October 21, 2015

To: Underground Storage Tank Owners and Operators

COMPLIANCE WITH CALIFORNIA AND FEDERAL UNDERGROUND STORAGE TANK REGULATIONS


On August 20, 2015 the State Water Resources Control Board (State Water Board) notified California UST owners and operators they must comply with the new federal UST regulations, in addition to California UST statutes and regulations. The new federal UST regulations became effective on October 13, 2015 in Indian Territory and in those states, including California, that do not have State Program Approval. The compliance deadlines for the new requirements in the federal UST regulations range from October 13, 2015 to October 13, 2018 for those USTs installed on or before October 13, 2015. All USTs installed after October 13, 2015 must fully comply with the new applicable federal UST regulations, as well as California UST statutes and/or regulations at the time of installation.

To assist in complying with the new federal UST regulations, the U.S. EPA provides publications and other resources on their 2015 Revised Underground Storage Tank Regulations webpage at http://www2.epa.gov/ust/revising-underground-storage-tank-regulations-revisions-existing-requirements-and-new. Additional resources for field constructed tanks and airport hydrant fuel distribution systems are posted at http://www2.epa.gov/ust/field-constructed-tanks-and-airport-hydrant-systems-2015-requirements. And finally, resources for emergency generator tank systems can be found at http://www2.epa.gov/ust/emergency-power-generator-ust-systems-2015-requirement-release-detection.

In addition to the U.S. EPA resources, State Water Board staff has compiled a detailed table to assist California UST owners and operators in identifying new federal UST regulations that must be met in addition to California UST statute and regulations. The table contains the category of the new federal requirement, the compliance deadline dates, a detailed description of each of the new federal regulations that affect California USTs, and the citation of the federal requirement.
For more information about the new federal UST regulations, please see the U.S. EPA’s 2015 Revised Underground Storage Tank Regulations webpage located at [http://www2.epa.gov/ust/revising-underground-storage-tank-regulations-revisions-existing-requirements-and-new](http://www2.epa.gov/ust/revising-underground-storage-tank-regulations-revisions-existing-requirements-and-new).

If you have any further questions regarding these new federal UST regulations, please contact me at (916) 341-5870 or laura.fisher@waterboards.ca.gov or Mr. Cory Hootman at (916) 341-5668 or cory.hootman@waterboards.ca.gov.

Sincerely,

Laura S. Fisher, Chief
UST Leak Prevention Unit and
Office of Tank Tester Licensing

Enclosure (1)

1. Federal Underground Storage Tank Regulations That Must Be Met In Addition To California Underground Storage Tank Regulations (October 2015)

cc: [Via email only]

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## Requirements for Underground Storage Tanks

<table>
<thead>
<tr>
<th>Category</th>
<th>Requirement</th>
<th>40 CFR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Definitions Effective October 13, 2015.</td>
<td><em>Release detection</em> means determining whether a release of a regulated substance has occurred from the underground storage tank (UST) system into the environment or a leak has occurred into the interstitial space between the UST system and its secondary barrier or secondary containment around it. <em>Repair</em> means to restore to proper operating condition a tank, pipe, spill prevention equipment, overfill prevention equipment, corrosion protection equipment, release detection equipment or other UST system component that has caused a release of product from the UST system or has failed to function properly. <em>Replaced</em> means: (1) For a tank—to remove a tank and install another tank. (2) For piping—to remove 50 percent or more of piping and install other piping, excluding connectors, connected to a single tank. For tanks with multiple piping runs, this definition applies independently to each piping run.</td>
<td>280.10 280.10 280.10</td>
</tr>
<tr>
<td>Design &amp; Construction Requirements Effective as Indicated.</td>
<td>Effective April 11, 2016, except for safe suction piping, when piping is installed or replaced; it must be double-walled and interstitially monitored. Effective October 13, 2015, when overfill prevention is installed or replaced, flow restrictors in vent lines may not be used to comply with the overfill requirement.</td>
<td>280.20 280.20(c)(3)</td>
</tr>
<tr>
<td>Notification Requirement Effective October 13, 2015.</td>
<td>Within 30 days of acquisition, any person who assumes ownership of a regulated underground storage tank system must submit a notice of the ownership change to the implementing agency, using the form in appendix II of part 280 of 40 Code of Federal Regulations.</td>
<td>280.22(b)</td>
</tr>
<tr>
<td>Compatibility Requirements Effective October 13, 2015.</td>
<td>Owners and operators must notify the implementing agency at least 30 days prior to switching to a regulated substance containing greater than 10 percent ethanol, greater than 20 percent biodiesel, or any other regulated substance identified by the implementing agency. Owners and operators must be able to demonstrate compatibility of the UST system (including the tank, piping, containment sumps, pumping equipment, release detection equipment, spill equipment, and overfill equipment) with the regulated substance containing greater than 10 percent ethanol, greater than 20 percent biodiesel, or any other regulated substance identified by the implementing agency. Owners and operators may demonstrate compatibility of the UST system with the regulated substance containing greater than 10 percent ethanol, greater than 20 percent biodiesel, or any other regulated substance identified by the implementing agency by using a certification or listing of UST system equipment or components by a nationally recognized, independent testing laboratory for use with the regulated substance stored; or equipment or component manufacturer approval. The manufacturer’s approval must be in writing, indicate an affirmative statement of compatibility, specify the range of biofuel blends the equipment or component is compatible with, and be from the equipment or component manufacturer. Owners and operators must maintain the compatibility certifications, listings, or equipment or component manufacturer approval of UST system equipment for as long as the UST system is used to store the regulated substance containing greater than 10 percent ethanol, greater than 20 percent biodiesel, or any other regulated substance identified by the implementing agency.</td>
<td>280.32(b) 280.32(b)(1) 280.32(b)(1)(i) &amp; (ii) 280.32(c)</td>
</tr>
</tbody>
</table>
### Equipment Inspection and Testing After Repairs Effective October 13, 2015.

