California Code of Regulations
Title 23. Waters
Division 3. State Water Resources Control Board and Regional Water Quality Control Boards
Chapter 16. Underground Tank Regulations

TEXT OF REGULATIONS

JULY 2016
State Water Resources Control Board
Division of Water Quality

TITLE 23. WATERS
DIVISION 3. STATE WATER RESOURCES CONTROL BOARD AND REGIONAL WATER QUALITY CONTROL BOARDS
CHAPTER 16. UNDERGROUND TANK REGULATIONS

Article 1. Definition of Terms

§ 2610. Definitions/Applicability of Definitions

(a) Unless the context requires otherwise and except as provided by subdivision (c), 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 25281of Chapter 6.7 of Division 20 of the Health and Safety Code:

Automatic ~~Line Leak Detector~~ line leak detector
Board
Department
Facility
Federal ~~Act~~ act
Local ~~Agency~~ agency
Owner
Pipe
Primary ~~Containment~~ containment
~~Product-Tight~~ Product-tight
Release
Secondary ~~Containment~~ containment
~~Single-Walled~~ Single-walled
Special ~~Inspector~~ inspector
~~Storage/Store~~ Storage or store
SWEEPS
Tank
Tank ~~Integrity Test~~ integrity test
Tank ~~Tester~~ tester
Unauthorized ~~Release~~ release
Underground ~~Storage Tank~~ storage tank
Underground ~~Tank System/Tank System~~ tank system or tank system

(c) The following terms shall have the same meaning as defined in section 15110 of title 27 of the California Code of Regulations:

California Environmental Reporting System
Data collection
Data element
Document
Electronic reporting

Local reporting portal
Local information management system
Signed or signature
Submittal element
Unified Program Data Dictionary

(d) The following shall have the same meaning as defined in chapter 3 of subdivision 1 of division 3 of title 27 of the California Code of Regulations:

UST Operating Permit Application – Facility Information
UST Operating Permit Application – Tank Information
UST Operating Permit Application – Monitoring Information
UST Certification of Installation/ Modification

Authority cited: Sections 25299.3 and 25299.7, Health and Safety Code.
Reference: ~~Section~~ Sections 25281, 25404 and 25404.1, Health and Safety Code.

§ 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.

"Best management practice" means any underground storage tank system management and operation practice that is the most effective and practicable method of preventing or reducing the probability of a release.

"Cathodic protection tester" means any individual who can demonstrate an understanding of the principles and measurements of all common types of cathodic protection systems as applied to buried or submerged metallic piping and underground storage tank systems. Such an individual shall possess a current certificate from the National Association of Corrosion Engineers or the International Code Council, demonstrating education and experience in soil resistivity, stray current, structure-to-soil potential, and component electrical isolation measurements of buried or submerged metallic piping and underground storage 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 any individual 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 buried or submerged metallic piping and underground storage tank systems. Such an individual shall possess a current certificate from the National Association of Corrosion Engineers as a corrosion specialist, or be a registered professional engineer with a current certificate or license requiring education and experience in corrosion control of buried or submerged metallic piping and underground storage tank systems.

“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.

“Designated underground storage tank operator” or “designated UST operator” means one or more individuals designated by the owner to have responsibility for training facility employees and conducting monthly visual inspections at an underground storage tank facility. A “designated UST operator” is not considered the “operator” as defined in Chapter 6.7 of Division 20 of the Health and Safety Code, although the same individual may hold both positions.

“Dispenser” means an aboveground or underground device that is used for the delivery of a hazardous substance from an underground storage tank. Dispenser includes metering and delivery devices, and fabricated assemblies located therein.

“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 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.

“Facility employee” means an individual who is employed on-site at an underground storage tank facility, and who may be called upon to respond to spills, overfills, or other problems associated with the operation of the underground storage tank system. A “facility employee” is not considered the “operator” as defined in Chapter 6.7 of Division 20 of the Health and Safety Code, although the same individual may hold both positions.

“Fail safe” means that a monitoring system will shut down the turbine pump in the event of a power outage, or when the monitoring system fails or is disconnected.

