CALIFORNIA UNDERGROUND STORAGE TANK REGULATIONS

Title 23
Division 3
Chapter 16
California Code of Regulations
May 5, 1994
Amended October 26, 1998

and

Chapter 6.7, Health & Safety Code
As Amended and Effective
January 1, 1998

STATE BOARD
CALIFORNIA ENVIRONMENTAL PROTECTION AGENCY

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CHAPTER 16 UNDERGROUND STORAGE TANK REGULATIONS

Effective May 5, 1994

Article 1 - DEFINITION OF TERMS

2610. Definitions/Applicability of Definitions

(a) Unless the context requires otherwise, the terms used in this chapter shall have the definitions provided by the appropriate section of Chapter 6.7 of Division 20 of the Health and Safety Code, or by section 2611 of this article.

(b) Except as otherwise specifically provided herein, the following terms are defined in section 25281 of Chapter 6.7 of Division 20 of the Health and Safety Code:

Automatic Line Leak Detector
Board
Department
Facility
Federal Act
Local Agency
Owner
Pipe
Primary Containment
Product-Tight
Release
Secondary Containment
Single-Walled
Special Inspector
Storage/Store
SWEEPS
Tank
Tank Integrity Test
Tank Tester
Unauthorized Release
Underground Storage Tank
Underground Tank System/Tank System

Authority: Health and Safety Code 25299.3, 25299.7
Reference: Health and Safety Code 25281

2611. Additional Definitions

Unless the context requires otherwise, the following definitions shall apply to terms used in this chapter.

"Bladder system" means a flexible or rigid material which provides primary containment including an interstitial monitoring system designed to be installed inside an existing underground storage tank.

"Cathodic protection tester" means a person who can demonstrate an understanding of the principles and measurements of all common types of cathodic protection systems as applied to buried or submerged metal piping and tank systems. The term includes only persons who have education and experience in soil resistivity, stray current, structure-to-soil potential, and component electrical isolation measurements of buried metal piping and tank systems.

"Coatings expert" means a person who, by reason of thorough training, knowledge, and experience in the coating of metal surfaces, is qualified to engage in the practice of internal tank lining inspections. The term includes only those persons who are independent of any lining manufacturer or applicator and have no financial interest in the tank or tanks being monitored.

"Compatible" means the ability of two or more substances to maintain their respective physical and chemical properties upon contact with one another for the design life of the tank system under conditions likely to be encountered in the underground storage tank.

"Connected piping" means all underground piping including valves, elbows, joints, flanges, and flexible connectors attached to a tank system through which hazardous substances flow. For the purpose of determining how much piping is connected to any individual underground storage tank system, the piping that joins two underground storage tank systems should be allocated equally between them.

"Continuous monitoring" means a system using equipment which routinely performs the required monitoring on a periodic or cyclic basis throughout each day.

"Corrosion specialist" means a person who, by reason of thorough knowledge of the physical sciences and the principles of engineering and mathematics acquired by a professional education and related practical experience, is qualified to engage in the practice of corrosion control on metal underground storage tanks and associated piping. The term includes only persons who have been certified by the National Association of Corrosion Engineers or registered professional engineers who have certification or licensing that requires education and experience in corrosion control of underground storage tanks and associated piping.

"Decommissioned tank" means an underground storage tank which cannot be used for one or more of the following reasons: 1) the tank has been filled with an inert solid; 2) the fill pipes have been sealed; or, 3) the piping has been removed.

"Emergency containment" means a containment system for accidental spills which are infrequent and unpredictable.

"Excavation zone" means the volume containing the tank system and backfill material bounded by the ground surface, walls, and floor of the pit and trenches into which the underground storage tank system is placed at the time of installation.

"Existing underground storage tank" means an underground storage tank that was installed prior to January 1, 1984. The term also includes an underground storage tank installed before January 1, 1987 and which is located on a farm, has a capacity greater than 1,100 gallons, and stores motor vehicle fuel used primarily for agricultural purposes and not for resale.

"Farm tank" means any one tank or a combination of manifolded tanks that: 1) are located on a farm; and 2) hold no more than 1,100 gallons of motor vehicle fuel which is used primarily for agricultural purposes and is not held for resale.

"First ground water" means the uppermost saturated horizon encountered in a bore hole.

"Free product" refers to a hazardous substance that is present as a non-aqueous phase liquid (e.g., liquid not dissolved in water).

"Ground water" means subsurface water which will flow into a well.

"Hazardous substance" means a substance which meets the criteria of either subsection (1) or subsection (2) of section 25281(f) of the Health and Safety Code.

"Heating oil tank" means a tank located on a farm or at a personal residence and which holds no more than 1,100 gallons of home heating oil which is used consumptively at the premises where the tank is located.

"Holiday," when used with respect to underground storage tank coating or cladding, means a pinhole or void in a protective coating or cladding.

"Hydraulic lift tank" means a tank holding hydraulic fluid for a closed loop mechanical system that uses compressed air or hydraulic fluid to operate lifts, elevators, and other similar devices.

"Inconclusive" means the conclusion of a statistical inventory reconciliation report that is not decisive as to whether a release has been detected.

"Independent testing organization" means an organization which tests products or systems for compliance with voluntary consensus standards. To be acceptable as an independent testing organization, the organization shall not be owned or controlled by any client, industrial organization, or any other person or institution with a financial interest in the product or system being tested. For an organization to certify, list, or label products or systems in compliance with voluntary consensus standards, it shall maintain formal periodic inspections of production of products or systems to ensure that a listed, certified, or labeled product or system continues to meet the appropriate standards.

"Independent third party" means independent testing organizations, consulting firms, test laboratories, not-for-profit research organizations and educational institutions with no financial interest in the matters

under consideration. The term includes only those organizations which are not owned or controlled by any client, industrial organization, or any other institution with a financial interest in the matter under consideration.

"Integral secondary containment" means a secondary containment system manufactured as part of the underground storage tank.

"Interstitial space" means the space between the primary and secondary containment systems.

"Leak threshold" means the value against which test measurements are compared and which serves as the basis for declaring the presence of a leak. The leak threshold is set by the manufacturer in order to meet state and federal requirements. Leak threshold is not an allowable leak rate.

"Liquid asphalt tank" means an underground storage tank which contains steam-refined asphalts.

"Liquefied petroleum gas tank" means an underground storage tank which contains normal butane, isobutane, propane, or butylene (including isomers) or mixtures composed predominantly thereof in a liquid or gaseous state having a vapor pressure in excess of 40 pounds per square inch absolute at a temperature of 100 degrees Fahrenheit.

"Maintenance" means the normal operational upkeep to prevent an underground storage tank system from releasing hazardous substances.

"Manufacturer" means any business which produces any item discussed in these regulations.

"Manual inventory reconciliation" means a procedure for determining whether an underground tank system is leaking based on bookkeeping calculations, using measured throughput and a series of daily inventory records taken manually by the tank owner or operator or recorded electronically. This term does not include procedures which are based on statistical inventory reconciliation.

"Membrane liner" means any membrane sheet material used in a secondary containment system. A membrane liner shall be compatible with the substance stored.

"Membrane liner fabricator" means any company which converts a membrane liner into a system for secondary containment.

"Membrane manufacturer" means any company which processes the constituent polymers into membrane sheeting from which the membrane liner is fabricated into a system for secondary containment.

"Motor vehicle" means a self-propelled device by which any person or property may be propelled, moved, or drawn.

"Motor vehicle fuel tank" means an underground storage tank that contains a petroleum product. The definition does not include underground storage tanks that contain used oil.

"New underground storage tank" means an underground storage tank which is not an existing underground storage tank.

"Non-volumetric test" means a tank integrity test method that ascertains the physical integrity of an underground storage tank through review and consideration of circumstances and physical phenomena internal or external to the tank.

"Operational life" means the period beginning when installation of the tank system has begun until the time the tank system should be properly closed.

"Operator" means any person in control of, or having responsibility for, the daily operation of an underground storage tank system.

"Person", as defined in Chapter 6.7 of Division 20 of the Health and Safety Code includes any entity defined as a person under the Federal Act.

"Perennial ground water" means ground water that is present throughout the year.

"Petroleum" means petroleum including crude oil, or any fraction thereof, which is liquid at standard conditions of temperature and pressure, which means at 60 degrees Fahrenheit and 14.7 pounds per square inch absolute.

"Pipeline leak detector" means a continuous monitoring system for underground piping capable of detecting at any pressure, a leak rate equivalent to a specified leak rate and pressure, with a probability of detection of 95 percent or greater and a probability of false alarm of 5 percent or less.

"Probability of detection" means the likelihood, expressed as a percentage, that a test method will correctly identify a leaking underground storage tank.

"Probability of false alarm" means the likelihood, expressed as a percentage, that a test method will incorrectly identify a "tight" tank as a leaking underground storage tank.

"Qualitative release detection method" means a method which detects the presence of a hazardous substance or suitable tracer outside the underground storage tank being tested.

"Quantitative release detection method" means a method which determines the integrity of an underground storage tank by measuring a release rate or by determining if a release exceeds a specific rate.

"Release detection method or system" means a method or system used to determine whether a release of a hazardous substance has occurred from an underground tank system into the environment or into the interstitial space between an underground tank system and its secondary containment.

"Repair" means to restore a tank or underground storage tank system component that has caused a release of a hazardous substance from the underground storage tank system.

"Septic tank" means a tank designed and used to receive and process biological waste and sewage.

"Statistical inventory reconciliation" means a procedure to determine whether a tank is leaking based on the statistical analysis of measured throughput and a series of daily inventory records taken manually by the tank owner or operator or recorded electronically.

"Statistical inventory reconciliation provider" means the developer of a statistical inventory reconciliation method that meets federal and state standards as evidenced by a third-party evaluation conducted according to section 2643(f), or an entity that has been trained and certified by the developer of the method to be used. In either case, the provider shall have no direct or indirect financial interest in the underground storage tank being monitored.

"Storm water or wastewater collection system" means piping, pumps, conduits, and any other equipment necessary to collect and transport the flow of surface water run-off resulting from precipitation, or domestic, commercial, or industrial wastewater to and from retention areas or any areas where treatment is designated to occur. The collection of storm water and wastewater does not include treatment except where incidental to conveyance.

"Substantially beneath the surface of the ground" means that at least 10 percent of the underground tank system volume, including the volume of any connected piping, is below the ground surface or enclosed below earthen materials.

"Sump," "pit," "pond," or "lagoon" means a depression in the ground which lacks independent structural integrity and depends on surrounding earthen material for structural support of fluid containment.

"Tank integrity test" means a test method that can ascertain the physical integrity of an underground storage tank. The term includes only test methods which are able to detect a leak of 0.1 gallons per hour with a probability of detection of at least 95 percent and a probability of false alarm of 5 percent or less. The test method may be either volumetric or non-volumetric in nature. A leak rate is reported using a volumetric test method, whereas, a non-volumetric test method reports whether a substance or physical phenomenon is detected which may indicate the presence of a leak.

"Unauthorized release" as defined in Chapter 6.7 of Division 20 of the Health and Safety Code does not include intentional withdrawals of hazardous substances for the purpose of legitimate sale, use, or disposal.

"Upgrade" means the addition or retrofit of some systems such as cathodic protection, lining, secondary containment, or spill and overfill controls to improve the ability of an underground storage tank system to prevent the release of hazardous substances.

"Volumetric test" means a tank integrity test method that ascertains the physical integrity of an underground storage tank through review and comparison of tank volume.

"Voluntary consensus standards" means standards that shall be developed after all persons with a direct and material interest have had a right to express a viewpoint and, if dissatisfied, to appeal at any point (a partial list of the organizations that adopt voluntary consensus standards are shown in Appendix I, Table B).

"Wastewater treatment tank" means a tank designed to treat influent wastewater through physical, chemical, or biological methods and which is located inside a public or private wastewater treatment facility. The term includes untreated wastewater holding tanks, oil water separators, clarifiers, sludge holding tanks, filtration tanks, and clarified water tanks that do not continuously contain hazardous substances.

Authority: Health and Safety Code 25299.3, 25299.7
Reference: Health and Safety Code 25281, 25282, 25299.5(a); 40 CFR 280.10, 280.12

Article 2 - GENERAL PROVISIONS

2620. General Intent, Content, Applicability, and Implementation of Regulations

(a) The regulations in this chapter are intended to protect waters of the state from discharges of hazardous substances from underground storage tanks. These regulations establish construction requirements for new underground storage tanks; establish separate monitoring requirements for new and existing underground storage tanks; establish uniform requirements for unauthorized release reporting, and for repair, upgrade, and closure of underground storage tanks; and specify variance request procedures.

(b) Owners and operators shall comply with these regulations except as otherwise specifically provided herein. If the operator is not the owner, then the owner shall enter into a written contract with the operator requiring the operator to monitor the underground storage tank; maintain appropriate records; and implement reporting procedures as required by any applicable permit. Both the owner and operator are responsible for assuring that the underground storage tank system is repaired or upgraded in accordance with Article 6, or closed in accordance with Article 7, as appropriate.

(c) Counties shall implement the regulations in this chapter within both the incorporated and unincorporated areas of the county through the issuance of underground storage tank operating permits to underground storage tank owners. A city may, by ordinance, assume the responsibility for implementing the provisions of this chapter within its boundaries in accordance with section 25283 of the Health and Safety Code. Local agencies shall issue an operating permit for each underground storage tank, for several underground storage tanks, or for each facility, as appropriate, within their jurisdiction.

(d) Owners and operators shall comply with the construction and monitoring requirements of Article 3 (new underground storage tanks) or the monitoring requirements of Article 4 (existing underground storage tanks). However, owners of existing underground storage tanks which meet the construction and monitoring requirements of Article 3 may be issued operating permits pursuant to the requirements of Article 3 in lieu of the requirements of Article 4. In addition, owners or operators of underground storage tanks shall comply with the release reporting requirements of Article 5, the repair and upgrade requirements of Article 6, the closure requirements of Article 7 the underground storage tank operating permit requirements of Article 10 and the corrective action requirements of Article 11.

Authority: Health and Safety Code 25299.3, 25299.7
Reference: Health and Safety Code 25283, 25284, 25299.1, 25299.3
40 CFR 280

2621. Exemptions to the Regulations

a) The term "underground storage tank" excludes the following, except those of the following included in the definition of an underground storage tank in 40 CFR, part 280.12 as modified by paragraphs (b), (c), and (d), of 40 CFR, part 280.10.

(1) A farm tank.
(2) A heating oil tank.
(3) A hydraulic lift tank in accordance with section 25281(x) of the Health and Safety Code.
(4) A liquefied petroleum gas tank.
(5) A liquid asphalt tank.
(6) A septic tank.
(7) A sump, pit, pond, or lagoon.
(8) A wastewater treatment tank except a tank which is part of an underground storage tank system.
(9) A pipeline located in a refinery or in an oil field unless the pipeline is connected to an underground storage tank.
(10) Storm water or wastewater collection systems.
(11) Tanks containing radioactive material such as spent fuel pools, radioactive waste storage tanks, and similar tanks under the Atomic Energy Act of 1954 (42 USC 2011) and following.
(12) An emergency containment tank kept empty to receive accidental spills and approved for such use by the appropriate local agency.
(13) Drums located in basements and which contain 55 gallons or less of a hazardous substance.
(14) Underground storage tanks containing hazardous wastes as defined in section 25316 of the Health and Safety Code if the person owning or operating the underground storage tank has been issued a hazardous waste facilities permit for the underground storage tank by the Department of Toxic Substances Control pursuant to section 25200 of the Health and Safety Code or granted interim status under section 25200.5 of the Health and Safety Code.
(15) A tank and associated piping located in a vault or basement and which meets the requirements of section 25283.5 of the Health and Safety Code.
(16) Any structure specifically exempted by section 25281(x) of the Health and Safety Code.

b) Sumps which are a part of a monitoring system required under Article 3 are considered part of the secondary containment or leak detection system of the primary containment and are required to meet the appropriate construction criteria.

c) The owner of a farm or heating oil tank or any tank which is exempt from regulation as an underground storage tank by virtue of its use shall, prior to any change which results in the tank becoming subject to regulation, obtain a valid operating permit.

Authority: Health and Safety Code 25299.3, 25299.7
Reference: Health and Safety Code 25281, 25283.5, 25299.1, 40 CFR 280.10 and 280.12

Article 3 - NEW UNDERGROUND STORAGE TANK DESIGN, ONSTRUCTION, AND MONITORING REQUIREMENTS

2630. General Applicability of Article

(a) The requirements in this article apply to owners of new underground storage tanks. Underground storage tanks installed after January 1, 1984, may be deemed to be in compliance with the requirements in this article if they were installed in accordance with federal and state requirements that existed at the time of installation. However, the applicable repair and upgrade requirements in Article 6 shall be complied with.

(b) Sections 2631 and 2632 specify design, construction, and monitoring requirements for all new underground storage tanks. New underground storage tanks which store only motor vehicle fuels may be constructed and monitored pursuant to the requirements specified in sections 2633 and 2634 in lieu of those specified in sections 2631 and 2632. However, if the tank is constructed according to requirements in section 2633 the monitoring requirements of section 2634 shall also be met.

(c) All new underground storage tanks, piping, and secondary containment systems shall comply with sections 2635 and 2636.

(d) All monitoring equipment used to satisfy the requirements of sections 2632, 2634, and 2636 shall be installed, calibrated, operated, and maintained in accordance with manufacturer's instructions, including routine maintenance and service checks (at least once per calendar year) for operability or running condition. Written records shall be maintained as required in section 2712 of Article 10.

Authority: Health and Safety Code 25299.3, 25299.7
Reference: Health and Safety Code 25281, 25291, 40 CFR 280.20

2631. Design and Construction Requirements for New Underground Storage Tanks

(a) All new underground storage tanks including associated piping used for the storage of hazardous substances shall have primary and secondary of containment. Primary containment shall be product-tight. Secondary containment may be manufactured as an integral part of the primary containment or it may be constructed as a separate containment system.

(b) The design and construction of all primary containment including any integral secondary containment system, shall be approved by an independent testing organization in accordance with industry codes, voluntary consensus standards, or engineering standards. All other components used to construct the primary containment system, such as special accessories, fittings, coatings or linings, monitoring systems and level controls used to form the underground storage tank system shall also be approved by an independent testing organization. This requirement became effective on July 1, 1991 for underground storage tanks; January 1, 1992 for piping; and shall be effective on January 1, 1995 for all other components. The exterior surface of underground storage tanks shall bear a marking, code stamp, or label showing the following minimum information:

1) Engineering standard used;
2) Nominal diameter in feet;
3) Nominal capacity in gallons;
4) Degree of secondary containment;
5) Useable capacity in gallons;
6) Design pressure in psig;
7) Maximum operating temperature in degrees Fahrenheit;
8) Construction materials;
9) Year manufactured; and
10) Identity of manufacturer.

(c) A primary containment system with or without an integral secondary containment system shall have wear plates (striker plates) installed, center to center, below all accessible openings. The plates shall be made of steel or other appropriate material if steel is not compatible with the hazardous substance stored. The width of the plate shall be at least eight inches on each side, or shall be equal to the area of the accessible opening or guide tube, whichever is larger. The thickness of the steel plate shall be at least 1/8 inch and those made of other materials shall be of sufficient thickness to provide equivalent protection. The plate, if under 1/4 inch thick, shall be rolled to the contours of the underground storage tank and all plates shall be bonded or tack welded in place. A drop tube-mounted bottom protector may fulfill this requirement.

(d) A secondary containment system which is not an integral part of primary containment shall be designed and constructed according to an engineering specification approved by a state registered professional engineer or according to a nationally recognized industry code or engineering standard. The engineering specification shall include the construction procedures. Materials used to construct the secondary containment system shall have sufficient thickness, density, and corrosion resistance to prevent structural weakening or damage to the secondary containment system as a result of contact with any released hazardous substance. The following requirements apply to these secondary containment systems:

1) The secondary containment system shall be constructed to contain at least the following volumes:

(A) hundred percent of the usable capacity of the primary containment system where only one primary container is within the secondary containment system.

(B) In the case of multiple primary containers within a single secondary containment system, the secondary containment system shall be large enough to contain 150 percent of the volume of the largest primary container within it, or 10 percent of the aggregate internal volume of all primary containers within the secondary containment system, whichever is greater. When all primary containers are completely enclosed within the secondary containment system, the restrictions of this subsection do not apply.

2) If the secondary containment system is open to rainfall, it shall be constructed to accommodate the volume of precipitation which could enter the secondary containment system during a 24-hour, 25-year storm in addition to the volume specified in subsection (d)(1).

3) If backfill material is placed in the secondary containment system, the volumetric requirements for the pore space shall be equal to the requirement in subsection (d)(1). The available pore space in the secondary containment system backfill shall be determined using standard engineering methods and safety factors. The specific retention and specific yield of the backfill material, the location of any primary container within the secondary containment, and the proposed method of operation for the secondary containment system shall be considered in determining the available pore space.

4) The secondary containment system shall be equipped with a collection system to accumulate, temporarily store, and permit removal of any liquid within the system.

5) The floor of the secondary containment system shall be constructed on a firm base and, if necessary for monitoring, shall be sloped to a collection sump. One or more access casings shall be installed in the sump and sized to allow removal of collected liquid. The access casing shall extend to the ground surface, be perforated in the region of the sump, and be covered with a locked waterproof cap or enclosed in a surface security structure that will protect the access casing(s) from entry of surface water, accidental damage, unauthorized access, and vandalism. A facility with locked gates will satisfy the requirements for protection against unauthorized access and vandalism. The casing shall have sufficient thickness to withstand all anticipated stresses with appropriate engineering safety factors and constructed of materials that will not be structurally weakened by the stored hazardous substance and will not donate, capture, or mask constituents for which analyses will be made.

6) Secondary containment systems utilizing using membrane liners shall be approved by an independent testing organization in accordance with industry codes, voluntary consensus standards, or engineering standards. A membrane liner shall contain no primary nutrients or food-like substances attractive to rodents and shall meet the requirements in Table 3.1 after a 30-day immersion in the stored hazardous substance.

7) A membrane liner, if used, shall be installed under the direct supervision of a representative of the membrane liner fabricator or a contractor certified by the fabricator.

8) The excavation base and walls for a membrane liner shall be prepared to the membrane liner fabricator's specifications and shall be firm, smooth, and free of any sharp objects or protrusions.

9) The site shall be assessed to ensure that the secondary containment is always above the ground water and not in a 25-year flood plain, unless the containment and monitoring designs are for use under such conditions.

(e) Laminated, coated, or clad materials shall be considered a single wall and do not fulfill the requirements of both primary and secondary containment.

(f) Underground storage tanks with integral secondary containment systems, which satisfy the construction requirements of subsection (b), fulfill the volumetric requirements for secondary containment specified in subsection (d)(1).

(g) Underground storage tanks with secondary containment systems shall be designed and installed so that any loss of a hazardous substance from the primary containment will be detected by an interstitial monitoring device or method.

(h) An underground storage tank which contains motor vehicle fuel and which is designed with an integral secondary containment system shall provide 100 percent secondary containment unless it is equipped with the overfill prevention system in accordance with section 2635(b)(2)(C). In this case, the top portion of the tank, no greater than two feet wide along the length of the tank, may be single-walled.

(i) Tanks designed and constructed pursuant to the provisions of this section shall be monitored according to the provisions of section 2632.

Authority: Health and Safety Code 25299.3, 25299.7
Reference: Health and Safety Code 25281, 25291; 40 CFR 280.20

2632. Monitoring and Response Plan Requirements for New Underground Storage Tanks Constructed Pursuant to Section 2631

(a) This section is applicable only to underground storage tanks constructed pursuant to the requirements of section 2631.

(b) Owners or operators of underground storage tanks subject to this section shall implement a monitoring program approved by the local agency and specified in the underground storage tank operating permit. The program shall include interstitial space monitoring as described in subsection (c) and shall include the items listed in subsection (d).

(c) Monitoring of the interstitial space shall include either visual monitoring of the primary containment system as described in subsection (c)(1) or one or more of the methods listed in subsection (c)(2).

(1) A visual monitoring program shall incorporate all of the following:

(A) All exterior surfaces of the underground storage tank and the surface of the floor directly beneath the underground storage tank shall be capable of being monitored by direct viewing.

(B) Visual inspections shall be performed daily, except on weekends and recognized state and/or federal holidays. Inspections may be more frequent if required by the local agency or the local agency may reduce the frequency of visual monitoring at facilities where personnel are not normally present and input to and withdrawals from the underground storage tank are very infrequent. In these instances, visual inspection shall be made weekly. The inspection schedule shall take into account the minimum anticipated time during which the secondary containment system is capable of containing any unauthorized release and the maximum length of time any hazardous substance released from the primary containment system will remain observable on the surface of the

secondary containment system. The inspection schedule shall be such that inspections will occur on a routine basis when the liquid level in the tank is at its highest. The inspection frequency shall be such that any unauthorized release will remain observable on the exterior of or the surface immediately beneath the underground storage tank between visual inspections. The evaluation of the length of time the hazardous substance remains observable shall consider the volatility of the hazardous substance and the porosity and slope of the surface immediately beneath the tank.

(C) The liquid level in the tank shall be recorded at the time of each inspection.

(D) If any liquid is observed around or beneath the primary containment system, the owner or operator shall, if necessary, have the liquid analyzed in the field using a method approved by the local agency or in a laboratory to determine if an unauthorized release has occurred. The owner or operator shall have a tank integrity test conducted, if necessary, to determine whether the primary containment system is leaking. If a leak is confirmed, the owner or operator shall comply with the applicable provisions of Article 5, Article 6, and Article 7.

(2) A monitoring program which relies on the mechanical or electronic detection of the hazardous substance in the interstitial space shall include one or more of the methods in Table 3.2. The following requirements shall apply when appropriate:

(A) The interstitial space of the tank shall be monitored using a continuous onitoring system which meets the requirements of section 2643(f).

(B) The continuous monitoring system shall be connected to an audible and visual alarm system approved by the local agency.

(C) For methods of monitoring where the presence of the hazardous substance is not determined directly, for example, where liquid level measurements in the interstitial space are used as the basis for determination, the monitoring program shall specify the proposed method(s) for determining the presence or absence of the hazardous substance in the interstitial space if the indirect methods indicate a possible unauthorized release.

(d) All monitoring programs shall include the following:

(1) A written procedure for monitoring which establishes:

(A) The frequency of performing the monitoring;

(B) The methods and equipment, identified by name and model, to be used for performing the monitoring;

(C) The location(s), as identified on a plot plan, where the monitoring will be performed;

(D) The name(s) and titles(s) of the person(s) responsible for performing the monitoring and/or maintaining the equipment;

(E) The reporting format;

(F) The preventive maintenance schedule for the monitoring equipment. The maintenance schedule shall be in accordance with the manufacturer's instructions; and

(G) A description of the training necessary for the operation of both the tank system and the monitoring equipment.

(2) A response plan which demonstrates, to the satisfaction of the local agency, that any unauthorized release will be removed from the secondary containment system within the time consistent with the ability of the secondary containment system to contain the hazardous substance, but not more than 30 calendar days or a longer period of time as approved by the local agency. The response plan shall include, but is not limited to, the following:

(A) A description of the proposed methods and equipment to be used for removing and properly disposing of any hazardous substances, including the location and availability of the required equipment if not permanently on-site, and an equipment maintenance schedule for the equipment located on-site.

(B) The name(s) and title(s) of the person(s) responsible for authorizing any work necessary under the response plan.

(e) When implementation of a monitoring program or any other condition indicates that an unauthorized release may have occurred, the owner or operator shall comply with the release reporting requirements of Article 5. If the release came from the tank system, the owner or operator shall replace, repair, or close the tank in accordance with Articles 3, 6, or 7, respectively.

Authority: Health and Safety Code 25299.3, 25299.7
Reference: Health and Safety Code 25281, 25291, 40 CFR 280.20

2633. Alternate Construction Requirements for New Underground Storage Tanks Containing Motor Vehicle Fuel

(a) This section sets forth alternate construction requirements for new underground storage tanks which contain motor vehicle fuels. Owners of new underground storage tanks which contain only motor vehicle fuels may comply with this section in lieu of section 2631. If the tanks are constructed in accordance with the requirements of this section, they shall be monitored in accordance with section 2634.

(b) Underground storage tanks used for storage of motor vehicle fuel and constructed in accordance with this section shall be composed of fiberglass-reinforced plastic, cathodically protected steel, or steel clad with fiberglass-reinforced plastic. These tanks shall be installed with the leak interception and detection system constructed in accordance with the requirements of subsections (d) through (f). The primary containment system shall meet the requirements of sections 2631(b) and 2631(c).

(c) Underground storage tanks used for storage of motor vehicle fuel that are constructed of materials other than those specified in subsection (b) shall be constructed in accordance with section 2631 and monitored in accordance with section 2632.

(d) The floor of a leak interception and detection system shall be constructed on a firm base and sloped to a collection sump. Methods of construction for a leak interception and detection system using membrane liners shall comply with the requirements of section 2631(d)(6).

(e) Access casings shall be installed in the collection sump of a secondary containment system which has backfill in the interstitial space. The access casing shall be:

(1) Designed and installed to allow the liquid to flow into the casing;

(2) Sized to allow efficient removal of collected liquid and to withstand all anticipated applied stresses using appropriate engineering safety factors;

(3) Constructed of material that will not be structurally weakened by the stored hazardous substance or donate, capture, or mask constituents for which analyses will be made;

(4) Screened along the entire vertical zone of permeable material which may be installed between the primary container and the leak interception and detection system;

(5) Capable of preventing leakage of any hazardous substance from the casing to areas outside the leak interception and detection system;

(6) Extended to the ground surface and covered with a locked waterproof cap or enclosed in a secured surface structure that will protect the access casing(s) from entry of surface water, accidental damage, unauthorized access, and vandalism. A facility with locked gates will satisfy the requirements for protection against unauthorized access and vandalism; and

(7) Capable of meeting requirements of local well-permitting agencies.

(f) The leak interception and detection system shall prevent the leaked hazardous substance from entering ground water. The leak interception and detection system shall be situated above the highest anticipated ground water elevation. Proof that the leak interception and detection system will protect ground water shall be demonstrated by the owner or operator of the underground storage tank to the satisfaction of the local agency. In determining whether the leak interception and detection system will adequately protect ground water, the local agency shall consider the following:

(1) The containment volume of the leak interception and detection system;
(2) The maximum leak which could go undetected under the monitoring method required in section 2634 and the maximum period during which the leak will go undetected;
(3) The frequency and accuracy of the proposed method of monitoring the leak interception and detection system;

(4) The depth from the bottom of the leak interception and detection system to the highest anticipated level of ground water;
(5) The nature of the unsaturated soils under the leak interception and detection system and their ability to absorb contaminants or to allow movement of contaminants;
(6) The effect of any precipitation or subsurface infiltration on the movement of any leak of hazardous substance and the available volume of the leak interception and detection system; and
(7) The nature and timing of the response plan required by section 2634 to clean up any hazardous substances which have been discharged from the primary container.

Authority: Health and Safety Code 25299.3, 25299.7
Reference: Health and Safety Code 25281, 25291 40 CFR 280.20

2634. Monitoring and Response Plan Requirements for New Underground Storage Tanks Containing Motor Vehicle Fuel and Constructed Pursuant to Section 2633

(a) This section applies only to underground storage tanks containing motor vehicle fuel and which are constructed in accordance with section 2633.

(b) Owners or operators of tanks which are constructed pursuant to section 2633 and which contain motor vehicle fuel shall implement a monitoring program approved by the local agency and specified in the tank operating permit.

(c) New tanks which contain motor vehicle fuel and which are constructed in accordance with section 2633 shall be monitored as follows:

(1) The leak interception and detection system shall be monitored in accordance with subsection (d) of this section;
(2) The motor vehicle fuel inventory shall be reconciled according to the performance requirements in section 2646; and,
(3) All underground piping shall be tested and monitored in accordance with section 2636.

(d) Before implementing a monitoring program, the owner or operator shall demonstrate to the satisfaction of the local agency that the program is effective in detecting an unauthorized release from the primary container before it can escape from the leak interception and detection system. A monitoring program for leak interception and detection system shall meet the following requirements:

(1) The system shall detect any unauthorized release of the motor vehicle fuel using either:

(A) One or more of the continuous monitoring methods provided in Table 3.2. The system shall be connected to an audible and visual alarm system approved by the local agency; or,

(B) Manual monitoring. If this method is used, it shall be performed daily, except on weekends and recognized state and/or federal holidays, but no less than once in any 72

hour period. Manual monitoring may be required on a more frequent basis as specified by the local agency.

(2) The owner or operator shall prepare a written procedure for routine monitoring which establishes:

(A) The frequency of performing the monitoring;
(B) The methods and equipment to be used for performing the monitoring;
(C) The location(s) where the monitoring will be performed;
(D) The name(s) and title(s) of the person(s) responsible for performing the monitoring and/or maintaining the equipment;
(E) The reporting format;
(F) The preventive maintenance schedule for the monitoring equipment. The maintenance schedule shall be in accordance with the manufacturer's instructions; and
(G) A description of the training necessary for the operation of both the tank system and the monitoring equipment.

