



Preparing for the ICC UST Inspector Exam

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Training Conference
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Poll Question 1

Why are you here today?

- a) I am a new UST inspector and will be taking the exam soon**
- b) I am an existing inspector but cannot pass the stupid exam**
- c) I am involved with training and am researching training resources**
- d) I need the CEUs and had 4 hours to kill**
- e) Other**

Getting Started

- You will need
 - 23 CCR
 - H&SC
 - PEI 500 / 900/ 1200
 - Title 8 CCR

Poll Question 2

Do you have the study resources with you now?

- a) **Yes**
- b) **No**

If you answer “No” and you can get them, go now

How this course works

**Review of resource material as related to
inspector duties**

Polling Questions

Audience feedback questions via chat

About the Exam

- Open book
- Use your own resource materials
- 60 questions / 90 minutes

Exam Breakdown

- **Inspector Qualifications** = **7%**
- **UST System & Design** = **10%**
- **Inspections & Admin** = **28%**
- **Testing & System Evaluation** = **25%**
- **Health & Safety** = **5%**
- **Installation, Closure, Repairs, & Modification** = **17%**
- **Education & Enforcement** = **8%**

Reference Materials

- **Must be bound or in a binder**
- **Permanent markings (notes in margins) are allowed**
 - Pencil markings are not
 - Separate note pages not allowed
- **Tabs on pages allowed, if stapled in place**

Title 23 CCR

23 CCR Organization

(and Table of Contents)

- Article 1 Definitions
- Article 2 General Provisions
- Article 3 “New” Tanks
- Article 4 “Existing” Tanks
- Article 5 Releases
- Article 6 Repairs & Upgrades
- Article 7 Closure
- Article 8 **Extra Stuff**
- Article 9 **Extra Stuff**
- Article 10 Permits & Licensing
- Article 10.5 Red Tags
- Article 11 **Extra Stuff**

Poll Question 3

**I have a question about temporary closure requirements.
Where should I start looking in 23 CCR?**

- a) Article 3**
- b) Article 4**
- c) Article 5**
- d) Article 7**
- e) Article 10**

Article 1- Definitions

2610 (b)

- **List of Terms found in H & SC 25281**

2611

- **Definitions for 23 CCR**

Note: Definitions for Red Tag found in 2717

Useful Definitions- 23CCR

- Existing underground storage tank
- New underground storage tank
- Operator
- Repair
- Service technician

Poll Question 4

Which of the following is an “Existing Underground Storage Tank”?

- a) UST installed on or after July 1, 2004
- b) UST installed prior to January 1, 1984
- c) UST installed on a farm on or after December 22, 1998
- d) UST installed on or after October 1, 2018

Poll Question 5

Which of the following is not a “New underground storage tank”

- a) 12,000 gallon unleaded fuel tank installed in 2003 at a retail sale location**
- b) 500 gallon waste oil tank installed in 1995 on a military base**
- c) 10,000 gallon diesel tank installed in 1982 at a trucking fleet operation**
- d) 1,500 gallon diesel tank installed in 2001 on a farm**

Poll Question 6

In order to meet the requirements for “Fail Safe,” the monitoring system must shut down the turbine pump during which of the following:

- a) **Power Outage**
- b) **Monitoring System Failure**
- c) **Monitoring System Disconnect**
- d) **All of the Above**

Article 2: General Provisions

- **Intent of the Regulations**
- **Exclusions from Regulation**

Poll Question 7

Which of the following is subject to regulation as a UST when installed underground and/or below grade?

- a) 1000 gallon buried double-walled waste oil tank**
- b) 55-gallon drum of new oil in a basement**
- c) 500-gallon LPG tank**
- d) 1000-gallon heating oil tank**

Poll Question 8

Which of the following is not included in HSC 25283.5, which specifies the requirements for a basement tank to be excluded from regulation as a UST?

- a) The owner or operator maintains a log of tank inspection results
- b) All exterior surfaces of the tank can be monitored by direct viewing
- c) The owner or operator conducts daily inspections of the tank
- d) The floor beneath the tank can be monitored by direct viewing

You Should Know

23CCCR 2620 (e)

Own/ops that fail to meet any testing due date must complete the subsequent test at the required interval from the due date of the previous test, not from the date of the overdue test

Test due dates will not shift backward due to late testing

Testing may be conducted earlier than the due date (month), with subsequent testing based off of the early date

Article 3

New UST Design, Construction, and Monitoring Requirements



Article 3- Concepts & Clarification

DW/DW =
-DW tank
-DW piping

Not all DW/DW
systems are VPH

VPH refers to
Monitoring



All VPH systems
are DW/DW

VPH $\geq 7/1/04$

VPH- see
HSC 25290.1

Article 3 Highlights

Requirements for UST Installation

- Construction
- Monitoring
- Testing

Testing Requirements Monitoring Program



You Should Know

2630(d)

“All monitoring equipment...shall be installed and maintained such that the equipment is capable of detecting a leak at the earliest possible opportunity.”

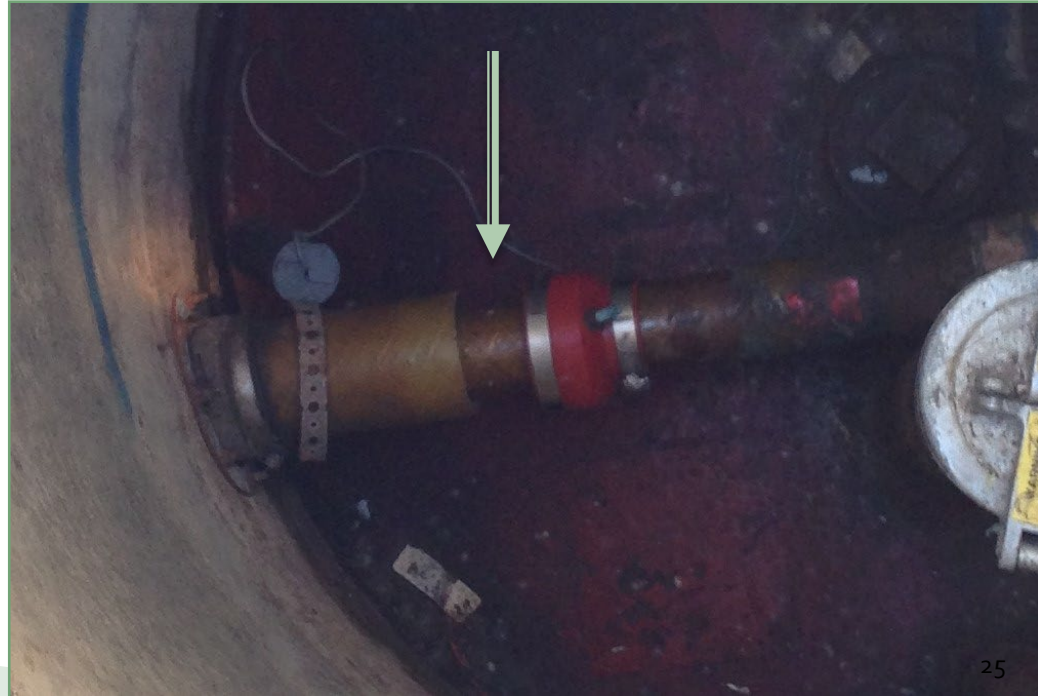
Citation for two common violations...