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Regulation</th>
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<tbody>
<tr>
<td>Within 30 days following the date of completion of any repairs to secondary containment areas of tanks and piping used for interstitial monitoring and containment sumps used for interstitial monitoring of piping, the secondary containment must be tested for tightness according to the manufacturer’s instructions, a code of practice developed by a nationally recognized association or independent testing laboratory, or according to requirements established by the implementing agency.</td>
<td>280.33(d)</td>
</tr>
<tr>
<td>Within 30 days following any repair to overfill prevention equipment, the repaired overfill prevention equipment must be inspected. At a minimum, the inspection must ensure that overfill prevention equipment is set to activate at the correct level to prevent spilling and overfilling associated with product transfer to the UST system, and will activate when regulated substance reaches that level to ensure it is operating properly. The inspection must be conducted according to requirements developed by the manufacturer, a code of practice developed by a nationally recognized association or independent testing laboratory, or requirements determined by the implementing agency to be no less protective of human health and the environment.</td>
<td>280.33(f) &amp; 280.35(a)(2)</td>
</tr>
<tr>
<td>Within 30 days following any repair to spill prevention equipment, the repaired spill prevention equipment must be tested. At a minimum, the test must ensure the equipment is liquid tight by using vacuum, pressure, or liquid testing in accordance with requirements developed by the manufacturer, a code of practice developed by a nationally recognized association or independent testing laboratory, or requirements determined by the implementing agency to be no less protective of human health and the environment.</td>
<td>280.33(f) &amp; 280.35(a)(1)(ii)</td>
</tr>
<tr>
<td>Owners and operators must maintain records of each repair of the tank, pipe, spill prevention equipment, overfill prevention equipment, corrosion protection equipment, release detection equipment or other UST system component that has caused a release of product from the UST system or has failed to function properly until the UST system is permanently closed or undergoes a change-in-service.</td>
<td>280.33(g)</td>
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</tbody>
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### First Periodic Inspection of Overfill Prevention Equipment Required by October 13, 2018.