“Farm tank” means any one tank or a combination of manifolded tanks that: 1) are located on a farm; and, 2) holds 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).

“GeoTracker” has the same meaning as “Geotracker” as defined in section 3891 of title 23 of the California Code of Regulations.

“Ground water” means subsurface water which will flow into a well.

“Hazardous substance” means a substance which meets the criteria of either ~~subsection~~ paragraph (1) or ~~subsection~~ paragraph (2) of subdivision (h) 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 ~~Liquid Level Measurement~~ liquid level measurement” ~~Method~~ method (as the term is used in section 25290.1 of the Health and Safety Code) or ~~“Hydrostatic Monitoring” Method~~ “hydrostatic monitoring” method means a release detection method that continuously monitors

the liquid level within a liquid-filled interstitial space of an underground storage tank. The term includes only those release detection systems that are capable of detecting a breach in the primary or secondary containment of the underground storage tank component(s) being monitored before the hazardous substance stored is released to the environment. To accomplish this, the liquid in the interstitial space shall be maintained at a pressure greater than the operating pressure found within the component(s) being monitored. This pressure may be achieved, for example, by adequately elevating the liquid reservoir or by pressurizing the liquid-filled interstice. Hydrostatic monitoring methods shall meet the requirements of section 2643, subdivision (f).

“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~~s~~ 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~~ 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 storage.

“Service technician” means any individual who installs or tests monitoring equipment, or provides maintenance, service, system programming or diagnostics, calibration, or trouble-shooting for underground storage tank system components.
“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.

“Submit” means to provide documentation or information to the State Water Board, the Regional Water Quality Board, or the local agency by the specified method. If no method is specified herein, submittal may be made by hand-delivery, mail, or facsimile or other electronic methods, unless otherwise directed by the agency that will receive the submittal. If the method specified is through the California Environmental Reporting System or a local reporting portal, but at the time of the submittal the California Environmental Reporting System data dictionary does not define the data elements for the submittal and there is no specific-named document upload option for that submittal, then it shall be as though no method is specified.

“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 any 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.

~~“Under-Dispenser Containment”~~ “Under-dispenser containment” means secondary containment that is located under a dispenser.

~~"Under-Dispenser~~ "Under-dispenser spill containment or control system" means a device that is capable of preventing an unauthorized release from under the dispenser from entering the soil or groundwater or both.

"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 any 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, clarifies, sludge holding tanks, filtration tanks, and clarified water tanks that do not continuously contain hazardous substances.

Authority cited: Sections 25299.3 and 25299.7, Health and Safety Code.
Reference: Sections 25281, 25282, 25283, 25284, 25284.1, 25290.1, 25292.3, 25296.35, ~~and~~ 25299.5(a), 25404 and 25404.1, Health and Safety Code; and 40 CFR §§ 280.10 and 280.12.

Article 3. New Underground Storage Tank Design, Construction, and Monitoring Requirements

§ 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~~ subdivision (c) and shall include the items listed in ~~subsection~~ subdivision (d).

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

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

(A) All exterior surfaces of the underground storage tanks and the surface of the floor directly beneath the underground storage tanks 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 inputs to and withdrawals from the underground storage tanks 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 tanks 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 tanks 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 tanks.

(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 monitoring 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~~, submitted on~~ submitted through the "~~Underground Storage Tank~~ UST Tank Information/Monitoring Plan"~~ in Title 27, Division 3, Subdivision 1, Chapter 6,~~ submittal element in the California Environmental Reporting System or a local reporting portal, 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 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.

(2) A response plan submitted through the California Environmental Reporting System or a local reporting portal 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.

Table 3.2 Methods of Monitoring for Hazardous Substances in the Interstitial Space of an Underground Storage Tank System

Methods of Monitoring

Condition of the Secondary System [FN1]	Type of Substance Stored	Liquid Level Indicator [FN2]	Hazardous Substance Sensor [FN3]	Vapor Monitor	Pressure or Vacuum Loss Detector [FN4]
Dry	Volatile	X	X	X	X
Dry	Nonvolatile	X	X		X
Wet	Volatile	X	X		X
Wet	Nonvolatile	X	X		X

[FN1]
A “dry” system does not contain liquid within the secondary containment during normal operating conditions while a “wet” system does.