2630(d) and Test Boots

Failure to maintain secondarily contained piping to allow liquid to flow into the sump in the event of a leak (i.e., failure to remove test boot)

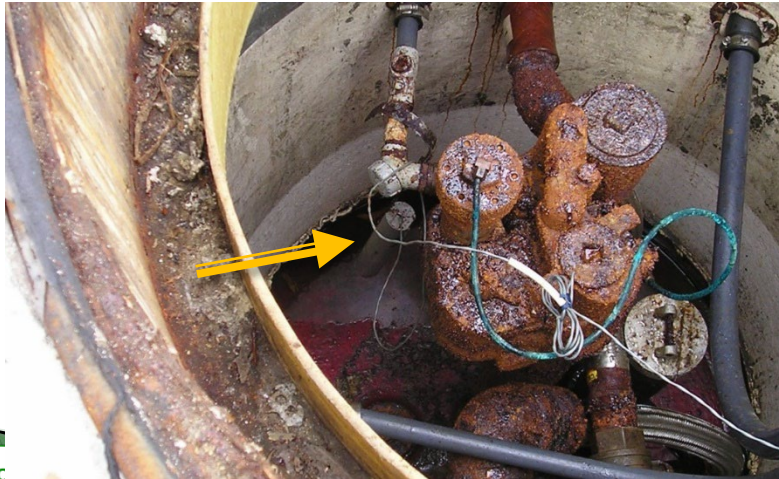
[CERS 2030040]

Red boot pulled back
(*violation if not pulled back*)



2630(d) and Raised Sensor

Failure of leak detection equipment to be installed, maintained and located such that the equipment is capable of detecting a leak at the earliest possible opportunity [CERS 2060015]



23 CCR 2631

Secondary containment

Tank marking requirements

Striker plates

Secondary containment design,
construction, capacity



Poll Question 9

23CCR 2631

What information must be located on the exterior surface of a new UST?

- a) **Engineering standard, capacity, year manufactured, location of manufacturer**
- b) **Diameter, capacity, construction materials, manufacturer**
- c) **Engineering standard, diameter, intended storage material, year manufactured**
- d) **Year manufactured, engineering standard, site address, manufacturer**

Monitoring & Response Plan- DW/DW systems

- Also for Article 4 tanks: reference 2641
- Electronic monitoring program
- Required components of a monitoring program
- Requirements of a response plan

Poll Question 10

23 CCR 2632

Which of the following is not a requirement of a monitoring program?

- a) **Overfill prevention testing method**
- b) **Approval by the local agency**
- c) **Specified in the UST operating permit**
- d) **Frequency of performing the monitoring**
- e) **Location where monitoring will be performed (plot plan)**

Installation & Testing for New USTs

- Primary and secondary containment: factory testing thru post-installation tests.
- Spill containment requirements
- Overfill prevention requirements
- Certificate of Compliance for UST Installation

Poll Question 11

23 CCR 2635(b)

Which of the following is a requirement for spill containers?

- a) Capacity of 5 liters
- b) Protected from galvanic corrosion, if made of metal
- c) Has a valve which allows drainage to the sump
- d) Provides positive shut-off when tank is filled to no more than 95 percent of capacity

You Should Know

Secondary containment requirement on vent and fill riser is dependent on:

- Date of UST install
- Overfill prevention method

Install \geq 7/1/03 = secondary containment on vent, vapor, and fill [HSC]

Install > July 1, 1987 = vent and fill must have secondary containment unless they have overfill methods 2635(c)(1)(B) or (C)

23 CCR 2635(c)(1)

Overfill Prevention Methods

- a) A/V alarm or ball float valve, set at $\leq 90\%$
- b) A/V alarm and BFV set at 95%
- c) Flapper valve set at $\leq 95\%$
- d) Flapper valve set to prevent tank top fittings from contact w/product

Poll Question 12

23 CCR 2635(c)(2)

Which of the following is not a condition that can allow the local agency to waive the requirement for overfill prevention equipment?

- a) Spill container is adequate to collect any overfill
- b) No more than 25 gallons is transferred to the tank at any one time
- c) Tank inlet is in an observable area
- d) Fill pipe is within a continuously monitored sump

23 CCR 2636- Piping

Design, construction, installation, testing, and monitoring requirements, primary & secondary

Exemptions: suction and gravity piping

Corrosion protection

Includes UDC requirements



Poll Question 13

A tank system installed in 1995 with pressurized piping uses an A/V alarm set at 90% for overfill prevention. All of the following are requirements for this system except:

- a) **Striker Plate**
- b) **Vent line with secondary containment**
- c) **Single-walled product piping**
- d) **Product piping with secondary containment**
- e) **Line leak detector**

Poll Question 14

2636(f)(5)- Emergency generator systems

An emergency generator system with pressurized underground piping was installed in 2019. All of the following are UST system requirements except:

- a) Primary containment is product-tight
- b) Spill bucket with minimum of 5 gallon capacity
- c) Daily checks of monitoring system
- d) Line leak detector

23 CCR 2637

Secondary Containment Testing

- **Timeline for testing** ---> **Every 36 months**
- **Tester Requirements** ---> **Service Tech**
- **Test Reporting** ---> **Required form, within 30 days of test**
- **Notification** ---> **At least 48 hours prior**
- **Exemptions** ---> **VPH, brine/hydrostatic tanks**



Poll Question 15

How often must secondary containment testing be conducted?