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Regulation</th>
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<tbody>
<tr>
<td>At least every once every 3 years, overfill prevention equipment must be inspected. At a minimum, the inspection must ensure that overfill prevention equipment is set to activate at the correct level to prevent spilling and overfilling associated with product transfer to the UST system, and will activate when regulated substance reaches that level to ensure it is operating properly. The inspection must be conducted according to requirements developed by the manufacturer, a code of practice developed by a nationally recognized association or independent testing laboratory, or requirements determined by the implementing agency to be no less protective of human health and the environment.</td>
<td>280.20(c)(4) &amp; 280.35(a)(2)</td>
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<tr>
<td>Owners and operators must maintain all records of overfill inspections for three years.</td>
<td>280.35(c)(1)</td>
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<table>
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<tr>
<td>Containment sumps used for interstitial monitoring of piping that are double-walled and the integrity of both walls is periodically monitored at a frequency not less than the frequency of the walkthrough inspections are not required to be tested every three years. Documentation showing that the prevention equipment is double-walled and the integrity of both walls is periodically monitored must be maintained for as long as the equipment is periodically monitored.</td>
<td>280.35(a)(1)(i) &amp; 280.35(c)(2)</td>
</tr>
</tbody>
</table>
Owners and operators must begin periodic tightness testing of containment sump used for interstitial monitoring of piping and conduct a test within 30 days of discontinuing periodic monitoring of the integrity of the double-walled containment sumps used for interstitial monitoring of piping.

Walkthrough inspections must be conducted every 30 days. The inspection must include inspecting the spill prevention equipment by visually checking for damage, removing liquid or debris, checking for and removing obstructions in the fill pipe, and checking the fill cap to make sure it is securely on the fill pipe. In addition, check to make sure the release detection equipment is operating with no alarms or other unusual operating conditions present; and ensure records of release detection testing are reviewed and current.

First Walkthrough Inspection Required by October 13, 2018.

Anually, containment sumps must be visually check for damage, leaks to the containment area, or releases to the environment; remove liquid or debris if present; and, for double walled sumps with interstitial monitoring, check for a leak in the interstitial area. Hand held release detection equipment devices such as tank gauge sticks or groundwater bailers must be check for operability and serviceability.


Anually, a test of the proper operation of release detection equipment must be performed that includes the testing of the automatic tank gauge and other controller’s backup battery, checking probes and sensors to ensure floats move freely; the shaft is not damaged, cables are free of kinks and breaks, and hand-held electronic sampling equipment associated with groundwater and vapor monitoring.

Anually, a test of the proper operation of release detection equipment must be performed that includes the testing of the automatic tank gauge and other controller’s backup battery, checking probes and sensors to ensure floats move freely; the shaft is not damaged, cables are free of kinks and breaks, and hand-held electronic sampling equipment associated with groundwater and vapor monitoring.

Owners and operators must maintain records of the results of the annual operation tests for three years. At a minimum, the results must list each component tested, indicate whether each component tested properly functions or needs to have action taken, and describe any action taken to correct an issue.

Owners and operators of USTs that use vapor or groundwater monitoring as a method of release detection must maintain records of a site assessment of the UST excavation zones to ensure the materials used as backfill are sufficiently porous (e.g., gravel, sand, crushed rock) to readily allow diffusion of vapors from releases into the excavation area; the level of background contamination in the excavation zone will not interfere with the method used; the regulated substance stored is immiscible in water and has a specific gravity of less than one; monitoring wells or devices intercept the excavation zone or are as close to it as is technically feasible. The records of the site assessment must be maintained for as long as the vapor or groundwater monitoring methods are used.

USTs using statistical inventory reconciliation as the tank’s form of release detection must use a release detection method based on the application of statistical principles to inventory data that reports a quantitative result with a calculated leak rate, be capable of detecting a leak rate of 0.2 gallon per hour or a release of 150 gallons within 30 days; and use a threshold that does not exceed one-half the minimum detectible leak rate.

Statistical Inventory Reconciliation Requirements Effective October 13, 2015.

Vapor and Groundwater Monitoring Site Assessment Required by October 13, 2018.
Records of site assessments developed after October 13, 2015 must be signed by a professional engineer or professional geologist, or equivalent licensed professional with experience in environmental engineering, hydrogeology, or other relevant technical discipline acceptable to the implementing agency.  