[FN2]
Includes continuously operated mechanical or electronic devices.

[FN3]
Includes either qualitative or quantitative determinations of the presence of the hazardous substance.

[FN4]
Detects changes in pressure or vacuum in the interstitial space of an underground storage tank with secondary containment.

Authority cited: Sections 25299.3 and 25299.7, Health and Safety Code.
Reference: Sections 25281, ~~and~~ 25291 and 25404, Health and Safety Code; and 40 CFR § 280.43.

§ 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~~ subdivision (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 systems 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, submitted on the "Underground Storage Tank Monitoring Plan" in Title 27, Division 3, Subdivision 1, Chapter 6, which establishes:~~ procedure for monitoring, submitted through the "UST Tank Information/Monitoring Plan" submittal element in the California Environmental Reporting System or a local reporting portal, 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 and submitted through the California Environmental Reporting System or a local reporting portal within 30 days after 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 ~~subsection~~ 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 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 cited: Sections 25299.3 and 25299.7, Health and Safety Code.
Reference: Sections 25281, 25291, ~~and~~ 25292 and 25404, Health and Safety Code; and 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~~ subdivision (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 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~~ subdivision.

(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 ~~subdivision~~ paragraphs (1) through (4) below. The certification shall be made on ~~an "Underground Storage Tank Certification of Installation/Modification" form in Title 27, Division 3, Subdivision 1, Chapter 6.~~ the "UST Certification of Installation/ Modification" submittal element in the California Environmental Reporting System or a local reporting portal.

(1) The installer has met the requirements set forth in section 2715, subdivisions (g) and (h);

(2) 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;

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

(4) 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 and experience with underground storage tank system installations.

Authority cited: Sections 25299.3 and 25299.7, Health and Safety Code.
Reference: Sections 25281, 25284.1, 25290.1, 25290.2, 25291, ~~and~~ 25299 and 25404, Health and Safety Code; and 40 CFR ~~280.20 and 280.40-280.45~~§§ 280.20, 280.40, 280.41, 280.42, 280.43, 280.44 and 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~~ 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~~ Vapor recovery piping if designed so that it cannot contain liquid-phase product; or,

(3) ~~suction~~ 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~~ subparagraphs (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 ~~"Underground Storage Tank Certification of Installation/Modification" form in Title 27, Division 3, Subdivision 1, Chapter 6.~~ "UST Certification of Installation/ Modification" submittal element in the California Environmental Reporting System or a local reporting portal.

(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 containments 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~~ 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, including under-dispenser piping with secondary containment, shall be equipped and monitored with monitoring systems as follows:

(1) All secondary containment, including under-dispenser containment, and under-dispenser spill control or containment systems shall be equipped with a continuous monitoring system that either activates an audible and visual alarm or stops the flow of product at the dispenser when it detects a leak.

(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, and shall restrict or shut off the flow of product through the piping when a leak is detected.

[Editor's note: Version of (f)(3) in effect prior to 1-17-2008.]

(3) Until November 9, 2004, other monitoring methods may be used in lieu of the requirement in ~~subdivision~~ paragraph (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. Continuous monitoring systems as described in ~~subdivision~~ paragraph (1), which shut down the pump in addition to either activating the audible and visual alarm or stopping the flow of product at the dispenser, satisfy the automatic line leak detector requirement of ~~subdivision~~ paragraph (2).

[Editor's note: Version of (f)(3) effective 1-17-2008.]

(3) Until November 9, 2004, other monitoring methods may be used in lieu of the requirement in ~~subdivision~~ paragraph (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. As an example, continuous monitoring systems as described in or stopping the flow of product at the dispenser, satisfy the automatic line leak ~~subdivision~~ paragraph (1), which shut down the pump in addition to either activating the audible and visual alarm detector requirement of ~~subdivision~~ paragraph (2), for purposes of this subdivision (f)(3).