(3) For methods of monitoring where the presence of the hazardous substance is not determined directly, for example, where liquid level measurements are used as the basis for determination (i.e., liquid level measurements), the monitoring program shall specify the proposed method(s) for determining the presence or absence of the hazardous substance if the indirect method indicates a possible unauthorized release of motor vehicle fuel.

(e) A response plan for an unauthorized release shall be developed before the underground storage tank system is put into service. If the leak interception and detection system meets the volumetric requirement of section 2631(d), the local agency shall require the owner to develop a response plan pursuant to the requirements of section 2632(d)(2). If the leak interception and detection system does not meet the volumetric requirements of section 2631(d)(1) through (5), the response plan shall consider the following:

(1) The volume of the leak interception and detection system in relation to the volume of the primary container;

(2) The amount of time the leak interception and detection system shall provide containment in relation to the period of time between detection of an unauthorized release and cleanup of the leaked substance;

(3) The depth from the bottom of the leak interception and detection system to the highest anticipated level of ground water;

(4) The nature of the unsaturated soils under the leak interception and detection system and their ability to absorb contaminants or to allow movement of contaminants; and

(5) The methods and scheduling for removal of all of the hazardous substances which may have been discharged from the primary container and are located in the unsaturated soils between the primary container and ground water, including the leak interception and detection system sump.

Authority: Health and Safety Code 25299.3, 25299.7
Reference: Health and Safety Code 25281, 25291, 25292; 40 CFR 280.41

2635. Installation and Testing Requirements for All New Underground Storage Tanks

(a) Primary and secondary containment systems shall be designed, constructed, tested, and certified to comply, as applicable, with all of the following requirements:

(1) All underground storage tanks shall be tested at the factory before being transported. The tests shall determine whether the tanks were constructed in accordance with the applicable sections of the industry code or engineering standard under which they were built.

(2) The outer surface of underground storage tanks constructed of steel shall be protected from corrosion as follows, except that primary containment systems installed in a secondary containment system and not backfilled do not need cathodic protection:

(A) Field-installed cathodic protection systems shall be designed and certified as adequate by a corrosion specialist. The cathodic protection systems shall be tested by a cathodic protection tester within six months of installation and at least every three years thereafter. The criteria that are used to determine that cathodic protection is adequate as required by this section shall be in accordance with a code of practice developed in accordance with voluntary consensus standards. Impressed-current cathodic protection systems shall also be inspected no less than every 60 calendar days to ensure that they are in proper working order.

(B) Underground storage tanks protected with fiberglass-reinforced plastic coatings, composites, or equivalent non-metallic exterior coatings or coverings, including coating/sacrificial anode systems, shall be tested at the installation site using an electric resistance holiday detector. All holidays detected shall be repaired and checked by a factory authorized repair service before installation. During and after installation, care shall be taken to prevent damage to the protective coating or cladding. Preengineered corrosion protection systems with sacrificial anodes shall be checked once every three years in accordance with the manufacturer's instructions.

(3) Before installation, the tank shall be tested for tightness at the installation site in accordance with the manufacturer's written guidelines. If there are no guidelines, the primary and secondary containment shall be tested for tightness with air pressure at not less than 3 pounds per square-inch (20.68 k Pa) and not more than 5 pounds per square-inch (34.48 k Pa). In lieu of the above, an equivalent differential pressure test, expressed in inches of mercury vacuum, in the interstitial space of the secondary containment, is acceptable. The pressure (or vacuum in the interstitial space) shall be maintained for a minimum of 30 minutes to determine if the tank is tight. If a tank fails the tightness test, as evidenced by soap bubbles, or water droplets, installation shall be suspended until the tank is replaced or repaired by a factory authorized repair service. Following repair or replacement, the tank shall pass a tightness test.

(4) All secondary containment systems shall pass a post-installation test which meets the approval of the local agency.

(5) After installation, but before the underground storage tank is placed in service, a tank integrity test shall be conducted to ensure that no damage occurred during installation. The tank integrity test is not required if the tank is equipped with an interstitial monitor certified by a third-party evaluator to meet the performance standards of a "tank integrity test" as defined in section 2611, or if the tank is tested using another method deemed by the State Water Resources Control Board to be equivalent.

(6) All underground storage tanks shall be installed according to a code of practice developed in accordance with voluntary consensus standards and the manufacturer's written installation instructions. The owner or operator shall certify that the underground storage tank was installed in accordance with the above requirements as required by subsection (d) of this section.

(7) All underground storage tanks subject to flotation shall be anchored using methods specified by the manufacturer or, if none exist, shall be anchored according to the best engineering judgment.

(b) All underground storage tanks shall be equipped with a spill container and an overfill prevention system as follows:

(1) The spill container shall collect any hazardous substances spilled during product delivery operations to prevent the hazardous substance from entering the subsurface environment. The spill container shall meet the following requirements:

(A) If it is made of metal, the exterior wall shall be protected from galvanic corrosion.
(B) It shall have a minimum capacity of five gallons (19 liters).
(C) It shall have a drain valve which allows drainage of the collected spill into the primary container or provide a means to keep the spill container empty.

(2) The overfill prevention system shall not allow for manual override and shall meet one of the following requirements:

(A) Alert the transfer operator when the tank is 90 percent full by restricting the flow into the tank or triggering an audible and visual alarm; or

(B) Restrict delivery of flow to the tank at least 30 minutes before the tank overfills, provided the restriction occurs when the tank is filled to no more than 95 percent of capacity; and activate an audible alarm sounds at least five minutes before the tank overfills; or

(C) Provide positive shut-off of flow to the tank when the tank is filled to no more than 95 percent of capacity; or,

(D) Provide positive shut-off of flow to the tank so that none of the fittings located on the top of the tank are exposed to product due to overfilling.

(3) The local agency may waive the requirement for overfill prevention equipment where the tank inlet exists in an observable area, the spill container is adequate to collect any overfill, and the tank system is filled by transfers of no more than 25 gallons at one time.

(c) Secondary containment systems including leak interception and detection systems installed pursuant to section 2633 shall comply with all of the following:

(1) The secondary containment system shall encompass the area within the system of vertical planes surrounding the exterior of the primary containment system. If backfill is placed between the primary and secondary containment systems, an evaluation shall be made of the maximum lateral spread of a point leak from the primary containment system over the vertical distance between the primary and secondary containment systems. The secondary containment system shall extend an additional distance beyond the vertical planes described above equal to the radius of the lateral spread plus one foot.

(2) The secondary containment system shall be capable of preventing the inflow of the highest ground water anticipated into the interstitial space during the life of the tank.

(3) If the interstitial space is backfilled, the backfill material shall not prevent the vertical movement of leakage from any part of the primary containment system.

(4) The secondary containment system with backfill material shall be designed and constructed to promote gravity drainage of an unauthorized release of hazardous substances from any part of the primary containment system to the monitoring location(s).

(5) Two or more primary containment systems shall not use the same secondary containment system if the primary containment systems store materials that in combination may cause a fire or explosion, or the production of a flammable, toxic, or poisonous gas, or the deterioration of any part of the primary or secondary containment system.

(6) Drainage of liquid from within a secondary containment system shall be controlled in a manner approved by the local agency to prevent hazardous materials from being discharged into the environment. The liquid shall be analyzed to determine the presence of any of the hazardous substance(s) stored in the primary containment system prior to initial removal, and monthly thereafter, for any continuous discharge (removal) to determine the appropriate method for final disposal. The liquid shall be sampled and analyzed immediately upon any indication of an unauthorized release from the primary containment system.

(7) For primary containment systems installed completely beneath the ground surface, the original excavation for the secondary containment system shall have a water-tight cover which extends at least one foot beyond each boundary of the original excavation. This cover shall be asphalt, reinforced concrete, or equivalent material which is sloped to drainways leading away from the excavation. Access openings shall be constructed as water-tight as practical. Primary containment systems with integral secondary containment and open vaults are exempt from the requirements of this subsection.

(8) The actual location and orientation of the tanks and appurtenant piping systems shall be indicated on as-built drawings of the facility. Copies of all drawings, photographs, and plans shall be submitted to the local agency for approval.

(d) Owners or their agents shall certify that the installation of the tanks and piping meets the conditions in subdivisions (1) through (5) below. The certification shall be made on a "Certificate of Compliance for Underground Storage Tank Installation Form C" (see Appendix V).

(1) The installer has been adequately trained as evidenced by a certificate of training issued by the tank and piping manufacturers;

(2) The installer has been certified or licensed by the Contractors State License Board;

(3) The underground storage tank, any primary piping, and any secondary containment, was installed according to applicable voluntary consensus standards and any manufacturer's written installation instructions;

(4) All work listed in the manufacturer's installation checklist has been completed; and

(5) The installation has been inspected and approved by the local agency, or, if required by the local agency, inspected and certified by a registered professional engineer who has education in and experience with underground storage tank system installation.

Authority: Health and Safety Code 25299.3, 25299.7
Reference: Health and Safety Code 25281, 25299, 40 CFR 280.20, and 280.20 through 280.45

2636. Design, Construction, Installation, Testing, and Monitoring Requirements for Piping

(a) Except as provided below, piping connected to tanks which were installed after July 1, 1987, shall have secondary containment that complies with the requirements of section 2631 for new underground storage tanks. This requirement does not apply to piping described as follows:

(1) vent or tank riser piping, provided the primary containment system is equipped with an overfill prevention system meeting the requirements specified in sections 2635(b)(2)(B) or (C); or,

(2) vapor recovery piping if designed so that it cannot contain liquid-phase product; or,

(3) suction piping if the piping is designed, constructed, and installed as follows:

(A) The below-grade piping operates at less than atmospheric pressure (suction piping);

(B) The below-grade piping is sloped so that the contents of the pipe will drain back into the storage tank if the suction is released (gravity-flow piping);

(C) No valves or pumps are installed below grade in the suction line. Only one check valve is located directly below and as close as practical to the suction pump;

(D) An inspection method is provided which readily demonstrates compliance with subdivisions (A) through (C) above.

(b) All corrodible underground piping, if in direct contact with backfill material, shall be protected against corrosion. Piping constructed of fiberglass-reinforced plastic, steel with cathodic protection, or steel isolated from direct contact with backfill, fulfills this corrosion protection requirement. Cathodic protection shall meet the requirements of section 2635(a)(2).

(c) Underground primary piping shall meet all of the following requirements:

(1) Primary piping in contact with hazardous substances under normal operating conditions shall be installed inside a secondary containment system which may be a secondary pipe, vault, or a lined trench. All secondary containment systems shall be sloped so that all releases will flow to a collection sump located at the low point of the underground piping.

(2) Primary piping and secondary containment systems shall be installed in accordance with an industry code of practice developed in accordance with voluntary consensus standards. The owner or operator shall certify that the piping was installed in accordance with the above requirements of section 2635(d). The certification shall be made on the "Certification of Compliance for Underground Storage Tank Installation Form C" (see Appendix V).

(d) Lined trench systems used as part of a secondary containment system shall be designed and constructed according to a code of practice or engineering standard approved by a state registered professional engineer. The following requirements shall also apply:

(1) All trench materials shall be compatible with the substance stored and evaluated by an independent testing organization for their compatibility or adequacy of the trench design, construction, and application.

(2) The trench shall be covered and capable of supporting any expected vehicular traffic.

(e) All new primary piping and secondary containment systems shall be tested for tightness after installation in accordance with manufacturer's guidelines. Primary pressurized piping shall be tested for tightness hydrostatically at 150 percent of design operating pressure or pneumatically at 110 percent of design operating pressure. If the calculated test pressure for pressurized piping is less than 40 psi, 40 psi shall be used as the test pressure. The pressure shall be maintained for a minimum of 30 minutes and all joints shall be soap tested. A failed test, as evidenced by the presence of bubbles, shall require appropriate repairs and retesting. If there are no manufacturer's guidelines, secondary containment systems shall be tested using an applicable method specified in an industry code or engineering standard. Suction piping and gravity flow piping which cannot be isolated from the tank shall be tested after installation in conjunction with an overfilled volumetric tank integrity test, or other test method meeting the requirements of section 2643(f), if approved by the local agency.

(f) Underground piping with secondary containment shall be equipped and monitored as follows:

(1) The secondary containment system shall be equipped with a continuous monitoring system which meets the requirements of section 2643(f) and which is connected to an audible and visual alarm system.

(2) Automatic line leak detectors shall be installed on underground pressurized piping and shall be capable of detecting a 3-gallon per hour leak rate at 10 psi within 1 hour with a probability of detection of at least 95 percent and a probability of false alarm no greater than 5 percent. Compliance with these standards shall be certified in accordance with section 2643(f) of Article 4.

(3) Other monitoring methods may be used in lieu of the requirement in subdivision (2) if it is demonstrated to the satisfaction of the local agency that the alternate method is as effective as the methods otherwise required by this section. A continuous monitoring system as described in subdivision (1), which shuts down the pump in addition to activating the alarm system, satisfies the automatic line leak detector requirement of subdivision (2).

(4) Monitoring shall be conducted on all underground pressurized piping with secondary containment at least annually at a pressure designated by the equipment manufacturer, provided that the method is capable of detecting a minimum release equivalent to 0.1 gallon per hour defined at 150 percent of the normal operating pressure of the product piping system at the test pressure with at least a 95 percent probability of detection and not more than a 5 percent probability of false alarm. This requirement is waived if the criteria in subsection (g) of this section are met.

(g) Underground pressurized piping which meets all of the following requirements satisfies the annual tightness test requirement specified in subsection (f)(4):

(1) The secondary containment system is equipped with a continuous monitoring system. The leak detection device may be located at the pump sump if the piping slopes back to this point.

(2) A continuous monitoring system is connected to an audible and visual alarm system and the pumping system.

(3) A continuous monitor shuts down the pump and activates the alarm system when a release is detected.

(4) The pumping system shuts down automatically if the continuous monitoring system fails or is disconnected.

(5) The requirements of subdivisions (3) and (4) do not apply to an emergency generator, provided the monitoring system is checked at least daily.

Authority: Health and Safety Code 25299.3 and 25299.7
Reference: Health and Safety Code 25281, 25291, 25299; 40 CFR 280.20; 280.40-280.45

Article 4 - Existing Underground Storage Tank Monitoring Requirements

2640. General Applicability of Article

(a) The requirements of this article apply to owners or operators of existing underground storage tanks.

(b) The requirements of this article apply during the following periods:

(1) Any operating period, including any period during which the tank is empty as a result of withdrawal of all stored substances before input of additional hazardous substances;

(2) Any period during which hazardous substances are stored in the tank, and no filling or withdrawal is conducted; and

(3) Any period between cessation of the storage of hazardous substances and the actual completion of closure, pursuant to Article 7, unless otherwise specified by the local agency, pursuant to section 2671(b), during a temporary closure period.

(c) This article shall not apply to underground storage tanks that are designed, constructed, installed, and monitored in accordance with sections 2631 and 2632 or 2633 and 2634 of Article 3.

(d) Owners or operators of tanks monitored pursuant to section 25292(b)(5)(A) of the Health and Safety Code shall comply with the requirements of section 2645. Tank systems having a capacity of more than 2,000 gallons shall not be monitored pursuant to section 25292(b)(5)(A) of the Health and Safety Code.

Authority: Health and Safety Code 25299.3, 25299.7
Reference: Health and Safety Code 25292; 40 CFR 280.40through 280.42, 280.43(b)

2641. Monitoring Program Requirements

(a) Owners or operators of existing underground storage tanks subject to this article shall implement a monitoring program which is capable of detecting an unauthorized release from any portion of the underground storage tank system at the earliest possible opportunity.

(b) Underground piping shall be exempt from monitoring requirements if the local agency determines that the piping has been designed and constructed in accordance with section 2636(a)(3).

(c) All underground piping that operates at less than atmospheric pressure, unless it is exempt from monitoring under subsection (b), shall comply with the monitoring requirements of section 2643(d) and shall also include daily monitoring as described in Appendix II.

(d) All portions of the underground storage tank system shall be visually monitored in accordance with section 2642. A portion of the underground storage tank shall be exempt from visual monitoring if

the owner demonstrates to the satisfaction of the local agency that one or more of the following conditions apply to that portion:

(1) It is not accessible for direct viewing;

(2) Visual inspection would be hazardous or would require the use of extraordinary personal protection equipment other than normal protective equipment such as steel-toed shoes, hard hat, or ear protection; or

(3) The underground storage tank is located at a facility which is not staffed on a daily basis.

(e) Non-visual monitoring shall be implemented for all portions of the underground storage tank which are exempt under subsection (d) and, for the underground storage tank, during periods when visual monitoring required under subsection (d) is not conducted. This non-visual monitoring shall include a quantitative release detection method as specified in section 2643 or a qualitative release detection method as specified in section 2644 or a combination of these methods as approved by the local agency.

(f) Non-visual monitoring for underground pressurized piping shall include a quantitative release detection method that complies with the performance requirements in section 2643(c)(1).

(g) The monitoring program shall be approved by the local agency and shall be in compliance with the requirements of this article and with the underground storage tank operating permit. The local agency may require additional monitoring methods specified in the operating permit or more frequent monitoring as necessary to satisfy the objective in subsection (a). In deciding whether to approve a proposed monitoring program, or to require additional methods or more frequent monitoring, the local agency shall consider the following factors:

(1) The volume and physical and chemical characteristics of the hazardous substance(s) stored in the underground storage tank;

(2) The compatibility of the stored hazardous substance(s) and any chemical-reaction product(s) with the function of monitoring equipment or devices;

(3) The reliability and consistency of the proposed monitoring equipment and systems under site-specific conditions;

(4) The depth and quantity of ground water and the direction of ground water flow;

(5) The patterns of precipitation in the region and any ground water recharge which occurs as a result of precipitation;

(6) The existing quality of ground water in the area, including other sources of contamination and their cumulative impacts;

(7) The current and potential future uses (e.g., domestic, municipal, agricultural, industrial supply) of ground water in the area;

(8) The proximity and withdrawal rates of ground water users in the area;

(9) The type, homogeneity, and range of moisture content of the backfill material and native soils and their probable effects on contaminant migration and detection;

(10) The presence of contamination in the excavation zone or surrounding soils;

(11) The proximity of the underground storage tank to surface waters; and

(12) Additional hydrogeologic characteristics of the zone surrounding the underground storage tank.

(h) The monitoring program shall include written monitoring procedures and a response plan as set forth in section 2632(d).

(i) If the local agency does not approve the monitoring program, the owner or operator shall replace, repair, upgrade, or close the tank in accordance with the applicable provisions of this chapter and local agency approval.

(j) Equipment and devices used to monitor underground storage tanks shall be installed, calibrated, operated, and maintained in accordance with manufacturer's instructions, including routine maintenance and service checks (at least once per calendar year) for operability or running condition. Written records shall be maintained as required in section 2712 of Article 10.

(k) When an unauthorized release is indicated during the installation of a release detection system, the owner or operator shall comply with the release reporting requirements of Article 5 and, if the release came from the existing tank, shall cease the installation process until the tank system is replaced, repaired, upgraded, or closed in accordance with the applicable provisions of this chapter.

(l) When implementation of the monitoring program, or any condition, indicates that an unauthorized release may have occurred, the owner or operator shall comply with the release reporting requirements of Article 5 and shall replace, repair, or close the underground storage tank in accordance with the applicable provisions of this chapter.

Authority: Health and Safety Code 25299.3, 25299.7
Reference: Health and Safety Code 25283, 25291, 25292; 40 CFR 280.40, 280.41

2642. Visual Monitoring

a) An owner or operator who is required, pursuant to section 2641(d) to implement a visual monitoring program shall comply with all of the following requirements:

(1) All visible exterior surfaces of an underground storage tank, including any visible horizontal surface directly beneath the underground storage tank, shall be inspected at least daily by direct viewing. The inspection schedule shall be established so that some inspections are conducted when the substance in the underground storage tank is at its highest level;

(2) A written statement of the routine monitoring procedure shall be available at the facility and the record shall include the frequency of visual inspections, the location(s) from which inspections will be made, the name(s) and title(s) of the person(s) responsible for inspections, and the reporting format;

(3) Written records shall be maintained according to section 2712 of Article 10 and shall specify the liquid level in the underground storage tank at the time of each inspection. These records shall also include a description of any sampling, analyses, and testing procedures conducted to satisfy subsection (b) of this section, including any minimum levels of detection used.

b) If any liquid is observed around or beneath the underground storage tank system, the owner or operator shall determine if an unauthorized release has occurred. An underground storage tank integrity test shall be conducted, if necessary, to determine whether the underground storage tank system is leaking. If a leak is confirmed, the owner or operator shall comply with the release reporting requirements in Article 5 and shall replace, repair, upgrade, or close the tank in accordance with the applicable provisions of this chapter.

(c) Visual monitoring of the exposed portion of a partially concealed underground storage tank shall not relieve an owner or operator from monitoring the concealed portion of the tank using a non-visual monitoring method as specified in section 2641.

Authority: Health and Safety Code 25299.3, 25299.7
Reference: Health and Safety Code 25292, 25293

2643. Non-Visual Monitoring/Quantitative Release Detection Methods

a) Non-visual quantitative release detection methods shall comply with the requirements of this section. Subsection (b) contains monitoring requirements for underground storage tanks; subsection (c) for pressurized piping; subsection (d) for suction piping; and subsection (e) for gravity-flow piping. Examples of release detection methods that may be used to meet the requirements of this section are in Appendix III.

b) Quantitative release detection method used to monitor underground storage tanks shall be conducted according to one of the methods listed in subdivisions (1) through (5) below. These quantitative monitoring methods shall meet the requirements of section 2643(f) and shall be capable of detecting release rates specified in this section with at least a 95 percent probability of detection and not more than a 5 percent probability of false alarm.

(1) Automatic tank gauge –

The automatic tank gauge shall test the tank at least once per month after product delivery or when the tank is filled to within 10 percent of the highest operating level during the previous month and shall be capable of detecting a release of 0.2 gallon per hour. The automatic tank gauge shall generate a hard copy of all data reported including time and date, tank identification, fuel depth, water depth, temperature, liquid volume, and the duration of the test.

Automatic tank gauge systems installed on or after January 1, 1995, shall also generate a hard copy of the calculated leak rate and leak threshold.

(2) Automatic tank gauge plus manual inventory reconciliation -

The automatic tank gauge shall test the tank at least once per month when the product level in the tank is at least three feet and shall be capable of detecting a release of 0.1 gallon per hour. The automatic tank gauge shall generate hard copies of data as specified in subdivision (b)(1) above. In addition, manual inventory reconciliation shall be conducted in accordance with section 2646 (except for subsection [b]).

(3) Statistical inventory reconciliation plus tank integrity testing -

Statistical inventory reconciliation shall be conducted at least once per month in accordance with section 2646.1 and shall be capable of detecting a release of 0.2 gallon per hour. In addition, a tank integrity test shall be conducted once every two years in accordance with section 2643.1.

(4) Manual inventory reconciliation plus tank integrity testing -

Manual inventory reconciliation shall be conducted at least once per month in accordance with section 2646 and shall be capable of detecting a release of 1.0 gallon per hour. In addition, a tank integrity test shall be conducted once per year in accordance with section 2643.1.

(5) Other test methods -

Other equivalent test methods may be used following review by the State Water Board for compliance with this section and section 2643(f).

c) Piping that conveys hazardous substances under pressure shall be monitored in accordance with subdivision (c)(1), and either subdivision (2) or (3).

(1) Monitoring shall be conducted at least hourly at any pressure. The monitoring method shall be capable of detecting a release equivalent to 3.0 gallons per hour defined at 10 pounds per square inch within one hour of its occurrence. The leak detection method shall restrict or shut off the flow of product through the piping or trigger a visual and audible alarm if an unauthorized release occurs. If the use of piping is intermittent, leak detection monitoring is required only at the beginning or end of the period during which the piping is under pressure, but in any event there shall not be more than one hour between the time the equipment initiates the test and detection of an unauthorized release; and,

(2) Monitoring shall be conducted at least monthly at any pressure. The monitoring method shall be capable of detecting a minimum release equivalent to 0.2 gallon per hour defined at normal operating pressure; or,

(3) Monitoring shall be conducted at least annually (once per calendar year) at a pressure designated by the equipment manufacturer. The monitoring method shall be capable of

detecting a minimum release equivalent to 0.1 gallon per hour defined at 150 percent (one and one half times) the normal operating pressure.

d) Piping that conveys hazardous substances under less than atmospheric pressure (suction piping) shall be tested at least every three years at a pressure designated by the test equipment manufacturer. The test method shall be capable of detecting a minimum release equivalent to 0.1 gallon per hour defined at a minimum of 40 psi. If the piping cannot be isolated from the tank for testing purposes, the piping shall be tested using an overfilled volumetric tank integrity test or other test method meeting the requirements of section 2643(f), if approved by the local agency. Daily monitoring shall be performed as described in Appendix II except for emergency generator systems, which may be monitored less often, but at least monthly. Written records describing the results of the monitoring shall be maintained in accordance with section 2712(b).

e) Piping that conveys hazardous substances by the force of gravity (excluding vertical drops) shall be monitored at least once every two years at a pressure designated by the test equipment manufacturer. The method shall be capable of detecting a minimum release equivalent to 0.1 gallon per hour defined at 40 psi. If the piping cannot be isolated from the tank for testing purposes, the piping shall be tested using an overfilled volumetric tank integrity test or other test method meeting the requirements of section 2643(f) if approved by the local agency.

f) Each quantitative release detection method, with the exception of manual inventory reconciliation and manual tank gauging, shall be certified to comply with the performance standard(s) specified in this section and shall be subject to limitations specified in the certification. This certification shall be obtained by the equipment manufacturer following one of the evaluation procedures in subdivisions (1) through (3) below:

(1) An independent third party testing laboratory shall evaluate and approve the method using the appropriate "EPA Standard Test Procedure" for leak detection equipment in Appendix IV; or,

(2) An independent third party testing laboratory shall evaluate and approve the method using a voluntary consensus standard that is intended for the method being evaluated; or,

(3) An independent third party testing laboratory shall evaluate and approve the method using a procedure deemed equivalent to an EPA procedure. Any resultant certification shall include a statement by the association or laboratory that the conditions under which the test was conducted were at least as rigorous as those used in the EPA standard test procedure. This certification shall include statements that:

(A) The method was tested under various conditions that simulate interferences likely to be encountered in actual field conditions (no fewer nor less rigorous than the environmental conditions used in the corresponding EPA test procedure);

(B) Each condition under which the method was tested was varied over a range expected to be encountered in 75 percent of the normal test cases;

(C) All portions of the equipment or method evaluated received the same evaluation;

(D) The amount of data collected and the statistical analysis are at least as extensive and rigorous as the data collected and statistical analysis used in the corresponding EPA test procedure and are sufficient to draw reasonable conclusions about the equipment or method being evaluated;

(E) The full-sized version of the leak detection equipment was physically tested; and

(F) The experimental conditions under which the evaluation was performed and the conditions under which the method was recommended for use have been fully disclosed and that the evaluation was not based solely on theory or calculation.

(4) The evaluation results referred to in subsections (f)(2) and (f)(3) shall contain the same information and shall be reported following the same general format as the EPA standard results sheet as any corresponding EPA test procedure.

g) The underground storage tank owner or operator shall notify the local agency 48 hours before conducting a tank or piping integrity test unless the notification requirement is waived by the local agency. Within 30 calendar days of completion of an underground storage tank or piping integrity test, the tank owner or operator shall provide the local agency with a report. The results of any underground storage tank tests, other than those required by this article, performed on the underground storage tank or piping to detect an unauthorized release shall be reported by the owner or operator to the local agency within 30 calendar days of completion of the test. The report shall be presented in written and/or tabular format, as appropriate, and shall be at a level of detail appropriate for the release detection method used.

Authority: Health and Safety Code 25299.3, 25299.7
Reference: Health and Safety Code 25292; 40 CFR 280.40 - 280.45

2643.1. Tank Integrity Testing Requirements

Tank integrity testing shall meet the requirements of section 2643(f) and shall be conducted using one of the two methods in subsections (a) or (b) below. Tank integrity test methods shall account for the effects of thermal expansion or contraction of the product, vapor pockets, tank deformation, evaporation or condensation, and the presence of water in the backfill:

a) A volumetric tank integrity test shall be capable of detecting a release of 0.1 gallon per hour from any portion of the tank when the tank is at least 65% full of product or at any product level if the product-filled portion of the tank is tested under pressure equivalent to that of a full tank. If any volumetric tank integrity test is conducted at a product level lower than the overfill protection device set point, a test meeting the requirements of subsection (b) must be used to test the ullage portion of the tank.

(b) A nonvolumetric tank integrity test shall be capable of detecting a release of 0.1 gallon per hour from any portion of the tank at any product level.

Authority: Health and Safety Code 25299.3, 25299.7

Reference: Health and Safety Code 25292, 40 CFR 280.40 - 280.45

2644. Non-Visual Monitoring/Qualitative Release Detection Methods

(a) An owner or operator who is required, pursuant to section 2641 to establish a non-visual monitoring program, shall comply with the requirements of this section if a qualitative release detection method is used. Each qualitative release detection method, including interstitial monitors, shall have an independent third-party evaluation to certify accuracy and response time of the detection method in accordance with procedures in Appendix IV. Examples of qualitative release detection methods that may be used are in Appendix III.

(b) If vadose zone monitoring is used as a release detection method, it shall be conducted in accordance with section 2647.

(c) If ground water monitoring is used as a release detection method, it shall be conducted in accordance with section 2648.

(d) A qualitative release detection method which includes the installation of monitoring wells or drilling other borings shall comply with installation, construction, and sampling and analysis procedures in section 2649.

(e) Underground pressurized piping that is monitored at least monthly by a non-visual qualitative release detection method satisfies the annual tightness test requirement of section 25292(e) of the Health and Safety Code.

Authority: Health and Safety Code 25299.3, 25299.7
Reference: Health and Safety Code 25292; 40 CFR 280.43

2645. Manual Tank Gauging and Testing for Small Tanks

(a) Manual tank gauging may be used as part of a non-visual monitoring program for existing underground storage tanks which have a total system capacity of 2,000 gallons or less and which can be taken out of service for at least 48 or 72 continuous hours each week as indicated in Table 4.1.

(b) Manual tank gauging shall be conducted weekly in accordance with subsection (d). Piping testing shall be conducted in accordance with section 2643(c), (d), or (e). Tanks with a capacity of 1,001 to and including 2,000 gallons shall also receive a tank integrity test each year. Tanks with a capacity of 551 to and including 1,000 gallons shall also have an annual tank integrity test unless the gauging period is 60 hours or more. Requirements of section 2643(b) do not apply to tanks which are monitored in accordance with this section.

(c) Manual tank gauging shall not be used on tanks with secondary containment and shall not be used as a leak detection method after December 22, 1998, for underground storage tanks with a capacity greater than 1,000 gallons.

(d) Owners or operators of existing underground storage tanks who use manual tank gauging as part of a non-visual monitoring program shall conduct weekly gauging according to the following specifications:

(1) Tank liquid level measurements shall be taken at the beginning and end of a gauging period which shall be at least 36 or 60 continuous hours as set forth in Table 4.1 during which no liquid is added to or removed from the tank. The underground storage tank shall be secured to prevent input or withdrawals during the gauging period. No product shall be added to the tank within the 12-hour period preceding the gauging period. The liquid level measurements shall be based on an average of two consecutive stick readings at both the beginning and end of the gauging period; and,

(2) The equipment used shall be capable of measuring the level of the product over the full range of the tank's height to the nearest one-eighth of an inch; and,

(3) If the variation between beginning and ending measurements exceeds the weekly or monthly standards set forth in Table 4.1, a second 36-hour or 60-hour test shall begin immediately and all measurements and calculations checked for possible errors. If the second test confirms a variation which exceeds the weekly or monthly standards in Table 4.1, a tank integrity test shall be conducted within 72 hours of completion of the second test. The local agency may extend this 72-hour period up to 30 calendar days, if all contents of the underground storage tank are safely and properly removed within the 72-hour period.

(e) If the results of a tank integrity test confirm an unauthorized release, the owner or operator shall comply with the release reporting requirements of Article 5 and shall replace, repair, upgrade, or close the underground storage tank in accordance with the applicable provisions of this chapter.

Authority: Health and Safety Code 25299.3 and 25299.7
Reference: Health and Safety Code 25292 and 25293, 40 CFR 280.43

2646. Manual Inventory Reconciliation

(a) Manual inventory reconciliation may be used as part of a non-visual monitoring program set forth in section 2643(b)(4) for existing underground storage tanks which contain motor vehicle fuels.

(b) After January 1, 1993, manual inventory reconciliation shall not be used to comply with the requirements of this article where the existing ground water level or the highest anticipated ground water level is less than 20 feet below the bottom of the tank. The ground water level shall be determined in accordance with the requirements of section 2649(c). After December 22, 1998, manual inventory reconciliation shall not be used to satisfy underground storage tank monitoring requirements.