**Release Investigation & Response Effective October 13, 2015.**

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<th><strong>280.45(a)</strong></th>
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| If a release is suspected owners and operators must conduct tightness test of the primary or secondary containment, as appropriate, to determine whether a leak exists in that portion of the tank that routinely contains product, the attached delivery piping, or a breach of either wall of the containment has occurred.  
| 280.52(a)(1) |
| If the system test confirms a leak into the interstice or a release, owners and operators must repair, replace, upgrade, or close the UST system. In addition, owners and operators must begin corrective action if the test results for the system, tank, or delivery piping indicate that a release exists.  
| 280.52(a)(2) |
| Class C operators must be trained by the Class A or Class B operator before assuming duties of the Class C operator.  
| 280.243(c) |
| The Class A and Class B operator training program for Class C operators must include an evaluation through testing, a practical demonstration, or another approach acceptable to the implementing agency.  
| 280.242(d) |
| Class A and Class B operators of UST systems determined by the implementing agency to be out of compliance must complete a training program or comparable examination. The training program or comparable examination must be developed or administered by an independent organization, the implementing agency, or a recognized authority. Class A and Class B operators take annual refresher training. The training program or comparable examination must be completed no later than 30 days from the date the implementing agency determines the facility is out of compliance unless the Class A and Class operators take annual refresher training for Class A and Class B operators that cover all applicable operator training requirements, or the implementing agency, at its discretion, waives this retraining requirement for either the Class A or Class B operator or both.  
| 280.244 |
| Owners and operators must maintain a list that identifies all Class A, Class B, and Class C operators currently designated for the facility and include names, class of the operator trained, date assumed duties, date each completed initial training, and any retraining.  
| 280.245(a) |
| Owners and operators must maintain records of classroom or field training programs (including Class C operator training provided by the Class A or Class B operator) or a comparable examination that, at a minimum, is signed by the trainer or examiner. Records from computer based training must, at a minimum, indicate the name of the training program and web address, if Internet based. Records of Class A or Class B operator recertification must include those areas in which the operator has been recertified.  
| 280.245(b) |

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1 In California, Class A and B are referred to as the designated operator, and Class C is referred to as the facility employee.
### Emergency Generator Tank Systems