- a) **Every 30 days**
- b) **Every 6 months**
- c) **Every 12 months**
- d) **Every 36 months**

23CCR 2637.1

Spill Container Testing

- | | | |
|------------------------|-----|---|
| ➤ Timeline for testing | --- | ➤ Every 12 months |
| ➤ Tester Requirements | --- | ➤ Service Tech |
| ➤ Test Reporting | --- | ➤ Required form, within 30 days of test |
| ➤ Notification | --- | ➤ At least 48 hours prior |
| ➤ Exemptions | --- | ➤ None |

23 CCR 2637.2

Overfill Prevention Requirements

- Timeline for testing ---> Every 36 months
- Tester Requirements ---> Service Tech
- Test Reporting of test ---> Required form, within 30 days
- Notification ---> At least 48 hours prior
- Exemptions ---> None

You Should Know

October 2021 is going to be very busy for overfill prevention testing

First testing interval since overfill testing was required

Sites with initial testing after October 2018 (excluding new installs)

- Violation should have been cited at the time
- Due on or before October 2021 *per 23 CCR 2620(e)*

Section 2638

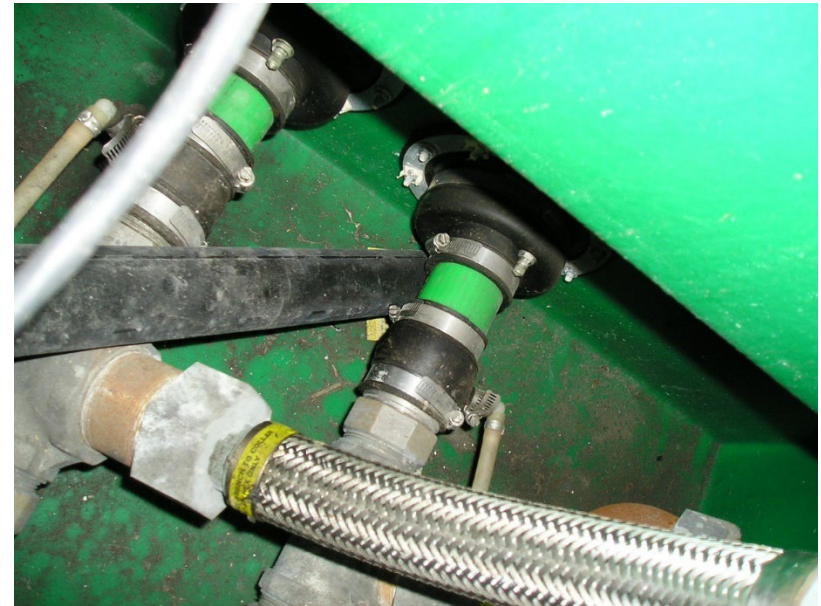
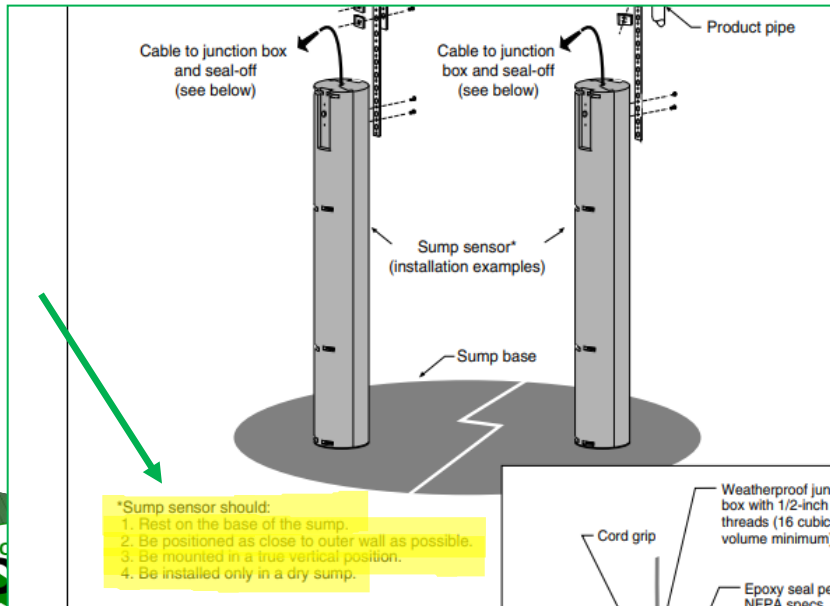
Monitor Certification

- | | | |
|------------------------|-----|---|
| ➤ Timeline for testing | --- | ➤ Every 12 months |
| ➤ Tester Requirements | --- | ➤ Service Tech |
| ➤ Test Reporting | --- | ➤ Required form, within 30 days of test |
| ➤ Notification | --- | ➤ At least 48 hours prior |
| ➤ Stickers/Tags | --- | ➤ On each component tested |

You Should Know

23 CCR 2638(a)

All monitoring equipment...shall be installed, calibrated, operated and maintained in accordance with manufacturer's instructions [2030043]



Poll Question 16

What information is required on the sticker/tag that the service tech must affix to each component tested?

- a) Certification date and tech license number**
- b) Certification date, tech name, facility name and address**
- c) Tech name and tech license number**
- d) Tech name, tech license number, testing company**

Poll Question 17

Which of the following have routine testing intervals of 12 months?

- a) Secondary containment and spill container testing**
- b) Monitoring system certification and spill container testing**
- c) Monitoring system certification and overfill prevention inspection**
- d) Secondary containment testing and overfill prevention inspection**
- e) Spill container testing and overfill prevention inspection**

Article 4

Existing Underground Storage Tank Monitoring Requirements

Single-walled systems

LEAK TEST REPORT

T 1: UNLEADED 87 OCT.
PROBE SERIAL NUM 375373

TEST STARTING TIME:
APR 26, 2016 1:00 AM

HEIGHT = 53.9 INCHES
WATER = 0.0 INCHES
TEMP = 71.2 F

TEST LENGTH = 4.0 HRS
STRT VOLUME = 5770.7 GAL
PERCENT VOLUME = 61.1

LEAK TEST RESULTS
RATE = -6.72 GAL/HR
THRS = -0.07 GAL/HR
0.10 GAL/HR TEST FAIL

***** END *****

You Should Know

- **SW UST systems have a sunset date of 12/31/2025**
- **This includes SW tanks and/or SWP**
- **Exempted/excluded piping is not affected by the sunset date**
- **HSC 25292.05**

23 CCR 2641

Monitoring program requirements

- Capable of detecting a release at the earliest possible opportunity
- Approved by local agency
- Written procedure and response plan from 2632(d)

Exemptions

Allows for visual and non-visual methods

Poll Question 18

23 CCR 2611

Which of the following is an “existing tank?”

- a) 10,000 gallon diesel UST installed in 1992
- b) 800 gallon diesel UST located on a farm, installed in 1986, primarily used for agricultural purposes
- c) 1,000 gallon waste oil UST installed in 1987
- d) 500 gallon heating oil UST located on a farm, installed in 1980

Poll Question 19

Which of the following is a time during which the monitoring requirements do not apply to an existing UST?