(c) Each underground storage tank shall be individually monitored using a method that incorporates the following procedures:

(1) Separate daily measurements shall be taken and recorded for both the motor vehicle fuel and any water layer. For the purpose of this section, "daily" means at least every day that motor vehicle fuel is added to or withdrawn from the tank, but no less than five days per week. The number of days may be reduced by the number of public holidays that occur during the week if there is no input to or withdrawal from the tank on the holiday. Local agencies may reduce the frequency of monitoring to not less than once every three days at facilities that are not staffed on a regular basis, provided that the monitoring is performed every day the facility is staffed. Measurements shall be:

(A) taken when no substance is being added to or withdrawn from the tank;

(B) performed by the owner, operator, or other designated persons who have had appropriate training;

(C) based on the average of two readings if dipstick or tape measurements are used;

(D) determined by equipment capable of measuring the level of the product over the full range of the tank's height to the nearest one-eighth of an inch. If a dipstick is used to determine the product level, a substance capable of rendering the readings legible shall be applied to the dipstick before use, if necessary to obtain accurate readings;

(E) determined by equipment capable of measuring, to the nearest one-eighth of an inch, water present in the bottom of the tank. If a dipstick is used, water-finding paste shall be applied to the dipstick. If the tank is not level, and the measurements are taken manually, the measurement shall be taken at the lowest end of the tank.

(F) measured at the center of the longitudinal axis of the tank if access is available or measured at the lowest end of the tank with a calibration measurement at both ends, if possible, to determine if any tank tilt exists and, if so, its magnitude; and

(G) converted to volume measurements based on a calibration chart for the tank. This chart shall, where feasible, take into account the actual tilt of the tank.

(2) Daily readings shall be taken for input and withdrawals. The amount of product input indicated by delivery receipt shall be compared with measurement of the tank inventory volume before and after delivery. Product input shall be determined by a method that introduces the least amount of error in the monthly inventory reconciliation calculations. Underground storage tanks that are connected by a manifold may require time for the level to stabilize before a measurement is taken. Product shall be delivered to the tank through a drop tube that extends to within 12 inches of the bottom of the tank.

(d) The daily variation shall be the difference between the physically measured inventory in storage and the calculated inventory in storage. The physically measured inventory shall be measured daily by taking a liquid level measurement and converting it to gallons using a calibration chart. The calculated inventory shall be determined daily by adding the amount of product added to the tank and subtracting the withdrawals from the inventory measured on the previous day. These variations

shall be algebraically summed for a period of one month. If the absolute value of the monthly variations exceeds a variation of 1.0 percent of the total monthly input to or withdrawals from the tank plus 130 gallons, the variation shall be investigated in accordance with subsection (e).

(e) If the monthly manual inventory reconciliation exceeds the allowable variation, the owner or operator shall:

(1) within 24 hours of completing inventory reconciliation which exceeds the allowable variation, notify the local agency of the suspected unauthorized release;

(2) within 24 hours of discovering a variation which exceeds the allowable variation, review the inventory records for the preceding 30 days to determine if an error in calculations was made. If investigation shows that an error in calculations was made and that variations have not been exceeded, no further steps need to be taken;

(3) within 24 hours of discovering a variation which exceeds an allowable variation, have all readily accessible facilities carefully inspected for leakage by appropriately trained persons. If an unauthorized release is detected, the owner or operator shall comply with the requirements of Article 5. If no unauthorized release is detected, the owner or operator shall continue with the following steps:

(4) have dispenser meters, which determine the amount of product withdrawn from the tank, checked and recalibrated, if necessary, within 24 hours of completing the procedure required in subdivision (3) above. Dispenser meters shall comply with California Code of Regulations, Title 4, Division 9, "Division of Measurement Standards, Department of Food and Agriculture." Meters shall be inspected by the County Department of Weights and Measures or a device repairman as defined in the California Business and Professions Code, Division 5, Chapter 5.5. This subdivision applies to all meters used for determining withdrawals, including those at non-retail facilities;

(5) continue to conduct inventory reconciliation according to the requirements of this section. If a second 30-day period of data confirms the initial results, the owner or operator shall comply with the requirements of Article 5; and

(6) conduct additional tests or investigations as required by the local agency and, if applicable, replace, repair, upgrade, or close the tank in accordance with the applicable provisions of this chapter.

(f) Whenever any of the steps in subsection (e) of this section are performed, the results shall be documented in the monitoring record required under section 2712. If completion of any of the steps in subsection (e) indicates that the apparent excessive variation is not due to a release or tank failure, the remainder of the steps need not be completed.

(g) On an annual basis, the owner or operator shall submit a written statement to the local agency verifying under penalty of perjury that all monthly reports were summarized and that all data are within allowable variations. If data exceeded allowable variations, the owner or operator shall provide the local agency with a list of times, dates, and corresponding variations which exceeded

allowable variations. This information shall be signed by the owner or operator under penalty of perjury.

(h) The transfer of hazardous substances into and out of the underground storage tank may continue while the steps in subsection (e) are being implemented, provided the steps are completed within the specified periods. Daily inventory readings and monthly reconciliation shall continue while the steps are being implemented.

(i) Dispenser meters which determine the amount of product withdrawn from the tank shall comply with the provisions of Title 4, Division 9, "Division of Measurement Standards, Department of Agriculture." Meters shall be inspected and recalibrated by the County Department of Weights and Measures or a device repairman as defined in Division 5, Chapter 5.5 of the Business and Professions Code.

Authority: Health and Safety Code 25299.3, 25299.7
Reference: Health and Safety Code 25291 and 25292; 40 CFR 280.43

2646.1 Statistical Inventory Reconciliation

(a) When approved by the local agency, statistical inventory reconciliation may be used as part of a non-visual monitoring program, set forth in section 2643(b)(3), for existing underground storage tanks which contain motor vehicle fuel.

(b) Each underground storage tank shall be individually monitored using a method prescribed by section 2646(c).

(c) On a monthly basis, the tank owner must provide the minimum number of data records to the statistical inventory reconciliation provider as required by that provider. The previous month's data may be included with the current month's data to total the minimum number of records necessary to complete the statistical inventory reconciliation. Data submissions to the statistical inventory reconciliation provider and subsequent receipt of reports from the provider shall be completed monthly within 20 calendar days of the end of the data collection period. To give the owner or operator an opportunity to become proficient in the use of statistical inventory reconciliation, the requirements in subsection (d) do not apply if any of the first three reports are inconclusive. The owner or operator shall inform the local agency of the results of the first three reports, regardless of the results.

(d) If the results of a report are inconclusive or indicate a possible unauthorized release, the owner or operator shall, within 24 hours of receipt of the report:

(1) notify the local agency of the possible unauthorized release, and within 10 calendar days, submit a copy of the report to the local agency. The local agency may allow up to 10 additional calendar days in which to submit the report;

(2) inspect the inventory records for errors to determine if data were collected properly;

(3) have all accessible portions of the underground storage tank system inspected for leakage by appropriately trained persons. If an unauthorized release is detected, the owner or operator shall comply with the requirements of Article 5. If no unauthorized release is detected, the owner or operator shall continue with the steps in subdivision (4) below:

(4) have dispenser meters, which determine the amount of product withdrawn from the tank, checked and recalibrated if necessary within 48 hours of receipt of the report. Meters shall be recalibrated by the County Department of Weights and Measures or a device repair person as defined in the California Business and Professions Code, Division 5, Chapter 5.5. This subdivision applies to all meters used for determining withdrawals, including those at non-retail facilities. Dispenser meters shall comply with California Code of Regulations, Title 4, Division 9, "Division of Measurement Standards, Department of Food and Agriculture."

(e) Daily readings shall continue to be taken and recorded during the investigation specified in subsection (d) above. If the second statistical inventory reconciliation report does not indicate a tight system, the owner or operator shall comply with the release reporting requirements of Article 5.

(f) The owner or operator who reports a suspected release in accordance with subsection (e) above shall conduct additional tests or investigations as required by the local agency and, if necessary, replace, repair, upgrade, or close the tank in accordance with the applicable provisions of this chapter.

(g) A tank integrity test meeting the requirements of section 2643.1 is also required every two years when statistical inventory reconciliation is used. The first tank integrity test shall be conducted within the first year of implementation of a monitoring program which includes statistical inventory reconciliation.

(h) The owner or operator shall conduct a piping tightness test and, if necessary, a tank integrity test within 15 calendar days of receipt of two successive reports which are inconclusive or which indicate a possible unauthorized release. The local agency may also require a piping tightness test and, if necessary, a tank integrity test if frequent inconclusive results are reported.

(i) Piping connected to a tank which is monitored using statistical inventory reconciliation shall be tested in accordance with section 2643(c),(d), or (e).

(j) On an annual basis, the owner or operator shall submit a written statement to the local agency which indicates the results from the statistical inventory reconciliation reports for the previous 12 months.

(k) Dispenser meters which determine the amount of product withdrawn from the tank shall comply with the provisions of Title 4, Division 9, "Division of Measurement Standards, Department of Agriculture." Meters shall be inspected and recalibrated by the County Department of Weights and Measures or a device repair person as defined in Division 5, Chapter 5.5 of the Business and Professions Code.

Authority: Health and Safety Code 25299.3 and 25299.7
Reference: Health and Safety Code 25291, 25292; 40 CFR 280.43

2647. Vadose Zone Monitoring Requirements

(a) Owners or operators of existing underground storage tanks who use vadose zone monitoring as part of a non-visual monitoring program shall comply with the requirements of this section. Vapor monitoring, soil-pore liquid monitoring, or a combination of these or other vadose zone monitoring methods may be used.

(b) Vadose zone monitoring shall not be used as the sole release detection method of non-visual monitoring where the monitoring well cannot be located within the backfill surrounding the tank, or where the existing ground water level or the highest anticipated ground water level, including intermittent perched ground water, is less than ten feet below the bottom of the tank. Ground water levels shall be determined in accordance with section 2649(c).

(c) Vadose zone vapor monitoring shall be conducted continuously. Other vadose zone monitoring shall be conducted at least weekly.

(d) The number, location, and depths of vadose zone monitoring points shall be selected to achieve the objective specified in section 2641(a). Where possible, monitoring points shall be located within the excavation backfill surrounding the underground storage tank. The owner or operator shall determine the exact location of the underground storage tank and associated piping before attempting to install monitoring wells and/or devices pursuant to local agency approval.

(e) Vadose zone vapor monitoring shall comply with the following minimum requirements:

(1) The vapor characteristics of the stored product, or a tracer compound placed in the underground storage tank system, shall be sufficiently volatile to result in a vapor level that is detectable by the monitoring devices;

(2) Backfill materials and soils surrounding monitoring points shall be sufficiently porous to readily allow diffusion of vapors;

(3) The level of background contamination in the excavation zone and surrounding soils shall not interfere with the method used to detect releases from the underground storage tank;

(4) The monitoring devices shall be designed and operated to detect any significant increase in concentration above the background of the hazardous substance stored in the underground storage tank, a component or components of that substance, or a tracer compound placed in the tank system;

(5) The location and depth of each monitoring point shall be placed according to the most probable movement of vapor through the backfill or surrounding soil;

(6) Vapor monitoring wells located in the backfill shall be constructed so that any unauthorized release that may pond at the horizontal interface between the backfill and natural soils can be detected in the vapor well; and,

(7) All vapor monitoring wells shall be installed, constructed, and sampled according to the requirements specified in sections 2649(b),(c),(e) and (f).

(f) Soil-pore liquid monitoring and other forms of vadose zone monitoring shall comply with the following minimum requirements:

(1) The stored substance shall be susceptible to detection by the proposed release detection method;

(2) The stored substance shall not corrode or otherwise attack the materials from which the detection system is constructed or otherwise render the detection system inoperable or inaccurate; and

(3) Site-specific conditions (e.g., precipitation, ground water, soil-moisture, background contamination) shall not interfere with the operability and accuracy of the release detection method.

(g) Compliance with the requirements of subsections (e) and (f) shall be based on a site-assessment, including assessment of the underground storage tank excavation zone.

Authority: Health and Safety Code 25299.3, 25299.9
Reference: Health and Safety Code 25292; 40 CFR 280.43

2648. Ground Water Monitoring Requirements

(a) Owners or operators of existing underground storage tanks who use ground water monitoring as part of a non-visual monitoring program shall comply with the requirements of this section. Ground water monitoring may be used in combination with other quantitative or qualitative release detection methods or, where permissible under this section, as the sole release detection method.

(b) Ground water monitoring may be used as the sole release detection method of non-visual monitoring for existing underground tanks only where all of the following conditions exist:

(1) The hazardous substance stored is immiscible with water and has a specific gravity of less than one;

(2) Continuous monitoring devices or manual methods are used which are capable of detecting the presence of at least one-eighth of an inch of free product on top of the ground water in the monitoring wells. This capability shall be certified by an independent third party using an appropriate evaluation procedure. Examples of acceptable evaluation procedures are in Appendix IV;

(3) The existing ground water level or the highest anticipated ground water level, including intermittent perched ground water, is less than 20 feet from the ground surface. The ground water level shall be determined according to the requirements of section 2649(c);

(4) The hydraulic conductivity of the soil(s) between the underground storage tank and the monitoring wells or devices is at least 0.01 cm/sec (e.g. the soil consists of gravels, coarse-to-medium sands, or other permeable materials);

(5) The ground water proposed for monitoring has no present beneficial uses (e.g., domestic, municipal, industrial, agricultural supply) or is not hydraulically connected to ground or surface water which has actual beneficial uses; and

(6) Monitoring wells or devices are located within the excavation zone or as close to the excavation zone as feasible.

(c) Compliance with the conditions specified in subsection (b) shall be based on a site-assessment, including assessment of the areas within and immediately below the underground storage tank excavation zone. If ground water monitoring is approved as the sole release detection method of a non-visual monitoring program, the number and location of the monitoring wells and/or devices as approved by the local agency shall also be based on this site-assessment with minimum requirements as follows:

(1) Single tank - two wells, one at each end of the tank.

(2) Two or three tanks - three wells equally spaced.

(3) Four or more tanks - four wells, at least two of which shall be downgradient and the remainder equally spaced.

(4) Pipelines - additional wells, if needed, as determined by the local agency.

(d) Ground water monitoring shall be conducted at least monthly or continuously. Any continuous monitoring system shall be capable of detecting the presence of hazardous substance on top of the ground water in the monitoring well and shall allow periodic collection of samples. Ground water samples shall be analyzed by visual observation or field or laboratory analysis as approved by the local agency, depending on the method of monitoring and the constituents being evaluated. The local agency may require periodic laboratory analysis where visual observation or field analysis does not provide an adequate degree of detection as compared to that of laboratory analysis. Sampling conducted which requires field or laboratory analysis shall comply with the minimum requirements of section 2649(g).

(e) The number, location, and depths of ground water monitoring wells shall be selected to achieve the objective specified in section 2641(a). Monitoring wells shall be located as close as possible to the underground storage tank or the perimeter of the underground storage tank cluster, subject to the review and approval of the local agency.

Authority: Health and Safety Code 25299.3, 25299.7
Reference: Health and Safety Code 25292; 40 CFR 280.43

2649. Well Construction and Sampling Requirements

(a) Owners or operators who use a qualitative release detection method shall comply with the requirements of this section and any applicable requirements of sections 2644, 2647, and 2648.

(b) The installation of all monitoring wells and the drilling of all other borings shall be in accordance with local permitting requirements or, in their absence, with the following requirements:

(1) All monitoring wells and all other borings shall be logged during drilling according to the following requirements:

(A) Soil shall be described in the geologic log according to the Unified Soil Classification System as presented in Geotechnical Branch Training Manual Numbers 4, 5, and 6, published in January of 1986 (available from the Bureau of Reclamation, Engineering and Research Center, Attention: Code D-7923-A, Post Office Box 25007, Denver, Colorado 80225);

(B) Rock shall be described in the geologic log in a manner appropriate for the purpose of the investigation;

(C) All wet zones above the water table shall be noted and accurately logged. Where possible, the depth and thickness of saturated zones shall be recorded in the geologic log; and

(D) Geologic logs shall be prepared by a professional geologist or civil engineer, who is registered or certified by the State of California and who is experienced in the use of the Unified Soil Classification System. The geologic logs may also be prepared by a technician trained and experienced in the use of the Unified Soil Classification System who is working under the direct supervision of one of the aforementioned professionals, provided that the professional reviews the logs and assumes responsibility for the accuracy and completeness of the logs.

(2) All drilling tools shall be thoroughly steam cleaned immediately before each boring is started;

(3) All well casings, casing fittings, screens, and all other components that are installed in a well shall be thoroughly cleaned before installation;

(4) Soil and water sampling equipment and materials used to construct a monitoring well shall be compatible with the stored hazardous substance and shall not donate, capture, mask, or alter the constituents for which analyses will be made. All perforated casings used in the construction of monitoring wells shall be factory perforated;

(5) Drilling fluid additives shall be limited to inorganic, non-hazardous materials which conform to the requirements of subsection (b)(4). All additives used shall be accurately recorded in the boring log;

(6) Representative samples of additives, cement, bentonite, and filter media shall be retained for 90 calendar days for possible analysis for contaminating or interfering constituents;

(7) If evidence of contamination is detected by sight, smell, or field analytical methods, drilling shall be halted until a responsible professional determines if further drilling is advisable;

(8) All borings which are converted to vadose zone monitoring wells shall have the portion of the boring which is below the monitored interval sealed with approved grout;

(9) All borings which are not used for ground water or vadose zone monitoring shall be sealed from the ground surface to the bottom of the boring with an approved grout. All slurry-type grouts used to seal an abandoned boring or an abandoned well shall be emplaced by the tremie method; and

(10) All monitoring wells shall be clearly marked and secured to avoid unauthorized access and tampering. Surface seals may be required by the local agency.

(c) When installing a vadose zone or ground water monitoring well, the highest anticipated ground water level and existing ground water level shall be determined. Highest anticipated ground water levels shall be determined by reviewing all available water level records for wells within one mile of the site. Existing site ground water levels shall be established either by reviewing all available water level measurements taken within the last two years at all existing wells, within 500 feet of the underground storage tank, which are perforated in the zone of interest, or by drilling at least one exploratory boring constructed as follows:

(1) The exploratory boring shall be drilled downgradient, if possible, and as near as possible to the underground storage tank within the boundaries of the property encompassing the facility, but no further than ten feet from the underground storage tank;

(2) The exploratory boring may be of any diameter capable of allowing the detection of first ground water;

(3) The exploratory boring shall be drilled to first perennial ground water, or to a minimum depth of 20 feet for vadose zone monitoring wells, or to a minimum depth of 30 feet for ground water monitoring wells if permitted by site lithology;

(4) If ground water is encountered, and ground water monitoring is the monitoring method, the boring shall be converted to a ground water monitoring well consistent with the provisions of this section; and

(5) If ground water is encountered, but ground water monitoring is not the monitoring method, or if the exploratory boring does not encounter ground water, the boring shall be sealed in accordance with the provisions of subsection (b)(9).

(d) In addition to the requirements of subsection (b), all ground water monitoring wells shall be designed and constructed according to the following minimum requirements:

(1) Ground water monitoring wells shall extend at least 20 feet below the lowest anticipated ground water level and at least 15 feet below the bottom level of the underground storage tank.

However, wells shall not extend through laterally extensive impermeable zones that are below the water table and that are at least five feet thick. In these situations, the well shall be terminated one to two feet into the impermeable zone;

(2) Ground water monitoring wells shall be designed and constructed as filter packed wells that will prevent the migration of the natural soil into the well and with a factory-perforated casing that is sized to prevent migration of filter material into the well;

(3) Ground water monitoring well casings shall extend to the bottom of the boring and shall be factory-perforated from a point of one foot above the bottom of the casing to an elevation which is either five feet above the highest anticipated ground water level or to within three feet of the bottom

(A) of the surface seal or to the ground surface, whichever is the lowest elevation;

(4) All well casings shall have a bottom cap or plug;

(5) Filter packs shall extend at least two feet above the top of the perforated zone except where the top two feet of the filter pack would provide cross-connection between otherwise isolated zones or where the ground surface is less than ten feet above the highest anticipated ground water level, the local agency may reduce the height of the filter pack as long as the filter pack extends at least to the top of the perforated zone. Under such circumstances, additional precautions shall be taken to prevent plugging of the upper portion of the filter pack by the overlying sealing material;

(6) Ground water monitoring wells shall be constructed with casings having a minimum inside diameter of two inches and shall be installed in a boring whose diameter is at least four inches greater than the outside diameter of the casing;

(7) Ground water monitoring wells shall be sealed in accordance with local permitting requirements or, in their absence, with the Department of Water Resources Standards for Well Construction (Reference Bulletins 74-81 and 74-90 on Water Well Standards are available from the Department of Water Resources, Sacramento);

(8) Seventy-two or more hours following well construction, all ground water monitoring wells shall be adequately developed and equilibrium shall be established prior to any water sampling;

(9) Well heads shall be provided with a water-tight cap and shall be enclosed in a surface security structure that protects the well from surface water entry, accidental damage, unauthorized access, and vandalism. Traffic lids shall be clearly marked as monitoring wells; and

(10) Pertinent well information including well identification, well type, well depth, well casing diameters (if more than one size is used), and perforated intervals shall be permanently affixed to the interior of the surface security structure and the well identification number and well type shall be affixed on the exterior of the surface security structure.

(e) In addition to the requirements of subsection (b), all vadose zone vapor monitoring wells shall be cased and sealed as follows:

(1) Well casings for vapor monitoring shall be fully perforated except for the portion adjacent to a surface seal and that portion used as a free liquid trap;

(2) Surface seals for vapor wells that are completed no more than five feet below the bottom of the underground storage tank and which are above any free water zones may be required at the discretion of the local agency on a site-specific basis;

(3) If surface seals for vapor wells are completed in or below a potential free water zone, the seal shall not extend below the top of the underground storage tank; and

(4) Vapor wells need not be sealed against infiltration of surface water if constructed wholly within backfill that surrounds the underground storage tank and which extends to the ground surface.

(f) Undisturbed (intact) soil samples shall be obtained from all borings for the installation of monitoring wells and all other borings and analyzed according to the following minimum requirements, unless the local agency waives this requirement under this subsection:

(1) Borings shall be drilled and sampled using accepted techniques which do not introduce liquids into the boring and which will allow the accurate detection of perched and saturated zone ground water. If this cannot be accomplished using acceptable techniques, the requirement for soil sampling may be waived by the local agency provided, however, that installation of the vadose zone or ground water monitoring system shall be completed; and provided further, that once below the water table, borings need not be advanced using the same method that was used in the vadose zone;

(2) Soil samples shall be obtained at intervals of five feet or less and at any significant change in lithology, beginning at the ground surface. Sampling is not required in unweathered bedrock which has little or no permeability;

(3) A soil sample shall be obtained at the termination depth of a dry boring regardless of the spacing interval;

(4) Soil samples shall be of sufficient volume to perform the designated analyses including soil vapor and soil extract analyses and to provide any specified replicate analyses;

(5) Soil samples shall be acquired, prepared, preserved, stored, and transported by methods that are appropriate for the objectives of the investigation which safeguard sample integrity and satisfy the requirements of subsection (g);

(6) Samples shall be analyzed in a state-certified laboratory by methods that provide quantitative or qualitative results. Lower detection limits shall be verified by the laboratory;

(7) Samples shall be analyzed for one or more of the most persistent constituents that have been stored in the underground storage tank. If the use of the underground storage tank has historically changed, samples shall be analyzed for at least one constituent from each period of use. If the hazardous substance is known to degrade or transform to other constituents in the soil environment, the analysis shall include these degradation and/or transformation constituents;

(8) If hazardous substances known or suspected to have been contained in the underground storage tank are detected at concentrations in excess of background concentrations (background concentrations shall be applicable only if the constituent occurs naturally at the site), further soil analysis is not necessary pursuant to this subsection. The hazardous substance(s) shall be assumed to have originated from the underground storage tank. In this situation, the remainder of the soil samples need not be analyzed pursuant to these regulations and the owner or operator shall comply with subdivision (9) below. A permit shall not be granted unless further detailed investigation clearly establishes that the underground storage tank is not the source of the hazardous substance or that it has been properly repaired since the unauthorized release and that any subsequent unauthorized release from the underground storage tank can be detected despite the presence of the hazardous substance already in the environment; and

(9) If soil analysis indicates that an unauthorized release has occurred, the owner or operator shall comply with the release reporting requirements of Article 5 and shall replace, repair, upgrade, or close the underground storage tank pursuant to the applicable provisions of this chapter.

(g) The qualitative release detection method shall include consistent sampling and analytical procedures, approved by the local agency, that are designed to ensure that monitoring results provide a reliable indication of the quality of the medium (e.g., ground water, soil-pore liquid, soil vapor, or soil) being monitored. Some acceptable procedures are listed as references in Appendix I, Table C. The owner or operator shall provide a written detailed description, to be specified in the permit and to be maintained as part of the records required under section 2712 of Article 10, of the procedures and techniques for:

(1) Sample collection (e.g., purging techniques, water level, sampling equipment, and decontamination of sampling equipment);
(2) Sample preservation and shipment;
(3) Analytical procedures; and
(4) Chain-of-custody control.

Authority: Health and Safety Code 25299.3, 25299.7
Reference: Health and Safety Code 25292 40 CFR 280.43

Article 5 - RELEASE REPORTING AND INITIAL ABATEMENT REQUIREMENTS

2650. Reporting and Recording Applicability

(a) The requirements of this article apply to all owners or operators of one or more underground storage tanks storing hazardous substances.

(b) The owner or operator shall record or report any unauthorized release from the underground storage tank, and any spill or overfill, in accordance with the appropriate sections of Chapter 6.7 of Division 20 of the Health and Safety Code and this article.

(c) The owner or operator of an underground storage tank with secondary containment shall record any unauthorized release described in section 25294 of the Health and Safety Code in accordance with section 2651.

(d) Owners or operators subject to the requirements of this article shall report all spills and overfills in accordance with section 2652.

(e) The owner or operator of an underground storage tank shall report to the local agency any unauthorized release described in sections 25295 and 25295.5 of the Health and Safety Code, and shall also record and report any of the following conditions in accordance with section 2652:

(1) Any unauthorized release recorded or reported under subsections (c) or (d) which the owner or operator is unable to clean up or which is still under investigation within eight hours of detection;

(2) The discovery by the owner or operator, local agency, or others, of released hazardous substances at the site of the underground storage tanks or in the surrounding area. This includes the presence of free product or vapors in soils, basements, sewer and utility lines, and nearby surface or drinking waters;

(3) Unusual operating conditions observed by the owner or operator including erratic behavior of product-dispensing equipment, the sudden loss of product from the underground storage tank, or an unexplained presence of water in the tank, unless system equipment is found to be defective, but has not leaked, and is immediately repaired or replaced; and

(4) Monitoring results from a release detection method required under Article 3 or Article 4 that indicate a release may have occurred, unless the monitoring device is found to be defective, and is immediately repaired, recalibrated or replaced, and additional monitoring does not confirm the initial results.

(f) The reporting requirements of this article are in addition to any reporting requirements in section 13271 of Division 7 of the California Water Code and other laws and regulations.

Authority: Health and Safety Code 25299.3, 25299.7
Reference: Health and Safety Code 25294, 25295, 25295.5; 40 CFR 280.52

2651. Recording Requirements for Unauthorized Releases

(a) Owners or operators required by section 2650 to record a release or condition shall comply with the requirements of this section.

(b) The operator's monitoring records, as required under section 2712 of Article 10 shall include:

(1) The operator's name and telephone number;

(2) A list of the types, quantities, and concentrations of hazardous substances released;

(3) A description of the actions taken to control and clean up the release;

(4) The method and location of disposal of the released hazardous substances (the monitoring record shall indicate whether a hazardous waste manifest was or will be used);

(5) A description of the actions taken to repair the underground storage tank and to prevent future releases. If this involves a change as described in section 25286 of the Health and Safety Code, notification pursuant to that section shall be made.

(6) A description of the method used to reactivate the interstitial monitoring system after replacement or repair of the primary containment.

(c) The integrity of the secondary containment shall be reviewed for possible deterioration under the following conditions:

(1) Hazardous substance in contact with the secondary containment is not compatible with the material used for secondary containment;

(2) The secondary containment is prone to mechanical damage from the mechanical equipment used to remove or clean up the hazardous substance collected in the secondary containment; or

(3) Hazardous substances, other than those stored in the primary containment system, are added to the secondary containment to treat or neutralize the released hazardous substance and the added substance or resulting substance from such a combination is not compatible with the secondary containment.

(d) If a recordable unauthorized release becomes a reportable unauthorized release due to initially unanticipated facts (e.g., secondary containment is breached due to deterioration), the release shall be reported pursuant to section 2652.

(e) Whenever the local agency reviews the operator's monitoring reports and finds that one or more recordable unauthorized releases have occurred, the local agency shall review the information included in the monitoring records pursuant to subsection (a), shall review the permit, and may inspect the underground storage tank pursuant to sections 2712(e) and (f) of Article 10. If the local agency finds that the containment and monitoring requirements of Articles 3 or 4 can no longer be met, the local agency shall require the owner or operator to cease operation of the underground

storage tank system until appropriate modifications are made to comply with the requirements of Articles 3 or 4, as appropriate.

Authority: Health and Safety Code 25299.3, 25299.7
Reference: Health and Safety Code 25291, 25292, 25294, 25295; 40 CFR 280.52

2652. Reporting, Investigation, and Initial Response Requirements for Unauthorized Releases

(a) Owners or operators required under section 2650 to report a release or condition, shall comply with the requirements of this section.

(b) Within 24 hours after an unauthorized release or condition has been detected, or should have been detected, the owner or operator shall notify the local agency and shall investigate the condition, and take immediate measures to stop the release. If necessary, or if required by the local agency, the owner or operator shall remove the remaining stored substance from the tank to prevent further releases to the environment or to facilitate corrective action. If an emergency exists, the owner or operator shall also notify the State Office of Emergency Services.

(c) Within five working days of detecting an unauthorized release, the owner or operator shall submit to the local agency a full written report which shall include but not be limited to all of the following information to the extent that the information is known at the time of filing the report:

(1) Owner's or operator's name and telephone number;

(2) A list of the types, quantities, and concentrations of hazardous substances released;

(3) The approximate date of the release;

(4) The date on which the release was discovered;

(5) The date on which the release was stopped;

(6) A description of the actions taken to control and/or stop the release;

(7) A description of the corrective and remedial actions, including investigations which were undertaken and will be conducted to determine the nature and extent of soil, ground water, or surface water contamination due to the release;

(8) The method(s) of cleanup implemented to date, proposed cleanup actions, and a time schedule for implementing the proposed actions;

(9) The method and location of disposal of the released hazardous substance and any contaminated soils or ground water or surface water. Copies of any completed hazardous waste manifests for off-site transport of these media shall be attached to the report;

(10) A description of the proposed method(s) of repair or replacement of the primary and secondary containment. If this involves a change described in section 25286 of the Health and Safety Code, notification pursuant to that section shall be made; and,

(11) A description of additional actions taken to prevent future releases.

(d) Until investigation and cleanup are complete, the owner or operator shall submit reports to the local agency or Regional Water Quality Board, whichever agency is overseeing the cleanup, every three months or more frequently as specified by the agency. Reports shall include but not be limited to, an update of the required information in subsection (c), and the results of all investigation monitoring or other corrective actions which have occurred during the reporting period. Information required by sections 2653 and 2654 shall be submitted as part of the periodic report to the agency.

(e) The owner or operator shall conduct all necessary initial abatement and site characterization actions as required by sections 2653 and 2654 and shall take additional corrective action as required by Article 11.

(f) If the test results from either an investigation conducted under subsection (f) or from other procedures approved by the agency, fail to confirm that there has been an unauthorized release from the underground storage tank, no further investigation or corrective action is required.

Authority: Health and Safety Code 25299.3, 25299.7, 25299.77
Reference: Health and Safety Code 25299.37; 40 CFR 280.60 through 280.67

2653. Initial Abatement Action Requirements

(a) Owners or operators required to conduct initial abatement in accordance with section 2652(f) shall comply with the following requirements. Owners and operators shall:

(1) Remove as much of the hazardous substance from the underground storage tank as necessary to prevent further release to the environment.

(2) Visually inspect any above ground releases or exposed below ground releases and prevent further migration of the released substance into surrounding soils and ground water.

(3) Continue to monitor and mitigate any additional fire and safety hazards posed by vapors or free product that have migrated from the underground storage tank excavation zone and entered into subsurface structures, such as sewers or basements.

(4) Remedy hazards posed by contaminated soils that are excavated or exposed as a result of release confirmation, site investigation, or abatement activities. If these remedies include treatment or disposal of soils, the owner or operator shall comply with applicable state and local requirements.

(5) Investigate to determine the possible presence of free product. If free product is present, begin removal thereof in accordance with section 2655.

Authority: Health and Safety Code 25299.3, 25299.7
Reference: Health and Safety Code 25295; 40 CFR 280.61, 280.62

2654. Initial Site Characterization Requirements

(a) Owners or operators required to conduct initial site characterization in accordance with section 2652(f), shall comply with the requirements of this section.

(b) The owner or operator shall promptly gather information about the underground storage tank site and the nature of the unauthorized release, including information obtained while confirming the release or completing initial abatement and free product removal. This information shall include, but is not limited to, the following:

(1) Data on the nature and estimated quantity of release;

(2) Data from available sources and/or site investigations concerning the surrounding populations, water quality, use and approximate locations of wells potentially affected by the release, subsurface soil conditions, locations of subsurface utilities, climatological conditions, and land use.