<table>
<thead>
<tr>
<th>Category</th>
<th>Requirement</th>
<th>40 CFR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Release Detection Required by October 13, 2018</td>
<td>Emergency generators tank systems must meet release detection requirements.</td>
<td>280.10(a)(1)(ii)</td>
</tr>
<tr>
<td>Release Reporting Effective October 13, 2018</td>
<td>Emergency generator tank systems that cannot apply a method of release detection must permanently close.</td>
<td>280.40(c)</td>
</tr>
<tr>
<td>First Annual Operations Test of Release Detection Equipment Required by October 13, 2018</td>
<td>Annually, a test of the proper operation of release detection equipment must be performed that includes the testing of the automatic tank gauge and other controller’s backup battery; checking probes and sensors to ensure floats move freely; the shaft is not damaged; and cables are free of kinks and breaks. Handheld electronic sampling equipment associated with groundwater and vapor monitoring must be checked to ensure proper operation. Owners and operators must maintain records of the results of the annual operation tests for three years. At a minimum, the results must list each component tested, indicate whether each component tested properly functions or needs to have action taken, and describe any action taken to correct an issue.</td>
<td>280.40(a)(3) 280.45(b)(1)</td>
</tr>
<tr>
<td>Statistical Inventory Reconciliation Requirements Effective October 13, 2015</td>
<td>Emergency generators tank systems using statistical inventory reconciliation as the UST’s form of release detection must use a release detection method based on the application of statistical principles to inventory data that reports a quantitative result with a calculated leak rate, be capable of detecting a leak rate of 0.2 gallon per hour or a release of 150 gallons within 30 days; and use a threshold that does not exceed one-half the minimum detectible leak rate.</td>
<td>280.43(h)</td>
</tr>
<tr>
<td>Vapor and Groundwater Monitoring Site Assessment Required by October 13, 2018</td>
<td>Owners and operators of USTs that use vapor or groundwater monitoring as a method of release detection must maintain records of a site assessment of the UST excavation zones to ensure the materials used as backfill are sufficiently porous (e.g., gravel, sand, crushed rock) to readily allow diffusion of vapors from releases into the excavation area; the level of background contamination in the excavation zone will not interfere with the method used; the regulated substance stored is immiscible in water and has a specific gravity of less than one; monitoring wells or devices intercept the excavation zone or are as close to it as is technically feasible. The records of the site assessment must be maintained for as long as the vapor or groundwater monitoring methods are used. Records of site assessments developed after October 13, 2015 must be signed by a professional engineer or professional geologist, or equivalent licensed professional with experience in environmental engineering, hydrogeology, or other relevant technical discipline acceptable to the implementing agency.</td>
<td>280.45(a)</td>
</tr>
<tr>
<td>Release Investigation &amp; Response Effective October 13, 2018</td>
<td>If a release is suspected owners and operators must conduct tightness test of the primary or secondary containment, as appropriate, to determine whether a leak exists in that portion of the tank that routinely contains product, the attached delivery piping, or a breach of either wall of the containment has occurred. If the system test confirms a leak into the interstice or a release, the owners and operators must repair, replace, upgrade, or close the UST system. In addition, owners and operators must begin corrective action if the test results for the system, tank, or delivery piping indicate that a release exists.</td>
<td>280.52(a)(1) 280.52(a)(2)</td>
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<tr>
<td>Requirements for Airport Hydrant Fuel Distribution Systems &amp; Field-Constructed Tanks</td>
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<tr>
<td><strong>Category</strong></td>
<td><strong>Requirement</strong></td>
<td><strong>40 CFR</strong></td>
</tr>
<tr>
<td><strong>Definitions Effective October 13, 2015.</strong></td>
<td><em>Airport hydrant fuel distribution system</em> (also called <em>airport hydrant system</em>) means a UST system which fuels aircraft and operates under high pressure with large diameter piping that typically terminates into one or more hydrants (fill stands). The airport hydrant system begins where fuel enters one or more tanks from an external source such as a pipeline, barge, rail car, or other motor fuel carrier.</td>
<td>280.50</td>
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<tr>
<td><strong>Field-constructed tank</strong> means a tank constructed in the field. For example, a tank constructed of concrete that is poured in the field, or a steel or fiberglass tank primarily fabricated in the field is considered field-constructed.</td>
<td>280.50</td>
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<tr>
<td><strong>General Requirements Effective as Indicated.</strong></td>
<td>Except as expressly specified, by October 13, 2015, owners and operators must comply with the requirements of Program Scope and Installation Requirements for Partially Excluded UST Systems; Release Reporting, Investigation, and Confirmation; Release Response and Corrective Action for UST Systems Containing Petroleum or Hazardous Substances; Out-of-Service UST Systems and Closure; Financial Responsibility; UST Systems: Design, Construction, Installation and Notification.</td>
<td>280.251(c)</td>
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<td>Except as expressly specified, by October 13, 2018, owners and operators must comply with the requirements of General Operating; Release Detection; and Operator Training.</td>
<td>280.251(c)</td>
</tr>
<tr>
<td><strong>Notification of System Existence Required by October 13, 2018.</strong></td>
<td>Owners and operators must submit a one-time notice of tank system existence to the implementing agency, using the notification form in appendix I of part 280 of 40 Code of Federal Regulations.</td>
<td>280.251(b)</td>
</tr>
<tr>