(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.

(5) Continuous monitoring systems as described in subdivision (f)(1) satisfy the annual tightness testing requirement of subdivision (f)(4) if both of the following conditions are met:

(A) The monitoring system shuts down the pump or stops the flow of product at the dispenser when a leak is detected in the under- dispenser containment.

(B) The monitoring system for all product piping other than that contained in the under-dispenser containment is fail safe, and shuts down the pump when a leak is detected.

(6) For emergency generator tank systems, continuous monitoring systems as described in ~~subdivision~~ paragraph (1), which activate an audible and visual alarm in the event of a leak or a malfunction of the monitoring system satisfy the automatic line leak detector requirement of ~~subdivision~~ paragraph (2), provided that the monitoring system is checked at least daily by either remote electronic access or on-site visual inspections. A log of daily checks shall be available for local agency review upon request.

(g) Under-dispenser containment shall be designed, constructed, and installed in accordance with the following:

(1) Owners or Operators of a UST system shall have the system fitted with under-dispenser containment, or an approved under-dispenser spill containment or control system according to the following schedule:

(A) At the time of installation for systems installed after January 1, 2000.

(B) By July 1, 2001, for systems installed after July 1, 1987 that are located within 1,000 feet of a public drinking water well, as identified pursuant to ~~the state Geographic Information System mapping database~~ GeoTracker.

(C) By December 31, 2003, for systems not subject to ~~subsection 2636(g)(1)~~ paragraph (A) or (B).

(2) Under-dispenser containment shall be designed, constructed, installed, and monitored in accordance with ~~section~~ sections 2631, 2636(c)(2), 2636(e), and 2636(f).

(3) A manufacturer of an under-dispenser spill containment or control system may apply to the Division of Water Quality Underground Storage Tank Program Manager for approval of the system. Owners or operators shall not install an under-dispenser spill containment or control system that has not been approved.

(A) Applications for approval shall be submitted in writing and include the following:

(i) A description of the proposed system.

(ii) Clear and convincing evidence that the system will protect the soil and beneficial uses of the waters of the state from unauthorized releases.

(B) The Program Manager shall review the application to determine if the proposed system adequately protects the soil and beneficial uses of groundwater before determining whether to approve the proposed system.

(C) The Program Manager may modify or revoke a previously issued approval if it finds that, based on new evidence, the approved system does not adequately protect the soil and beneficial uses of groundwater from unauthorized releases.

Authority cited: Sections 25299.3 and 25299.7, Health and Safety Code.
Reference: Sections 25281, 25284.1, 25291, 25296.35, ~~and~~ 25299 and 25404, Health and Safety Code; and 40 CFR ~~280.20 and 280.40-280.45~~§§ 280.20, 280.40, 280.41, 280.42, 280.43, 280.44 and 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 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 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.

(e) 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 notified by the board according to ~~its Geographic Information System mapping database~~ GeoTracker, shall implement a program of enhanced leak detection or monitoring for that tank system in accordance with section 2644.1. Additionally, the following conditions for enhanced leak detection shall apply:

(1) For the purpose of section 2644.1, vent or tank riser piping, vapor recovery piping, and suction piping that meet the definitions of section 2636(a)(1), (2), or (3), are not considered single-walled components.

(2) Owners or operators notified by the board who believe that their facility is not subject to this requirement may request reconsideration by the Division of ~~Clean Water Programs~~ Water Quality Underground Storage Tank Program Manager. The request shall be in writing and received by the Underground Storage Tank Program Manager within 60 calendar days of the date the notification was mailed. The Program Manager shall make a decision on the request, and notify the applicable local agency of this decision, within 90 calendar days of receipt of the request.

(3) The request for reconsideration must include the name and address of the subject facility, the name and address of the owner or operator submitting the request, and the reason(s) why the requester believes the board notification was in error. If the request is based on evidence that the UST system in question is greater than 1,000 feet from a public drinking water well, the request shall include a demonstration that the center of the well head is more than 1,000 ~~ft~~ feet from the closest component of the UST system. If the request is based on evidence that the subject UST system does not have a single-walled component, the request shall include supporting documentation. A copy of the request shall be concurrently submitted to the local agency.