Authority: Health and Safety Code 25299.3, 25299.7
Reference: Health and Safety Code 25295; 40 CFR 280.63

2655. Free Product Removal Requirements

(a) At sites where investigations made pursuant to section 2652 indicate the presence of free product, the owner or operator shall comply with the requirements of this section. The owner or operator shall remove free product to the maximum extent practicable, as determined by the local agency, while continuing to take any actions required under sections 2652 through 2654.

(b) Free product shall be removed in a manner that minimizes the spread of contamination into previously uncontaminated zones by using recovery and disposal techniques appropriate to the hydrogeologic conditions at the site. The free product removal process shall result in proper treatment, discharge or disposal of recovery byproducts in compliance with applicable local, state and federal regulations.

(c) Abatement of free product migration shall be the predominant objective in the design of the free product removal system.

(d) Flammable products shall be handled in a safe manner consistent with state and local requirements.

(e) A free product removal report shall be submitted to the agency within 45 calendar days of release confirmation and shall include, but not be limited to:

(1) The name of the person(s) responsible for implementing the free product removal measures;

(2) The estimated quantity, type, and thickness of free product observed or measured in wells, boreholes, and excavations;

(3) The type of free product recovery system used;

(4) Whether any discharge will take place on-site or off-site during the recovery operation and, if so, where this discharge will be located;

(5) The type of treatment applied to, and the effluent quality expected in, any discharge;

(6) The steps that have been or are being taken to obtain necessary permits for the discharge; and

(7) The means of disposal and/or proposed disposition of the recovered free product.

Authority: Health and Safety Code 25299.3, 25299.7
Reference: Health and Safety Code 25295; 40 CFR 280.64

Article 6 - UNDERGROUND STORAGE TANK REPAIR AND UPGRADE REQUIREMENTS

2660. General Applicability of Article

(a) This article describes the requirements for repairing or upgrading underground storage tank systems. Upgrades and repairs shall be properly conducted in accordance with this article and any additional manufacturers' specifications.

(b) Section 2661 describes the requirements for repairing underground storage tanks, piping, or other underground storage tank system components that have caused an unauthorized release as defined in sections 25294 and 25295 of the Health and Safety Code.

(c) Section 2662(b) describes upgrade requirements for underground storage tanks containing hazardous substances other than motor vehicle fuel. Sections 2662(c), and (d) describe upgrade requirements for all underground storage tanks containing motor vehicle fuel. Underground storage tanks which contain motor vehicle fuel and which are constructed of fiberglass, other non-corrosive materials, steel clad with fiberglass, or steel clad with other noncorrosive materials, are not required to comply with the requirements of section 2662(c), but are required to meet the requirements of section 2662(d).

(d) Section 2663 describes the requirements for upgrading or repairing tanks using interior lining.

(e) Section 2664 describes the requirements for upgrading tanks using bladder systems.

(f) Section 2665 describes the upgrade requirements for spill and overfill prevention equipment.

(g) Section 2666 describes the upgrade requirements for underground piping.

(h) Upgrade requirements for underground storage tanks, spill and overfill prevention, and underground piping shall be completed no later than December 22, 1998.

(i) As a preventive measure, an owner or operator may upgrade any underground storage tank constructed of any material which is not under pressure and which contains motor vehicle fuel as specified in sections 2662(a), (c), and (e). Before upgrading in accordance with this subsection, the owner or operator shall prove to the satisfaction of the local agency that the underground storage tank system has not caused an unauthorized release. If soil samples are taken, the owner or operator shall notify the local agency in advance of taking the samples.

(j) Owners or operators shall maintain records of repairs, linings, and upgrades that demonstrate compliance with the requirements of this article for the remaining operating life of the tank.

(k) Local agencies shall not approve a repair or upgrade unless it can be demonstrated that the underground storage tank system is structurally sound and the method of repair or upgrade will prevent unauthorized releases due to structural failure or corrosion during the operating life of the underground storage tank system.

(l) The materials used in the repair or upgrading process shall be applied in accordance with nationally recognized engineering practices.

(m) Materials used in repairs and upgrades shall be compatible with the existing underground storage tank system materials and shall not be subject to deterioration due to contact with the hazardous substance being stored.

(n) Steel underground storage tanks that exhibit external corrosion during the course of repair or upgrade shall comply with the cathodic protection requirements of section 2635(a)(2).

Authority: Health and Safety Code 25299.3, 25299.7
Reference: Health and Safety Code 25292, 25292.1, 25296; 40 CFR 280.21, 280.33, and 281.32(d)

2661. Requirements for Repairing Underground Storage Tanks

(a) Before repairing an underground storage tank system, the owner or operator shall comply with applicable requirements of Article 5.

(b) Before repairing an underground storage tank system, the owner or operator shall demonstrate to the satisfaction of the local agency that the conditions and requirements specified in subsection 2660(k) will be met. When selecting a method of repair, the owner or operator shall take into consideration whether the cause of failure is isolated to the actual failure, is affecting other areas of the underground storage tank, or if any other cause of failure is affecting the primary container.

(c) A tank may be repaired once using the interior lining method specified in section 2663. A previously lined tank may not be repaired using the interior lining method.

(d) Holes in steel tanks shall be plugged using self-tapping bolts, boiler plugs, water-tight hydraulic cement, or by welding. In addition, holes in steel and fiberglass tanks shall be repaired as follows:

(1) Repair areas shall be covered with epoxy or isophthalic polyester based resin. The resin shall be compatible with the intended use of the tank.

(2) Fiberglass cloth with a minimum weight of 1.5 oz/yd that is silane-treated shall be worked completely into the resin base. The resin base shall be installed a minimum of two inches beyond the fiberglass cloth.

(3) All repairs shall include installation of fiberglass cloth with a minimum dimension of 12 x 12 inches centered over the area to be repaired. Larger repairs shall require the cloth to be large enough to provide cloth coverage of at least five inches of cloth bonded to the tank wall, measured from the outermost edge of the repair area to the cloth's edge.

(4) A second layer of fiberglass cloth of the same weight as specified in subsection (d)(2) above, shall be installed directly over the primary cloth layer and shall be cut to overlap the primary patch by 1.5 inches on all sides.

(5) The repair shall be allowed sufficient cure time, as determined by the resin manufacturer, to provide an acceptable base for tank lining installation.

(e) Metal piping, pipe fittings, or tank fittings that have released product as a result of corrosion or other damage shall be replaced. Non-metal piping, pipe fittings, or tank fittings shall be repaired or replaced in accordance with manufacturer specifications.

(f) Tanks and piping which have been repaired shall be tested for tightness within 30 calendar days following the date of completion of the repair. Tanks or piping that fail this test shall be repaired in accordance with this section or closed in accordance with Article 7.

(g) A vapor or ground water monitoring system shall be installed to continuously monitor a tank repaired by lining for future unauthorized releases, in accordance with section 2647 or 2648, if no secondary containment system exists.

Authority: Health and Safety Code 25299.3, 25299.7
Reference: Health and Safety 25296; 40 CFR 280.33

2662. Requirements for Upgrading Underground Storage Tanks

(a) Before upgrading an underground storage tank system, the owner or operator shall demonstrate to the satisfaction of the local agency that the conditions and requirements specified in subsection 2660(k) will be met.

(b) By December 22, 1998, all underground storage tanks containing hazardous substances other than motor vehicle fuel, shall be retrofitted with secondary containment meeting the requirements of Article 3.

(c) By December 22, 1998, owners of motor vehicle fuel tanks constructed of steel shall retrofit those tanks with secondary containment meeting the requirements of Article 3, or shall upgrade those tanks using one of the following options:

(1) Interior lining and cathodic protection:

(A) Interior lining shall be installed in accordance with section 2663 except those requirements pertaining to non-steel tanks; and,

(B) Cathodic protection shall be designed, installed, and inspected as specified in section 2635(a)(2)(A). All cathodic protection wells shall be constructed in accordance with applicable state and local well regulations.

(2) Bladder system and cathodic protection:

(A) Bladder systems shall be installed in accordance with the requirements of section 2664.

(d) By December 22, 1998, owners shall install a wear plate (striker plate) which meets the criteria in section 2631(c) under all tank openings that could be used for manual dipsticking. A drop tube-mounted bottom protector may fulfill this requirement.

(e) An upgraded underground storage tank shall be closed in accordance with Article 7 at the end of the tank's operational life.

Authority: Health and Safety 25299.3, 25299.7
Reference: Health and Safety 25291 and 25296 and 40 CFR 280.21

2663. Interior Tank Lining Requirements

(a) Tank lining may be used to satisfy part of the upgrade requirements of section 2662 or to repair a tank pursuant to section 2661. However, a tank that has been repaired using the interior lining method may not be repaired a second time using the interior lining method. The evaluations described in subsections (b) and (c) of this section shall be completed before the lining of a primary container may be authorized by the local agency. The local agency shall deny the proposed lining if the owner fails to demonstrate that the lined primary container will provide continued containment based on the evaluations described in subsections (b) and (c).

(b) Appropriate tests shall be conducted by a special inspector who shall certify that the shell will provide structural support if the tank is lined. A copy of this certification shall be provided by the owner to the local agency. The special inspector shall make this certification by entering and inspecting the entire interior surface of the tank and shall base this certification upon one of the following sets of procedures and criteria:

(1) If a tank is made of non-corrodible material, the following shall be performed:

(A) The tank shall be cleaned so that no residue remains on the tank wall surface;

(B) The special inspector shall take interior diameter measurements and, if the cross-section of the tank has compressed more than one percent of the original diameter, the tank shall neither be certified nor returned to service unless the tank is excavated and repaired to correct the compression;

(C) The special inspector shall conduct an interior inspection to identify any area where compression or tension cracking is occurring and shall determine whether additional fiberglass reinforcing is required for certification before the tank may be lined; and

(D) If the special inspector does not certify the tank as suitable for lining because it failed a test conducted in accordance with subdivisions (1)(A) through (C) of this subsection, the tank shall be closed in accordance with Article 7.

(2) If the tank is constructed of steel or steel clad with a non-corrodible material, the following shall be performed:

(A) The tank interior surface shall be abrasive-blasted completely free of scale, rust, and foreign matter; and,

(B) The entire tank interior shall be tested using a thickness gauge on a one-foot grid pattern with wall thicknesses recorded on a form that identifies the location of each reading. The tank shall be closed in accordance with Article 7 if the tank's average metal thickness is less than 75 percent of the original wall thickness or if the tank has any of the following defects:

(i) An open seam or a split longer than three inches.

(ii) A perforation larger than one and one half inches in diameter except directly below a gauging opening at the bottom of a tank where the perforation shall be no larger than two and one half inches in diameter.

(iii) Five or more perforations in any one square-foot area.

(iv) Multiple perforations of which any single perforation is larger than one half inch in diameter.

(3) A test approved by the State Water Board as comparable to the tests specified in subsections (b)(1) or (2) above.

(c) The owner or operator shall demonstrate to the satisfaction of the local agency, based on the tests conducted in accordance with subsection (b) above, that a serious corrosion or structural problem does not exist. If the local agency or special inspector determines that a serious corrosion or structural problem exists, interior lining may be performed only if it can be demonstrated to the satisfaction of the local agency that new or additional corrosion protection will significantly minimize the corrosion and that the existing corrosion problem does not threaten the structural integrity or containment ability of the underground storage tank.

(d) Before lining a tank, thin areas or other flaws in the tank walls which need additional reinforcing shall be reinforced in accordance with section 2661(d).

(e) On and after August 9, 1992, the lining material and lining process shall be listed or certified by an independent testing organization based on voluntary consensus standards.

(f) Before being returned to service, any tank which has been lined shall be internally inspected by a coatings expert or special inspector for conformance with the standards under which the tank was lined. This inspection shall be conducted in accordance with section 2663(h) except for subdivisions (h)(3) and (h)(5).

(g) Following the lining process and before it is returned to service, the tank shall be given a tank integrity test.

(h) If a steel tank is lined for the purpose of satisfying the requirements of section 2662(c), or if any tank is repaired using the interior lining method, it shall be inspected by a coatings expert or special

inspector within ten years of lining and every five years thereafter. Written certification of the inspection shall be provided by the tank owner and the party performing the inspection to the local agency within 30 calendar days of completion of the inspection. The inspection shall include all of the following:

(1) Determining that the tank has been cleaned so that no residue remains on the tank walls.

(2) Determining that the tank has been vacuum tested at a vacuum of 5.3 inches of Hg for no less than one minute. This vacuum test is not required if the tank is constructed of fiberglass and is submerged in groundwater by more than 50% of its depth.

(3) If the tank is constructed of fiberglass, taking interior diameter measurements to verify whether the cross-section has compressed by more than one percent of the original diameter.

(4) Visually checking the tank interior and lining for discontinuity, compression, tension cracking, and corrosion.

(5) For steel tanks, testing the entire tank interior using a thickness gauge on a one-foot grid pattern with metal wall thickness recorded on a form that identifies the location of each reading in order to verify that average metal thickness is greater than 75 percent of the original wall thickness.

(6) Testing for thickness and hardness of the lining in accordance with nationally recognized industry codes to verify that the lining meets the standards under which the lining was applied.

(7) For steel tanks, testing the lining using an electrical resistance holiday detector in accordance with nationally-recognized industry codes. The owner or operator shall have all holidays repaired and checked in accordance with nationally recognized industry codes.

(8) Certification from the special inspector or coatings expert that:

(A) the tank is suitable for continued use for a minimum of five (5) years.

(B) the tank is suitable for continued use for a minimum of five years only if it is relined or other improvements are made.

(C) the tank is no longer suitable for continued use and shall be closed in accordance with Article 7.

(9) A lined tank shall be closed in accordance with Article 7 at the end of its operational life.

Authority Health and Safety Code 25299.3, 25299.7
Reference Health and Safety Code 25292, 25292.1, 25296, 40 CFR 280.21 and 280.33

2664. Requirements for Using Bladder Systems

(a) Bladder systems may be installed in tanks which store motor vehicle fuel only, may be used to satisfy part of the upgrade requirements in section 2662, and shall be installed and operated in accordance with this section.

(b) Materials used in the bladder system and in the installation process shall be approved by an independent testing organization based on voluntary consensus standards, an industry code, or engineering standard for the applicable use of the bladder system. Evidence of this approval shall be provided to the local agency before the local agency authorizes the installation. The following conditions shall be met:

(1) The bladder system shall be installed under the direct supervision of a representative of the bladder system fabricator or a contractor certified by the fabricator.

(2) The entire interstitial space between the tank and the bladder shall be monitored in accordance with subsection 2632(c)(2).

(3) Materials used in the bladder system shall be product-tight and compatible with the substance stored.

(4) The bladder system shall include an internal striker plate (wear plate) which meets the requirements of section 2631(c).

(5) If the underground storage tank is constructed of steel, cathodic protection shall be installed in accordance with section 2635(a)(2)(A) and, before installing a bladder system, a special inspector shall certify that the underground storage tank has sufficient structural integrity to seal the interstitial space between the bladder and the underground storage tank and provide secondary containment. The special inspector shall make this certification by entering and inspecting the entire interior surface of the tank and shall base this certification upon the set of procedures and criteria specified in section 2663(b)(2), except that abrasive blasting is only required to the extent deemed necessary by manufacturers' specifications, or the special inspector, to assess the structural integrity of the underground storage tank.

(6) The bladder installer shall certify in writing to the local agency that sufficient measures have been taken to minimize or eliminate the potential for the underground storage tank or interstitial monitoring system components to puncture the bladder.

(7) Before installing a bladder, thin areas or other flaws in the underground storage tank walls that need additional reinforcing shall be reinforced in accordance with section 2661(d).

(8) If required by manufacturers' specifications or the special inspector, the underground storage tank shall be lined in accordance with section 2663 prior to installation of the bladder only to

the thickness deemed necessary by the more stringent requirement of the manufacturers' specifications of the special inspector.

Authority: Health and Safety Code 25299.3, 25299.7
Reference: Health and Safety Code 25292, 25292.1, 40 CFR 280.21, 280.32(d), 281.33

2665. Spill and Overfill Prevention Equipment Upgrade Requirements

By December 22, 1998, all underground storage tank systems shall be retrofitted with an overfill prevention system and a spill container which meet the requirements of section 2635(b). The local agency may waive the requirement for overfill prevention equipment if the conditions specified in section 2635(b)(3) are met.

Authority: Health and Safety 25299.3, 25299.7
Reference: Health and Safety 25292, 25292.1, 40 CFR 280.21

2666. Requirements for Upgrading Underground Piping

(a) By December 22, 1998, all underground piping containing hazardous substances other than motor vehicle fuel shall be retrofitted with secondary containment meeting the requirements of section 2636.

(b) By December 22, 1998, all underground piping containing motor vehicle fuel and connected to an existing tank shall be retrofitted with secondary containment unless the owner or operator demonstrates to the local agency that the piping is constructed of fiberglass reinforced plastic, cathodically protected steel, or other materials compatible with stored products and resistant to corrosion. The secondary containment system shall meet the construction, installation, and monitoring requirements of section 2636.

(c) By December 22, 1998, all automatic line leak detectors for underground pressurized piping which is not secondarily contained shall be capable of shutting off the pump when a release occurs. In addition, the pumping system shall shut down automatically if the automatic line leak detector fails or is disconnected. In lieu of the above, for underground storage tank emergency generator systems, the leak detector must be connected to an audible and visible alarm to indicate a release or malfunction of the system.

(d) All underground piping and secondary containment shall be tested for tightness after installation in accordance with section 2636(e).

Authority: Health and Safety 25299.3, 25299.7
Reference: Health and Safety 25292, 25292.1; 40 CFR 280.21

Article 7 - CLOSURE REQUIREMENTS

2670. General Applicability of Article

(a) This article defines temporary and permanent underground storage tank closure and describes the nature of activities which shall be accomplished in order to protect water quality in each of these situations.

(b) The temporary closure requirements of section 2671 shall apply to those underground storage tanks in which the storage of hazardous substances has ceased but the underground storage tank will again be used for the storage of hazardous substances within the next 12 consecutive months. At the end of 12 consecutive months during which the tank is temporarily closed, the local agency may approve an extension of the temporary closure period for a maximum additional period of up to 12 months. Owners or operators shall complete a site assessment in accordance with section 2672(d) before an extension may be granted by the local agency. The temporary closure requirements of section 2671 do not apply to underground storage tanks that are empty as a result of the withdrawal of all stored substances during normal operating practice prior to the planned input of additional hazardous substances.

(c) The permanent closure requirements of section 2672 shall apply to those underground storage tanks in which the storage of hazardous substances has ceased and the tanks will not be used, or are not intended for use, for the storage of hazardous substances within the next 12 consecutive months.

(d) The requirements of this article do not apply to those underground storage tanks in which hazardous substances continue to be stored but no input or withdrawals are being made. In these cases, the applicable containment and monitoring requirements of Articles 3 or 4 shall continue to apply.

(e) During the period of time between cessation of hazardous substance storage and actual completion of underground storage tank closure pursuant to section 2671 or 2672, the applicable containment and monitoring requirements of Articles 3 or 4 shall continue to apply. The time period between cessation of hazardous substance storage and application for temporary or permanent tank closure shall not exceed 90 calendar days. Closure shall be completed within a reasonable time period as determined by the local agency.

(f) At least 30 calendar days prior to closure, or within a shorter period of time approved by the local agency, the owner or operator who intends to close a tank shall submit to the local agency for approval, a proposal for compliance with section 2671 or 2672, as appropriate.

(g) Underground storage tanks that have had an unauthorized release do not qualify for temporary closure pursuant to section 2671 until the owner or operator demonstrates to the satisfaction of the local agency that appropriate authorized repairs have been made which make the underground storage tank capable of storing hazardous substances in accordance with the permit issued by the local agency.

(h) Underground storage tanks that have emitted an unauthorized release and that cannot be repaired by authorized methods shall be permanently closed pursuant to requirements of section 2672.

(i) Decommissioned tanks and underground storage tanks, permanently closed on-site by cleaning and filling with an inert solid prior to January 1, 1984, need not comply with the closure requirements in this section unless required by the local agency. However, hazardous substances released from such tanks before or after the closure, shall be reported by the owner pursuant to Article 5 and shall be cleaned up pursuant to section 13304 of the Water Code, Article 11 of these regulations, and any other applicable law or regulations.

(j) A regulated tank shall be subject to the requirements of subsections (d) and (e) of section 2672 before the local agency may grant exempt status to the tank.

Authority: Health and Safety 25299.3, 25299.7
Reference: Health and Safety 25298; 40 CFR 280.70, 280.71; 280.73, and 280.74

2671. Temporary Closure Requirements

(a) An owner or operator shall comply with all of the following requirements to complete and maintain temporary closure of an underground storage tank:

(1) All residual liquid, solids, or sludges shall be removed and handled in accordance with the applicable provisions of in accordance with Chapters 6.5 and 6.7 of Division 20 of the Health and Safety Code.

(2) If the underground storage tank contained a hazardous substance that could produce flammable vapors at standard temperature and pressure, it shall be inerted, as often as necessary, to levels that will preclude an explosion or to lower levels as required by the local agency.

(3) The underground storage tank may be filled with a noncorrosive liquid that is not a hazardous substance. This liquid shall be tested and the test results submitted to the local agency prior to removal from the underground storage tank at the end of the temporary closure period.

(4) Except for required venting, all fill and access locations and piping shall be sealed using locking caps or concrete plugs.

(5) Power service shall be disconnected from all pumps associated with the use of the underground storage tank unless the power services some other equipment which is not being closed, such as the impressed-current cathodic protection system.

(b) The monitoring required pursuant to the permit may be modified by the local agency during the temporary closure period. In making a decision to modify monitoring requirements, the local agency shall consider the need to maintain monitoring in order to detect unauthorized releases that may have occurred during the time the underground storage tank was used but that have not yet been detected. In all cases, corrosion protection shall continue to be operated.

(c) The underground storage tank shall be inspected by the owner or operator at least once every three months to verify that the temporary closure measures are still in place. The inspection shall include but is not limited to the following:

(1) Visual inspection of all locked caps and concrete plugs.

(2) If locking caps are used, at least one shall be removed to determine if any liquids or other substances have been added to the underground storage tank or if there has been a change in the quantity or type of liquid added pursuant to subsection (a)(3) of this section.

(d) At the end of a temporary closure period over 12 months, including any extension granted by the local agency, the owner may reuse the underground storage tank only if the tank meets the requirements of Article 3 for new underground storage tanks or is upgraded to meet the requirements of Article 6.

(e) All new and existing underground storage tank systems which have been temporarily closed must continue to comply with repair and recordkeeping requirements, release reporting and investigation requirements, and release response and corrective action requirements specified in this chapter and Chapter 6.7 of the Health and Safety Code.

Authority: Health and Safety Code 25299.3, 25299.7
Reference: Health and Safety Code 25298; 40 CFR 280.70, 281.36(a)(1)

2672. Permanent Closure Requirements

(a) Owners or operators of underground storage tanks subject to permanent closure shall comply with either subsection (b) for underground storage tank removal or subsection (c) for closure in place. It is not essential that all portions of an underground storage tank be permanently closed in the same manner; however, all closure actions shall be conducted in accordance with this section. Subsections (d) and (e) apply to all underground storage tanks subject to permanent closure.

(b) Owners or operators of underground storage tanks subject to permanent closure shall comply with applicable provisions of Chapter 6.5 of Division 20 of the Health and Safety Code and with the following requirements:

(1) All residual liquid, solids, or sludges shall be removed and handled as hazardous wastes or recyclable materials in accordance with Chapter 6.5 of the Health and Safety Code.

(2) If the underground storage tank contained a hazardous substance that could produce flammable vapors at standard temperature and pressure, it shall be inerted to levels that shall preclude explosion or to lower levels as required by the local agency.

(3) When an underground storage tank or any part thereof is disposed of, the owner or operator shall document to the local agency that proper disposal has been completed. This documentation shall be submitted within the time frame specified by the local agency.

(4) An owner or operator of an underground storage tank or any part thereof that is destined for a specific reuse shall advise the local agency, within the time frame specified by that agency, of:

(A) The names of the new owner and new operator of the underground storage tank;
(B) The location of intended use; and
(C) The nature of intended use.

(c) Owners or operators of underground storage tanks subject to permanent closure where the tanks are approved to be closed in place shall comply with the applicable provisions of Chapters 6.5 and 6.7 of Division 20 of the Health and Safety Code and with the following requirements:

(1) All residual liquid, solids, or sludges shall be removed and handled as a hazardous waste or recyclable materials in accordance with Chapters 6.5 and 6.7 of the Health and Safety Code.

(2) If the underground storage tank contained a hazardous substance that could produce flammable vapors at standard temperature and pressure, it shall be inerted to levels that shall preclude explosion or to lower levels as may be required by the local agency.

(3) All piping associated with the underground storage tank shall be removed and disposed of unless removal might damage structures or other pipes that are being used and that are contained in a common trench, in which case the piping to be closed shall be emptied of all contents and capped.

(4) The underground storage tank, except for piping that is closed in accordance with subdivision (3), shall be completely filled with an inert solid, unless the owner intends to use the underground storage tank for the storage of a nonhazardous substance which is compatible with the previous use and construction of the underground storage tank.

(d) The owner or operator of an underground storage tank being closed pursuant to this section shall demonstrate to the satisfaction of the local agency that no unauthorized release has occurred. This demonstration shall be based on soil sample analysis and/or water analysis if water is present in the excavation. This analysis shall be performed during or immediately after closure activities. If the demonstration is based on soil sample analysis, soil samples shall be taken and analyzed as follows:

(1) If the underground storage tank or any portion thereof is removed, soil samples shall be taken immediately beneath the removed portions of the tank, a minimum of two feet into native material at each end of the tank in accordance with section 2649. A separate sample shall be taken for each 20 lineal-feet of trench for piping.

(2) If the underground storage tank or any portion thereof is not removed, at least one boring shall be taken as close as possible to the midpoint beneath the tank using a slant boring (mechanical or manual), or other appropriate method such as vertical borings drilled on each long dimensional side of the tank as approved by the local agency.

(3) Soils shall be analyzed in accordance with section 2649 for all constituents of the previously stored hazardous substances and their breakdown or transformation products. The local agency may waive the requirement for analysis of all constituents, breakdown or

transformation products when key constituents that pose a significant threat to water quality or the environment can be identified for analysis.

(e) The detection of any reportable unauthorized release shall require compliance with the applicable requirements of Articles 5 and 11.

Authority: Health and Safety Code 25299.3, 25299.7, and 25299.77
Reference: Health and Safety Code 25298, 25299.37; 40 CFR 280.60 through 280.67, 280.71, and 281.36

Article 8 - SITE-SPECIFIC VARIANCE PROCEDURES

2680 General Applicability of Article

(a) This article sets forth procedures for site-specific variances from the requirements for the construction and monitoring of new and existing underground storage tanks as described in Chapter 6.7 of Division 20 of the Health and Safety Code and Articles 3 and 4 of this chapter. A site-specific variance, if approved, would apply only to the specific site(s) approved for a variance. These procedures are in addition to those established by the appropriate sections of Chapter 6.7 of Division 20 of the Health and Safety Code.

(b) Section 2681 specifies the procedures that shall be followed by the applicant, local agency, and the Regional Water Quality Board for site-specific variance requests.

Authority: Health and Safety Code 25299.3
Reference: Health and Safety Code 25299.4

2681. Site-Specific Variances

(a) A site-specific variance allows an alternative method of construction or monitoring which would be applicable at one or more sites within a local agency's jurisdiction. Application for a site-specific variance shall be made to the appropriate Regional Water Quality Board.

(b) Prior to applying to the Regional Water Quality Board for a variance, the applicant shall submit a complete construction and monitoring plan to the local agency. The proposed alternative construction or monitoring methods which may require a variance shall be clearly identified. If the local agency decides that a variance would be necessary to approve the specific methods or if the local agency does not act within 60 calendar days of receipt of a complete construction and monitoring plan from the applicant, the applicant may submit the variance application to the Regional Water Quality Board.

(c) An application for a site-specific variance shall include, but is not limited to:

(1) A description of the provision from which the variance is requested.
(2) A detailed description of the complete construction and monitoring methods to be used. The proposed alternative program, method, device, or process shall be clearly identified.
(3) Any special circumstances on which the applicant relies to justify the findings necessary for the variance, as prescribed by the appropriate section of Chapter 6.7 of Division 20 of the Health and Safety Code.
(4) Clear and convincing evidence that the proposed alternative will adequately protect the soil and the beneficial uses of waters of the state from an unauthorized release.
(5) Any environmental information or documentation requested by the Regional Water Quality Board pursuant to the California Environmental Quality Act (Division 13, commencing with section 21000 of the Public Resources Code).

(6) A list including names and addresses of all persons known to the applicant who may be affected by or may be interested in the variance request.

(7) A fee not to exceed $2,750 for variance requests at one site. A fee not to exceed $5,500 for variance requests at more than one site within one local agency's jurisdiction.

(d) The Regional Water Quality Board shall review all applications submitted and shall notify the applicant in writing within 30 calendar days of receipt of the application whether the application is complete.

(e) The Regional Water Quality Board shall hold a hearing on the proposed variance as specified in section 25299.4(c) of the Health and Safety Code.

(f) Any site-specific variance shall prescribe appropriate additional conditions and shall describe the specific alternative system for which the variance is being granted. The Regional Water Quality Board shall notify the applicant, the local agency, and the State Water Board of its decision.

(g) If the variance is approved, the local agency shall issue a permit to the applicant which includes the conditions prescribed by the Regional Water Quality Board. A local agency shall not modify the permit unless it determines that the modification is consistent with the variance that has been granted.

(h) The Regional Water Quality Board shall modify or revoke a variance upon a finding that the proposed alternative does not adequately protect the soil and the beneficial uses of the waters of the state from an unauthorized release. The Regional Water Quality Board shall not modify nor revoke the variance until it has followed procedures comparable to those prescribed in this section and Chapters 1.5 and 6 of Division 3 of Title 23 of the California Code of Regulations. The Regional Water Quality Board shall notify the local agency and the State Water Board of the modification or revocation. The local agency shall modify or revoke the permit for the site.

Authority: Health and Safety Code 25299.3, 25299.7
Reference: Health and Safety Code 25299.4

Article 9 - Local Agency Requests for Additional Design and Construction Procedures

2690. General Applicability of Article

This article sets forth procedures by which local agencies may request State Water Board authorization for design and construction standards other than those set by Article 3. These procedures are in addition to those established by Chapter 6.7 of Division 20 of the Health and Safety Code.

Authority: Health and Safety 25299.3, 25299.7
Reference: Health and Safety 25299.2, 25299.4

2691. Procedures for Requesting Additional Standards

(a) A local agency application for additional design and construction standards shall include:

(1) A description of the proposed design and construction standards which are in addition to those described in Article 3 of this chapter.

(2) Clear and convincing evidence that the additional standards are necessary to protect the soil and beneficial uses of the waters of the state from unauthorized releases.

(3) Any documents required by the California Environmental Quality Act (Division 13, commencing with section 21000 of the Public Resources Code).

(4) An initial fee of $5,500.

(b) The applicant shall be required to pay a fee based on the actual costs of considering the application. The State Water Board will bill the applicant for additional costs or refund any unused portion of the initial fee.

(c) The State Water Board shall conduct an investigation and public hearing on the proposed standards and the need to protect the soil and beneficial uses of the water before determining whether to authorize the local agency to implement additional standards.

(d) The State Water Board may modify or revoke a previously issued authorization allowing the implementation of additional standards if it finds that, based on new evidence, the additional standards are not necessary to adequately protect the soil and beneficial uses of the waters of the state from unauthorized releases. The State Water Board shall neither modify nor revoke the authorization until it has followed procedures comparable to those in Chapters 1.5 and 6 of Division 3 of Title 23 of the California Code of Regulations.

Authority: Health and Safety Code 25299.3, 25299.7
Reference: Health and Safety Code 25299.4

Article 10 - Permit Application, Quarterly Report and Trade Secret Request Requirements

2710. General Applicability of Article

(a) This article describes specific administrative actions that shall be undertaken by all underground storage tank owners, local agencies, and the State Water Board relative to issuing permits for underground storage tanks. These steps are in addition to those established by Chapter 6.7 of Division 20 of the Health and Safety Code.

(b) Section 2711 lists the information that shall be submitted by the underground storage tank owner or representative to the local agency as part of the permit application.

(c) Section 2712 describes the conditions associated with a permit for the operation of an underground storage tank and the conditions which local agencies shall meet before issuing a permit.

(d) Section 2713 describes the local agency reporting requirements for unauthorized releases.

(e) Section 2714 specifies conditions that shall be met by an underground storage tank owner or operator when requesting trade secret protection for any information submitted to the local agency, State Water Board, or Regional Water Quality Board. The section also specifies how those agencies shall consider the request and how they shall maintain the information if the trade secret request is accepted.

Authority: Health and Safety Code 25299.3, 25299.7
Reference: Health and Safety Code 25284, 25285, 25286, 25288, 25289, 25290, 25293

2711. Information and Application for Permit to Operate an Underground Storage Tank

(a) The permit application shall include, but not be limited to, the following information to the extent such information is known to the permit applicant:

(1) The name and address of the person who owns the underground storage tank or tanks.

(2) The name, location, mailing address, and telephone number where the underground storage tank is located, and type of business involved, if any.

(3) The name, address, and telephone numbers of the underground storage tank operator and 24-hour emergency contact person.

(4) The name and telephone number of the person making the application.