<td><strong>Demonstrate Financial Responsibility Required by October 13, 2018.</strong></td>
<td>Owners and operators must demonstrate financial responsibility at the time of submission of the tank system existence notification form and maintain these records for the life of the system.</td>
<td>280.251(b)</td>
</tr>
<tr>
<td><strong>Change of Ownership Notification Effective October 13, 2015.</strong></td>
<td>Within 30 days of acquisition, any person who assumes ownership of an airport hydrant fuel distribution system or field constructed tank must submit a notice of the ownership change to the implementing agency, using the form in appendix II of part 280 of 40 Code of Federal Regulations.</td>
<td>280.22(b)</td>
</tr>
<tr>
<td><strong>Design and Construction Effective April 11, 2016.</strong></td>
<td>Effective April 11, 2016, except for safe suction piping, when piping is installed or replaced; it must be double-walled and interstitially monitored.</td>
<td>280.20</td>
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<td>Owners and operators of field constructed tanks greater than 50,000 gallons and piping associated with airport hydrant systems do not have to meet the requirement to upgrade single-walled piping to double-walled interstitially monitored piping when installing or replacing piping as required after April 11 2016, including under–dispenser containment.</td>
<td>280.252(a)</td>
</tr>
<tr>
<td><strong>System Upgrades Required by October 13, 2018.</strong></td>
<td>Steel tanks and piping of airport hydrant fuel distribution systems and field-constructed tanks in direct contact with the ground must have cathodic protection.</td>
<td>280.252(b)(1)</td>
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<td></td>
<td>Airport hydrant fuel distribution systems and field-constructed tanks must comply with spill and overfill prevention equipment requirements to prevent spilling and overfilling associated with product transfer to the UST system.</td>
<td>280.252(b)(2)</td>
</tr>
<tr>
<td>Compatibility Requirements by October 13, 2018.</td>
<td>Owners and operators must notify the implementing agency at least 30 days prior to switching to a regulated substance containing greater than 10 percent ethanol, greater than 20 percent biodiesel, or any other regulated substance identified by the implementing agency.</td>
<td>280.32(b)</td>
</tr>
<tr>
<td></td>
<td>Owners and operators must be able to demonstrate compatibility of the UST system (including the tank, piping, containment sumps, pumping equipment, release detection equipment, spill equipment, and overfill equipment) with the regulated substance containing greater than 10 percent ethanol, greater than 20 percent biodiesel, or any other regulated substance identified by the implementing agency.</td>
<td>280.32(b)(1)</td>
</tr>
<tr>
<td></td>
<td>Owners and operators may demonstrate compatibility of the UST system with the regulated substance containing greater than 10 percent ethanol, greater than 20 percent biodiesel, or any other regulated substance identified by the implementing agency by using a certification or listing of UST system equipment or components by a nationally recognized, independent testing laboratory for use with the regulated substance stored; or equipment or component manufacturer approval. The manufacturer’s approval must be in writing, indicate an affirmative statement of compatibility, specify the range of biofuel blends the equipment or component is compatible with, and be from the equipment or component manufacturer.</td>
<td>280.32(b)(1)(i) &amp; (ii)</td>
</tr>
<tr>
<td></td>
<td>Owners and operators must maintain the compatibility certifications, listings, or equipment or component manufacturer approval of UST system equipment for as long as the UST system is used to store the regulated substance containing greater than 10 percent ethanol, greater than 20 percent biodiesel, or any other regulated substance identified by the implementing agency.</td>
<td>280.32(c)</td>
</tr>
<tr>
<td>Equipment Inspection and Testing After Repairs Effective October 13, 2018.</td>
<td>Within 30 days following the date of completion of any repairs to the primary or secondary containment of tanks and piping, the containment must be tested for tightness according to the manufacturer’s instructions, a code of practice developed by a nationally recognized association or independent testing laboratory, or according to requirements established by the implementing agency.</td>
<td>280.33(d)</td>
</tr>
<tr>
<td></td>
<td>Within 30 days following any repair to overfill prevention equipment, the repaired overfill prevention equipment must be inspected. At a minimum, the inspection must ensure that overfill prevention equipment is set to activate at the correct level to prevent spilling and overfilling associated with product transfer to the UST system, and will activate when regulated substance reaches that level to ensure it is operating properly. The inspection must be conducted according to requirements developed by the manufacturer, a code of practice developed by a nationally recognized association or independent testing laboratory, or requirements determined by the implementing agency to be no less protective of human health and the environment.</td>
<td>280.33(f) &amp; 280.35(a)(2)</td>
</tr>
<tr>
<td></td>
<td>Within 30 days following any repair to spill prevention equipment, the repaired spill prevention equipment must be tested. At a minimum, the test must ensure the equipment is liquid tight by using vacuum, pressure, or liquid testing in accordance with requirements developed by the manufacturer, a code of practice developed by a nationally recognized association or independent testing laboratory, or requirements determined by the implementing agency to be no less protective of human health and the environment.</td>
<td>280.33(f) &amp; 280.35(a)(1)(ii)</td>
</tr>
</tbody>
</table>
Owners and operators must maintain records of each repair of the tank, pipe, spill prevention equipment, overfill prevention equipment, corrosion protection equipment, release detection equipment or other UST system component that has caused a release of product from the UST system or has failed to function properly until the UST system is permanently closed or undergoes a change-in-service.