Authority cited: Sections 25299.3 and 25299.7, Health and Safety Code.
Reference: Sections 25292 ~~and~~ 25292.4 and 25296.35, Health and Safety Code; and 40 CFR §§ 280.40, 280.42 and 280.43(b).

§ 2643. Non-Visual Monitoring/Quantitative Release Detection Methods

(a) Non-visual quantitative release detection methods shall comply with the requirements of this section. ~~Subsection~~ Subdivision (b) contains monitoring requirements for underground storage tanks; ~~subsection~~ subdivision (c) for pressurized piping; ~~subsection~~ subdivision (d) for suction piping; and ~~subsection~~ subdivision (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~~ paragraphs (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]~~ subdivision (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~~ subdivision and ~~section 2643~~ subdivision (f).

(c) Piping that conveys hazardous substances under pressure shall be monitored in accordance with ~~subdivision (c)~~ paragraph (1), and either ~~subdivision~~ paragraph (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 pressure within one hour of its occurrence with at least a 95 percent probability of detection and not more than a 5 percent probability of false alarm. 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 ~~by~~ be capable of detecting a minimum release equivalent to 0.1 gallon per hour defined at a minimum of 40 psi with at least a 95 percent probability of detection and not more than a 5 percent probability of false alarm. 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~~ paragraphs (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)~~ paragraphs (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~~ submit a report to the local agency through the California Environmental Reporting System or a local reporting portal ~~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~~ submitted by the owner or operator to the local agency through the California Environmental Reporting System or a local reporting portal 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 cited: Sections 25299.3 and 25299.7, Health and Safety Code.
Reference: ~~Section~~ Sections 25292 and 25404, Health and Safety Code; and 40 CFR ~~280.40-280.45~~§§ 280.40, 280.41, 280.42, 280.43, 280.44 and 280.45.

§ 2644.1. Enhanced Leak Detection

(a) An owner or operator who is required, pursuant to section 2640(e), to implement a program of enhanced leak detection or monitoring shall comply with the requirements of this section as follows:

(1) Enhanced leak detection means a test method that ascertains the integrity of an underground tank system by introduction, and external detection, of a substance that is not a component of the fuel formulation that is stored in the tank system.

(2) The enhanced leak detection test method shall be third party certified, in accordance with section 2643(f), for the capability of detecting both vapor and liquid phase releases from the underground storage tank system. The enhanced leak detection test method shall be capable of detecting a leak rate of at least 0.005 gph, with a probability of detection of at least 95% and a probability of false alarm no greater than 5%.

(3) Owners and operators subject to the requirements of this section shall have a program of enhanced leak detection reviewed and approved by the local agency within 6 months following notification by the board. The enhanced leak detection shall be implemented no later than 18 months following receipt of notification from the board and repeated every 36 months thereafter.

(4) Owners and operators of underground storage tanks subject to the requirements of this section must notify the local agency at least 48 hours prior to conducting the enhanced leak detection test unless this notification requirement is waived by the local agency.

(5) Owners and operators of underground storage tanks subject to the requirements of this section shall submit a copy of the enhanced leak detection test report to the board and submit the report to the local agency through the California Environmental Reporting System or a local reporting portal within 60 days of completion of the test.

Authority cited: Sections 25299.3 and 25299.7, Health and Safety Code.
Reference: Sections 25283, 25291, 25292, ~~and~~ 25292.4 and 25404, Health and Safety Code; and 40 CFR §§ 280.40 and 280.41.

Article 5. Release Reporting and Initial Abatement Requirements

§ 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 through the California Environmental Reporting System or a local reporting portal 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~~ accompany 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.