(5) A description of the underground storage tank including, but not limited to, the underground storage tank manufacturer, date of installation, and tank capacity.

(6) Construction details of the underground storage tank and any auxiliary equipment including, but not limited to, type of primary containment, type of secondary containment (if applicable), spill and overfill prevention equipment, interior lining, and corrosion protection (if applicable).

(7) A description of the piping including, but not limited to, the type of piping system, construction, material, corrosion protection and leak detection.

(8) A scaled diagram or design or as-built drawing which indicates the location of the underground storage tank (underground storage tank, piping, auxiliary equipment) with respect to buildings or other landmarks.

(9) The description of the proposed monitoring program including, but not limited to, the following where applicable:

(A) Visual inspection procedures;
(B) Underground storage tank release detection methods or inspection procedures;
(C) Inventory reconciliation including gauging and reconciliation methods;
(D) Piping leak detection methods;
(E) Vadose zone sampling locations and methods and analysis procedures;
(F) Ground water well(s) locations, construction and development methods, sampling, and analysis procedures; and

(10) A list of all the substances which have been, are currently, or are proposed to be stored in the underground storage tank or tanks.

(11) Documentation to show compliance with state and federal financial responsibility requirements applicable to underground storage tanks containing petroleum.

(12) If the owner or operator of the underground storage tank is a public agency, the application shall include the name of the supervisor of the division, section, or office which operates the underground storage tank.

(13) The permit application shall be signed by:

(A) The owner of the underground storage tank or a duly authorized representative of the owner; or,

(B) If the tank is owned by a corporation, partnership, or public agency, the application shall be signed by:

1) A principal executive officer at the level of vice-president or by an authorized representative. The representative shall be responsible for the overall operation of the facility where the underground storage tank(s) are located; or,
2) A general partner proprietor; or,
3) A principal executive officer, ranking elected official, or authorized representative of a public agency.

(b) The owner or operator shall inform the local agency of any changes to the information provided in accordance with subsection (a) within 30 calendar days unless required to obtain approval before making the change.

(c) The permit applications, "Underground Storage Tank Permit Application - Form A," dated 5-91 and "Underground Storage Tank Permit Application - Form B," dated 12-91 shall be accompanied by the local government and state surcharge fees.

(d) The local agency shall provide the California Association of Environmental Health Administrators with copies of permit applications in accordance with Chapter 6.7 of the Health and Safety Code.

Authority: Health and Safety Code 25299.3, 25299.7
Reference: Health and Safety Code 25286, 25287

2712. Permit Conditions

(a) As a condition of any permit to operate an underground storage tank, the owner or operator shall comply with the reporting and recording requirements for unauthorized releases specified in Article 5.

(b) Written monitoring and maintenance records shall be maintained on-site or off-site at a readily available location, if approved by the local agency, for a period of at least 3 years, 6 1/2 years for cathodic protection maintenance records, and 5 years for written performance claims pertaining to release detection systems, and calibration and maintenance records for such systems. Records of repairs, lining, and upgrades shall be maintained on site or at another approved location for the remaining life of the underground storage tank. These records shall be made available, upon request within 36 hours, to the local agency or the State Water Board. Monitoring records shall include:

(1) The date, and time of all monitoring or sampling;

(2) Monitoring equipment calibration and maintenance records;

(3) The results of any visual observations;

(4) The results of all sample analysis performed in the laboratory or in the field, including laboratory data sheets and analysis used;

(5) The logs of all readings of gauges or other monitoring equipment, ground water elevations, or other test results; and

(6) The results of inventory readings and reconciliations.

(c) A permit to operate issued by the local agency shall be effective for five years. In addition to other information specified by the local agency, the permit shall include the permit expiration date, monitoring requirements, and the state underground storage tank identification number(s) for which the permit was issued. Before a local agency issues a new permit or renewal to operate an

Reference: Health and Safety Code 25284, 25285, 25286, 25288, 25289, 25293, 25294; 40 CFR 280.31(d), 280.33(f), 280.45, 281.32(e)

2712.1. Content of Upgrade Compliance Certificates

(a) An upgrade compliance certificate includes one decal as described in subdivision (b), one file copy of the decal as described in subdivision (c), and one tag for each tank storing petroleum as described in subdivision (d) of this section.

(b) A decal shall have an adhesive-backing and shall be 5 inches wide by 8 inches long containing:

(1) a graphic comprised of a blue background, solid white symbol in the shape of the State of California, and wavy blue lines depicting water;

(2) the words, "Underground Storage Tank Facility Upgrade Compliance Certificate;"

(3) the statement, "This upgrade compliance certificate is issued pursuant to Chapter 6.7, Section 25284 (e), California Health and Safety Code;"

(4) a certificate number affixed mechanically at the time of production;

(c) A file copy shall be paper, 8 1/2 inches wide by 11 inches long, and shall contain:

(1) in the upper right corner, a certificate number affixed at the time of production;

(2) an unnumbered, black and white facsimile of an upgrade compliance certificate;

(3) instructions to the local agency to enter the name of the owner, and facility; street address, city, and zip code of facility; facility identification number; name of issuing agency; and date of issue.

(d) A tag shall be 3 15/16 inches long by 2 inches wide made of plastic. It shall bear a facsimile of an unnumbered decal on both sides and contain the words, "CALIFORNIA UST UPGRADE."

Authority: Health and Safety Code 25299.3
Reference: Health and Safety Code 25284, 25292.3

2712.2. Issuing Upgrade Compliance Certificates

(a) The Board shall provide decals, file copies, tags, and nylon straps to local agencies for issuance to underground storage tank facilities.

(b) Local agencies shall issue one decal to the owner or operator of each underground storage tank facility containing one or more petroleum underground storage tanks meeting the requirements of Section 25291 or subdivisions (d) and (e) of Section 25292 of the Health and Safety Code.

(c) Local agencies shall issue one matching file copy of the decal to the owner or operator.

(d) Local agencies shall issue one tag for each petroleum underground storage tank meeting the requirements of Section 25291 or subdivisions (d) and (e) of Section 25292 of the Health and Safety Code, to the owner or operator.

(e) Local agencies shall issue one locking nylon strap, 18 inches long, for each tag issued. The strap shall be imprinted with the words,"CALIFORNIA UST UPGRADE."

Authority: Health and Safety Code 25299.3
Reference: Health and Safety Code 25284

2712.3. Displaying Upgrade Compliance Certificates

(a) A decal shall be displayed at the facility in a location visible to the person delivering petroleum to an underground storage tank.

(b) A tag shall be displayed on the fill pipe of each underground storage tank. It shall be attached using a nylon strap described in Section 2712.2 (e).

Authority: Health and Safety Code 25299.3
Reference: Health and Safety Code 25284, 25292.3

2712.4. Replacing Upgrade Compliance Certificates

a) A facility owner or operator may request replacement of a lost, stolen, or destroyed decal, file copy, tag, or strap from the local agency. The request must be in writing, signed under penalty of perjury by the requester, and include the reason for the request and any additional information as required by the local agency.

b) A local agency may replace a decal, file copy, tag, or nylon strap to the facility owner or operator upon receipt of a written request. No replacements shall be issued if the local agency determines that the request is not due to loss, theft, or destruction of the originals.

Authority: Health and Safety Code 25299.3
Reference: Health and Safety Code 25284

2712.5. Lists of Underground Storage Tank Facilities

(a) Local agencies shall maintain lists of underground storage tank facilities that have been issued an upgrade compliance certificate. The lists shall include, but not be limited to the name and physical address of the facility, the upgrade compliance certificate number, and the name of the owner.

(b) Local agencies shall provide copies of lists to any person upon request.

Authority: Health and Safety Code 25299.3
Reference: Health and Safety Code 25284

2712.6. Prohibitions

(a) No person shall alter an upgrade compliance certificate decal.

(b) Unless authorized by the local agency, no person shall alter an upgrade compliance certificate file copy. The local agency may amend the file copy to reflect changes in the operating permit.

(c) No person shall deliver petroleum to an underground storage tank without verification that the underground storage tank meets the requirements of Section 25291 or subdivisions (d) and (e) of Section 25292 of the Health and Safety Code. Verification may include one of the following:

1) viewing an upgrade compliance certificate decal displayed at the facility and viewing a fill pipe tag attached to the tank receiving petroleum;

2) obtaining written verification or list from a local agency confirming that the facility has received an upgrade compliance certificate decal and viewing a fill pipe tag attached to the tank receiving petroleum;

3) obtaining an upgrade compliance certificate file copy and viewing a fill pipe tag attached to the tank receiving petroleum.

Authority: Health and Safety Code 25299.3
Reference: Health and Safety Code 25284

2712.7. Sunset provisions

The State Water Resources Control Board, in consultation with the Secretary for Environmental Protection, shall conduct a sunset review within two years of the effective date of the regulations in this article to determine whether the regulations should be retained, revised, or repealed.

Authority: Health and Safety Code 25299.3
Reference: Health and Safety Code 25284 and 25292.3

2713. Transmittal of Unauthorized Release Reports

(a) Each local agency shall transmit unauthorized release information submitted by the owner or operator, to the appropriate Regional Water Quality Board.

(b) Local agencies shall transmit unauthorized release update report information, submitted by the owner or operator pursuant to section 2712, to the appropriate Regional Water Quality Board for sites where they are overseeing cleanup. Local agencies shall transmit this unauthorized release update information on a quarterly schedule established by the State Water Board.

(c) On a quarterly basis, each local agency shall send to the State Water Board, information pertaining to local underground storage tank program implementation and enforcement activities. This information shall include, but not be limited to the number of:

(1) tanks subject to regulation

(2) regulated facilities

(3) facility inspections conducted

(4) inspected facilities in compliance with leak detection requirements

(5) facilities receiving formal and informal enforcement action

Authority: Health and Safety Code 25299.3, 25299.7
Reference: Health and Safety Code 25286.

2714. Trade Secret Provisions

(a) Any person making an application for a permit to operate an underground storage tank, for renewal of the permit, or application for a site-specific variance, shall identify all information which the person believes is a trade secret and submit a legal justification for the request for confidentiality. The information which shall be submitted includes, but is not limited to:

(1) Identification of those portions of the information which are believed to be trade secrets;
(2) The length of time this information should be treated as confidential;
(3) Measures that have been taken to protect this information as confidential; and,
(4) A discussion of why this information is subject to trade secret protection, including references to statutory and case law as appropriate.

(b) If the local agency, the State Water Board, or the Regional Water Quality Board (collectively referred to as "agency" for the purposes of this section) determines that a request for trade secret protection is clearly valid, the material shall be given trade secret protection as discussed in subsection (f) of this section.

(c) If the agency determines that the request for trade secret protection is clearly frivolous, it shall send a letter to the applicant stating that the information will not be treated as a trade secret unless the agency is instructed otherwise by a court within 10 working days of the date of the letter.

(d) If the validity of the request for trade secret protection is unclear, the agency will inform the person claiming trade secrecy that the burden is on him or her to justify the claim. The applicant shall be given a fixed period of time to submit the additional information as the agency may request. The agency shall then evaluate the request on the basis of the definition of "trade secrets" contained in the appropriate section of Chapter 6.7 of Division 20 of the Health and Safety Code and shall issue its decision. If the agency determines that the information is not a trade secret, it shall act in accordance with subsection (c) of this section.

(e) All information received for which trade secrecy status is requested shall be treated as confidential as discussed in subsection (f) of this section until a final determination is made.

(f) Information which has been found to be confidential or which is being reviewed to determine if confidentiality should exist, shall be immediately filed in a separate "confidential" file. If a document or portion of a document is filed in a confidential file, a notation shall be filed with the file document indicating that further information is in the confidential file.

(g) Information contained in confidential files shall be disclosed only to authorized representatives of the applicant or other governmental agencies in connection with the agency's responsibilities pursuant to Chapter 6.7 of the Health and Safety Code or Division 7 of the Water Code.

(h) Nothing contained herein shall limit an applicant's right to prevent disclosure of information pursuant to other provisions of law.

Authority: Health and Safety Code 25299.3, 25299.7
Reference: Health and Safety Code 25290

Article 11 - CORRECTIVE ACTION REQUIREMENTS

2720. Additional Definitions

Unless the context clearly indicates otherwise, the following definition shall apply to terms used in this Article.

"Corrective action" means any activity necessary to investigate and analyze the effects of an unauthorized release; propose a cost-effective plan to adequately protect human health, safety, and the environment and to restore or protect current and potential beneficial uses of water; and implement and evaluate the effectiveness of the activity(ies). Corrective action does not include any of the following activities:

(1) Detection, confirmation, or reporting of the unauthorized release; or

(2) Repair, upgrade, replacement or removal of the underground storage tank.

"Cost effective" means actions that achieve similar or greater water quality benefits at an equal or lesser cost than other corrective actions.

"Federal act" means Subchapter IX (commencing with Section 6991) of Chapter 82 of Title 42 of the United States Code, as added by the Hazardous and Solid Waste Amendments of 1984 (P.L. 98-616), or as it may subsequently be amended or supplemented, and the regulations adopted pursuant thereto.

"Regulatory agency" means the Board, regional board, or any local, state, or federal agency which has responsibility for regulating underground storage tanks or which has responsibility for overseeing cleanup of unauthorized releases from underground storage tanks.

"Responsible party" means one or more of the following:

(1) Any person who owns or operates an underground storage tank used for the storage of any hazardous substance;

(2) In the case of any underground storage tank no longer in use, any person who owned or operated the underground storage tank immediately before the discontinuation of its use;

(3) Any owner of property where an unauthorized release of a hazardous substance from an underground storage tank has occurred; and

(4) Any person who had or has control over an underground storage tank at the time of or following an unauthorized release of a hazardous substance.

Authority: H&SC 25299.77
Reference: H&SC Section 25299.37 and 40 CFR Section 280.12

2721. General Applicability of Article

(a) Responsible parties for an underground storage tank shall comply with the requirements of this article whenever there is any reportable unauthorized release pursuant to Section 25295 of Chapter 6.7.

(b) Responsible parties shall take corrective action in compliance with the following requirements:

(1) all applicable waste discharge requirements or other order issued pursuant to Division 7, commencing with section 13000 of the Porter-Cologne Water Quality Control Act (Water Code);

(2) all applicable state policies for water quality control adopted pursuant to Article 3 (commencing with Section 13140) of Chapter 3 of Division 7 of the Water Code;

(3) all applicable water quality control plans adopted pursuant to Article 3 (commencing with Section 13240) of Chapter 4 of Division 7 of the Water Code;

(4) all applicable requirements of Chapter 6.7 (commencing with Section 25280) and the regulations (Chapter 16, Title 23 CCR) promulgated thereto; and

(5) all applicable requirements of Article 4 of Chapter 6.75 of the Health and Safety Code, the applicable provisions of this Chapter, and the Federal act.

(c) When acting as the regulatory agency, the Board or regional board shall take appropriate action pursuant to Division 7, commencing with Section 13000 of the California Water Code, to ensure that corrective action complies with the applicable policies for water quality control and applicable water quality control plans.

(d) The regulatory agency responsible for overseeing corrective action at an underground storage tank site shall comply with the applicable public participation provisions of Section 2728 of this Article.

(e) Upon completion of required corrective action, the regulatory agency shall inform the responsible party in writing that no further work is required at that time, based on available information. This written notice shall constitute agency concurrence on the completed corrective action.

Authority: H&SC Section 25299.77
Reference: H&SC Sections 25299.37, 25299.54, 25295, and 25298 and 40 CFR Section 280.67

2722. Scope of Corrective Action

(a) Corrective action includes one or more of the following phases:

(1) Preliminary Site Assessment Phase
(2) Soil and Water Investigation Phase;
(3) Corrective Action Plan Implementation Phase; and

(4) Verification Monitoring Phase.

(b) The responsible party shall take or contract for interim remedial actions, as necessary, to abate or correct the actual or potential effects of an unauthorized release. Interim remedial actions can occur concurrently with any phase of corrective action. Before taking interim remedial action, the responsible party shall notify the regulatory agency of the proposed action and shall comply with any requirements that the regulatory agency sets. Interim remedial actions include, but are not limited to, the following:

(1) removal of free product. Free product removal must comply with the applicable provisions of Section 2655 of Article 5;

(2) enhanced biodegradation to promote bacterial decomposition of contaminants;

(3) excavation and disposal of contaminated soil;

(4) excavation and treatment of contaminated soil;

(5) vacuum extraction of contaminants from soil or groundwater; and

(6) pumping and treatment of ground water to remove dissolved contaminants.

(c) The responsible party shall submit a workplan to the regulatory agency responsible for overseeing corrective action at the underground storage tank site, under the conditions listed below. If no regulatory agency has assumed responsibility for overseeing corrective action, the responsible party shall submit the workplan to the regional board with jurisdiction for the site where the underground storage tank is or was located:

(1) for proposed activities under the Preliminary Site Assessment Phase, if directed by the regulatory agency; and
(2) before initiating any work in accordance with Sections 2725 and 2727 of this Article.

(d) The workplan shall include the proposed actions and a proposed schedule for their completion. The responsible party shall modify the workplan, as necessary, at the direction of the regulatory agency.

(e) In the interest of minimizing environmental contamination and promoting prompt cleanup, the responsible party may begin implementation of the proposed actions after the workplan has been submitted and before it has received agency concurrence. Implementation of the workplan may begin sixty (60) calendar days after submittal, unless the responsible party is otherwise directed in writing by the regulatory agency. Before beginning these activities, the responsible party shall:

(1) notify the regulatory agency of the intent to initiate the proposed actions included in the workplan submitted; and

(2) comply with any conditions set by the regulatory agency, including mitigation of adverse consequences from cleanup activities.

Authority: H&SC Section 25299.77
Reference: H&SC Sections 25295, 25297, 25299.14, 25299.37, 25299.78, and 40 CFR Sections 280.53, and 280.60 through 280.66, and Section 13267 of the Water Code

2723. Preliminary Site Assessment Phase

(a) The Preliminary Site Assessment Phase includes, at a minimum, initial site investigation, initial abatement actions and initial site characterization in accordance with Sections 2652, 2653, and 2654 of Article 5 and any interim remedial actions taken in accordance with Section 2722(b) of this Article.

(b) Implementation of any of the interim remedial actions or any of the activities included in the Preliminary Site Assessment Phase shall constitute initiation of corrective action.

Authority: H&SC Section 25299.77
Reference: H&SC Sections 25295, 25298, 25299.37, and 40 CFR Sections 280.61 and 280.62

2724. Conditions That Require Soil and Water Investigation

The responsible party shall conduct investigations of the unauthorized release, the release site, and the surrounding area possibly affected by the unauthorized release, if any of the following conditions exists:

(1) There is evidence that surface water or ground eater has been or may be affected by the unauthorized release;

(2) Free product is found at the site where the unauthorized release occurred or in the surrounding area;

(3) There is evidence that contaminated soils are or may be in contact with surface water or ground water; or

(4) The regulatory agency requests an investigation, based on the actual or potential effects of contaminated soil or ground water on nearby surface water or ground water resources or based on the increased risk of fire or explosion.

Authority: H&SC Section 25299.77
Reference: H&SC Sections 25299.37 and 40 CFR Sections 280.61 through 280.64

2725. Soil and Water Investigation Phase

(a) The Soil and Water Investigation Phase includes the collection and analysis of data necessary to assess the nature and vertical and lateral extent of the release and to determine a cost-effective method of cleanup.

(b) Using information obtained during the investigation, the responsible party shall propose a Corrective Action Plan. The Corrective Action Plan shall consist of those activities determined to be cost-effective.

(c) The responsible party shall submit the Corrective Action Plan to the regulatory agency for review and concurrence. The regulatory agency shall concur with the Corrective Action Plan after determining that implementation of the plan will adequately protect human health, safety and the environment and will restore or protect current or potential beneficial uses of water. The responsible party shall modify the Corrective Action Plan in response to a final regulatory agency directive.

(d) The Corrective Action Plan shall include the following elements:

(1) an assessment of the impacts listed in subsection (e) of this Section;

(2) a feasibility study, in accordance with subsection (f) of this Section; and

(3) applicable cleanup levels, in accordance with subsection (g) of this Section.

(e) An assessment of the impacts shall include, but is not limited to, the following:

(f) The physical and chemical characteristics of the hazardous substance or its constituents, including their toxicity, persistence and potential for migration in water, soil, and air;

(g) The hydrogeologic characteristics of the site and the surrounding area where the unauthorized release has migrated or may migrate;

(h) The proximity and quality of nearby surface water or ground water, and the current and potential beneficial uses of these waters;

(i) The potential effects of residual contamination on nearby surface water and ground water; and

(f) The responsible party shall conduct a feasibility study to evaluate alternatives for remedying or mitigating the actual or potential adverse effects of the unauthorized release. Each alternative shall be evaluated for cost-effectiveness, and the responsible party shall propose to implement the most cost-effective corrective action.

(1) For all sites, each recommended alternative shall be designed to mitigate nuisance conditions and risk of fire or explosion;

(2) For sites where the unauthorized release affects or threatens waters with current or potential beneficial uses designated in water quality control plans, the feasibility study shall also identify and evaluate at least two alternatives for restoring or protecting these beneficial uses;

(3) For sites where the unauthorized release affects or threatens waters with no current or potential beneficial uses designated in water quality control plans, the feasibility study shall identify and evaluate at least one alternative to satisfy paragraph (1) of this subsection.

(g) Cleanup levels for ground or surface waters, affected or threatened by the unauthorized release, shall comply with the requirements of Section 2721(b) and shall meet the following requirements:

(1) For waters with current or potential beneficial uses for which numerical objectives have been designated in water quality control plans, the responsible party shall propose at least two alternatives to achieve these numerical objectives;

(2) For waters with current or potential beneficial uses for which no numerical objectives have been designated in water quality control plans, the responsible party shall recommend target cleanup levels for long-term corrective actions to the regulatory agency for concurrence. Target cleanup levels shall be based on the impact assessment, prepared in accordance with subsection (e) of this Section.

Authority: H&SC Section 25299.77
Reference: H&SC Sections 25299.37, 25299.57

2726. Corrective Action Implementation Phase

(a) The Corrective Action Plan Implementation Phase consists of carrying out the cost-effective alternative selected during the Soil and Water Investigation Phase for remediation or mitigation of the actual or potential adverse effects of the unauthorized release.

(b) Upon concurrence with the Corrective Action Plan or as directed by the regulatory agency, the responsible party shall implement the Corrective Action Plan. The responsible party shall monitor, evaluate, and report the results of implementation of the Corrective Action Plan on a schedule agreed to by the regulatory agency.

(c) In the interest of minimizing environmental contamination and promoting prompt cleanup, the responsible party may begin cleanup of soil and water after the Corrective Action Plan has been submitted and before it has received agency concurrence. Implementation of the Corrective Action Plan may begin sixty (60) calendar days after submittal, unless the responsible party is otherwise directed in writing by the regulatory agency. Before beginning this cleanup, the responsible party shall:

(1) notify the regulatory agency of its intention to begin cleanup; and

(2) comply with any conditions set by the regulatory agency, including mitigation of adverse consequences from cleanup activities.

(d) The responsible party shall modify or suspend cleanup activities when directed to do so by the regulatory agency.

Authority: H&SC Section 25299.77
Reference: H&SC Section 25299.7 and 40 CFR Sections 280.65 and 280.66

2727. Verification Monitoring Phase

(a) The Verification Monitoring Phase includes all activities required to verify implementation of the Corrective Action Plan and evaluate its effectiveness.

(b) The responsible party shall verify completion of the Corrective Action Plan through sampling or other monitoring of soil and/or water for such period of time and intervals agreed to by the regulatory agency. Using the monitoring results obtained pursuant to this Section and any other relevant data obtained pursuant to this Article, the responsible party shall evaluate the effectiveness of the site work.

(c) The responsible party shall submit monitoring data and an evaluation of the results of such monitoring in writing on a schedule and for a duration agreed to by the regulatory agency.

Authority: H&SC Section 25299.77
Reference: H&SC Section 25299.37 and 40 CFR Section 280.65

2728. Public Participation

(a) For each confirmed unauthorized release that requires a Corrective Action Plan, the regulatory agency shall inform the public of the proposed activities contained in the Corrective Action Plan. This notice shall include at least one of the following:

(1) publication in a regulatory agency meeting agenda;
(2) public notice posted in a regulatory agency office;
(3) public notice in a local newspaper;
(4) block advertisements;
(5) a public service announcement;
(6) letters to individual households; or
(7) personal contacts with the affected parties by regulatory agency staff.

(b) The regulatory agency shall ensure that information and decisions concerning the Corrective Action Plan are made available to the public for inspection upon request.

(c) Before concurring with a Corrective Action Plan, the regulatory agency may hold a public meeting when requested by any member of the public, if there is sufficient public interest on the proposed Corrective Action Plan.

(d) Upon completion of corrective action, the regulatory agency shall file public notice that complies with subsection (a) of this Section, if both of the following conditions apply:

(1) Implementation of the Corrective Action Plan does not achieve the cleanup levels established in the Corrective Action Plan; and

(2) The regulatory agency does not intend to require additional corrective action, except for monitoring in accordance with Section 2727.

(e) The regulatory agency shall comply with all applicable provisions of the California Environmental Quality Act, Public Resources Code, commencing with Section 21000.

Authority: H&SC Section 25299.77
Reference: H&SC Sections 25299.37 and 25299.78 and 40 CFR Sections 280.65 through 280.67

Appendix I - TABLE A

SUGGESTED TEST METHODS
APPLICABLE TO REGULATORY REQUIREMENTS

SECTION NUMBER		
2631(d)(6)	ASTM D-751 (1989)	"Coated Fabrics"
	ASTM D-1004 (1988)	"Initial Tear Resistance of Plastic Film and Sheeting"
2631(d)(6)	ASTM D-413 (1982)	"Rubber Property - Adhesion to Flexible Substrate"
	ASTM D-471 (1979)	"Rubber Property - Effect of Liquids"
	ASTM D-638 (1989)	"Tensile Properties of Plastics"
	ASTM E-96 (1980)	"Water Vapor Transmission of Materials"
2631(d)(6)	FTMS 101C Method 2065 (1980)	"Puncture Resistance and Elongation Test (1/8 inch Radius Probe)"
2631(d)(6)	FTMS 101C Method 2031 (1980)	"Puncture Resistance"

Appendix I - TABLE B

ORGANIZATIONS THAT ADOPT VOLUNTARY CONSENSUS STANDARDS

ANSI	American National Standards Institute 1430 Broadway New York, NY 10018 (212) 642-4900
API	American Petroleum Institute 1220 L Street, N.W. Washington, D.C. 20005 (202) 682-8000
ASME	The American Society of Mechanical Engineers 345 East 47th Street New York, NY 10017 (212) 705-7800
ASTM	American Society for Testing and Materials 1916 Race Street Philadelphia, PA 19103 (215) 299-5400
NACE	National Association of Corrosion Engineers 1440 South Creek Drive Katy, TX 77450 (713) 492-0535
NFPA	National Fire Protection Association Batterymarch Park Quincy, MA 02269 (800) 244-3555
NLPA	National Leak Prevention Association P.O.Box 1643 Boise, ID 83701 (208) 389-2074
NSF	National Sanitation Foundation 3475 Plymouth Road Post Office Box 1468 Ann Arbor, MI 48106 (313) 769-8010
UL	Underwriters Laboratories 333 Pfingsten Road Northbrook, IL 60062 (708) 272-8800
ULC	Underwriters Laboratories of Canada, Inc. 7 Crouse Road Scarborough, Ontario

Appendix I - TABLE C

REFERENCES

"Guidelines Establishing Test Procedures for the Analysis of Pollutants Under the Clean Water Act; Final Rule and Interim Final Rule and Proposed Rule," EPA Fed. Reg. Vol. 49, No. 209, October 26, 1984.

"Manual of Methods for the Chemical Analysis of Water and Wastes," EPA 600/4-79-020, March 1979.

"Procedures Manual for Ground Water Monitoring at Solid Waste Disposal Facilities," EPA 530/SW-611, August 1977.

"Soil Sampling Quality Assurance User's Guide," EPA 600/4-84-043, May 1984.

"Hazardous Waste Land Treatment," EPA SW-874, April 1983.

"Methods for Organic Chemical Analysis of Municipal and Industrial Wastewater," EPA 600/4-82-057, July 1982.

"Handbook for Sampling and Sample Preservation of Water and Wastewater," EPA 600/4-82-029, September 1982.

"Manual of Analytical Quality Control for Pesticides and Related Compounds in Human and Environmental Samples," EPA 600/2-81-059, April 1981.

"EPA Test Methods for Evaluating Solid Waste - Physical/Chemical Method,"SW-846

"Manual of Analytical Methods for the Analysis of Pesticides in Human and Environmental Samples," EPA 600/8-80-038.

"Standard Methods for the Examination of Water and Wastewater," American Public Health Assoc., American Water Works Assoc., Water Pollution Control Federation, 15th Edition, 1981.

"Selected Analytical Methods Approved and Cited by the United States Environmental Protection Agency," Supplement to the Fifteenth Edition of Standard Methods for the Examination of Water and Wastewater, 1981.

"Guidelines on Sampling and Statistical Methodologies for Ambient Pesticide Monitoring," Federal Working Group on Pest Management, October 1974.

"American Society for Testing and Materials (ASTM) Annual Book of Standards, Part 31, Water," 1982.

"Methods for Analysis of Organic Substances in Water," U.S. Geological Survey, Techniques of Water-Resources Investigations, Book 5, Chapter A3, 1972.

"Criteria for Identification of Hazardous and Extremely Hazardous Wastes," Sections 66693 through 66746, Article 11, Chapter 30, Division 4, Title 22, California Code of Regulations.

"American Society for Testing and Materials (ASTM) Annual Book of Standards, Parts 23-25, Petroleum Products and Lubricants, 1981."

Appendix II
SUCTION PIPING MONITORING

Suction piping (piping operating at less than atmospheric pressure) shall be monitored for the presence of air in the pipeline by observing the suction pumping system for the following indicators:

(1) The cost/quantity display wheels on the meter suction pump skip or jump during operation;

(2) The suction pump is operating, but no motor vehicle fuel is being pumped;

(3) The suction pump seems to overspeed when first turned on and then slows down as it begins to pump liquid; and

(4) A rattling sound in the suction pump and erratic flow indicating an air and liquid mixture.

If any of the above indicators are observed during testing of the suction piping system, the pipeline check valve should be inspected to determine if it is seated tightly. If there is any doubt following the inspection that the valve seats tightly, it should be repaired, replaced, or sealed off. Then the suction pumping test should be repeated and, if air is still entering the suction line, it is assumed that the pipe is leaking underground.

Written records of the daily monitoring shall be maintained at the facility site.

Appendix III

Examples of Quantitative Release Detection Methods for Existing Tanks

Detection Method	Performance Standards
Automatic Tank Gauging (Monthly)	Section 2643(b)(1)
Automatic Tank Gauging (Monthly) and Manual Inventory Reconciliation (Monthly)	Section 2643(b)(2)
Tank Integrity Test (Annually) and Manual Inventory Reconciliation (Monthly)	Section 2643(c)(2)(B)(b)(4)
Statistical Inventory Reconciliation (Monthly) and Tank Integrity Testing (Biennially)	Section 2643(b)(3)
Manual Tank Gauging (Weekly) and Tank Integrity Testing (Annually)	Section 2645

Examples of Quantitative Release Detection Methods for Single-Walled Pressure Piping

Automatic Line Leak Detector (Hourly) and Automatic Electronic Line Leak Detector (Monthly)	Section 2643(c)(1) Section 2643(c)(2)
Automatic Line Leak Detector (Hourly) and Automatic Electronic Line Leak Detector (Annually)	Section 2643(c)(1) Section 2643(c)(3)
Automatic Line Leak Detector (Hourly) and Line Tightness Test (Annually)	Section 2643(c)(1) Section 2643(c)(3)
Automatic Electronic Line Leak Detectors (Hourly) (meets both 2643(c)(1) and (3) standards)	Section 2643(c)(3)

Examples of Qualitative Release Detection Methods for Single-Walled Suction Piping

Line Tightness Test (Triennially) and Daily Monitoring	Section 2643(d) Appendix II

APPENDIX III. (continued)

Example of Qualitative Release Detection Methods for Single-Walled Gravity Flow Piping

Line Tightness Test (Biennially)	Section 2643(e)

Examples of Qualitative Release Detection Methods for Existing Tanks and Piping

Vapor Monitoring	Sections 2644(a) and (b) and 2647
or	
Ground Water Monitoring	Sections 2644(a) and (c) and 2648

Appendix IV

EVALUATION PROCEDURE FOR LEAK DETECTION EQUIPMENT

Leak detection equipment can be evaluated for performance in accordance with one of the following three evaluation procedures:

1. EPA Standard Test Procedures

   EPA has developed a series of standard test procedures that cover most of the methods commonly used for underground storage tank leak detection. These include:

   a. "Standard Test Procedures for Evaluating Leak Detection Methods: Volumetric Tank Tightness Testing Methods"

   b. "Standard Test Procedures for Evaluating Leak Detection Methods: Nonvolumetric Tank Tightness Testing Methods"

   c. "Standard Test Procedures for Evaluating Leak Detection Methods: Automatic Tank Gauging Systems"

   d. "Standard Test Procedures for Evaluating Leak Detection Methods: Statistical Inventory Reconciliation Methods"

   e. "Standard Test Procedures for Evaluating Leak Detection Methods: Vapor-Phase Out-of-Tank Product Detectors"

   f. "Standard Test Procedures for Evaluating Leak Detection Methods: Liquid-Phase Out-of-Tank Product Detectors"

   g. "Standard Test Procedures for Evaluating Leak Detection Methods: Pipeline Leak Detection Systems"

   Each test procedure provides an explanation of how to conduct the test, how to perform the required calculations, and how to report the results. The results from each standard test procedure provide the information needed by tank owners and operators to determine if the method meets the regulatory requirements.