- a) When all stored substances have been removed and the tank is empty**
- b) When the facility has closed, but stored substances remain in the tank**
- c) When UST closure has been completed pursuant to Article 7**
- d) When removal plans have been received and approved by the local agency**

23 CCR 2643

Non-Visual Monitoring- Quantitative Release Detection

- **ATG**
- **SIR**
- **Continuous in-tank leak detection (CITLD)**

Poll Question 20

23CCR 2643(a)(1)

Which of the following is a requirement for existing UST sites to use automatic tank gauging as a release detection method?

- a) Tanks must be continuously monitored**
- b) Test must be capable of detecting a release of 0.2 gph**
- c) Local agency must be notified at least 48 hours prior to testing**
- d) Testing must be conducted every 12 months**

Poll Question 21

2643(a)(2)

Which of the following is a requirement for existing USTs that are using Statistical Inventory Reconciliation (SIR) monitoring?

- a) Tank integrity testing is conducted at least once every 24 months
- b) SIR test is conducted at least once every 7 days
- c) SIR test is capable of detecting a release of 0.1 gph
- d) Test report must be submitted within 30 days of the test

23 CCR 2644.1

Enhanced Leak Detection

- For existing USTs within 1000 feet of a public water well
- Sites Identified via GIS mapping database (Geographic Information System)
- Affected sites notified by SWRCB

Poll Question 22

Which of the following is not a requirement for existing UST sites that are required to implement an enhanced leak detection program?

- a) Local agency must be notified at least 48 hours prior to testing
- b) ELD program implementation within 18 months of notification by SWRCB
- c) ELD testing must be conducted every 36 months
- d) ELD report must be submitted within 30 days of completion of the test

You Should Know

ELD- additional applications

- **SWTs within 1000' of public well**
- Every 3 years
2640(e) and HSC
25292.4
- **DWTs within 1000' of public well**
-One time, by 1/1/05
HSC 25292.5
- **New UST installations**
-Before UST placed into use
HSC 29290.1(j)

Article 5 Release Reporting & Abatement



SW Tank with broken seam

23 CCR 2650(e)

Conditions Requiring Reporting as Unauthorized Releases:

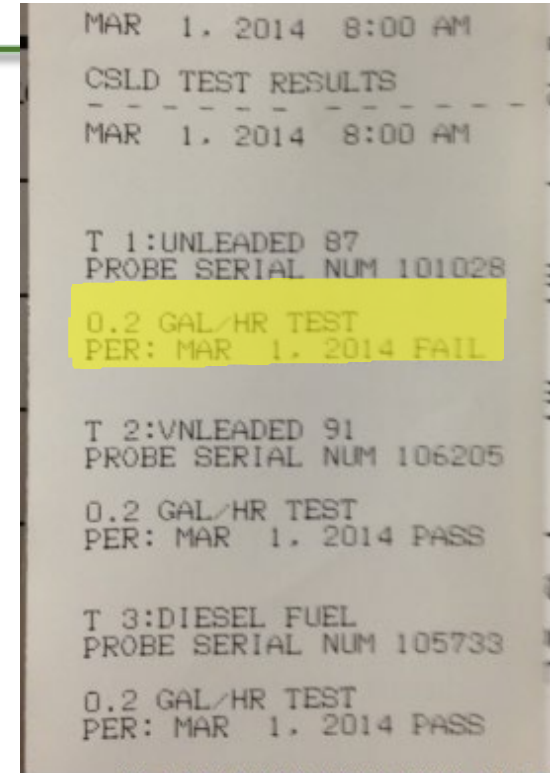
- Release in the secondary containment or as a result of spill or overfill, not cleaned up within 8 hours
- Discovery of released hazardous substance at UST site or surrounding area
- Unusual operation of equipment that could indicate a leak
- Monitoring results that indicate a release may have occurred

You Should Know

SWT Monitoring & Results

For SWT monitoring, it's not enough to maintain documents of the SW test results

Own/op must also follow up if there is a **FAIL** or other indicator of a possible leak
(even if it is followed by a PASS result)



Recording an Unauthorized Release

Required for release from the primary containment:

- **Cleaned up within 8 hours**
- **Does not escape secondary containment**
- **Does not increase hazard of fire or explosion**
- **Does not cause deterioration of secondary containment**

**Note: HSC 25294 contains these recordable conditions.
2650(c) provides the link to HSC**

23 CCR 2651

- **Monitoring records**
- **Secondary containment integrity**

Poll Question 23

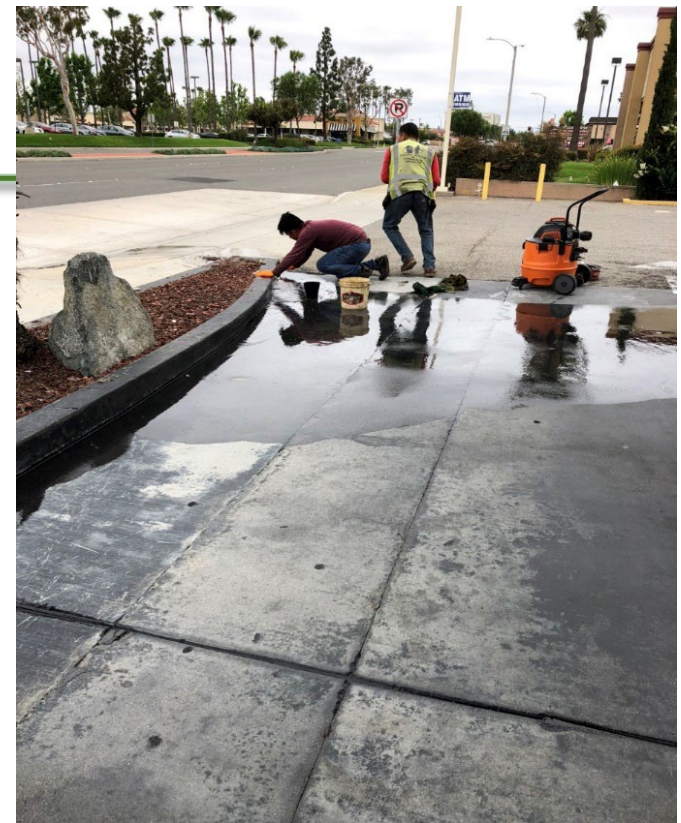
What information is not required when an own/op is recording a release in their monitoring records?