(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~~,~~ through GeoTracker ~~whichever agency is overseeing the cleanup,~~ every three months, or more frequently ~~as~~ if specified by the agency overseeing the cleanup. Reports shall include but not be limited to, an update of the required information in ~~subsection~~ subdivision (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~~ subdivision (e), 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 cited: Sections 25299.3 and 25299.7, Health and Safety Code.
Reference: Sections 25286, 25288, ~~and~~ 29295, 25296.35 and 25404, Health and Safety Code; and 40 CFR ~~280.52-280.53~~§§ 280.52 and 280.53.

§ 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 by products 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 through GeoTracker to the agency overseeing the cleanup 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 cited: Sections 25299.3 and 25299.7, Health and Safety Code
Reference: Sections 25295 and 25296.35, Health and Safety Code; and 40 CFR § 280.64.

Article 6. Underground Storage Tank Repair and Upgrade Requirements

§ 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 with the interior lining method. The evaluations described in ~~subsections~~ subdivisions (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~~ subdivisions (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~~ submitted by the owner to the local agency through the California Environmental Reporting System or a local reporting portal. The special inspector shall make this certification by entering and inspecting the entire interior surface of the tank and shall base this certification upon 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)~~ subparagraphs (A) through (C) of this ~~subsection~~ paragraph, 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:

1. An open seam or a split longer than three inches.

2. 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 longer than two and one half inches in diameter.

3. Five or more perforations in any one square-foot area.

4. 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)~~ paragraphs (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~~ subdivision (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~~ submitted by the tank owner ~~and the party performing the inspection~~ to the local agency through the California Environmental Reporting System or a local reporting portal 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 the tank is:

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

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

(C) ~~the tank is no~~ 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 cited: Sections 25299.3 and 25299.7, Health and Safety Code.
Reference: Sections 25292, 25292.1, ~~and~~ 25296 and 25404, Health and Safety Code; and 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~~ subdivision 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. The tank owner shall submit the certification to the local agency through the California Environmental Reporting System or a local reporting portal.

(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 or the special inspector.

Authority cited: Sections 25299.3 and 25299.7, Health and Safety Code.
Reference: Sections 25292, ~~and~~ 25292.1 and 25404, Health and Safety Code; and 40 CFR §§ 280.21, 280.32(d) and 281.33.

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

§ 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 underground storage tank owner, underground storage tank operator, facility owner or facility operator, or a duly authorized representative of the owner; or,

(B) If the tank or facility 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~~ submit to the local agency through the California Environmental Reporting System or a local reporting portal ~~of~~ any changes to the information provided in accordance with ~~subsection~~ subdivision (a) within 30 calendar days unless required to obtain approval before making the change.

(c) ~~The permit applications, "Underground Storage Tank Operating Permit Application -Facility Information," "Underground Storage Tank Operating Permit Application -Tank Information," and "Underground Storage Tank Monitoring Plan" in Title 27, Division 3, Subdivision 1, Chapter 6, shall be accompanied by the~~ All applicable submittal elements for the permit application must be submitted to the California Environmental Reporting System or a local reporting portal. Owners and operators shall pay all applicable local government and state surcharge fees.

Authority cited: Sections 25299.3 and 25299.7, Health and Safety Code.
Reference: Sections 25286, ~~and~~ 25287 and 25404, Health and Safety Code.

§ 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 5 years. In addition to other information specified by the local agency, the permit shall include the permit expiration date, California Environmental Reporting System identification number, 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 underground storage tank the local agency shall inspect the underground storage tank and determine that it complies with the provisions of these regulations.

(d) Permits may be transferred to new underground storage tank owners if: (1) the new underground storage tank owner does not change conditions of the permit~~,~~ and (2) the transfer is ~~registered with~~ reported to the local agency by submitting all of the required submittal elements in the California Environmental Reporting System or a local reporting portal within 30 days of the change in ownership~~, and (3) state permit application forms are completed to show the changes~~. Transferred permits shall expire and be renewed on the original expiration date. A local agency may review, modify, or terminate the permit to operate the underground storage tank upon receiving an ownership transfer request.