   EPA standard test procedures must be conducted by an independent third party under contract to the manufacturer in order to prove compliance with the regulations. Independent third-parties may include consulting firms, test laboratories, not-for-profit research organizations, or educational institutions with no organizational conflict of interest. In general, evaluations are more likely to be fair and objective the greater the independence of the evaluating organization.

UST Installation - Certificate of Compliance

Formerly SWRCB Form C

Complete this certification upon installation of an UST and piping. One certification is required for each tank system. This page may be completed by either the UST owner or representative.

Refer to 23 CCR 2635 for UST installation and testing requirements.

(Note: the numbering of the instructions follows the data element numbers that are on the UPCF pages. These data element numbers are used for electronic submission and are the same as the numbering used in 27 CCR, Appendix C, the Business Section of the Unified Program Data Dictionary.)

Please number all pages of your submittal. This helps your CUPA or local agency identify whether the submittal is complete and if any pages are separated.

1. FACILITY ID NUMBER - Leave this blank. This number is assigned by the CUPA. This is the unique number which identifies your facility.

3. BUSINESS NAME - Enter the full legal name of the business.

476. ADDRESS - Enter the street address where the tank is located. This is to assist the tank inspector in locating the tank.

477. TANK ID NUMBER - Enter the tank ID number assigned by the owner. This is a unique number used to identify the tank. It may be assigned by the owner or by the CUPA. This is the same as item 432 as found on the UST Tank Page 1.

478. TRAINED AND CERTIFIED BY TANK AND PIPING MANUFACTURER - Check if the tank installer provided evidence of being trained and certified by the tank and piping manufacturer.

479. REGISTERED ENGINEER INSPECTION - Check if the installation has been inspected and certified by a registered professional engineer, if necessary.

480. UNIFIED PROGRAM AGENCY APPROVAL - Check if the installation has been inspected and approved by the Unified Program agency.

481. COMPLETION OF MANUFACTURER'S CHECKLIST - Check if all work listed on the manufacturer's installation checklist was completed.

482. CONTRACTORS' STATE LICENSE BOARD CERTIFICATION OR LICENSE - Check if the installer has provided proof of CSLB certification or licensing.

483. INSTALLATION DESCRIPTION - Check if the UST system was installed according to applicable voluntary consensus standards and any manufacturer's written installation instructions. Describe the installation in the space provided. Clarify the type and the extent of work completed at the facility, such as installation of dispenser containment, replacement of piping, or installation of turbine sumps.

SIGNATURE OF TANK OWNER/AGENT - The tank owner or agent of the owner shall sign in the space provided. This signature certifies that the signer believes that all the information submitted is true and accurate.

484. DATE CERTIFIED - Enter the date that the page was signed.

485. TANK OWNER/AGENT NAME - Enter the full printed name of the person signing the page.

486. TANK OWNER/AGENT TITLE - Enter the title of the person signing the page.

Statutes of Chapter 6.7 Health and Safety Code

Underground Storage of Hazardous Substances

As Amended and Effective
January 1, 2000

Section

Cross References

Hazardous waste control, grounds for denial, suspension or revocation of permits, registration or certificates, see § 25186.

Loans for replacing, removing, or upgrading of underground storage tanks, applicants subject to regulations of this chapter, see Government Code § 15399.12.

Public records, definition as including information relating to this chapter, see § 25152.5.

Environmental data required by this chapter, standardized electron format and protocol, see Public Resources Code § 71061.

§ 25280. Legislation findings and declarations

(a) The Legislature finds and declares as follows:

(1) Substances hazardous to the public health and safety and to the environment are stored prior to use or disposal in thousands of underground locations in the state.

(2) Underground tanks used for the storage of hazardous substances and wastes are potential sources of contamination of the ground and underlying aquifers, and may pose other dangers to public health and the environment.

(3) In several known cases, underground storage of hazardous substances, including, but not limited to, industrial solvents, petroleum products, and other materials, has resulted in undetected and uncontrolled releases of hazardous substances into the ground. These releases have contaminated public drinking water supplies and created a potential threat to the public health and to the waters of the state.

(4) The Legislature has previously enacted laws regulating the management of hazardous wastes, including statutes providing the means to clean up releases of hazardous substances into the environment when the public health, domestic livestock, wildlife, and the environment are endangered. Current laws do not specifically govern the construction, maintenance, testing, and use of underground tanks used for the storage of hazardous substances, or the short-term storage of hazardous wastes prior to disposal, for the purposes of protecting the public health and the environment.

(5) The protection of the public from releases of hazardous substances is an issue of statewide concern.

(b) The Legislature therefore declares that it is in the public interest to establish a continuing program for the purpose of preventing contamination from, and improper storage of, hazardous substances stored underground. It is the intent of the Legislature, in enacting this chapter, to establish orderly procedures that will ensure that newly constructed underground storage tanks meet appropriate standards and that existing tanks be properly maintained, inspected, tested, and upgraded so that the health, property, and resources of the people of the state will be protected.

(Added by Stats.1984, c. 1038, § 1. Amended by Stats.1989, c. 1397, § 1; Stats.1992, c. 654 (A.B.3089), § 1, eff. Sept. 14, 1992.)

§ 25280.5. Additional legislative findings and declarations

The Legislature finds and declares all of the following:

(a) Subchapter IX (commencing with Section 6991) of Chapter 82 of Title 42 of the United States Code provides for regulation of underground storage tanks and allows underground storage tanks to be regulated pursuant to a state program, in lieu of a federal program, in states which are authorized to implement these provisions.

(b) It is in the interest of the people of the state, in order to avoid direct regulation by the federal government of persons already subject to regulation under state law pursuant to this chapter, to authorize the state to implement the provisions of Subchapter IX (commencing with Section 6991) of Chapter 82 of Title 42 of the United States Code, including any acts amending or supplementing Subchapter IX and any federal regulations and guidelines adopted pursuant to Subchapter IX.

(Added by Stats.1989, c. 1397, § 2.)

§ 25281. Definitions

For purposes of this chapter, the following definitions apply:

(a) "Automatic line leak detector" means any method of leak detection, as determined in regulations adopted by the board, which alerts the owner or operator of an underground storage tank to the presence of a leak. "Automatic line leak detector" includes, but is not limited to, any device or mechanism which alerts the owner or operator of an underground storage tank to the presence of a leak by restricting or shutting off the flow of hazardous substance through piping, or by triggering an audible or visual alarm, and which detects leaks of three gallons or more per hour at 10 pounds per square inch line pressure within one hour.

(b) "Board" means the State Water Resources Control Board. "Regional board" means a California regional water quality control board.

(c) (1) "Certified Unified Program Agency" or "CUPA" means the agency certified by the Secretary for Environmental Protection to implement the unified program specified in Chapter 6.11 (commencing with Section 25404) within a jurisdiction.

(2) "Participating Agency" or "PA" means an agency which has a written agreement with the CUPA pursuant to subdivision (d) of Section 25404.3, and is approved by the secretary to implement or enforce the unified program element specified in paragraph (3) of subdivision (c) of Section 25404, in accordance with the provisions of Sections 25404.1 and 25404.2.

(3) "Unified Program Agency" or "UPA: means the CUPA, or its participating agencies to the extent each PA has been designated by the CUPA, pursuant to a written agreement, to implement or enforce the unified program element specified in paragraph (3) of subdivision (c) of Section 25404. For purposes of this chapter, the UPAs have the responsibility and authority, to the extent provided by this chapter and Sections 25404.1 and 25404.2, to implement and enforce only those requirements of this chapter listed in paragraph (3) of subdivision (c) of Section 25404. The UPAs also have the responsibility and authority, to the extent provided by this chapter and Sections 25404.1 and 25404.2, to implement and enforce the regulations adopted to implement the requirements of this chapter listed in paragraph (3) of subdivision (c) of

Section 25404. After a CUPA has been certified by the secretary, the unified program agencies shall be the only local agencies authorized to enforce the requirements of this chapter listed in paragraph (3) of subdivision (c) of Section 25404 within the jurisdiction of the CUPA. This section shall not be construed to limit the authority or responsibility granted to the board and the regional boards by this chapter to implement and enforce this chapter and the regulations adopted pursuant thereto.

(d) "Department" means the Department of Toxic Substances Control.

(e) "Facility" means any one, or combination of, underground storage tanks used by a single business entity at a single location or site.

(f) "Federal act" means Subchapter IX (commencing with Section 6991) of Chapter 82 of Title 42 of the United States Code, as added by the Hazardous and Solid Waste Amendments of 1984 (P.L. 98-616), or as it may subsequently be amended or supplemented.

(g) "Hazardous substance" means both of the following:

(1) All of the following liquid and solid substances unless the department, in consultation with the board, determines that the substance could not adversely affect the quality of the waters of the state:

(A) Substances on the list prepared by the Director of Industrial Relations pursuant to Section 6382 of the Labor Code.

(B) Hazardous substances, as defined in Section 25316.

(C) Any substance or material which is classified by the National Fire Protection Association (NFPA) as a flammable liquid, a Class II combustible liquid, or a Class III-A combustible liquid.

(2) Any regulated substance, as defined in subsection (2) of Section 6991 of Title 42 of the United State Code, as that section reads on January 1, 1989, or as it may subsequently be amended or supplemented.

(h) "Local agency" means the local agency authorized, pursuant to Section 25283, to implement this chapter.

(i) "Operator" means any person in control of, or having daily responsibility for, the daily operation of an underground storage tank system.

(j) "Owner" means the owner of an underground storage tank.

(k) "Person" means an individual, trust, firm, joint stock company, corporation, including a government corporation, partnership, or association. "Person" also includes any city,

county, district, the state, any department or agency thereof, or the United States to the extent authorized by federal law.

(l) "Pipe" means any pipeline or system of pipelines which is used in connection with the storage of hazardous substances and which is not intended to transport hazardous substances in interstate or intrastate commerce or to transfer hazardous materials in bulk to or from a marine vessel.

(m) "Primary containment" means the first level of containment, such as the portion of a tank which comes into immediate contact on its inner surface with the hazardous substance being contained.

(n) "Product-tight" means impervious to the substance which is contained, or is to be contained, so as to prevent the seepage of the substance from the primary containment. To be product-tight, the tank shall not be subject to physical or chemical deterioration by the substance which it contains over the useful life of the tank.

(o) "Release" means any spilling, leaking, emitting, discharging, escaping, leaching, or disposing from an underground storage tank into or on the waters of the state, the land, or the subsurface soils.

(p) "Secondary containment" means the level of containment external to, and separate from, the primary containment.

(q) "Single-walled" means construction with walls made of only one thickness of material. For the purposes of this chapter, laminated, coated, or clad materials are considered single-walled.

(r) "Special inspector" means a professional engineer, registered pursuant to Chapter 7 (commencing with Section 6700) of Division 3 of the Business and Professions Code, who is qualified to attest, at a minimum, to structural soundness, seismic safety, the compatibility of construction materials with contents, cathodic protection, and the mechanical compatibility of the structural elements of underground storage tanks.

(s) "Storage" or "store" means the containment, handling, or treatment of hazardous substances, either on a temporary basis or for a period of years. "Storage" or "store" does not mean the storage of hazardous wastes in an underground storage tank if the person operating the tank has been issued a hazardous waste facilities permit by the department pursuant to Section 25200 or granted interim status under Section 25200.5.

(t) "Tank" means a stationary device designed to contain an accumulation of hazardous substances which is constructed primarily of nonearthen materials (e.g. wood. concrete, steel, plastic) which provides structural support.

(u) "Tank integrity test" means a test method capable of detecting an unauthorized release from an underground storage tank consistent with the minimum standards adopted by the board.

(v) "Tank tester" means an individual who performs tank integrity tests on underground storage tanks.

(w) "Unauthorized release" means any release of any hazardous substance which does not conform to this chapter, including, but not limited to, an unauthorized release specified in Section 25295.5, unless this release is authorized by the board or a regional board pursuant to Division 7 (commencing with Section 13000) of the Water Code.

(x)(1) "Underground storage tank" means any one or combination of tanks, including pipes connected thereto, which is used for the storage of hazardous substances and which is substantially or totally beneath the surface of the ground. "Underground storage tank" does not include any of the following:

(A) A tank with a capacity of 1,100 gallons or less which is located on a farm and which stores motor vehicle fuel used primarily for agricultural purposes and not for resale.

(B) A tank which is located on a farm or at the residence of a person, which has a capacity of 1,100 gallons or less, and which stores home heating oil for consumptive use on the premises where stored.

(C) Structures, such as sumps, separators, storm drains, catch basins, oil field gathering lines, refinery pipelines, lagoons, evaporation ponds, well cellars, separation sumps, lined and unlined pits, sumps and lagoons. Sumps which are a part of a monitoring system required under Section 25291 or 25292 and sumps or other structures defined as underground storage tanks under the federal act are not exempted by this subparagraph.

(D) A tank holding hydraulic fluid for a closed loop mechanical system that uses compressed air or hydraulic fluid to operate lifts, elevators, and other similar devices.

(2) Structures identified in subparagraphs (C) and (D) of paragraph (1) may be regulated by the board and any regional board pursuant to the Porter-Cologne Water Quality Control Act (Division 7 (commencing with Section 13000) of the Water Code) to ensure that they do not pose a threat to water quality.

(y) "Underground tank system" or "tank system" means an underground storage tank, connected piping, ancillary equipment, and containment system, if any.

(z) (1) "Unified program facility" means all contiguous land and structures, other appurtenances, and improvements on the land which are subject to the requirements of paragraph (3) of subdivision (c) of Section 25404.

(2) "Unified program facility permit" means a permit issued pursuant to Chapter 6.11 (commencing with Section 25404), and which encompasses the permitting requirements of Section 25284.

(3) "Permit" means a permit issued pursuant to Section 25284 or a unified program facility permit as defined in paragraph (2).

(Formerly § 25280, added by Stats.1983, c. 1046, § 3. Renumbered § 25281 and amended by Stats.1984, c. 1038, § 2; Stats.1986, c. 935, § 1; Stats.1986, c. 1390, § 1, eff. Sept. 30, 1986; Stats.1986, c. 1390, § 2, eff. Sept. 30, 1986, operative Jan. 1, 1987; Stats.1986, c. 1372, § 1; Stats.1989, c. 1397, § 3; Gov.Reorg.Plan No. 1 of 1991, 108, eff. July 17, 1991; Stats.1991, c. 1138 (A.B.1954), § 1. Amended by Stats.1992, c. 654 (A.B.3089), § 2, eff. Sept. 14, 1992; Stats.1993, c. 432 (A.B.1061), § 2, eff. Sept. 24, 1993; Stats.1994, c. 1200 (S.B.469), § 35, eff. Sept. 30, 1994; Stats.1995, c. 639 (S.B.1191), §52.)

Historical and Statutory Notes

1993 Legislation

Section 11 of Stats.1993, c. 432 (A.B.1061), provides: "On or before January 1, 1995, the State Water Resources Control Board shall submit a report to the Legislature regarding whether the temporary exemption in the definition of underground storage tank in Section 25281 of the Health and Safety Code for tanks holding hydraulic fluid for a closed loop mechanical system that uses compressed air or hydraulic fluid to operate lifts, elevators, and other similar devices should be permanently enacted into law. The report shall address all of the following:

"(a) The number of tanks holding hydraulic fluid that are in operation in the state, are no longer in use, or are abandoned."

"(b) An estimate of the number of these tanks that have leaked hydraulic fluid into the environment."

"(c) An evaluation of the types of dangers to the environment posed by tanks leaking hydraulic fluid."

"(d) An assessment as to whether the danger posed by leaking hydraulic fluid tanks justifies their regulation pursuant to Chapter 6.7 (commencing with Section 25280) of Division 20 of the Health and Safety Code."

1995 Legislation

Legislative intent relating to Stats.1995, c. 639 (S.B.1191), see Historical and Statutory Notes under Health and Safety Code § 13143.10.

§ 25281.5. "Pipe" defined; exclusions

(a) Notwithstanding subdivision (k) of Section 25281, for purposes of this chapter "pipe" means all parts of any pipeline or system of pipelines, used in connection with the storage of hazardous substances, including, but not limited to, valves and other appurtenances connected to the pipe, pumping units, fabricated assemblies associated with pumping units, and metering and delivery stations and fabricated assemblies therein, but does not include any of the following:

(1) An interstate pipeline subject to 49 Code of Federal Regulations, Part 195.

(2) An intrastate pipeline subject to Chapter 5.5 (commencing with Section 51010) of Part 1 of Division 1 of Title 5 of the Government Code.

(3) Unburied delivery hoses, vapor recovery hoses, and nozzles which are subject to unobstructed visual inspection for leakage.

(4) Vent lines, vapor recovery lines, and fill pipes which are designed to prevent, and do not hold, standing fluid in the pipes or lines.

(b) In addition to the exclusions specified in subdivision (x) of Section 25281, "underground storage tank" does not include vent lines, vapor recovery lines, and fill pipes which are designed to prevent, and do not hold, standing fluid in the pipes or lines.

(Added by Stats.1986, c. 1025, § 1. Amended by Stats.1989, c. 1397, § 4; Stats.1991, c. 1091 (A.B.1487), § 100; Stats.1991, c. 1033 (A.B.1699), § 1, eff. Oct. 14, 1991.)

§ 25282. Master list of hazardous substances

(a) The department shall compile a comprehensive master list of hazardous substances. The master list shall be made available to the public and mailed to each local agency no later than June 30, 1984, notwithstanding any other provision of law, including Chapter 3.5 (commencing with Section 11340) of Part 1 of Division 3 of Title 2 of the Government Code. Local agencies and owners or operators of underground storage tanks shall use the master list or, when adopted, the revised list adopted pursuant to subdivision (b), to determine which underground storage tanks require permits pursuant to this chapter. Hazardous substances included on the list may be denominated by scientific, common, trade, or brand names.

(b) The department may revise, when appropriate, the master list of all the hazardous substances specified in subdivision (a). The revised list of hazardous substances shall be prepared and adopted, and may be further revised, in accordance with Chapter 3.5 (commencing with Section 11340) of Part 1 of Division 3 of Title 2 of the Government Code.

(Formerly § 25281, added by Stats.1983, c. 1046, § 3. Renumbered § 25282 and amended by Stats.1984, c. 1038, § 3.)

Cross References

Hazardous substances defined, see § 25316.

Listing of hazardous and extremely hazardous wastes, see § 25140.

§ 25283. Implementation of chapter; notice by city of assumption of responsibility; proration of revenue

(a)(1) This chapter shall be implemented, pursuant to the regulations adopted by the board, by one of the following:

(A) If there is a CUPA, the unified program agency.

(B) If there is no CUPA, by one of the following:

(i) Before January 1, 1997, the county or a city, pursuant to paragraph (2).

(ii) On and after January 1, 1997, the agency authorized pursuant to subdivision (f) of Section 25404.3.

(2) (A) Before January 1, 1997, if there is no CUPA, a city may, by ordinance, assume responsibility for the implementation of this chapter pursuant to the regulations adopted by the board and, if so, shall have exclusive jurisdiction within the boundary of the city for the purposes of carrying out this chapter. The ordinance adopted by the city shall comply with this chapter, applicable federal laws, and the regulations and guidelines adopted pursuant thereto. If there is no CUPA, a city which, prior to January 1, 1990, was exempt from implementing this chapter, has the exclusive jurisdiction, within its boundaries, for the purpose of implementing this chapter.

(B) No city may assume responsibility for implementation of this chapter unless it has notified the county, on or before July 1, 1990, of its intentions to assume responsibility for implementation of this chapter.

(C) A city's authorization for implementing this chapter pursuant to this paragraph shall remain in effect only until a CUPA is certified, or until January 1, 1997, whichever is earlier. On and after January 1, 1997, the agency responsible for administering and enforcing this chapter shall be the agency so authorized pursuant to subdivision (f) of Section 25404.3.

(b) If there is no CUPA, the county and any city that assumes responsibility pursuant to paragraph (2) of subdivision (a) shall designate a department, office, or other agency of that county or city, as the case may be, as the local agency responsible for administering and enforcing this chapter, pursuant to subdivision (a). A city that assumes responsibility for implementation of this chapter pursuant to paragraph (2) of subdivision (a) shall designate the agency which has responsibility for implementing Chapter 6.95 (commencing with Section 25500) as the local agency responsible for administering and enforcing this chapter. A designation pursuant to this subdivision shall remain in effect only until a CUPA is certified or until January 1, 1997, whichever is earlier. On and after January 1, 1997, the agency responsible for administering and enforcing this chapter shall be the agency so authorized pursuant to subdivision (f) of Section 25404.3.

(c) If the agency which receives certification as a certified unified program agency subsequently withdraws or is decertified before January 1, 1997, the local agency responsible for administering and enforcing this chapter prior to the certification of the CUPA shall assume responsibility for administering and enforcing this chapter until a successor CUPA is certified or until January 1, 1997, whichever is earlier.

(d) Revenue from fees collected by the county pursuant to this chapter shall be prorated between the city and county based upon when the city assumes responsibility for implementation of this chapter.

(Formerly 25282, added by Stats.1983, c. 1046, § 3. Renumbered 25283 and amended by Stats.1984, c. 1038, § 4; Stats.1985, c. 1228, § 1, eff. Sept. 30, 1985; Stats.1989, c. 432, § 1; Stats.1989, c. 1397, § 5. Amended by Stats.1995, c. 639 (S.B.1191), § 53.)

Historical and Statutory Notes

1995 Legislation

Legislative intent relating to Stats.1995, c. 639 (S.B.1191), see Historical and Statutory Notes under Health and Safety Code § 13143.10.

§ 25283.1. Joint powers agreement

This chapter does not prohibit any county from entering into a joint powers agreement with other counties for the purposes of enforcing this chapter.

(Added by Stats.1986, c. 1390, § 3, eff. Sept. 30, 1986.)

§ 25283.5. Exemptions from chapter; underground storage tanks; criteria

An underground storage tank which meets all of the following criteria is exempt from the requirements of this chapter:

(a) All exterior surfaces of the tank, including connected piping, and the floor directly beneath the tank, can be monitored by direct viewing.

(b) The structure in which the tank is located is constructed in such a manner that the structure provides for secondary containment of the contents of the tank, as determined by the local agency designated pursuant to Section 25283.

(c) The owner or operator of the underground storage tank conducts daily inspections of the tank and maintains a log of inspection results for review by the local agency, designated pursuant to Section 25283, as requested by the local agency.

(d) The local agency designated pursuant to Section 25283 determines without objection from the board that the underground storage tank meets requirements which are equal to or more stringent than those imposed by this chapter.

(Added by Stats.1988, c. 876, § 1. Amended by Stats.1991, c. 627 (A.B.1057), § 1.)

§ 25284. Permit to own or operate underground storage tank; transferred permits

(a)(1) Except as provided in subdivision (c) , no person shall own or operate an underground storage tank unless a permit for its operation has been issued by the local agency to the owner or operator of the unified program facility on which the tank is located.

(2) If the operator is not the owner of the tank, or if the permit is issued to a person other than the owner or operator of the tank, the permittee shall ensure that both the owner and the operator of the tank are provided with a copy of the permit.

(3) If the permit is issued to a person other than the operator of the tank, that person shall do all of the following:

(A) Enter into a written agreement with the operator of the tank to monitor the tank system as set forth in the permit.

(B) Provide the operator with a copy or summary of Section 25299 in the form that the board specifies by regulation.

(C) Notify the local agency of any change of operator.

(b) Each local agency shall prepare a form that provides for the acceptance of the obligations of a transferred permit by any person who is to assume the ownership of an underground storage tank from the previous owner and is to be transferred the permit to operate the tank. That person shall complete the form accepting the obligations of the permit and submit the completed form to the local agency within 30 days from the date that the ownership of the underground storage tank is to be transferred. A local agency may review and modify, or terminate, the transfer of the permit to operate the underground storage tank, pursuant to the criteria specified in subdivision (a) of Section 25295, upon receiving the completed form.

(c) Any person assuming ownership of an underground storage tank used for the storage of hazardous substances for which a valid operating permit has been issued shall have 30 days from the date of assumption of ownership to apply for an operating permit pursuant to Section 25286 or, if accepting a transferred permit, shall submit to the local agency the completed form accepting the obligations of the transferred permit, as specified in subdivision (b). During the period from the date of application until the permit is issued or refused, the person shall not be held to be in violation of this section.

(d) A permit issued pursuant to this section shall apply and require compliance with all applicable regulations adopted by the board pursuant to Section 25299.3.

(e) A permit issued for a petroleum underground storage tank system that meets the requirements of Section 25291 or subdivisions (d) and (e) of Section 25292 and related regulations adopted pursuant to Section 25299.3 shall include an upgrade compliance certificate, the color, size, and content of which shall be specified by the board, that documents that the petroleum underground storage tank system meets the requirements of Section 25291 or subdivisions (d) and (e) of Section 25292 and related regulations. The owner shall place the upgrade compliance certificate in a conspicuous location that can be readily viewed by any person depositing petroleum into the underground storage tank system.

(f) On or before December 22, 1998, the board shall notify all persons that may deliver petroleum to an underground storage tank of where they can obtain a list of underground storage tank facilities that have been issued an upgrade compliance certificate. Local agencies shall maintain a list of underground storage tank facilities that have been issued an upgrade compliance certificate and shall provide this information to anyone requesting it.

(Formerly § 25283, added by Stats.1983, c. 1046, § 3. Renumbered 25284 and amended by Stats.1984, c. 1038, § 5; Stats.1989, c. 1397, § 6. Amended by Stats.1992, c. 654 (A.B.3089), § 3, eff. Sept. 14, 1992; Stats.1995, c. 639 (S.B.1191), § 54. Amended by Stats.1997, c., § (A.B.1491).)

Historical and Statutory Notes

1995 Legislation

Legislative intent relating to Stats.1995, c. 639 (S.B.1191), see Historical and Statutory Notes under Health and Safety Code § 13143.10.

Cross Reference

Hazardous waste facilities permits, see § 25200 et seq.

§ 25284.1. Prevention of unauthorized releases; field-based research program; containment systems; review of requirements for contractors

(a) The board shall take all of the following actions with regard to the prevention of unauthorized releases from petroleum underground storage tanks:

(1) On or before June 1, 2000, initiate a field-based research program to quantify the probability and environmental significance of releases from underground storage tank systems meeting the 1998 upgrade requirements specified in subdivision (c) of Section 25284.

The research program shall do all of the following:

(A) Seek to identify the source and causes of releases and any deficiencies in leak detection systems.

(B) Include single-walled, double-walled, and hybrid tank systems, and avoid bias toward known leaking underground storage tank systems by including a statistically valid sample of all operating underground storage tank systems.

(C) Include peer review.

(2) Complete the research program on or before June 1, 2002.

(3) Use the results of the research program to develop appropriate changes in design, construction, monitoring, operation, and maintenance requirements for tank systems.

(4) On or before January 1, 2001, adopt regulations to do all of the following:

(A) (i) Require underground storage tank owners, operators, service technicians, installers, and inspectors to meet minimum industry-established training standards and require tank facilities to be operated in a manner consistent with industry-established best management practices.

(ii) The board shall implement an outreach effort to educate small business owners or operators on the importance of the regulations adopted pursuant to this subparagraph.

(B) Require testing of the secondary containment components, including under-dispenser and pump turbine containment components, upon initial installation of a secondary containment component and periodically thereafter, to ensure that the system is capable of containing releases from the primary containment until a release is detected and cleaned up. The board shall consult with the petroleum industry and local government to assess the appropriate test or tests that would comply with this subparagraph.

(C) Require annual testing of release detection sensors and alarms, including under-dispenser and pump turbine containment sensors and alarms. The board shall consult with the petroleum industry and local government to assess the appropriate test or tests that would comply with this subparagraph.

(5) (A) Require an owner or operator of an underground storage tank installed after July 1, 1987, if a tank is located within 1,000 feet of a public drinking water well, as identified pursuant to the state GIS mapping data base, to have the underground storage tank system fitted, on or before July 1, 2001, with under-dispenser containment or a spill containment or control system that is approved by the board as capable of containing any accidental release.

(B) Require all underground storage tanks installed after January 1, 2000, to have the tank system fitted with under-dispenser containment or a spill containment system or control system to meet the requirements of subparagraph (A).

(C) Require an owner or operator of an underground storage tank that is not otherwise subject to subparagraph (A), and not subject to subparagraph (B), to have the underground storage tank system fitted to meet the requirements of subparagraph (A), on or before December 31, 2003.

(D) On and after January 1, 2002, no person shall install, repair, maintain, or calibrate monitoring equipment for an underground storage tank unless that person satisfies both of the following requirements:

(i) The person has fulfilled training standards identified by the board in regulations adopted pursuant to this section.

(ii) The person possesses a Class "A" General Engineering Contractor License, C-10 Electrical Contractor License, C-34 Pipeline Contractor License, C-36 Plumbing Contractor License, or C-61 (D40) Limited Specialty Service Station Equipment and Maintenance Contractor License issued by the Contractors' State License Board.

(E) Loans and grants for the installation of under-dispenser containment or a spill containment or control system shall be made available pursuant to Chapter 8.5 (commencing with Section 15399.10) of Part 6.7 of Division 3 of Title 2 of the Government Code.

(6) Convene a panel of local agency and regional board representatives to review existing enforcement authority and procedures and to advise the board of any changes that are needed to enable local agencies to take adequate enforcement action against owners and operators of noncompliant underground storage tank facilities. The panel shall make its recommendations to the board on or before September 30, 2001. Based on the recommendations of the panel, the board shall also establish effective enforcement procedures in cases involving fraud.

(b) On or before July 1, 2001, the Contractors State License Board, in consultation with the board, the petroleum industry, air pollution control districts, air quality management districts, and local government, shall review its requirements for petroleum underground storage tank system installation and removal contractors and make changes, where appropriate, to ensure these contractors are qualified.

(Added by Stats. 1999, c. 812 (S.B. 989), § 10.)

Historical and Statutory Notes

1984 Legislation

Former §25284.1 was renumbered Health and Safety Code §25292 and amended by Stats. 1984, c. 1584, §4.

1999 Legislation

Provision of Stats. 1999, c. 812 (S.B. 989) relating to effect of that law on the rights and liabilities relating to MTBE, evaluation of options for closure of certain underground petroleum storage tanks, and multimedia review of proposed CaRFG3 regulations, see Historical and Statutory Notes under Government Code §15399.10.

§ 25284.4. Tank integrity tester licensing; fees; examination; field experience; course of studies; civil liability of testers; sanctions

(a) All tank integrity tests required by this chapter or pursuant to any local ordinance in compliance with Section 25299.1 shall be performed only by, or under the direct and personal supervision of, a tank tester with a currently valid tank testing license issued pursuant to this section. No person shall engage in the business of tank integrity testing, or act in the capacity of a tank tester, within this state without first obtaining a tank testing license from the board. Any person who violates this subdivision is guilty of a misdemeanor and may be subject to civil liability pursuant to subdivision (g).

(b) Any person proposing to conduct tank integrity testing within the state shall apply to the board for a tank testing license, and shall pay the appropriate fee established by the board. A license issued pursuant to this section shall expire three years after the date of issuance and shall be subject to renewal, except as specified in this section. If the tank tester fails to renew the tank tester's license within three years of the license's expiration date, the license shall lapse and the person shall apply for a new tank testing license and shall meet the same requirements of this section for a new applicant. A tank tester shall pay a fee to the board at the time of licensing and at the time of renewal. The board shall adopt a fee schedule for the issuance and renewal of tank testing licenses to cover the necessary and reasonable costs of administering and enforcing this section.

(c) (1) The board may establish any additional qualifications and standards for the licensing of tank testers. Each applicant for licensing as a tank tester shall pass an examination specified by the board and shall have completed a minimum of either of the following:

(A) One year of qualifying field experience by personally testing a number of underground storage tanks specified by the board.

(B) Completed six months of field experience by personally testing a number of underground storage tanks specified by the board and have successfully completed a course of study applicable to tank testing which is satisfactory to the board.

(2) The examination required by paragraph (1) shall, at a minimum, test the applicant's knowledge of all of the following:

(A) General principles of tank and pipeline testing.

(B) Basic understanding of the mathematics relating to tank testing.

(C) Understanding of the specific test procedures, principles, and equipment for which the tank tester will be qualified to operate.

(D) Knowledge of the regulations and laws governing the regulation of underground storage tanks.

(E) Proper safety procedures.

(d) The board shall maintain a current list of all persons licensed pursuant to this section, including a record of enforcement actions taken against these persons. This list shall be made available to local agencies and the public on request.

(e) A tank tester may be liable civilly in accordance with subdivision (g) and, in addition, may be subject to administrative sanctions pursuant to subdivision (f) for performing or causing another to perform, any of the following actions:

(1) Willfully or negligently violating, or causing, or allowing the violation of, this chapter or any regulations adopted pursuant to this chapter.