- a) Operator's name and telephone number**
- b) Type and quantity of hazardous substance released**
- c) Method of disposal of the released hazardous substance**
- d) Manufacturer of affected secondary containment**

23 CCR 2652

Reporting Requirements for Releases

- Notification
 - Timelines
- Reporting
 - Required info
- Investigation
- Test results



**Leak while testing LLD
(Fuel on ground)**

Poll Question 24

How long after detecting a reportable unauthorized release does the own/op have to submit a written report to the local agency?

- a) 8 hours**
- b) 24 hours**
- c) 5 days**
- d) 30 days**

Article 6

UST Repair & Upgrade Requirements



23 CCR 2660

- Upgrades for USTs (non-motor vehicle fuel)
- Tank lining
- Periodic upgrades: 1998, 2018
- Recordkeeping
- Materials for repair



Cathodic protection rectifier panel

23 CCR 2661

Tank Repair Requirements

- Tank lining repair
- Steel tanks
- Components that have released product
- Testing



Poll Question 25

Which of the materials or conditions below is not consistent with repair requirements for a hole in a fiberglass tank?

- a) Fiberglass cloth with a minimum dimension of 12 x 12 inches
- b) Self-tapping bolts
- c) 2 layers of fiberglass cloth, with a minimum weight of 1.5 ounce per yard
- d) Tank tightness test within 30 days of the repair

23 CCR 2662

Upgrade Requirements for Tanks (1998)

- All SW tanks other than motor vehicle fuel shall be retrofitted with secondary containment
- SW steel tanks: interior lining and cathodic protection
- Striker plate



You Should Know

- **Many current UST sites still have SW fuel tanks, but DW waste oil tanks**
- **Waste oil tanks were not covered by 2662, which only allowed motor vehicle fuel tanks to remain SW**

23 CCR 2663

Interior Tank Lining Requirements

Conditions for application

- UST may only be repaired once using tank lining method
- Lining certification
- Inspection schedule



Poll Question 26

When evaluating a tank prior to using the interior tank lining method for repair, which one of the following defects will not disqualify the tank from lining repair?

- a) An open seam or split shorter than 3 inches
- b) 5 or more perforations in a one-square foot area
- c) Tank's average metal thickness is less than 75% of the original wall thickness
- d) Multiple perforations of which any single one is larger than ½ inch in diameter

Poll Question 27

Following tank lining for repair, when is the first required tank inspection by a coatings expert or special inspector?

- a) Within 6 months of lining the tank**
- b) Every 12 months**
- c) Every 36 months**
- d) Within 120 months of lining the tank**

You Should Know

Ball Float Valves after 10/1/18

- Flow restrictor (ball float valve) may not be newly installed on vent piping in order to meet overfill prevention requirements
- Existing ball float valves may still be used, but must be tested. If an existing ball float valve fails, it may not be replaced with a new one

Ref: 2635(d) and 2665

23 CCR 2666

- Piping Upgrade Requirements
- Secondary containment
- SWP: repairs & LLDs
- UDCs installed by 12/31/2003
- EGTs and LLDs



Article 7

UST Closure Requirements

- Temporary closure
- Permanent closure



23 CCR 2670

Temp Closure

- Tank will be used again
- If release, must be repaired prior

Permanent Closure

- Tank will not be used again

Monitoring required until
completion of closure



Temporary Closure

- All residuals removed from tank
- Tank inerted
- Access locations sealed
- Power disconnected from pumps
- Monitoring plan may be modified
- Inspections every 3 months
- Valid for 12 months

Poll Question 28

Which of the following is not a requirement for temp closure?

- a) UST must be inspected at least once every three months
- b) Corrosion protection shall be disconnected to prevent ignition of flammable vapors
- c) All residual liquid and solids must be removed from the tank
- d) Power service shall be disconnected from all pumps associated with the use of the UST

Permanent Closure

- Tank removal or closure in place
- All residuals removed from tank
- Tank inerted
- Proper tank disposal or documentation of reuse
- Soil sampling
- Maintain sample analysis for 36 months

Poll Question 29

Which of the following is not a permanent closure requirement?

- a) All residual liquid and solids must be removed from the tank**
- b) The owner or operator of a UST being closed shall demonstrate that no unauthorized release occurred**
- c) All portions of the UST system must be closed in the same manner**
- d) Tanks shall be inerted to reduce the possibility of explosion.**

Article 10

Permit Application

California Environmental Reporting System: Regulator

CERS Regulator

Facility Submittal: [REDACTED] [Print Submittal](#)

Home » Submittal Search » Submittal: 9/25/2020 (10138491)

Submittal: Sep. 25, 2020 10:58 AM

Facility Information Accepted Sep. 28, 2020 [Set Submittal Status](#)

Submitted for CERS ID [REDACTED] on 9/25/2020 10:58AM by [REDACTED] of [REDACTED]
Submittal was Accepted on 9/28/2020 by [REDACTED] for [Orange County Environmental Health](#)
[Business Activities](#)
[Business Owner/Operator Identification](#)

Underground Storage Tanks Accepted Sep. 28, 2020 [Set Submittal Status](#)

Submitted for CERS ID [REDACTED] on 9/25/2020 10:58AM by [REDACTED] of [REDACTED]
Comments by submitter: Upload DO STATEMENT [REDACTED]
Submittal was Accepted on 9/28/2020 by [REDACTED] for [Orange County Environmental Health](#)
[UST Facility Operating Permit Application](#)
[UST Tank Information/Monitoring Plan - Tank ID # 1 - CERS TankID # 10138491-001](#)
[UST Tank Information/Monitoring Plan - Tank ID # 2 - CERS TankID # 10138491-002](#)
[UST Tank Information/Monitoring Plan - Tank ID # 3 - CERS TankID # 10138491-003](#)
[UST Tank Information/Monitoring Plan - Tank ID # 4 - CERS TankID # 10138491-004](#)
[UST Monitoring Site Plan: Upload Document\(s\)](#)
[UST Certification of Financial Responsibility: Upload Document\(s\)](#)
[UST Response Plan: Upload Document\(s\)](#)
[UST Owner/Operator Written Agreement: Exempt](#)
[UST Letter from Chief Financial Officer: Upload Document\(s\)](#)
[Owner Statement of Designated UST Operator Compliance: Upload Document\(s\) \(4\)](#)
[Miscellaneous State-Required Documents: Upload Document\(s\) \(21\)](#)

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23CCR 2711

- Applicant information
- Tank information
- Monitoring Program
- Financial Responsibility
- Submittal via CERS

Polling Question 30

A UST facility is changing product storage in one of their USTs. When must the own/op notify the local agency regarding the change?