(e) The local agency shall not renew an underground storage tank permit unless the underground storage tank has been inspected by the local agency or a special inspector within the previous 12 months and the inspection verified that the underground storage tank complied with the provisions of Article 3 or 4, as applicable, and with all existing permit conditions. The inspection shall be conducted as specified in section 25288 of Chapter 6.7 of Division 20 of the Health and Safety Code. If the inspection indicated noncompliance then the local agency shall verify by a follow-up inspection that all required corrections have been implemented before renewing the permit.

(f) Within 30 calendar days of receiving an inspection report from either the local agency or the special inspector, the permit holder shall implement the corrections specified in the inspection report and comply with the permit conditions. The corrective action shall include all of the recommendations made by the local agency or special inspector. The local agency may waive the implementation of any of the special inspector's recommendations based on a demonstration by the permit holder to the local agency's satisfaction that failure to implement the recommendation will not cause an unauthorized release.

(g) The local agency shall take appropriate enforcement action pursuant to section 25299 of the Health and Safety Code or prohibit the operation of the tank systems if the owner or operator fails to comply with the monitoring requirements in Article 3 or 4 or the reporting requirements of Article 5.

(h) The local agency shall provide the permittee with a written list of all applicable requirements of Chapter 6.7 and 6.75 of the Health and Safety Code and these regulations.

(i) A paper or electronic copy of the permit and all conditions and attachments, including monitoring plans, shall be ~~retained~~ readily accessible at the facility.

(j) All primary containment shall be product-tight.

(k) Owners and operators shall use care to prevent releases due to spilling or overfilling. Before product is delivered, owners, operator, or their agents shall ensure that the space available in the tank is greater than the volume of product to be transferred to the tank and shall ensure that the transfer operation is monitored constantly to prevent overfilling and spilling.

Authority cited: Sections 25299.3 and 25299.7, Health and Safety Code.
Reference: Sections 25284, 25285, 25286, 25288, 25289, 25293, ~~and~~ 25294 and 25404, Health and Safety Code; and 40 CFR §§ 280.31(d), 280.33(f), 280.45 and 281.32(e).

§ 2713. Local Agency Reporting Requirements

(a) Each local agency shall transmit unauthorized release information, submitted by the owner or operator, to the appropriate regional board through the California Environmental Reporting System or a local reporting portal.

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

(c) On a semi-annual basis, each local agency shall send to the board, information pertaining to local underground storage tank program implementation and enforcement activities. This information shall be submitted using ~~"Semi-Annual Underground Storage Tank Program Report 6" as specified in Title 27, section 15290,~~ a local information management system, local reporting portal, or the California Environmental Reporting System, and shall include, but not be limited to the number of:

(1) ~~tanks~~ Tanks subject to regulation

(2) ~~regulated~~ Regulated facilities

(3) ~~facility~~ Facility inspections conducted

(4) ~~inspected~~ Inspected facilities in compliance with release detection and release prevention requirements

(5) ~~underground~~ Underground storage tank systems that received a red tag pursuant to Article 10.5, including:

(A) ~~the~~ The name and address of the facility at which the tank system is located;

(B) ~~the~~ The names of the owner and operator of the tank system;

(C) ~~the~~ The red tag's identification number;

(D) ~~the~~ The date the red tag was affixed to the tank system;

(E) ~~the~~ The specific violation for which the tank system received the red tag;

(F) ~~the~~ The date the red tag was removed from the tank system.

(d) Local agencies shall report formal and informal enforcement actions, including the specific violation for which the local agency took the enforcement action, ~~using "Annual Enforcement Summary Report 4"~~ as specified in Title 27, section 15290 through a local information management system, local reporting portal, or the California Environmental Reporting System.

Authority cited: Sections 25299.3 and 25299.7, Health and Safety Code.
Reference: Sections 25286, ~~and~~ 25292.3, 25296.35 and 25404, Health and Safety Code.

§ 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 submit all of the application submittal elements through the California Environmental Reporting System or a local reporting portal. Any person asserting a trade secret must submit ~~identify~~ all information which the person believes is a trade secret and ~~submit~~ a legal justification for the request for confidentiality to the local agency. 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~~ subdivision (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~~ subdivision (c) of this section.

