

GUIDELINES FOR TESTING OF UNDERGROUND STORAGE TANK SECONDARY CONTAINMENT SYSTEMS

For use by Unidocs Member Agencies or where approved by your Local Jurisdiction

Authority Cited: Title 23, Div. 3, Ch. 16 CCR

These guidelines are applicable to underground storage tank systems (tanks and piping) that store hazardous materials which are liquid at standard temperature and pressure (STP). They supplement the State Water Resources Control Board's (SWRCB) LG-160 Local Guidance Letter which is available on the Internet at www.swrcb.ca.gov/cwphome/ust/docs/lgs/avail.html. *[Exceptions: The following tank systems are exempt from secondary containment testing requirements: 1.) Tanks located on a farm or at a personal residence, which hold no more than 1,100 gallons of home heating oil which is used consumptively at the premises where the tank is located, and 2.) hydraulic lift tanks.]*

A. Test Frequency

1. All secondary containment systems (i.e. tank annular spaces, secondary piping, piping sumps, dispenser containment, etc.) installed after January 1, 2001 shall be tested upon installation, six (6) months after installation, and every 36 months thereafter. [23 CCR §2637(a)]
2. All secondary containment systems installed prior to January 1, 2001 shall be tested by January 1, 2003 and every 36 months thereafter. [23 CCR §2637(a)]

(Exception: Secondary containment systems where a continuous monitoring device automatically monitors both the primary and secondary containment, such as systems that are hydrostatically monitored (e.g. brine-filled annular spaces) or under constant vacuum, are exempt from secondary containment testing.) [23 CCR §2637(a)(6)]

B. Test Methods and Procedures

1. All secondary containment testing shall be performed by either a tank tester licensed by the State of California; or any person possessing a current Class A, C-10, C-34, C-36, or C-61 (D40) License issued by the Contractors State License Board (CSLB). [23 CCR §2637(a)(3)] *[Note: Contractor information may be obtained by calling the CSLB at (800) 321-2752.]*
2. Periodic testing of secondary containment systems shall be conducted using a test procedure that demonstrates that the system performs at least as well as it did upon installation. For example, if the secondary containment system was tested upon installation by using a test method that applied a pressure of 5 p.s.i., then the periodic test must be conducted using a method that tests the system at an equivalent pressure. [23 CCR §2637(a)(2)]
3. All testing shall be performed in accordance with the secondary containment system manufacturer's guidelines or standards. If there are no manufacturer's guidelines or standards, testing shall be performed using an applicable method specified in an industry code or engineering standard. If there are no manufacturer's guidelines, industry codes, or engineering standards, a test method approved by a state-registered professional engineer (PE) shall be used. [23 CCR §2637(a)(2)] *(Note: In the case of pressure/vacuum testing, any loss in pressure/vacuum during the course of the test shall be considered a failed test, regardless of the manufacturer or PE's criteria for declaring a passed test.)*
4. Under no circumstances shall any primary containment system for flammable or combustible liquids, or secondary containment system holding a potentially explosive atmosphere, be pressurized with air.

5. When a tank manufacturer's installation guidelines/standards allow a choice between either pressure or vacuum testing of a tank annular space, it is recommended that vacuum testing be performed. If pressure testing is performed, the primary containment shall first be pressurized using nitrogen (or another approved inert gas) to a pressure equal to the intended secondary containment test pressure, so as to prevent undue stress to, or structural failure of, primary containment. Pressure shall be maintained on the primary containment until pressure is released from the annular space at the conclusion of testing.
6. In cases where water is used for testing of secondary containment systems (e.g. lake testing of sumps), a means shall be provided for removing all water at the conclusion of testing. Removed water shall be analyzed for contamination by hazardous materials and, if contaminated, properly disposed of at an authorized disposal facility. [HSC §25291(e), 22 CCR §66262.11]
7. Water removed from secondary containment systems, even if uncontaminated by hazardous materials, shall not be disposed of to the storm water system. [Nonpoint Source (Urban Runoff) Ordinance]

C. Test Notification and Reporting

1. Owners/operators of underground storage tanks shall notify the local agency at least 48 hours prior to conducting testing of secondary containment systems. [23 CCR §2637(a)(5)]
2. Test reports shall consist of either a properly completed SWRCB Secondary Containment Testing Report Form (available at www.swrcb.ca.gov/cwphome/ust/docs/secondary_containment/index.html) or other report containing a level of detail at least equivalent to the State form. Copies of any logs documenting pressure/vacuum readings during testing shall be included with the report. [HSC §25293]
3. Owners/operators of underground storage tanks shall submit a copy of the secondary containment system test report to the local agency within 30 days of completion of the test. [23 CCR §2637(a)(4)]

D. Systems That Can Not Be Tested

The owner or operator of any secondary containment system which can not be tested in accordance with requirements specified in these guidelines shall either: [23 CCR §2637(a)(1)]

1. By December 31, 2002, replace the secondary containment system with a system that can pass testing; or
2. Submit a proposal and work plan for enhanced leak detection to the local agency in accordance with 23 CCR §2644.1(a)(1), (2), (4), and (5) by July 1, 2002; complete implementation of enhanced leak detection by December 31, 2002; and, by July 1, 2005, replace the secondary containment system with a system that can be successfully tested.