- a) Within 5 business days of the change
- b) Within 30 days of the change
- c) 30 days prior to the change
- d) Notification is not required for change in product storage

23 CCR 2712

Permit Conditions

- **Comply w/Article 5 Release Reporting**
- **Recordkeeping**
- **Permit to Operate information**
- **Monitoring**
- **Primary containment is product-tight**

Poll Question 31

Which of the following information must be on the permit application?

- a) Name and address of tank owner, tank manufacturer, date of installation, tank diameter, substance stored in tank
- b) Name and address of tank operator, date of installation, scaled diagram, documentation of financial responsibility, Phase I Environmental Assessment
- c) Address of the UST location, date of installation, overfill prevention equipment, monitoring program, substance stored in tank
- d) None of the above are correct

23 CCR 2715

Certification & Licensing

- Owner statement
- Designated Operator
- Employee Training
- Installers
- Service Technicians
- Inspectors

Poll Question 32

Which of the following may not be used to meet requirements for service technician?

- a) Class "A" General Engineering Contractor License
- b) SWRCB-issued tank testing license
- c) ICC California UST Service Technician certification
- d) ICC California UST System Operator certification
- e) Certification from manufacturer of the equipment

DO Visual Inspection

- Inspection Frequency
- Records Review
- Training
- Physical inspection
- Monthly report

Poll Question 33

The designated UST operator visual inspection must include which of the following?

- a) Review previous inspection report to verify that each compliance issue has a documented action
- b) Review testing records to verify that all required testing has been completed
- c) Review of alarm history to verify that each alarm condition has been documented and responded to
- d) All of the above

Article 10.5

Red Tag Authority

- Significant Violation
- Imminent Threat
- Affixing Red Tags
- Removing Red Tags
- Exempt violations
- Content of Red Tags

Poll Question 34

Which of the following is not a significant violation?

- a) A violation that causes a liquid release of petroleum from a UST system**
- b) A violation that impairs the ability of a UST system to detect a liquid leak**
- c) A violation that has minimal probability of harm and lacks evidence of a pattern or neglect or disregard**
- d) A violation that threatens to cause a liquid release of petroleum from a UST system**

H & SC Chapter 6.7

Section 25281

Definitions

- Hazardous substance
- Operator
- Product tight
- Release
- Underground storage tank
- Underground tank system

Section 25281.5

“Pipe” & exclusions

- **Unburied delivery hoses and nozzles**
- **Unburied fuel delivery piping at marinas***
- **Unburied fuel piping connected to an emergency generator tank system***

***must meet additional requirements**

Poll Question 35

What condition must be met in order for an owner/operator to exclude unburied fuel piping at a marina from regulation?

- a) Conduct annual line test
- b) Conduct a daily visual inspection of the piping and maintain a log
- c) Calibrate dispensing meter monthly
- d) Line leak detector that shuts off flow of product if an unauthorized release occurs

Poll Question 36

Which of the following is not included in the description of an Emergency Generator Tank System?

- a) Stores diesel fuel or kerosene*
- b) Provides power supply in the event of commercial power failure
- c) Used in connection with emergency system
- d) Used to provide fuel for emergency vehicles

**kerosene added in 2019. May not yet be included in test material*

Below Grade Emergency generator tanks (EGT)

Exempt from regulation as UST if:

- **All tank surfaces can be visually inspected**
- **Secondary containment (building structure may be used)**
- **Visual inspections with log**
- **Total below grade volume <1320 gallons**

Visually Monitored Tanks

Exempt from regulation as UST if:

- All tank surfaces can be visually inspected, including floor
- Secondary containment (building structure may be used)
- Weekly visual inspections with log

Section 25284

Permit to Operate, Transfer, & Compliance

- May not own or operate a UST unless a permit has been issued by the local agency
- Owner/Operator agreement
- Notification within 30 days of change of ownership

Section 25285

Permit, term, Inspection, Fee

- **Permits issued every five years**
- **No permit for sites with Red Tags or enforcement action**
- **No permit for nonpayment of fees**

Poll Question 37

A permit to operate can be issued by the local agency in all of the following circumstances except?

- a) The operator is not the owner of the tank**
- b) The UST system is in temporary closure**
- c) The own/op has not paid UST fees**
- d) The UST monitoring system does not shutdown the pump when a leak is detected**

Section 25286

Permit Application or Renewal

Application to the CUPA
by the owner or operator

Via CERS

California Environmental Reporting System (CERS)		Underground Storage Tank - Tank Information	
Facility/Site		Tank ID# 1 CERS Tank ID#	
Submitted Status		Submitted on 5/18/2020 by [REDACTED] Comments by submitter: Updated O&D Statement for [REDACTED] Submittal was Accepted; Processed on 5/20/2020 by [REDACTED]	
Type of Action		Type of Action (UST Tank) Confirmed/Updated information	
Facility Information		[REDACTED]	
Tank Description		Tank ID# / CERS Tank ID# [REDACTED] Tank Manufacturer KEROES Tank Capacity in Gallons 10000	
Date UST System Installed 8/1/1994 Date Isolating UST Discovered [REDACTED] Date UST Permanently Closed [REDACTED]		Tank Configuration A Stand-alone Tank Number of Compartments in the UST 1 Additional Description	
Tank Use and Contents		Tank Construction	
Tank Use Motor Vehicle Fueling		Type of Tank Double Wall Primary Containment Fiberglass Overfill Protection Audible/Visual Alarms YES Self Heat YES	
Tank Contents Premium Unleaded Other Petroleum Contents Other Non-Petroleum Contents		Secondary Containment Fiberglass H2 Valve Shut-Off Valve Bypass	
Product / Waste Piping Construction		Piping Construction	
Double-walled Piping System Type Pressure		Primary Containment Fiberglass Secondary Containment Fiberglass Piping/Transfer Containment Sump Single-walled	
Vent, Vapor Recovery (VR) and Riser / Fill Pipe Piping Construction		Vent Piping Construction	
Primary Containment Fiberglass Secondary Containment None		Vapor Recovery Primary Containment Fiberglass Vapor Recovery Secondary Containment None Riser Pipe Primary Containment Steel Riser Pipe Secondary Containment Fiberglass Vent Piping Transition Sumps Single-walled VR Components Installed YES Spill Bucket YES Spill/Run-Off/Bottom Protector YES Containment Sump YES	
Under Dispenser Containment (UDC)		Corrosion Protection	
Construction Type Single-walled Construction Material Fiberglass		Sacrificial Anodes Impressed Current Isolation YES	

Poll Question 38

Which of the following is not required information as part of the permit application?

