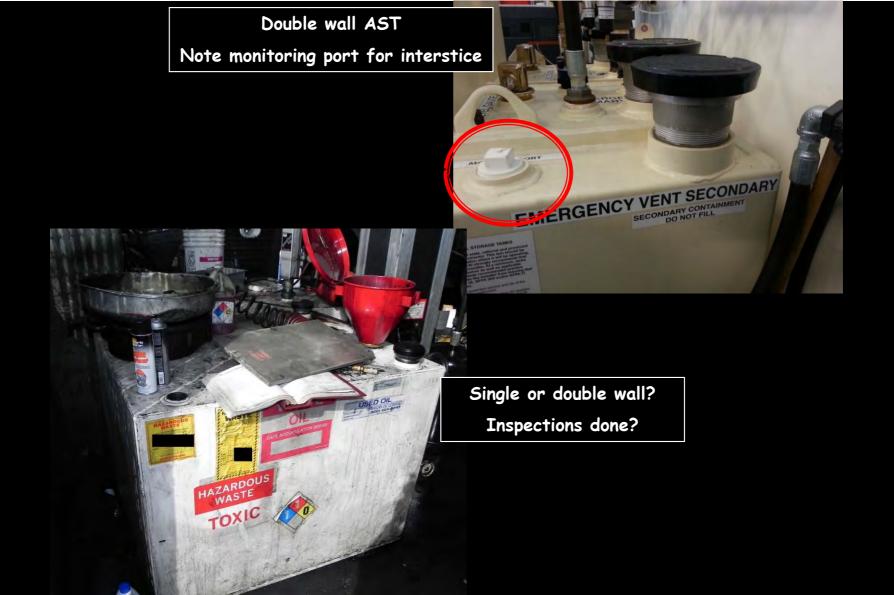


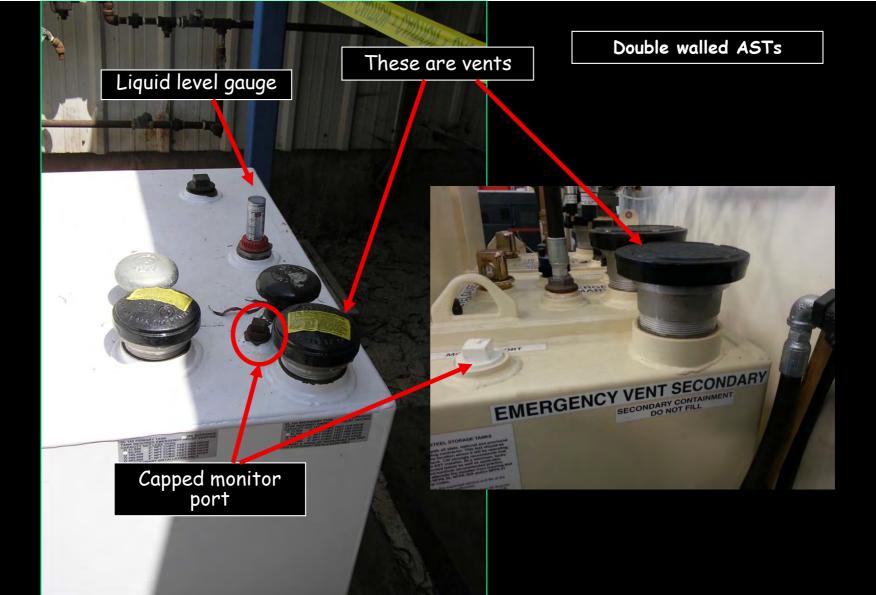








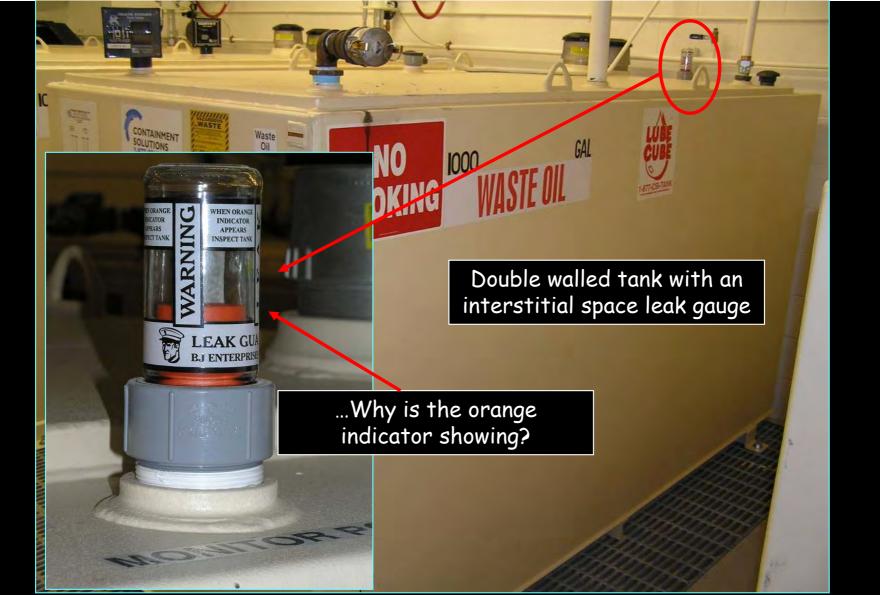


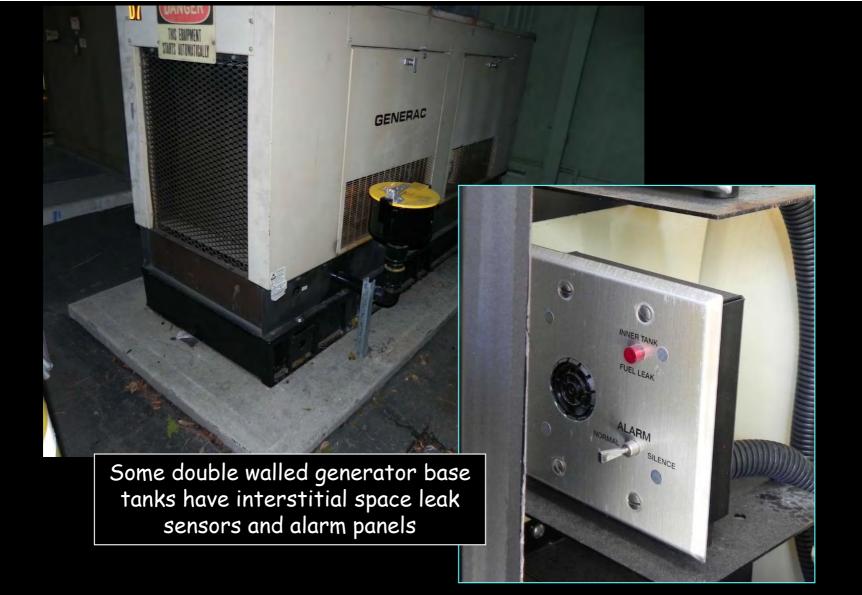














Some double walled generator base tanks have interstitial space leak sensors... and some of those are not connected \odot

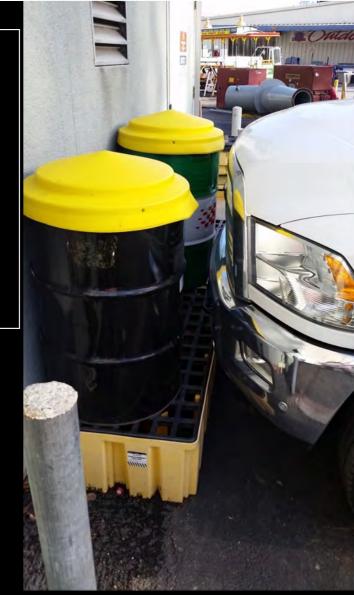
	Item	Status		
* 14.0 *	 Is the containment/interstitial monitoring equipment in good working condition? On the generator control panel, press and hold the 'Alarm Silence/Lamp Test' button for 2 – 3 seconds to test the controller indicator lamps, alarm horn, and digital display). Do the lamps, display and horn test successfully? If they do not all light up, check the No box and take corrective action: the lamp might be out, OR the leak sensor is not functioning and/or the wiring may be defective. 	□ Yes □ No*	emergency vents, valves), an inspection of these components is required immediately following	
* * 15.0	Is the secondary containment free of any liquid? On the generator control panel - look at the FAULT lamp/indicator: A yellow or red FAULT light indicates a problem. If lit - look at the LCD display and look for: Fuel Leak Warning' (and a yellow FAULT light Fuel Leak Shutdown' and a red FAULT light EITHER one indicates a fuel leak into the secondary containmentand immediate corrective action must be taken. If there is NO fuel leak fault indication on the panel check the Yes box. If any fuel leak fault	□Yes □No*	1. Emergency stop switch 2. Generator set master control switches, OFF/RESET AUTO RUN buttons with lamps 3. Digital display 4. Alarm born (behind panel) 5. Pushbutton/rotary selector dial 6. Annunciator fault lamp 7. Controller rainal strips (on circuit board) 8. Alarm silence/lamp test button with lamp 9. Mini USB connection KOHLER	
* 16.0	Are spill supplies (absorbent, PPE, etc.) nearby,	□ Voc □ No*		



Does this drum area pass inspection?