(2) Willfully or negligently failing to exercise direct and personal control over an unlicensed employee, associate, assistant, or agent during any phase of tank integrity testing.

(3) Without regard to intent or negligence, using or permitting a licensed or unlicensed employee, associate, assistant, or agent to use any method or equipment which is demonstrated to be unsafe or unreliable for tank integrity testing.

(4) Submitting false or misleading information on an application for license.

(5) Using fraud or deception in the course of doing business as a tank tester.

(6) Failing to use reasonable care, or judgment, while performing tank integrity tests.

(7) Failing to maintain competence in approved tank testing procedures.

(8) Failing to use proper tests or testing equipment to conduct tank integrity tests.

(9) Any other action which the board may, by regulation, prescribe.

(f) (1) The board may suspend the license of a tank tester for a period of up to one year, and may revoke, or refuse to grant or renew, a license and may place on probation, or reprimand, the licensee upon any reasonable ground, including, but not limited to, those violations specified in subdivision (e). The board may investigate any licensed tank tester after receiving a written request from a local agency.

(2) The board shall notify the tank tester of any alleged violations and of proposed sanctions, before taking any action pursuant to this subdivision. The tank tester may request a hearing, or submit a written response within 30 days of the date of notice. Any hearing conducted pursuant to this subdivision shall be conducted in accordance with the hearing procedure specified in subdivision (g). After the hearing, or at a time after the 30-day response period, the board may impose the appropriate administrative sanctions authorized by this subdivision if it finds that the tank tester has committed any of the alleged violations specified in the notice.

(g) (1) The board may impose civil liability for a violation of subdivision (a) or (e) in accordance with Article 2.5 (commencing with Section 13323) of Chapter 5 of Division 7 of the Water Code in an amount which shall not exceed five hundred dollars ($500) for each day in which the violation occurs, except that the chief of the division of water quality of the board or any other person designated by the board shall issue the complaint to the violator. The complaint shall be issued based on information developed by board staff or local agencies. Any hearing on the complaint shall be made before the board, or a panel thereof, consisting of one or more board members. The decision of the board shall be final upon issuance and may be reviewed pursuant to Section 13325 of the Water Code within 30 days following issuance of the order.

(2) Civil liability for a violation of subdivision (a) or (e) may be imposed by a superior court at the request of the board in an amount which shall not exceed two thousand five hundred dollars ($2,500) for each day in which the violation occurs.

(h) Any fees or civil liability collected pursuant to this section shall be deposited in the Underground Storage Tank Tester Account which is hereby created in the General Fund. The money in this account is available for expenditure by the board, upon appropriation by the Legislature, for purposes of implementing the tank tester licensing program established by this section and for repayment of the loan made by Section 13 of Chapter 1372 of the Statutes of 1987.

(Added by Stats.1987, c. 1372, § 3. Amended by Stats.1991, c. 708 (A.B.1359), § 1; Stats.1992, c. 654 (A.B.3089), § 4, eff. Sept. 14, 1992.)

§ 25285. Permit; term; inspection; fee and surcharge

(a) Except as provided in Section 25285.1, a permit to operate issued by the local agency pursuant to Section 25284 shall be effective for five years. This subdivision does not apply to unified program facility permits.

(b) A local agency shall not issue or renew a permit to operate an underground storage tank if the local agency inspects the tank and determines that the tank does not comply with this chapter.

(c) Except as provided in Section 25404.5, a local agency shall not issue or renew a permit to operate an underground storage tank to any person who has not paid the fee and surcharge required by Section 25287.

(Formerly 25283.1. added by Stats.1983, c. 1046, § 3. Renumbered § 25285 and amended by Stats.1984, c. 1038, § 6; Stats.1986, c. 1390, § 5, eff. Sept. 30, 1986; Stats.1989, c. 1442, § 2, eff. Oct. 2, 1989. Amended by Stats 1995, c. 639 (S.B.1191), § 55.)

Historical and Statutory Notes

1995 Legislation

Legislative intent relating to Stats.1995, c. 639 (S.B.1191), see Historical and Statutory Notes under Health and Safety Code § 13143.10.

§ 25285.1. Revocation or modification of permit; justifiable reasons

(a) A local agency may revoke or modify a permit issued pursuant to Section 25284 for cause, including, but not limited to, any of the following:

(1) Violation of any of the terms or conditions of the permit.

(2) Obtaining the permit by misrepresentation or intentional failure to fully disclose all relevant facts.

(3) A change in any condition that requires modification or termination of the operation of the underground storage tank.

(b) The local agency shall revoke the permit of an underground storage tank issued pursuant to Section 25284 if the owner or operator is not in compliance with Article 3 (commencing with Section 25299.30) of Chapter 6.75 on the date three months after the date on which the owner or operator of the tank first becomes subject to Article 3 (commencing with Section 25299.30) of Chapter 6.75.

(Added by Stats.1989, c. 1442, § 3, eff. Oct. 2, 1989.)

§ 25286. Application for permit or renewal; form; fee; conditions; copies; contents; storage of unlisted substances

(a) An application for a permit to operate an underground storage tank, or for renewal of the permit, shall be made, by the owner or operator of the tank, or, if there is a CUPA, by the owner or operator of the unified program facility on which the tank is located, on a standardized form provided by the local agency. Except as provided in Section 25404.5, the permit shall be accompanied by the appropriate fee, as specified in Section 25287. As a condition of any permit to operate an underground storage

tank, the permittee shall notify the local agency, within the period determined by the local agency, of any changes in the usage of the underground storage tank, including the storage of new hazardous substances, changes in monitoring procedures, and if there has been any unauthorized release from the underground storage tank, as specified in Section 25294 or 25295.

(b)(1) The local agencies shall provide the designee of the board with copies of the completed permit applications, using forms, an industry standard computer readable magnetic tape, diskettes, or any other form in a format acceptable to the board.

(2) The board may enter into a contract with any designee of the board for the purpose of administering the underground storage tank permit database, and reimburse the designee of the board, upon appropriation by the Legislature, for any costs determined by the board to have been necessary and incurred pursuant to this section, including programming, training, maintenance, actual data-processing expenditures, and any incidental costs of the operation of the database related to the permitting of underground storage tanks. In selecting a contractor pursuant to this paragraph, the board shall consider the fiscal impact upon local agencies of converting to the database systems and procedures employed by that contractor. The permit application information required in subdivision (c) shall be stored in the data base. The designee of the board shall submit to the board a quarterly report, including any information required by the board concerning permit application data. Each local agency shall provide the designee of the board with a copy of the completed permit application within 30 days after taking final action on the application.

(c) The application form shall include, but not be limited to, requests for the following information:

(1) A description of the age, size, type, location, uses, and construction of the underground storage tank or tanks.

(2) A list of all the hazardous substances which are or will be stored in the underground storage tank or tanks, specifying the hazardous substances for each underground storage tank.

(3) A description of the monitoring program for the underground tank system.

(4) The name and address of the person, firm, or corporation which owns the underground tank system and, if different, the name and address of the person who operates the underground tank system.

(5) The address of the facility at which the underground tank system is located.

(6) The name of the person making the application.

(7) The name and 24-hour phone number of the contact person in the event of an emergency involving the facility.

(8) If the owner or operator of the underground storage tank or the owner or operator of the unified program facility on which the tank is located is a public agency, the application shall include the name of the supervisor of the division section, or office which owns or operates the tank or owns or operates the unified program facility.

(9) The State Board of Equalization registration number issued to the owner of the tank pursuant to Section 50108.1 of the Revenue and Taxation Code.

(10) If applicable, the name and address of the owner and, if different, the operator of the unified program facility on which the tank is located.

(d) If an underground storage tank is used to store a hazardous substance which is not listed in the application, as required by paragraph (2) of subdivision (c), the permittee shall apply for a new or amended permit within 30 days after commencing the storage of that hazardous substance.

(Formerly § 25283.2, added by Stats.1983, c. 1046, § 3. Renumbered § 25286 and amended by Stats.1984, c. 1038, § 7; Stats.1986, c. 1390, § 6, eff. Sept. 30, 1986; Stats.1989, c. 1397, § 7. Amended by Stats.1993, c. 1008 (A.B.1011), § 1; Stats.1995, c. 639 (S.B.1191) § 56.)

Historical and Statutory Notes

1995 Legislation

Legislative intent relating to Stats.1995, c. 639 (S.B.1191), see Historical and Statutory Notes under Health and Safety Code § 13143.10.

Cross References

Hazardous substance defined see § 25316.

Penalties for violations of this section, see § 25299.

§ 25287. Fees for permit; amount; surcharge; waiver

(a) Except as provided in subdivision (c), a fee shall be paid to the local agency by each person who submits an application for a permit to operate an underground storage tank or to renew or amend a permit. The governing body of the county, or a city which assumes enforcement jurisdiction, shall establish the amount of the fees at a level sufficient to pay the necessary and reasonable costs incurred by the local agency in administering this chapter, including, but not limited to permitting and inspection responsibilities. The governing body may provide for the waiver of fees when a state or local government agency makes an application for a permit to operate or an application to renew a permit.

(b) This fee shall include a surcharge, the amount of which shall be determined by the Legislature annually to cover the costs of the board in carrying out its responsibilities under this chapter and the costs of the local agency in collecting the surcharges. The local agency may retain 6 percent of any surcharge collected for costs incurred in its collection. The 6 percent of the surcharge retained by the local agency is the local agency's sole source of reimbursement for the cost of collecting the surcharge. The local agency shall transmit all remaining surcharge revenue collected by the local agency to the board within 45 days after receipt pursuant to subdivision (a). The surcharge shall be deposited in the Underground Storage Tank Fund hereby created in the General Fund. The money in this account is available, upon appropriation by the Legislature, to the board for the purposes of implementing this chapter.

(c) A local agency may waive the fee required by subdivision (a) for an underground storage tank which has a capacity of 5,000 gallons or less, which is located on a farm, and which contains motor vehicle or heating fuel used primarily for agricultural purposes, if the local agency finds that the fee will impose undue economic hardship upon the person applying for the permit. However, the local agency shall not waive the surcharge required under subdivision (b).

(d) A county of the fifth class, as defined in Section 28020 of the Government Code as a county with a population of 1,000,000 and under 1,070,000, and any city located within that county, is exempt from the requirements of collecting or transmitting to the board the surcharge required to be included in fees paid to a local agency pursuant to this section.

(e) This section does not apply in any jurisdiction in which a single fee system, which replaces the fee required by this section, has been implemented pursuant to Section 25404.5.

(Formerly § 25283.3, added by Stats.1983, c. 1046, § 3. Renumbered § 25287 and amended by Stats.1984, c. 1038, § 8; Stats.1986, c. 935, § 3; Stats.1986, c. 1390, § 7, eff. Sept. 30, 1986; Stats.1986, c. 1390, § 8, eff. Sept. 30, 1986, operative Jan. 1, 1987; Stats.1989, c. 1397, § 8. Amended by Stats.1993, c. 1008 (A.B.1011), § 2; Stats.1995, c. 639 (S.B.1191), § 57.)

Historical and Statutory Notes

1995 Legislation

Legislative intent relating to Stats.1995, c. 639 (S.B.1191), see Historical and Statutory Notes under Health and Safety Code § 13143.10.

§ 25288. Inspection of tank systems; employment of special inspectors; report with recommendations

(a) The local agency shall inspect every underground tank system within its jurisdiction at least once every year. The purpose of the inspection is to determine whether the tank system complies with the applicable requirements of this chapter and the regulations adopted by the board pursuant to Section 25299.3, including the design and construction standards of Section 25291 or 25292, whichever is applicable, whether the operator has monitored and tested the tank system as required by the permit, and whether the tank system is in a safe operating condition.

(b) After an inspection conducted pursuant to subdivision (a), the local agency shall prepare a compliance report detailing the inspection and shall send a copy of this report to the permitholder and the owner or operator, if the owner or operator is not the permitholder. Any report prepared pursuant to this section shall be consolidated into any other inspection reports required pursuant to Chapter 6.11 (commencing with Section 25404), the requirements listed in subdivision (c) of Section 25404, and the regulations adopted to implement the requirements listed in subdivision (c) of Section 25404.

(c) In lieu of the annual local agency inspections, the local agency may require the permitholder to employ a special inspector to conduct the annual inspection. The local agency shall supply the permitholder with a list of at least three special inspectors that are qualified to conduct the inspection. The permitholder shall employ a special inspector from the list provided by the local agency. The special inspector's authority shall be the same as that of the local agency as set forth in subdivision (a).

(d) Within 60 days after receiving a compliance report or special inspection report prepared in accordance with subdivision (b) or (c), respectively, the permitholder shall file with the local agency a plan to implement all recommendations contained in the compliance report or shall demonstrate, to the satisfaction of the local agency, why these recommendations should not be implemented. Any corrective action conducted pursuant to the recommendations in the report shall be taken pursuant to Sections 25299.36 and 25299.37.

(Formerly § 25283.4, added by Stats.1983, c. 1046, § 3. Renumbered § 25288 and amended by Stats.1984, c. 1038, § 9; Stats.1989, c. 1397, § 9. Amended by Stats.1995, c. 639 (S.B.1191), § 58; Amended by Stats. 1999, c. 812 (S.B. 989), § 11.)

Historical and Statutory Notes

1995 Legislation

Legislative intent relating to Stats.1995, c. 639 (S.B.1191), see Historical and Statutory Notes under Health and Safety Code § 13143.10.

1999 Legislation

Provisions of Stats. 1999, c. 812 (S.B. 989) relating to effect of that law on rights and liabilities relating to MTBE, evaluation of options for closure of certain underground petroleum storage tanks, and multimedia review of proposed CaRFG3 regulations, see Historical and Statutory Notes under Government Code § 15399.10.

Library References

Forms: B-W Cal Civil Practice: Environmental Litigation §§7:43, 7:49.

§ 25289. Authority to inspect location of tank systems, records, and surrounding real property; monitoring and testing

(a) To carry out the purposes of this chapter or Chapter 6.75 (commencing with Section 25299.10), any duly authorized representative of the local agency, the regional board, or the board has the authority specified in Section 25185, with respect to any place where underground tank systems are located, or in which records relevant to operation of an underground tank system are kept, and in Section 25185.5, with respect to real property which is within 2,000 feet of any place where underground tank systems are located. The authority conferred by this subdivision includes the authority to conduct any monitoring or testing of an underground tank system.

(b) To carry out the purposes of this chapter or Chapter 6.75 (commencing with Section 25299.10), any authorized representative of the local agency, the regional board, or the board may require the owner or operator of an underground storage tank to, upon request, submit any information relevant to the compliance with this chapter or the regulations, to conduct monitoring or testing, and to report the results of that monitoring or testing under penalty of perjury. The burden of the monitoring, testing, and reporting, including costs, shall bear a reasonable relationship to the need for the monitoring, testing, and reporting.

(Formerly § 25283.5, added by Stats.1983, c. 1046, § 3. Renumbered § 25289 and amended by Stats.1984, c. 1038, § 10; Stats.1989, c. 1397, § 10. Amended by Stats.1996, c.611, §2 (S.B.562).)

§ 25290. Trade secrets; definition; disclosure; identification of information on application for permit

(a) "Trade secrets," as used in this chapter, includes, but is not limited to, any formula, plan, pattern, process, tool, mechanism, compound, procedure, production data, or compilation of information which is not patented, which is known only to certain individuals within a commercial concern who are using it to fabricate, produce, or compound an article of trade or a service having commercial value, and which gives its user an opportunity to obtain a business advantage over competitors who do not know or use it.

(b) The board or a local agency may disclose trade secrets received by the board or the local agency pursuant to this chapter to authorize representatives or other governmental agencies only in connection with the board's or local agency's responsibilities pursuant to this chapter. The board and the local agency shall establish procedures to ensure that these trade secrets are utilized only in connection with these responsibilities and are not otherwise disseminated without the consent of the person who provided the information to the board or the local agency.

(c) Any person providing information pursuant to Section 25286 shall, at the time of its submission, identify all information which the person believes is a trade secret. Any information or record not identified as a trade secret is available to the public, unless exempted from disclosure by other provisions of law.

(d) Where the local agency, by ordinance, provides an alternative to the listing of a substance which is a trade secret, the person storing that substance shall provide the identification of the material directly to the board pursuant to this section.

(Formerly § 25283.6, added by Stats.1983, c. 1046, § 3. Renumbered § 25290 and amended by Stats.1984, c. 1038, § 11.)

§ 25291. Underground storage tanks installed after January 1, 1984; requirements

Every underground storage tank installed after January 1, 1984, shall meet all of the following requirements:

(a) The underground storage tank shall be designed and constructed to provide primary and secondary levels of containment of the hazardous substances stored in it in accordance with the following performance standards:

(1) Primary containment shall be product-tight.

(2) Secondary containment shall be constructed to prevent structural weakening as a result of contact with any released hazardous substances, and also shall be capable of storing the hazardous substances for the maximum anticipated period of time necessary for the recovery of any released hazardous substance.
(3) In the case of an installation with one primary container, the secondary containment shall be large enough to contain at least 100 percent of the volume of the primary tank.

(4) In the case of multiple primary tanks, the secondary container shall be large enough to contain 150 percent of the volume of the largest primary tank placed in it, or 10 percent of the aggregate internal volume of all primary tanks, whichever is greater.

(5) If the facility is open to rainfall, then the secondary containment shall be able to additionally accommodate the maximum volume of a 24-hour rainfall as determined by a 25-year storm history.

(6) Single-walled containers do not fulfill the requirement of an underground storage tank providing both a primary and a secondary containment. However, an underground storage tank with a primary container constructed with a double complete shell shall be deemed to have met the requirements for primary and secondary containment set forth in this section if the outer shell is constructed primarily of non earthen materials, including, but not limited to, concrete, steel, and plastic, which provide structural support and a continuous leak detection system with alarm is located in the space between the shells; the system is capable of detecting the entry of hazardous substances from the inner container into the space; and the system is capable of detecting water intrusion into the space from the outer shell.

(7) Underground storage tanks for motor vehicle fuels installed before January 1, 1997, may be designed and constructed in accordance with this paragraph in lieu of the requirements of paragraphs (1) to (6), inclusive, if all of the following conditions exist:

(A) The primary containment construction is of glass fiber reinforced plastic, cathodically protected steel, or steel clad with glass fiber reinforced plastic.

(B) Any alternative primary containment is installed in conjunction with a system that will intercept and direct a leak from any part of the underground storage tank to a monitoring well to detect any release of motor vehicle fuels stored in the tank.

(C) The system is designed to provide early leak detection and response, and to protect the groundwater from releases.

(D) The monitoring is in accordance with the alternative method identified in paragraph (4) of subdivision (b) of Section 25292.

(E) Pressurized piping systems connected to tanks used for the storage of motor vehicle fuels and monitored in accordance with paragraph (4) of subdivision (b) of Section 25292 also meet the conditions of this subdivision if the tank meets the conditions of subparagraphs (A) to (D), inclusive. However, any pipe connected to an underground storage tank installed after July 1, 1987, shall be equipped with secondary containment which complies with paragraphs (1) to (6), inclusive.

(b) The underground tank system shall be designed and constructed with a monitoring system capable of detecting the entry of the hazardous substance stored in the primary containment into the secondary containment.

(c) The underground storage tank shall be provided with equipment to prevent spills and overflows from the primary tank.

(d) If different substances are stored in the same tank and in combination may cause a fire or explosion or the production of flammable, toxic, or poisonous gas, or the deterioration of a primary or secondary container, those substances shall be separated in both the primary and secondary containment so as to avoid potential intermixing.

(e) If water could enter into the secondary containment by precipitation or infiltration, the facility shall contain a means of monitoring for water intrusion and for removing the water by the owner or operator. This removal system shall also prevent uncontrolled removal of this water and provide for a means of analyzing the removed water for hazardous substance contamination and a means of disposing of the water, if so contaminated, at an authorized disposal facility.

(f) Underground pressurized piping that conveys a hazardous substance shall be equipped with an automatic line leak detector and shall be tightness tested annually.

(g) Before the underground storage tank is covered, enclosed, or placed in use, the standard installation testing for requirements for underground storage systems specified in Section 2-7 of the Flammable and Combustible Liquids Code, adopted by the National Fire Protection Association, (NFPA 30) as amended and published in the respective edition of the Uniform Fire Code, shall be followed.

(h) Before the underground storage tank is placed in service, the underground tank system shall be tested in operating condition using a tank integrity test.

(I) If the underground storage tank is designed to maintain a water level in the secondary containment, the tank shall be equipped with a safe method of removing any excess water to a holding facility and the owner or operator shall inspect the holding facility monthly for the presence of excess water overflow. If excess water is present in the holding facility, the permit holder shall provide a means to analyze the water for hazardous substance contamination and a means to dispose of the water, if so contaminated, at an authorized disposal facility.

(Formerly § 25284, added by Stats.1983, c. 1046, § 3. Renumbered § 25291 and amended by Stats.1984, c. 1584, § 2; Stats.1985, c. 1228. § 3, eff. Sept. 30, 1985; Stats.1985, c. 1535, § 3, eff. Oct. 2, 1985; Stats.1986, c. 248, § 151; Stats.1986, c. 1025, § 2; Stats.1987, c. 1372, § 6; Stats.1989, c. 1397, § 11; Stats.1996, c. 611, §2.5 (S.B.562).)

Cross Reference

Regulations implementing requirements of this section, see § 25150.1.

§ 25292. Underground storage tanks installed on or before January 1, 1984; actions to monitor, replacement or upgrading; automatic line leak detectors

For every underground storage tank installed on or before January 1, 1984, and used for the storage of hazardous substances, the following actions shall be taken:

(a) On or before July 1, 1985, the owner shall outfit the underground tank system with a monitoring system capable of detecting unauthorized releases of any hazardous substances stored in the tank system, and thereafter, the operator shall monitor each tank system, based on materials stored and the type of monitoring installed.

(b) Provide a means for visual inspection of the tank system, wherever practical, for the purpose of the monitoring required by subdivision (a). Alternative methods of monitoring the tank system on a monthly, or more frequent basis, may be required by the local agency, consistent with the regulations of the board.

The alternative monitoring methods include, but are not limited to, the following methods:

(1) Tank integrity testing for proving the integrity of an underground tank system at time intervals specified by the board.

(2) A groundwater monitoring well or wells which are down gradient and adjacent to the underground tank system, vapor analysis within a well where appropriate, and analysis of soil borings at the time of initial installation of the well.

(3) A continuous leak detection and alarm system which is located in monitoring wells adjacent to an underground tank system and which is approved by the local agency.

(4) For monitoring tanks containing motor vehicle fuels, daily gauging and inventory reconciliation by the operator, if all of the following requirements are met:

(A) Inventory records are kept on file for one year and are reviewed quarterly.

(B) The tank system is tested, using the tank integrity test at time intervals specified by the board and whenever there is a shortage greater than the amount which the board shall specify by regulation.

(C) If a pressurized pump system is connected to the tank system, the system has a leak detection device to monitor for leaks in the piping. The leak detection device shall be installed in a manner designed to resist unauthorized tampering and to clearly show by visual inspection if tampering has occurred. The leak detection device shall be tested annually, at a minimum, and all devices found to be not performing in conformance with the manufacturer's leak detection specifications shall be promptly repaired or replaced.

(5) For monitoring underground tank systems which are located on farms and which store motor vehicle or heating fuels used primarily for agricultural purposes, alternative monitoring methods include the following:

(A) If the tank has a capacity of greater than 1,100 gallons but of 5,000 gallons or less, the tank shall be tested using the tank integrity test, at least once every three years, and the owner shall utilize tank gauging on a monthly or more frequent basis, as required by the local agency, subject to the specifications provided in paragraph (7) of subdivision (c) of Section 2641 of Title 23 of the California Code of Regulations, as that section read on August 13, 1985.

(B) If the tank has a capacity of more than 5,000 gallons, the tank shall be monitored pursuant to the methods for all other tanks specified in this subdivision.

(c) The board shall develop regulations specifying monitoring alternatives. The local agency, or any other public agency specified by the local agency, shall approve the location and number of wells, the depth of wells, and the sampling frequency, pursuant to these regulations.

(d) On or before December 22, 1998, the underground storage tank shall be replaced or upgraded to prevent releases due to corrosion or spills or overfills for the underground storage tanks's[1] operating life.

(e) (1) All existing underground pressurized piping shall be equipped with an automatic line leak detector on or before December 22, 1990, and shall be retrofitted with secondary containment on or before December 22, 1998. Underground pressurized piping shall be tightness tested annually.

(2) Paragraph (1) does not apply to existing pressurized piping containing motor vehicle fuel, if the pipeline is constructed of glass fiber reinforced plastic, cathodically protected steel, or steel clad with glass fiber reinforced plastic, is equipped with an automatic line leak detector, and is tightness tested annually.

(Formerly § 25284.1, added by Stats.1983, c. 1046, § 3. Renumbered § 25292 and amended by Stats.1984, c. 1584, § 4; Stats.1986, c. 935, § 5; Stats.1986, c. 1025, § 5; Stats.1987, c. 1372, § 7; Stats.1989, c. 1397, § 12.)

[1] So in chaptered copy.

Cross Reference

Regulations implementing requirements of this section, see § 25150.1.

§ 25292.1. Underground tank systems; operational requirements

All underground tank systems shall meet the following operational requirements:

(a) The underground tank system shall be operated to prevent unauthorized releases, including spills and overfills, during the operating life of the tank, including during gauging, sampling, and testing for the integrity of the tank.

(b) Where equipped with cathodic protection, the underground tank system shall be operated by a person with sufficient training and experience in preventing corrosion.

(c) The underground tank system shall be structurally sound at the time of upgrade or repair.

(Added by Stats.1989, c. 1397, § 13. Amended by Stats.1991, c. 1138 (A.B.1954), § 2.)

§ 25292.2. Evidence of financial responsibility

(a) All owners and operators of an underground tank system shall maintain evidence of financial responsibility for taking corrective action and for compensating third parties for bodily injury and property damage caused by a release from the underground tank system, in accordance with regulations adopted by the board pursuant to Section 25299.3. The regulations shall include a schedule that requires that financial responsibility requirements are phased-in for all underground storage tank systems on or before October 26, 1990.

(b) If the owner and the operator are separate persons, either the owner or the operator shall demonstrate compliance with subdivision (a).

(c) An owner may comply with this article by entering into an agreement with the operator of the tank requiring the operator to demonstrate compliance with subdivision (a). However, both the owner and the operator are in violation of subdivision (a) if evidence of financial responsibility is not established and maintained in accordance with this article.

(Added by Stats.1989, c. 1397, § 14.)

§ 25292.3 Upgrade compliance certificate for petroleum underground storage tank systems

(a) On and after January 1, 1999, no person shall deposit petroleum into a underground storage tank system unless the underground storage tank system meets the requirements of Section 25291 or subdivisions (d) and (e) of Section 25292 and related regulations adopted pursuant to Section 25299.3.

(b) Any person depositing petroleum into an underground storage tank system shall verify that the system meets the requirements of Section 25291 or subdivisions (d) and (e) of Section 25292, and related regulations adopted pursuant to Section 25299.3, by taking one of the following actions:

(1) Viewing the upgrade compliance certificate for the petroleum underground storage tank system displayed pursuant to subdivision (e) of Section 25284.

(2) Obtaining written verification from the local agency that the petroleum underground storage tank system is on a list maintained by a local agency pursuant to subdivision (f) of Section 25284.

(3) Obtaining a correct copy of the upgrade compliance certificate from the owner or operator of the petroleum underground storage tank system.

(Added by Stats.1997, c. , § (A.B.1491).)

§ 25292.4. Underground storage tank systems with single-walled component located near public drinking water wells, enhanced leak detection or monitoring

(a) On and after November 1, 2000, an owner or operator of an underground storage tank system with a single-walled component that is located within 1,000 feet of a public drinking water well, as identified pursuant to the state G1S mapping data base, shall implement a program of enhanced leak detection or monitoring, in accordance with the regulations adopted by the board pursuant to subdivision (c).

(b) The board shall notify the owner and operator of each underground storage tank system that is located within 1,000 feet of a public drinking water well, as identified pursuant to the state GIS mapping data base, of the owner and operators' responsibilities pursuant to this section. The board shall provide each local agency with a list of tank systems within the local agency's jurisdiction that are located within 1,000 feet of a public drinking water well, as identified pursuant to the state GIS mapping data base.

(c) The board shall adopt regulations to implement the enhanced leak detection and monitoring program required by subdivision (a). Before adopting these regulations, the board shall consult with the petroleum industry, local governments, environmental groups, and other interested parties to assess the appropriate technology and procedures to implement the enhanced leak detection or monitoring program required by subdivision (a). In adopting these regulations, the board shall consider existing leak detection technology and external monitoring techniques or procedures for underground storage tanks.

(Added by Stats. 1999, c. 812 (S.B. 989), § 12.)

Historical and Statutory Notes

1999 Legislation

Provisions of Stats. 1999, c. 812 (S.B. 989) relating to effect of that law on rights and liabilities relating to MTBE, evaluation of options for closure of certain underground petroleum storage tanks, and multimedia review of proposed CaRFG3 regulations, see Historical and Statutory notes under Government Code § 15399.10).

§ 25293. Monitoring of tank system by operator; records; duties of owners and operators

The operator of the underground tank system shall monitor the tank system using the method specified on the permit for the tank system. Records of monitoring, testing, repairing, and closure shall be kept in sufficient detail to enable the local agency to determine whether the underground tank system is in compliance with the applicable provisions of this chapter, the regulations adopted by the board pursuant to Section 25299.3, and the permit issued for the operation of the tank system.

(Formerly § 25284.2, added by Stats.1983, c. 1046, § 3. Renumbered § 25293 and amended by Stats.1984, c. 1038, § 14; Stats.1989, c. 1397, § 15. Amended by Stats.1995, c. 639 (S.B.1191), § 59.)

Historical and Statutory Notes

1995 Legislation

Legislative intent relating to Stats.1995, c. 639 (S.B.1191), see Historical and Statutory Notes under Health and Safety Code § 13143.10.

§ 25294. Unauthorized release; conditions requiring recordation on operator's monitoring reports

Any unauthorized release from the primary containment which the operator is able to clean up within eight hours after the release was detected or should reasonably have been detected, and which does not escape from the secondary containment, does not increase the hazard of fire or explosion, and does not cause any deterioration of the secondary containment of the underground storage tank, shall be recorded on the operator's monitoring reports.

(Formerly § 25284.3, added by Stats.1983, c. 1046, § 3. Renumbered § 25294 and amended by Stats.1984, c. 1038. § 15.)

Cross Reference

Penalty for failure to report unauthorized release, see § 25299.

§ 25295. Unauthorized release; reporting requirements; review of permit; annual report to Legislature

(a)(1) Any unauthorized release which escapes from the secondary containment, or from the primary containment, if no secondary containment exists, increases the hazard of fire or explosion, or causes any deterioration of the secondary containment of the underground tank system shall be reported by the operator to the local agency designated pursuant to Section 25283 within 24 hours after the release has been detected or should have been detected. A full written report shall be transmitted by the owner or operator of the underground tank system to the local agency within five working days of the occurrence of the release. The report shall describe the nature and volume of the unauthorized release, any corrective or remedial actions undertaken, and any further corrective or remedial actions, including investigative actions, which will be needed to clean up the unauthorized release and abate the effects of the release and a time schedule for implementing these actions.

(2) The local agency shall review the permit whenever there has been an unauthorized release or when it determines that the underground tank system is unsafe. In determining whether to modify or terminate the permit, the local agency shall consider the age of the tank, the methods of containment, the methods of monitoring, the feasibility of any required repairs, the concentration of the hazardous substances

stored in the tank, the severity of potential unauthorized releases, and the suitability of any other long-term preventive measures which would meet the requirements of this chapter.

(b) In cooperation with the Office of Emergency Services, the board shall submit an annual statewide report by county, to the Legislature, of all unauthorized releases, indicating for each unauthorized release the operator, the hazardous substance, the quantity of the unauthorized release, and the actions taken to abate the problem.

(c) The reporting requirements imposed by this section are in addition to any requirements which may be imposed by Sections 13271 and 13272 of the Water Code.

(Formerly § 25284.4, added by Stats.1983, c. 1046, § 3. Renumbered § 25295 and amended by Stats.1984, c. 1038, § 16; Stats.1989, c. 1397, § 16. Amended by Stats.1994, c. 1214 (A.B.3404), § 6.)

Historical and Statutory Notes

1994 Legislation

Legislative findings and declarations relating to Stats.1994, c. 1214 (A.B.3404), see Historical and Statutory Notes under Government Code § 8589.7.

Cross References

Penalty for failure to report an unauthorized release, see § 25299.

Reports to legislature or governor, moratorium and exceptions, see Government Code § 7550.5.

§ 25295.5. Unauthorized release; spill or overfill; notification; qualification for funds

(a) For purposes of this chapter, an unauthorized release includes, but is not limited to, a spill or overfill of a hazardous substance that meets both of the following conditions:

(1) The spill or overfill occurs while the hazardous substance is being placed in an underground storage tank.

(2) The spill or overfill is due to the use of improper equipment, faulty equipment, operator error, or inattention or overfilling.