Within 6 months following the repair of any cathodically protected UST system, the cathodic protection system must be tested to ensure that it is operating properly.

At least every once every 3 years, spill prevention equipment and containment sumps used for interstitial monitoring of piping must be tested. At a minimum, the test must ensure that spill prevention equipment is liquid tight. The test must be conducted according to requirements developed by the manufacturer, a code of practice developed by a nationally recognized association or independent testing laboratory, or requirements determined by the implementing agency to be no less protective of human health and the environment.

Periodic tightness testing of spill prevention equipment and containment sumps used for interstitial monitoring of piping is not required if the spill prevention equipment and containment sumps used for interstitial monitoring of piping monitor is double-walled the integrity of the double-walled equipment is monitored at a frequency no less than the periodic walkthroughs.

Containment sumps used for interstitial monitoring of piping that are double-walled and the integrity of both walls is periodically monitored at a frequency not less than the frequency of the walkthrough inspections are not required to be tested every three years. Documentation showing that the prevention equipment is double-walled and the integrity of both walls is periodically monitored must be maintained for as long as the equipment is periodically monitored.

Owners and operators must begin periodic tightness testing of spill prevention equipment and containment sumps used for interstitial monitoring of piping and conduct a test within 30 days of discontinuing periodic monitoring of the integrity of the double-walled spill prevention equipment and containment sumps used for interstitial monitoring of piping.

At least every once every 3 years, overfill prevention equipment must be inspected. At a minimum, the inspection must ensure that overfill prevention equipment is set to activate at the correct level to prevent spilling and overfilling associated with product transfer to the UST system, and will activate when regulated substance reaches that level to ensure it is operating properly. The inspection must be conducted according to requirements developed by the manufacturer, a code of practice developed by a nationally recognized association or independent testing laboratory, or requirements determined by the implementing agency to be no less protective of human health and the environment.

Owners and operators must maintain all records of overfill inspections for three years.

### First Periodic Test of Spill Prevention Equipment and Containment Sump Required by October 13, 2018.

**First Periodic Inspection of Overfill Prevention Equipment Required by October 13, 2018.**
<table>
<thead>
<tr>
<th>Release Detection Required by October 13, 2018.</th>
<th>Airport hydrant fuel distribution systems and field-constructed tanks that cannot apply a method of release detection must permanently close.</th>
<th>280.40(c)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Owners and operators of field-constructed tanks with a capacity less than or equal to 50,000 gallons and associated piping must meet the release detection requirements in subpart D of part 280 of 40 Code of Federal Regulations.</td>
<td>280.252(d)(1) &amp; (2)</td>
<td></td>
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<td>Owners and operators of field constructed tanks with a capacity greater than 50,000 gallons and associated piping and airport hydrant fuels distribution systems must meet release detection requirements by monitoring the tank and/or piping, as applicable, with vapor and/or groundwater monitoring combined with inventory control; tightness testing; automatic tank gauging; or interstitial monitoring.</td>
<td>280.252(d)(1)</td>
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<td>Owners and operators of airport hydrant fuel distribution systems and field-constructed tanks must maintain release detection records.</td>
<td>280.252(d)(3)</td>
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<td>Vapor and Groundwater Monitoring Site Assessment Required by October 13, 2018.</td>
<td>Owners and operators of USTs that use vapor or groundwater monitoring as a method of release detection must maintain records of a site assessment of the UST excavation zones to ensure the materials used as backfill are sufficiently porous (e.g., gravel, sand, crushed rock) to readily allow diffusion of vapors from releases into the excavation area; the level of background contamination in the excavation zone will not interfere with the method used; the regulated substance stored is immiscible in water and has a specific gravity of less than one; monitoring wells or devices intercept the excavation zone or are as close to it as is technically feasible. The records of the site assessment must be maintained for as long as the vapor or groundwater monitoring methods are used.</td>
<td>280.45(a)</td>
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<td>Records of site assessments developed after October 13, 2015 must be signed by a professional engineer or professional geologist, or equivalent licensed professional with experience in environmental engineering, hydrogeology, or other relevant technical discipline acceptable to the implementing agency.</td>
<td>280.45(a)</td>
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<td>First Annual Operations Test of Release Detection Equipment Required by October 13, 2018.</td>
<td>Annually, a test of the proper operation of release detection equipment must be performed that includes the testing of the automatic tank gauge and other controller’s backup battery; checking probes and sensors to ensure floats move freely; the shaft is not damaged; and cables are free of kinks and breaks. Hand-held electronic sampling equipment associated with groundwater and vapor monitoring must be checked to ensure proper operation.</td>
<td>280.40(a)(3)</td>
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<td>Owners and operators must maintain records of the results of the annual operation tests for three years. At a minimum, the results must list each component tested, indicate whether each component tested properly functions or needs to have action taken, and describe any action taken to correct an issue.</td>
<td>280.45(b)(1)</td>
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<td>Operator Training Required by October 13, 2018.</td>
<td>Class C operators must be trained by the Class A or Class B operator before assuming duties of the Class C operator.</td>
<td>280.243(c)</td>
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<td>The Class A and Class B operator training program for Class C operators must include an evaluation through testing, a practical demonstration, or another approach acceptable to the implementing agency.</td>
<td>280.242(d)</td>
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Class A and Class B operators of UST systems determined by the implementing agency to be out of compliance must complete a training program or comparable examination. The training program or comparable examination must be developed or administered by an independent organization, the implementing agency, or a recognized authority. Class A and Class B operators take annual refresher training. The training program or comparable examination must be completed no later than 30 days from the date the implementing agency determines the facility is out of compliance unless the Class A and Class operators take annual refresher training for Class A and Class B operators that cover all applicable operator training requirements, or the implementing agency, at its discretion, waives this retraining requirement for either the Class A or Class B operator or both.\(^1\)