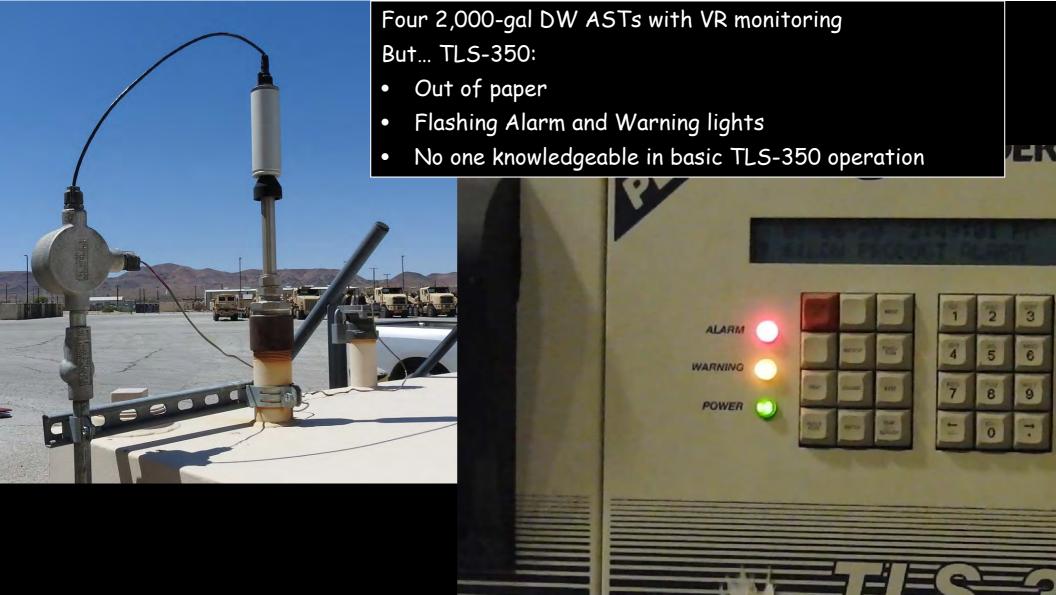
- Not leaking
- In good condition
- Protected from rain
- Within properly sized containment

Inspection form (or industry standard) says nothing about parking an F350 butt-ass up against the drums

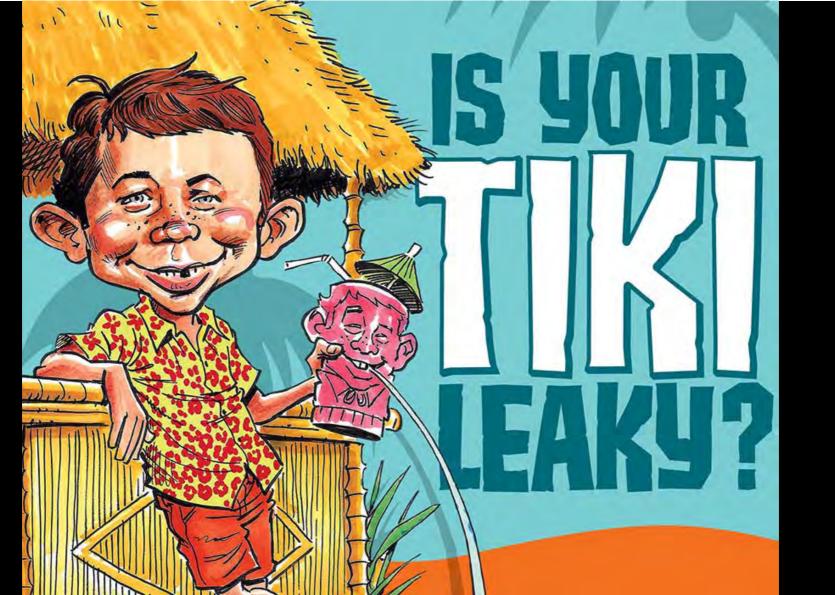














Any Questions?

(Zoom Room and Irish Whiskey follows)

Steve Lichten
President, ESCI EnviroServices, Inc.
Long Beach, CA

562-984-2079 or

714-322-0470 mobile

slichten@enviroservices.com