- a) Tank age, name of applicant, address of tank manufacturer
- b) Tank size, substance stored, address of the UST facility
- c) Tank construction, description of monitoring program, Board of equalization number
- d) Tank age, substance stored, name and number of contact person in the event of an emergency

Poll Question 39

Requirements for the permit application are found in HSC 25286, as well as in which Article of 23 CCR?

- a) Article 2
- b) Article 3
- c) Article 4
- d) Article 10

Section 25290.1

Tanks Installed after July 1, 2004

- “Product tight” primary and secondary containment
- Tank interstitial monitoring: brine, pressure, vacuum (VPH)
- “Pipe” includes vent and vapor recovery lines, fill pipes

Poll Question 40

Underground storage tanks installed on or after July 1, 2004 must meet all of the following conditions except:

- a) Secondary containment shall be product tight**
- b) Secondary containment shall be tested upon installation, six months after installation, and at least once every 36 months thereafter**
- c) The interstitial space of the storage tank shall be maintained under constant vacuum or pressure, or the interstitial liquid level measurement method shall be used**
- d) Automatic line leak detector must be installed on pressurized piping**

Other Installation Dates

- **Between July 1, 2003 and July 1, 2004 (see 25290.2)**
- **After January 1, 1984 (see 25291)**
- **Pre-January 1, 1984 (see 25292)**

You Should Know

The only difference between 25290.1 (on/after July 1, 2004) and 25290.2 (July 1, 2003-July 1, 2004) tank requirements is monitoring

Secondary containment of the 2004 or later tanks must be maintained under constant vacuum, pressure, or hydrostatic monitoring 25290.1(e)

Poll Question 41

Requirements specific for USTs* installed after January 1, 1984 are found in HSC 25291, as well as in which Article of 23 CCR?

- a) Article 2
- b) Article 3
- c) Article 4
- d) Article 10

**non-farm tanks*

Poll Question 42

Requirements specific for USTs installed before January 1, 1984 are found in HSC 25292, as well as in which Article of 23 CCR?

- a) Article 2
- b) Article 3
- c) Article 4
- d) Article 10

Section 25292.05


Permanent Closure of SW USTs

All single-walled tanks or components must be closed prior to 12/31/25

Section 25292.2

Financial Responsibility

- Corrective action
- Compensation to third parties for bodily injury

 State of California State of Water Resources Control Board Division of Financial Assistance P.O. Box 944212 Sacramento, CA 94244-2120 (Instructions of reverse side)		For State Use Only				
CERTIFICATION OF FINANCIAL RESPONSIBILITY FOR UNDERGROUND STORAGE TANKS CONTAINING PETROLEUM						
A. I am required to demonstrate Financial Responsibility in the required amounts as specified in California Code of Regulations (CCR), Title 23, Division 3, Chapter 18, Section 2807: <input type="checkbox"/> 500,000 dollars per occurrence or <input checked="" type="checkbox"/> 1 million dollars annual aggregate <input checked="" type="checkbox"/> 1 million dollars per occurrence AND <input type="checkbox"/> 2 million dollars annual aggregate						
B. [Redacted] hereby certifies that it is in compliance with the requirements of Section 2807, (Name of Tank Owner or Operator) California Code of Regulations, Title 23, Chapter 18, Division 3, Article 3, Section 2807. The mechanisms used to demonstrate financial responsibility as required by Section 2807 are as follows:						
C. Mechanism Type	Name and Address of Issuer	Mechanism Number	Coverage Amount	Coverage Period	Corrective Action	3rd-Party Comp
State UST Fund	State UST Cleanup Fund P.O. Box 944212 Sacramento, CA 94244-2120	UST Cleanup Fund	\$ 995,000 per Occurrence and Annual Aggregate	State UST Cleanup Fund is Continuous	Yes	Yes
Chief Financial Officer Letter	[Redacted]	C. F. O. Letter	\$ 5,000 per Occurrence and \$ 5,000 General Aggregate	Date Covered From: 02/01/2020 To: 02/28/2021	Yes	Yes
Note: If you are using the State Fund as any part of your demonstration of financial responsibility, your execution and submission of this certification also certifies that you are in compliance and shall remain in compliance with all conditions for participation in the Fund. See Instructions.						
D. Facility Name		Facility Address				
[Redacted]		[Redacted]				
Facility Name		Facility Address				
[Redacted]		[Redacted]				
E. Signature of Tank Owner or Operator		Date		Name and Title of Tank Owner or Operator		
[Redacted]		02/03/2020		[Redacted]		
Signature of Witness or Notary		Date		Name of Witness or Notary		
[Redacted]		02/03/2020		[Redacted]		
CFR (Revised 12/07)		FILE - Original - Local Agency		Copies - Facility/State(s)		

Section 25292.3

Red Tags

- **Imminent Threat**
 - May apply Red Tag immediately
- **Significant Violation**
 - Issue Notice of Significant Violation

Poll Question 43

Which of the following is not prohibited with respect to a UST that has a Red Tag affixed to the fill pipe?

- a) Notify local agency when significant violation has been corrected**
- b) Deposit of petroleum into the UST with Red Tag**
- c) Withdrawal from UST with Red Tag**
- d) Alter or tamper with Red Tag**

Poll Question 44

Requirements for Red Tags are found in HSC 25292.3, as well as in which Article of 23 CCR?

- a) Article 6.7
- b) Article 7
- c) Article 10
- d) Article 10.5
- e) Article 12

Section 25292.4 and 25292.5

- Enhanced Leak Detection (ELD)
- USTs within 1000' of public drinking water well

SWTs

= ELD monitoring program (test every 3 years)

DWTs

= one time ELD testing by January 1, 2005

Poll Question 45

Requirements for ELD testing of SWTs are found in HSC 25292.4, as well as in which section of Article 4 of 23 CCR?

- a) Section 2641
- b) Section 2643
- c) Section 2644.1
- d) Section 2647
- e) Section 2648

Section 25294 and 25295

Release Recording

Release Reporting

Poll Question 46

Requirements for unauthorized release reporting are found in HSC 25295, as well as in which section of Article 5 of 23 CCR?

- a) Section 2651
- b) Section 2652
- c) Section 2655
- d) Section 2711
- e) Section 2717

Poll Question 47

After detecting a reportable unauthorized release, how long does the own/op have to report it to the local agency?

- a) **8 hours**
- b) **24 hours**
- c) **5 days**
- d) **30 days**

Section 25296

Interior Tank Lining & Repair Requirements

- UST may only be repaired once using tank lining method
- Special Inspector
- Tank Integrity test after repair



Poll Question 48

Requirements for repairing a tank using an interior coating/lining are found in HSC 25296, as well as in which section of Article 6 of 23 CCR?