(b) A person who causes an unauthorized release of a hazardous substance specified in subdivision (a) shall immediately notify the operator of the underground storage tank that a spill has occurred and the operator shall comply with the requirements of Sections 25294 or 25295, whichever is applicable.

(c) A spill or overfill shall not qualify for funds provided pursuant to Section 25299.51.

(Added by Stats.1991, c. 1138 (A.B.1954), § 3.)

§ 25296. Unauthorized release; underground storage tank containing motor vehicle fuel not under pressure; repair requirements

(a) If there has been any unauthorized release, as defined in Section 25294 or subdivision (a) of Section 25295, from an underground storage tank containing motor

vehicle fuel not under pressure, the permit holder may repair the tank once by an interior-coating process if the tank meets all of the following requirements:

(1) One of the following tests has been conducted to determine the thickness of the storage tank:

(A) An ultrasonic test.

(B) Certification by a special inspector that the shell will provide structural support for the interior lining. The special inspector shall make this certification by entering and inspecting the entire interior surface of the tank and shall base this certification upon the following procedures and criteria:

(i) If the tank is made of fiberglass. the tank is cleaned so that no residue remains on the tank wall surface. The special inspector shall take interior diameter measurements and, if the cross-section has compressed more than 1 percent of the original diameter, the tank shall not be certified and shall also not be returned to service. The special inspector shall also conduct an interior inspection to identify any area where compression or tension cracking is occurring and shall determine whether additional glass fiber reinforcing is required for certification before the tank may be lined.

(ii) If the tank is made of steel, the tank interior surface shall be abrasive blasted completely free of scale, rust, and foreign matter, as specified in the American Petroleum Institute's recommended practice 16-31, relating to white metal blasting. The special inspection shall sound any perforations or areas showing corrosion pitting with a brass ballpeen hammer to enlarge the perforation or break through a potentially thin steel area. Tanks that have any of the following defects shall not be certified or returned to service:

(I) A tank which has an open seam or a split longer than three inches.

(II) A tank which has a perforation larger than one and one-half inches in diameter, or a gauging opening larger than two and one-half inches in diameter.

(III) A tank with five or more perforations.

(IV) A tank with 20 or more perforations in a 500 square foot area.

(V) A tank with a perforation larger than one-half inch.

(C) A test approved by the board as comparable to the tests specified in subparagraph (A) or (B). If the person conducting the test determines that the test results indicate that the tank has a serious corrosion problem, the local agency may require additional corrosion protection for the tank or may prohibit the permit holder from making the repair.

(2) The material used to repair the tank by an interior-coating process is compatible with the motor vehicle fuel that is stored, as approved by the board by regulation.

(3) The material used to repair the tank by an interior-coating process is applied in accordance with nationally recognized engineering practices such as the American Petroleum Institute's recommended practice No. 1631 for the interior lining of existing underground storage tanks.

(4) Before the tank is placed back into service following the repair, the tank is tested in the operating condition using the tank integrity test.

(b) The board may adopt regulations, in consultation with the State Fire Marshal, for the repair of underground storage tanks, which may include, but are not limited to, a requirement that a test be conducted to determine whether the interior-coating process has bonded to the wall of the tank. The standards specified in subdivision (a) shall remain in effect until the adoption of these regulations.

(c) The board shall, by regulation, require that monitoring systems be installed when a repair is made pursuant to this section. For purposes of this subdivision, "monitoring system" means a continuous leak detection and alarm system which is located in monitoring wells adjacent to an underground storage tank and which is approved by the board.

(d) If there has not been an unauthorized release, as defined in subdivision (a) of Section 25295, from an underground storage tank containing motor vehicle fuel not under pressure, the permit holder may line the interior of the tank as a preventative measure. If an unauthorized release occurs from a tank which was lined as a preventative measure, the permit holder shall not reline the tank again.

(Formerly § 25284.5, added by Stats.1983, c. 1046, § 3. Renumbered § 25296 and amended by Stats.1984, c. 1584, § 6; Stats.1987, c. 1372, § 8.)

§ 25297. Authority to remedy effects of and remove hazardous substance released

The local agency may request the following agencies to utilize that agency's authority to remedy the effects of, and remove, any hazardous substance which has been released from an underground storage tank:

(a) The department which may take action pursuant to Chapter 6.8 (commencing with Section 25300) and, for this purpose, any unauthorized release shall be deemed a release as defined in Section 25320.

(b) A regional water quality control board may take action pursuant to Division 7 (commencing with Section 13000) of the Water Code and, for this purpose, the discharged hazardous substance shall be deemed a waste as defined in subdivision (d) of Section 13050.

(Formerly § 25285, added by Stats.1983, c. 1046, § 3. Renumbered § 25297 and amended by Stats.1984, c. 1038, § 18.)

§ 25297.1. Local oversight program for the abatement of unauthorized releases of hazardous substances from underground storage tanks; participation by local agencies; agreements; funding; administrative and technical procedures; expenditures; costs

(a) In addition to the authority granted to the board pursuant to Division 7 (commencing with Section 13000) of the Water Code and to the department pursuant to Chapter 6.8 (commencing with Section 25300), the board, in cooperation with the department, shall develop and implement a local oversight program for the abatement of, and oversight of the abatement of, unauthorized releases of hazardous substances from underground storage tanks by local agencies. In implementing the local oversight program, the agreement specified in subdivision (b) shall be between the board and the local agency. The board shall select local agencies for participation in the program from among those local agencies which apply to the board, giving first priority to those local agencies which have demonstrated prior experience in cleanup, abatement, or other actions necessary to remedy the effects of unauthorized releases of hazardous substances from underground storage tanks. The board shall select only those local agencies which have implemented this chapter and which, except as provided in Section 25404.5, have begun to collect and transmit to the board the surcharge or fees pursuant to subdivision (b) of Section 25287.

(b) In implementing the local oversight program described in subdivision (a), the board may enter into an agreement with any local agency to perform, or cause to be performed, any cleanup, abatement, or other action necessary to remedy the effects of a release of hazardous substances from an underground storage tank with respect to which the local agency has enforcement authority pursuant to this section. The board shall not enter into an agreement with a local agency for soil contamination cleanup or for groundwater contamination cleanup unless the board determines that the local agency has a demonstrated capability to oversee or perform the cleanup. The implementation of the cleanup, abatement, or other action shall be consistent with procedures adopted by the board pursuant to subdivision (d) and shall be based upon cleanup standards specified by the board or regional board.

(c) The board shall provide funding to a local agency which enters into an agreement pursuant to subdivision (b) for the reasonable costs incurred by the local agency in overseeing any cleanup, abatement, or other action taken by a responsible party to remedy the effects of unauthorized releases from underground storage tanks.

(d) The board shall adopt administrative and technical procedures, as part of the state policy for water quality control adopted pursuant to Section 13140 of the Water Code, for cleanup and abatement actions taken pursuant to this section. The procedures shall include, but not be limited to, all of the following:

(1) Guidelines as to which sites may be assigned to the local agency.

(2) The content of the agreements which may be entered into by the board and the local agency.

(3) Procedures by which a responsible party may petition the board or regional board for review, pursuant to Article 2 (commencing with Section 13320) of Chapter 5 of Division 7 of the Water Code, or pursuant to Chapter 9.2 (commencing with Section 2250) of Division 3 of Title 23 of the California Code of Regulations, or any successor regulation, as applicable, of actions or decisions of the local agency in implementing the cleanup, abatement, or other action.

(4) Protocols for assessing and recovering money from responsible parties for any reasonable and necessary costs incurred by the local agency in implementing this section, as specified in subdivision (i) unless the cleanup or abatement action is subject to Section 25299.37.

(5) Quantifiable measures to evaluate the outcome of a pilot program established pursuant to this section.

(e) Any agreement between the board and a local agency to carry out a local oversight program pursuant to this section shall require both of the following:

(1) The local agency shall establish and maintain accurate accounting records of all costs it incurs pursuant to this section and shall periodically make these records available to the board. The Controller may annually audit these records to verify the hourly oversight costs charged by a local agency. The board shall reimburse the Controller for the cost of the audits of a local agency's records conducted pursuant to this section.

(2) The board and the department shall make reasonable efforts to recover costs incurred pursuant to this section from responsible parties, and may pursue any available legal remedy for this purpose.

(f) The board shall develop a system for maintaining a database for tracking expenditures of funds pursuant to this section, and shall make this data available to the Legislature upon request.

(g)(1) Sections 25355.5 and 25356 do not apply to expenditures from the Hazardous Substance Cleanup Fund for oversight of abatement of releases from underground storage tanks as part of the local oversight program established pursuant to this section.

(2) A local agency which enters into an agreement pursuant to subdivision (b), shall notify the responsible party, for any site subject to a cleanup, abatement, or other action taken pursuant to the local oversight program established pursuant to this section, that the responsible party is liable for not more than 150 percent of the total amount of site-specific oversight costs actually incurred by the local agency.

(h) Any aggrieved person may petition the board for review of the action or failure to act of a local agency, which enters into an agreement pursuant to subdivision (b), at a site subject to cleanup, abatement, or other action conducted as part of the local oversight program established pursuant to this section, in accordance with the procedures adopted by the board pursuant to subdivision (d).

(I) (1) For purposes of this section, site-specific oversight costs include only the costs of the following activities, when carried out by technical program staff of a local agency and their immediate supervisors:

(A) Responsible party identification and notification.

(B) Site visits.

(C) Sampling activities.

(D) Meetings with responsible parties or responsible party consultants.

(E) Meetings with the regional board or with other affected agencies regarding a specific site.

(F) Review of reports, workplans, preliminary assessments, remedial action plans, or post-remedial monitoring.

(G) Development of enforcement actions against a responsible party.

(H) Issuance of a closure document.

(2) The responsible party is liable for the site-specific oversight costs, calculated pursuant to paragraphs (3) and (4), incurred by a local agency, in overseeing any cleanup, abatement, or other action taken pursuant to this section to remedy an unauthorized release from an underground storage tank.

(3) Notwithstanding the requirements of any other provision of law, the amount of liability of a responsible party for the oversight costs incurred by the local agency and

by the board and regional boards in overseeing any action pursuant to this section shall be calculated as an amount not more than 150 percent of the total amount of the site-specific oversight costs actually incurred by the local agency and shall not include the direct or indirect costs incurred by the board or regional boards.

(4) (A) The total amount of oversight costs for which a local agency may be reimbursed shall not exceed one hundred fifteen dollars ($115) per hour, multiplied by the total number of site-specific hours performed by the local agency.

(B) The total amount of the costs per site for administration and technical assistance to local agencies by the board and the regional board entering into agreements pursuant to subdivision (b) shall not exceed a combined total of thirty-five dollars ($35) for each hour of site-specific oversight. The board shall base its costs on the total hours of site-specific oversight work performed by all participating local agencies. The regional board shall base its costs on the total number of hours of site-specific oversight costs attributable to the local agency which received regional board assistance.

(C) The amounts specified in subparagraphs (A) and (B) are base rates for the 1990-91 fiscal year. Commencing July 1, 1991, and for each fiscal year thereafter, the board shall adjust the base rates annually to reflect increases or decreases in the cost of living during the prior fiscal year, as measured by the implicit price deflator for state and local government purchases of goods and services, as published by the United States Department of Commerce or by a successor agency of the federal government.

(5) In recovering costs from responsible parties for costs incurred under this section, the local agency shall prorate any costs identifiable as startup costs over the expected number of cases which the local agency will oversee during a 10-year period. A responsible party who has been assessed startup costs for the cleanup of any unauthorized release which, as of January 1, 1991, is the subject of oversight by a local agency, shall receive an adjustment by the local agency in the form of a credit, for the purposes of cost recovery. Startup costs include all of the following expenses:

(A) Small tools, safety clothing, cameras, sampling equipment, and other similar articles necessary to investigate or document pollution.

(B) Office furniture.

(C) Staff assistance needed to develop computer tracking of financial and site-specific records.

(D) Training and setup costs for the first six months of the local agency program.

(6) This subdivision does not apply to costs which are required to be recovered pursuant to Article 7.5 (commencing with Section 25385) of Chapter 6.8.

(Added by Stats.1990, c. 1574 (A.B.3560), § 1. Amended by Stats.1995, c. 639 (S.B.1191), § 60; amended by Stats.1996, c. 611, §3 (S.B.562).)

Historical and Statutory Notes

1995 Legislation

Legislative intent relating to Stats.1995, c. 639 (S.B.1191), see Historical and Statutory Notes under Health and Safety Code § 13143.10.

§ 25297.2. Immunity from liability; local agencies

Any local agency which performs, or causes to be performed, any cleanup, abatement, or other action necessary to remedy the effects of a release of hazardous substances from an underground storage tank is immune from liability for this action to the same extent as the board or regional board is immune if the board or regional board had performed the cleanup, abatement, or other action.

(Added by Stats.1988, c. 1431, § 2, eff. Sept. 27, 1988.)

§ 25297.3. Leaking Underground Storage Tank Cost Recovery Fund

(a) The Leaking Underground Storage Tank Cost Recovery Fund is hereby created in the General Fund and the money in the fund may be expended by the board, upon appropriation by the Legislature, for the purposes specified in subdivisions (c) and (d).

(b) All of the following amounts shall be deposited in the Leaking Underground Storage Tank Cost Recovery Fund:

(1) All money recovered pursuant to the federal act for purposes of this chapter.

(2) Notwithstanding Section 16475 of the Government Code, all interest earned upon any money deposited in the Leaking Underground Storage Tank Cost Recovery Fund.

(3) Upon receipt of a written request from the board, the Controller shall transfer to the Leaking Underground Storage Tank Cost Recovery Fund the cash balance of the account in the Special Deposit Fund, as specified in Section 16370 of the Government Code, in which is deposited all money recovered pursuant to the federal act.

(c) The board may expend the money in the Leaking Underground Storage Tank Cost Recovery Fund for the purpose of taking any of the following actions with respect to underground storage tanks containing petroleum, as defined in the federal act:

(1) Enforcement activities.

(2) Corrective action and oversight.

(3) Cost recovery.

(4) Relocation of residents and provision of water supplies.

(5) Exposure assessments.

(d) The board may expend the money in the Leaking Underground Storage Tank Cost Recovery Fund for administrative expenses related to carrying out the activities specified in subdivision (c).

(Added by Stats.1992, c. 1215 (A.B.3180), § 1.)

§ 25298. Abandonment, closing or temporary ceasing of operation of underground storage tank

(a) No person shall abandon an underground tank system or close or temporarily cease operating an underground tank system, except as provided in this section.

(b) An underground tank system which is temporarily taken out of service, but which the operator intends to return to use, shall continue to be subject to all the permit, inspection, and monitoring requirements of this chapter and all applicable regulations adopted by the board pursuant to Section 25299.3, unless the operator complies with subdivision (c) for the period of time the underground tank system is not in use.

(c) No person shall close an underground tank system unless the person undertakes all of the following actions:

(1) Demonstrates to the local agency that all residual amounts of the hazardous substance or hazardous substances which were stored in the tank system prior to its closure have been removed, properly disposed of, and neutralized.

(2) Adequately seals the tank system to minimize any threat to the public safety and the possibility of water intrusion into, or runoff from, the tank system.

(3) Provides for, and carries out, the maintenance of the tank system as the local agency determines is necessary for the period of time the local agency requires.

(4) Demonstrates to the appropriate agency, which has jurisdiction over the site, that the site has been investigated to determine if there are any present, or were past, releases, and if so, that appropriate corrective or remedial actions have been taken.

(Formerly § 25286, added by Stats.1983, c. 1046, § 3. Renumbered § 25298 and amended by Stats.1984, c. 1038, § 19; Stats.1989, c. 1397, § 17.)

§ 25298.5. Analysis required to be performed by accredited laboratories

The analysis of any material which is required to demonstrate compliance with this chapter shall be performed by a laboratory accredited by the department pursuant to Chapter 7.5 (commencing with Section 1010) of Part 2 of Division 1.

(Added by Stats.1988, c. 894, § 12.)

Cross Reference

Enjoining laboratories performance of noncertified work, see Health and Safety Code § 100885.

§ 25299. Violations; civil and criminal penalties; operative date

(a) Any operator of an underground tank system shall be liable for a civil penalty of not less than five hundred dollars ($500) or more than five thousand dollars ($5,000) for each underground storage tank for each day of violation for any of the following violations:

(1) Operating an underground tank system which has not been issued a permit, in violation of this chapter.

(2) Violation of any of the applicable requirements of the permit issued for the operation of the underground tank system.

(3) Failure to maintain records, as required by this chapter.

(4) Failure to report an unauthorized release, as required by Sections 25294 and 25295.

(5) Failure to properly close an underground tank system, as required by Section 25298.

(6) Violation of any applicable requirement of this chapter or any requirement of this chapter or any regulation adopted by the board pursuant to Section 25299.3.

(7) Failure to permit inspection or to perform any monitoring, testing, or reporting required pursuant to Section 25288 or 25289.

(8) Making any false statement, representation, or certification in any application, record, report, or other document submitted or required to be maintained pursuant to this chapter.

(9) Tampering with or otherwise disabling automatic leak detection devices or alarms.

(b) Any owner of an underground tank system shall be liable for a civil penalty of not less than five hundred dollars ($500) or more than five thousand dollars ($5,000) per day for each underground storage tank, for each day of violation, for any of the following violations:

(1) Failure to obtain a permit as specified by this chapter.

(2) Failure to repair or upgrade an underground tank system in accordance with this chapter.

(3) Abandonment or improper closure of any underground tank system subject to this chapter.

(4) Knowing failure to take reasonable and necessary steps to assure compliance with this chapter by the operator of an underground tank system.

(5) Violation of any applicable requirement of the permit issued for operation of the underground tank system.

(6) Violation of any applicable requirement of this chapter or any regulation adopted by the board pursuant to Section 25299.3.

(7) Failure to permit inspection or to perform any monitoring, testing, or reporting required pursuant to Section 25288 or 25289.

(8) Making any false statement, representation, or certification in any application, record, report, or other document submitted or required to be maintained pursuant to this chapter.

(c) Any person who intentionally fails to notify the board or the local agency when required to do so by this chapter or who submits false information in a permit application, amendment, or renewal, pursuant to Section 25286, is liable for a civil penalty of not more than five thousand dollars ($5,000) for each underground storage tank for which notification is not given or false information is submitted.

(d) (1) Any person who falsifies any monitoring records required by this chapter, or knowingly fails to report an unauthorized release, shall, upon conviction, be punished by a fine of not less than five thousand dollars ($5,000) or more than ten thousand dollars ($10,000), by imprisonment in the county jail for not to exceed one year, or by both that fine and imprisonment.

(2) Any person who intentionally disables or tampers with an automatic leak detection system in a manner that would prevent the automatic leak detection system from detecting a leak or alerting the owner or operator of the leak, shall, upon conviction, be punished by a fine of not less than five thousand dollars ($5,000) or more than ten thousand dollars ($10,000), by imprisonment in the county jail for not more than one year, or by both the fine and imprisonment.

(e) In determining both the civil and criminal penalties imposed pursuant to this section, the court shall consider all relevant circumstances, including, but not limited to, the extent of harm or potential harm caused by the violation, the nature of the violation and the period of time over which it occurred, the frequency of past violations, and the corrective action, if any, taken by the person who holds the permit.

(f) Each civil penalty or criminal fine imposed pursuant to this section for any separate violation shall be separate, and in addition to, any other civil penalty or criminal fine imposed pursuant to this section or any other provision of law, and shall be paid to the treasury of the local agency or state, whichever is represented by the office of the city attorney, district attorney, or Attorney General bringing the action. All penalties or fines collected on behalf of the board or a regional board by the Attorney General shall be deposited in the State Water Pollution Cleanup and Abatement Account in the State Water Quality Control Fund, and are available for expenditure by the board, upon appropriation, pursuant to Section 13441 of the Water Code.

(g) Paragraph (9) of subdivision (a) does not prohibit the owner or operator of an underground storage tank, or his or her designee, from maintaining, repairing, or replacing automatic leak detection devices or alarms associated with that tank.

(Added by Stats.1988, c. 296, § 3, operative Jan. 1, 1991. Amended by Stats.1989, c. 1397, § 19, operative Jan. 1, 1991; Amended by Stats. 1999, c. 812 (S.B. 989), § 13.)

Historical and Statutory Notes

1999 Legislation

Provision of Stats. 1999, c. 812 (S.B. 989) relating to effect of that law on rights and liabilities relating to MTBE, evaluation of options for closure of certain underground petroleum storage tanks, and multimedia review of proposed CaRFG3 regulations, see Historical and Statutory Notes under Government Code § 15399.10.

Library References

Forms: B-W Cal Civil Practice: Environmental Litigation § 7:49.

Cross References

Failure to furnish required reports, discharge affecting water quality, misdemeanor, see Water Code § 13268.

Provision of copy of this section by owner to non-owning operators, see § 25293.

§ 25299.01. Injunctions; restraining orders or other orders

When any person has engaged in, is engaged in, or is about to engage in any acts or practices which violate this chapter, or Chapter 6.75 (commencing with Section 25299.10) or any rule, regulation, permit, standard, requirement, or order issued,

adopted, or executed pursuant to this chapter or Chapter 6.75 (commencing with Section 25299.10), the city attorney of the city in which the acts or practices occur, occurred, or will occur, the district attorney of the county in which the acts or practices occur, occurred, or will occur, or the Attorney General may apply to the superior court for any order enjoining these acts or practices, or for an order directing compliance. The court may grant a permanent or temporary injunction, restraining order, or other order.

(Added by Stats.1986, c. 1390, § 10, eff. Sept. 30, 1986. Amended by Stats.1989, c. 1442, § 4, eff. Oct. 2. 1989.)

§ 25299.02. Civil actions; joinder or consolidation

Every civil action brought under this chapter shall be brought by the city attorney, the district attorney, or the Attorney General in the name of the people of the State of California, and any actions relating to the same violations may be joined or consolidated.

(Added by Stats.1986, c. 1390, § 11, eff. Sept. 30, 1986.)

§ 25299.03. County in which civil action is brought

Any civil action brought pursuant to this chapter shall be brought in the county in which the violation occurred, the county in which the principal office of the defendant is located, or the county in which the Attorney General has an office nearest to the county in which the principal office of the defendants, or any of them, in this state is located.

(Added by Stats.1986, c. 1390, § 12, eff. Sept. 30, 1986.)

§ 25299.04. Temporary restraining order; preliminary or permanent injunction; proofs

In any civil action brought pursuant to this chapter in which a temporary restraining order, preliminary injunction, or permanent injunction is sought, it is not necessary to allege or prove at any state of the proceeding that irreparable damage will occur should the temporary restraining order, preliminary injunction, or permanent injunction not be issued or that the remedy at law is inadequate. The temporary restraining order, preliminary injunction, or permanent injunction shall be issued without these allegations and without this proof.

(Added by Stats.1986, c. 1390, § 13, eff. Sept. 30, 1986.)

§ 25299.1. City or county exempt from provisions of this chapter

(a) Any city or county which prior to January 1, 1984, adopted an ordinance which, at a minimum met the requirements set forth in Sections 25284 and 25284.1, as they read on January 1, 1984, prior to being amended and renumbered, providing for double containment, and monitoring of underground storage tanks which was exempt from this chapter as of December 31, 1989, is not exempt from implementing this chapter and shall implement this chapter on or before January 1, 1991.

(b) Until a city or county specified in subdivision (a) implements this chapter, the city or the county shall, at a minimum, do all of the following:

(1) Submit to the board the application form and annual information specified by Section 25286 and submit a written report of any unauthorized release from an underground storage tank to the Office of Emergency Services within 10 working days from the time the local agency is notified of the unauthorized release.

(2) Collect and transmit to the board the surcharge specified in subdivision (b) of Section 25287.

(3) Issue permits for the operation of an underground storage tank, which, at a minimum, ensure compliance with any applicable requirement of the federal act and any applicable regulation adopted by the board pursuant to Section 25299.3 which the board determines is necessary to assure consistency with the federal act.

(c) A permit issued on or after January 1, 1991, by a city or county specified in subdivision (a) shall require compliance with all applicable requirements of this chapter and with the regulations adopted by the board pursuant to Section 25299.3.

(d) This chapter does not limit or abridge the authority of any city or county to adopt an ordinance requiring information, conducting investigations, inspections, or implementing and enforcing this chapter.

(Formerly § 25288, added by Stats.1983, c. 1046, § 3. Amended by Stats.1984, c. 1537, § 2. Renumbered § 25299.1 and amended by Stats.1984, c. 1038, § 21; Stats.1984, c. 1584, § 8; Stats.1985, c. 1228, § 5, eff. Sept. 30, 1985; Stats.1989, c. 1397, § 20.)

§ 25299.2. Local regulations, requirements, or standards of performance

(a) Except as provided in subdivision (a) of Section 25299.4, this chapter does not preclude or deny the right of a local agency to adopt and enforce any regulation, requirement, or standard of performance that is more stringent than a regulation, requirement, or standard of performance in effect under this chapter with respect to underground storage tanks, if the regulation, requirement, or standard of performance, as provided in this subdivision, is consistent with this chapter.

(b) This chapter shall not be construed to preclude or deny the right of a local agency to regulate tanks which are not subject to regulation under this chapter or the federal act.

(Formerly § 25288.1, added by Stats.1983, c. 1046, § 3. Renumbered § 25299.2 and amended by Stats.1984, c. 1038, § 22; Stats.1989, c. 1397, § 21; Stats.1991, c. 724 (A.B.1731), § 1, eff. Oct. 9, 1991.)

§ 25299.3. Regulations

(a) The board shall adopt regulations implementing this chapter.

(b) Every city and county shall undertake its regulatory responsibilities under this chapter. Except as provided in Section 25299.1, every city and county shall implement this chapter not later than July 1, 1985.

(c) Any regulation adopted by the board pursuant to this section shall assure consistency with the requirements for state programs implementing the federal act, and shall include any more stringent requirements necessary to implement this chapter.

(Formerly § 25288.2, added by Stats.1983, c. 1046, § 3. Amended by Stats.1984, c. 1537, § 3. Renumbered § 25299.3 and amended by Stats.1984, c. 1038, § 23; Stats.1984, c. 1584. § 9; Stats.1989, c. 1397, § 22. Amended by Stats.1992, c. 654 (A.B.3089), § 8, eff. Sept. 14, 1992; Stats.1995, c. 639 (S.B.1191), § 61.)

Historical and Statutory Notes

1995 Legislation

Legislative intent relating to Stats.1995, c. 639 (S.B.1191), see Historical and Statutory Notes under Health and Safety Code § 13143.10.

§ 25299.4. Additional standards; site-specific variance; fee

(a) (1) Any local agency may apply to the board for authority to implement design and construction standards for the containment of a hazardous substance in underground storage tanks which are in addition to those set forth in this chapter. The application shall include a description of the additional standards and a discussion of the need to implement them. The board shall approve the application if it finds, after an investigation and public hearing, that the local agency has demonstrated by clear and convincing evidence that the additional standards are necessary to adequately protect the soil and the beneficial uses of the waters of the state from unauthorized releases.

(2) The board shall make its determination within six months of the date of application for authority to implement additional standards. If the board's determination upholds the application for authority to implement additional standards, the standards shall be

effective as of the date of the determination. If the board's determination does not uphold the application, the additional standards shall not go into effect.

(b) (1) Any permitholder or permit applicant may apply to the regional board having jurisdiction over the location of the permitholder or applicant's facility for a site-specific variance from Section 25291 or 25292. A site-specific variance is an alternative procedure which is applicable in one local agency jurisdiction. Prior to applying to the regional board, the permitholder shall first contact the local agency pursuant to paragraph (5).

(2) The regional board shall hold a public hearing 60 days after the completion of any documents required by the California Environmental Quality Act (Division 13 (commencing with Section 21000) of the Public Resources Code).

(3) The regional board shall consider the local agency's and the city, county, or city and county's recommendations in rendering its decision. Failure of the local agency or city, county, or city and county to join in the variance application pursuant to paragraph (5) shall not affect the request of the applicant to proceed with the variance application.

(4) The regional board shall approve the variance if it finds, after investigation and public hearing, that the applicant has demonstrated by clear and convincing evidence either of the following:

(A) Because of the facility's special circumstances, not generally applicable to other facilities' property, including size, shape, design, topography, location, or surroundings, the strict application of Sections 25291 and 25292 is unnecessary to adequately protect the soil and beneficial uses of the waters of the state from an unauthorized release.

(B) Strict application of the standards of Sections 25291 and 25292 would create practical difficulties not generally applicable to other facilities or property and that the proposed alternative will adequately protect the soil and beneficial uses of the waters of the state from an unauthorized release.

(5) Before applying for a variance the applicant shall contact the local agency to determine if a site-specific variance is required. If the local agency determines that a site-specific variance is required or does not act within 60 days, the applicant may proceed with the variance procedure in subdivision (a).

(6) At least 30 days before applying to the appropriate regional board, the applicant shall notify and request the city, county, or city and county to join the applicant in the variance application before the regional board.

(A) The city, county, or city and county shall provide notice of the receipt of that request to any person who has requested the notice.

(B) The local agency within the city, county, or city and county which has the jurisdiction for land use decisions shall have 30 days from completion of any documents required by the California Environmental Quality Act (Division 13 (commencing with Section 21000) of the Public Resources Code) to act on the applicant's request to join the applicant.

(e) Applicants requesting a variance pursuant to subdivision (b) shall pay a fee determined by the board to be necessary to recover the reasonable cost of administering subdivision (b).

(d) The permit issued for any underground storage tank issued a variance pursuant to subdivision (b) shall require compliance with any conditions prescribed by the board or a regional board in issuing the variance. The conditions prescribed by the board or regional board in the permit shall include any conditions necessary to assure compliance with any applicable requirements of the federal act.

(e) This section does not apply to or within any city or county which was exempt from implementing this chapter as of December 31, 1984.

(Formerly § 25288.3, added by Stats.1983, c. 1046, § 3. Amended by Stats.1984, c. 144, § 156. Renumbered § 25299.4 and amended by Stats.1984, c. 1038, § 24; Stats.1989, c. 1397, § 23; Stats.1991, c. 724 (A.B.1731), § 2, eff. Oct. 9, 1991. Amended by Stats.1992, c. 654 (A.B.3089), § 9, eff. Sept. 14, 1992.)

§ 25299.5. Construction of chapter

(a) This chapter shall be construed to assure consistency with the requirements for state programs implementing the federal act.

(b) This chapter shall not be construed to limit or abridge the powers and duties granted to the department by Chapter 6.5 (commencing with Section 25100) and Chapter 6.8 (commencing with Section 25300) or to the board and each regional board by Division 7 (commencing with Section 13000) of the Water Code.

(Formerly § 25289, added by Stats.1983, c. 1046, § 3. Renumbered § 25299.5 and amended by Stats.1984, c. 1038, § 25; Stats.1989, c. 1397, § 24.)

§ 25299.6. Accident or spill prevention plan or response plan; format

An owner or operator who is required to prepare an accident or spill prevention plan or response plan pursuant to this chapter or pursuant to an underground storage tank ordinance adopted by a city or county may, if the owner or operator elects to do so, use the format adopted pursuant to Section 25503.4.

(Added by Stats.1993, c. 630 (A.B.1451), § 5.)

§ 25299.7. Board as lead agency for purposes of federal act; procedures and implementation plans; regulations

(a) The board is designated as the lead agency in the state for all purposes stated in the federal act and may exercise any powers which a state may exercise pursuant to the federal act.

(b) The board may prepare, as part of any program application submitted to the Environmental Protection Agency for state program approval pursuant to Section 6991(c) of Title 42 of the United States Code, any procedures and implementation plans necessary to assure compliance with the requirements for a state program implementing the federal act. These procedures and implementation plans may include, but are not limited to, procedures or implementation plans with respect to investigation, compliance monitoring, enforcement, public participation, and sharing of information among local agencies, the board, and the Environmental Protection Agency. If the Environmental Protection Agency approves of the state program, the board, the regional boards, and each local agency shall administer this chapter in accordance with these procedures and implementation plans where required by the memorandum of agreement executed by the board and the Environmental Protection Agency. These procedures and implementation plans shall also apply to any public agency or official who brings a civil enforcement action pursuant to this chapter, and to any city or county specified in Section 25299.1, to the extent required by the memorandum of agreement. The board's approval of the program application and memorandum of agreement is not subject to Chapter 3.5 (commencing with Section 11340) of Part 1 of Division 3 of Title 2 of the Government Code.

(c) The board shall adopt any regulations necessary to obtain state program approval pursuant to Section 6991c of Title 42 of the United States Code. The board shall adopt these regulations as emergency regulations in accordance with Chapter 3.5 (commencing with Section 11340) of Part 1 of Division 3 of Title 2 of the Government Code, and for the purposes of that chapter, including Section 11349.6 of the Government Code, the adoption of these regulations is an emergency and shall be considered by the Office of Administrative Law as necessary for the immediate preservation of the public peace, health and safety, and general welfare. Notwithstanding Chapter 3.5 (commencing with Section 11340) of Part 1 of Division 3 of Title 2 of the Government Code, any emergency regulations adopted by the board pursuant to this section shall be filed with but may not be repealed by, the Office of Administrative Law and shall remain in effect until revised by the board.

(Added by Stats.1989, c. 1397, § 26.)