Owners and operators must maintain a list that identifies all Class A, Class B, and Class C operators currently designated for the facility and include names, class of the operator trained, date assumed duties, date each completed initial training, and any retraining.\(^1\)

Owners and operators must maintain records of classroom or field training programs (including Class C operator training provided by the Class A or Class B operator) or a comparable examination that, at a minimum, is signed by the trainer or examiner. Records from computer based training must, at a minimum, indicate the name of the training program and web address, if Internet based. Records of Class A or Class B operator recertification must include those areas in which the operator has been recertified.\(^1\)

Walkthrough inspections must be conducted every 30 days. The inspection must include inspecting the spill prevention equipment by visually checking for damage, removing liquid or debris, checking for and removing obstructions in the fill pipe, and checking the fill cap to make sure it is securely on the fill pipe. In addition, check to make sure the release detection equipment is operating with no alarms or other unusual operating conditions present; and ensure records of release detection testing are reviewed and current.

Annually, containment sumps must be visually check for damage, leaks to the containment area, or releases to the environment; remove liquid or debris if present; and, for double walled sumps with interstitial monitoring, check for a leak in the interstitial area. Hand held release detection equipment devices such as tank gauge sticks or groundwater bailers must be check for operability and serviceability.

Owners and operators must maintain records of operation and maintenance walkthrough inspections for one year. Records must include a list of each area checked, whether each area checked was acceptable or needed action taken, and a description of actions taken to correct an issue.

In addition, owners and operators of airport hydrant fuel distribution systems must inspect hydrant pits and hydrant piping vaults. Hydrant pits inspections must include checking for any visual damage, removing any liquid or debris present, and checking for any leaks. Hydrant piping vaults inspection must include checking for any hydrant piping leaks. Hydrant pits and hydrant piping vaults must be inspected at least once every 30 days if confined space entry according to the Occupational Safety and Health Administration is not required or at least annually if confined space entry is required.
## Release Investigation & Response

**Effective October 13, 2015.**

If a release is suspected, owners and operators must conduct tightness test of the primary or secondary containment, as appropriate, to determine whether a leak exists in that portion of the tank that routinely contains product, the attached delivery piping, or a breach of either wall of the containment has occurred.

If the system test confirms a leak into the interstice or a release, the owners and operators must repair, replace, upgrade, or close the UST system. In addition, owners and operators must begin corrective action if the test results for the system, tank, or delivery piping indicate that a release exists.

### 280.52(a)(1)

### 280.52(a)(2)

## Closure Requirements

**Effective October 13, 2015.**

At least 30 days before beginning either permanent closure or a change-in-service, or within another reasonable time period determined by the implementing agency, owners and operators must notify the implementing agency of their intent to permanently close or make the change-in-service, unless such action is in response to corrective action. The required assessment of the excavation zone must be performed after notifying the implementing agency but before completion of the permanent closure or a change-in-service.

When directed by the implementing agency, the owner and operator of an UST system with field constructed tanks or airport hydrant system permanently closed before October 13, 2015 must assess the excavation zone and close the UST system in accordance with closure requirements if releases from the UST may, in the judgment of the implementing agency, pose a current or potential threat to human health and the environment.

### 280.71(a)

### 280.252(e)

**NOTE:** This working document was developed for ease of reference. State Water Resources Control Board staff have taken every effort to ensure that the requirements listed in this document match the requirements in part 280 of 40 Code of Federal Regulations. We recommend that this document be used in conjunction with 40 Code of Federal Regulations part 280. In the event of a conflict between this document and 40 Code of Federal Regulations part 280, 40 Code of Federal Regulations part 280 controls.