- a) Section 2663
- b) Section 2664
- c) Section 2665
- d) Section 2666

Section 25298

Tank Closure

- Abandonment
- Permanent Closure
- Temporary Closure

Poll Question 49

Requirements for temporary closure of a UST are found in HSC 25298, as well as in which section of Article 7 of 23 CCR?

- a) Section 2650
- b) Section 2666
- c) Section 2671
- d) Section 2672

Section 25299- Violations & Penalties

\$500-5000

(a) Operator Penalties

(b) Owner Penalties

Up to \$5000

(c) Failure to notify, false information

(e) Red Tag violations

\$500-5000

- Operating without a permit
- Failure to comply with permit reqs
- Failure to report unauthorized release
- Failure to properly close UST
- Making false statement/representation

25299- More Violations & Penalties

\$5000-10,000, 1 year imprisonment

- **Falsification of monitoring records**
- **Failure to report unauthorized release (intentional)**
- **Tampering**

Up to \$10,000

- **Corrective action violation**

Poll Question 50

What is the maximum penalty for a tank owner who fails to obtain a permit to operate?

- a) **\$500**
- b) **\$5,000**
- c) **\$10,000**
- d) **Imprisonment in the county jail for one year**

PEI/RP500/900/1200

Recommended Practices

500- Inspection/Maintenance of Dispensing Equipment

900- Inspection/Maintenance of UST Systems

**1200- Testing of Spill, Overfill, Leak Detection, and
Secondary Containment**

Poll Question 51

RP- 900

Which of the following is a method of corrosion protection that utilizes a rectifier and buried anodes to protect buried metal from corrosion via an electric current?

- a) Galvanic cathodic protection
- b) Voltaic cathodic protection
- c) Impressed-current cathodic protection
- d) Variable resistance cathodic protection

Poll Question 52

RP 1200

Which of the following is an overfill prevention device that restricts flow into the tank by blocking the vent opening?

- a) Flapper valve
- b) Check valve
- c) Drop tube shutoff valve
- d) Ball float valve

Title 8 CCR

Confined Spaces

Poll Question 53

Which of the following means the displacement of the atmosphere in a permit space by a noncombustible gas to such an extent that the resulting atmosphere is noncombustible?

- a) Nullifying
- b) Transneutralizing
- c) Normalizing
- d) Inerting

Poll Question 54

A confined space is defined as having all of the following except:

- a) Large enough so that an employee can enter and perform work**
- b) Limited means for entry or exit**
- c) Contains potential hazard or harmful condition**
- d) Not designed for continuous employee occupancy**

True or False Review

Poll- 1

True or False?

A service technician may install monitoring equipment on a UST system

Poll 2

True or False?

In UST law, the definition of “Person” includes corporations, cities, and the United States

Poll 3

True or False?

When installing primary piping, the joints are not required to be pressure and soap tested because the system will be maintained under constant vacuum, pressure, or hydrostatic monitoring

Poll 4

True or False?

Periodic secondary containment testing is not required on UST systems that utilize vacuum, pressure, or hydrostatic monitoring of both the primary and secondary containment

Poll 5

True or False

Tank Pad is defined as the 12 inch layer of pea gravel that a tank is placed upon in the tank pit during installation [RP900]

Poll 6

True or False?

A ball float valve used to meet overfill prevention requirements fails periodic testing. It may be replaced if the UST system was installed prior to January 1, 1984

Poll 7

True or False?

The permit application must include the UST manufacturer, date of installation, tank capacity, and overfill prevention equipment

Poll 8

True or False?

The own/op of a SWT using continuous in-tank leak detection for monitoring observes 3 failed tests followed by a passed test. Since there is a passing result, the owner does not need to investigate or follow up.

Poll 9

True or False?

An oxygen deficient atmosphere means an atmosphere containing less than 17.5% oxygen

Poll 10

True or False?

UST monitoring programs must include frequency of monitoring, name of the designated operator, and the location of monitoring as identified on a plot plan

Poll 11

True or False?

- A 1500 gallon farm tank installed in 1982 used for diesel storage is excluded from the definition of underground storage tank

Poll 12

True or False?

A tank tester may have their license suspended for using fraud or deception in the course of doing business as a tank tester

Poll 13

True or False?

An own/op zip ties the turbine sump sensor to the electrical conduit to avoid turbine shutdown during rainy season. The maximum monetary penalty for this violation is \$5000.

Poll 14

True or False?

An own/op zip ties the turbine sump sensor to the electrical conduit to avoid turbine shutdown during rainy season. The own/op can be imprisoned for this violation.

Poll 15

True or False?

A Red Tag may only be removed from the UST system by the local agency

Poll 16

True or False?

After affixing a Red Tag to the fill pipe of a noncompliant UST system, the local agency may issue a written directive to the own/op to empty the noncompliant UST system

Poll 17

True or False?

Own/ops that change the substance stored in the UST must notify the local agency within 30 days of the change

Poll 18

True or False?

State or Federal agencies may own or operate a UST without being issued a permit to operate by the local agency

Poll 19

True or False?

A SW UST received failed automatic tank gauging results, and also failed an integrity test. Temporary closure is an option until the facility can afford to replace the tanks.

Poll 20

True or False?

In 23 CCR, “operator” means an individual who is employed on site at a UST facility and who may be called upon to respond to spills, overfills, or problems with UST operation

Poll 21

True or False?

When affixing a red tag for a significant violation that poses an imminent threat, the local agency must notify the owner within 7 business days of affixing a red tag

Poll 22

True or False?

Pressurized piping that is continuously monitored using a vacuum, pressure, or hydrostatic method is not required to have an automatic line leak detector

Poll 23

True or False?

Overfill prevention equipment must be inspected every 12 months

Poll 24

True or False?

When conducting secondary containment testing in accordance with PEI1200, the test duration for a 15,000 gallon tank interstitial is 2 hours

Poll 25

True or False?

Striker plates must be installed below all accessible UST openings and shall be at least 1/8" thick if made of steel

Poll 26

True or False?

A drop tube-mounted bottom protector may not be used to meet the striker plate requirement

Poll 27

True or False?

A Red Tag must contain the following wording “PETROLEUM DELIVERY PROHIBITED”

Poll 28

True or False?

Spill container testing must be conducted by a service technician

Poll 29

True or False?

In-ground liquefied petroleum gas (LPG) tanks are excluded from the definition of underground storage tank

Poll 30

True or False?

Both the owner and operator of an underground storage tank are responsible for complying with UST laws

Poll 31

True or False?

UST monitoring programs must include a leak response plan



Any Questions?

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