(e) All information received for which trade secrecy status is requested shall be treated as confidential as discussed in ~~subsection~~ subdivision (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 only be disclosed 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 cited: Sections 25299.3 and 25299.7, Health and Safety Code.
Reference: ~~Section~~ Sections 25290 and 25404, Health and Safety Code.

§ 2715. Certification, Licensing, and Training Requirements for Underground Storage Tank Owners, Operators, Installers, Service Technicians, and Inspectors

(a) (1) By January 1, 2005, owners of underground storage tank systems shall submit a signed statement to the local agency indicating that the owner understands and is in compliance with all applicable underground storage tank requirements, and identifying the designated UST operator(s) for each facility owned.

(2) Within 30 days of installing an underground storage tank system, owners shall submit a signed statement to the local agency indicating that the owner understands and is in compliance with all applicable underground storage tank requirements, and identify the designated UST operator(s) for the facility, through the California Environmental Reporting System or a local reporting portal.

(3) The owner shall ~~inform the local agency of~~ submit any change of designated UST operator(s) to the local agency through the California Environmental Reporting System or a local reporting portal no later than 30 days after the change.

(b) Effective January 1, 2005, designated UST operators shall possess a current certificate issued by the International Code Council (ICC) indicating he or she has passed the California UST System Operator exam. The individual shall renew the ICC certification, by passing the California UST System Operator exam, every 24 months.

(c) The designated UST operator(s) shall perform monthly visual inspections of all underground storage tank systems for which they are designated. The results of each inspection shall be

recorded in a monthly inspection report. The monthly visual inspection shall include, but is not limited to, the following:

(1) Reviewing the alarm history report or log for the previous month, and checking that each alarm condition was documented and responded to appropriately. A copy of the alarm history report or log, along with documentation describing action taken in response to any alarm(s), shall be attached to the monthly visual inspection record.

(2) Inspecting for the presence of hazardous substance, water, or debris in spill containers.

(3) Inspecting for the presence of hazardous substance, water, or debris in under-dispenser containment areas, and checking that the monitoring equipment in these areas is located in the proper position to detect a leak at the earliest possible opportunity.

(4) Inspecting for the presence of hazardous substance, water, or debris in containment sumps that, in the past month, have had an alarm for which there is no record of a service visit, and checking that the monitoring equipment in these containment sumps is located in the proper position to detect a leak at the earliest possible opportunity.

(5) Checking that all required testing and maintenance for the underground storage tank system have been completed, and documenting the dates these activities occurred.

(6) Verifying that all facility employees have been trained in accordance with subdivision ~~2715~~(f).

(d) The designated UST operator(s) shall provide the owner or operator with a copy of each monthly inspection report, and alert the owner or operator of any condition discovered during the monthly visual inspection that may require follow-up actions.

(e) The owner or operator shall maintain a copy of the monthly inspection record and all attachments for the previous twelve months. The records shall be maintained on-site or, if approved by the local agency, off-site at a readily available location.

(f) By July 1, 2005, and every twelve months thereafter, the designated UST operator(s) shall train facility employees for which he or she is responsible in the proper operation and maintenance of the underground storage tank system. For facility employees hired on or after July 1, 2005, the initial training shall be conducted within 30 days of the date of hire.

(1) The training for facility employees must include, but is not limited to:

(A) The operation of the underground storage tank system in a manner consistent with the facility's best management practices.

(B) The facility employee's role with regard to the monitoring equipment as specified in the facility's monitoring plan.

(C) The facility employee's role with regard to spills and overfills as specified in the facility's response plan.

(D) The name of the contact person(s) for emergencies and monitoring equipment alarms.

(2) At least one of the facility employees present during operating hours shall have current training in accordance with subdivision (f)(1). For facilities that are not routinely staffed, the designated UST operator shall implement a facility employee training program approved by the local agency.

(3) A list of facility employees who have been trained by the designated UST operator(s), shall be maintained on-site or off-site at a readily available location, if approved by the local agency. The list shall be provided to the local agency upon request. The list shall include the dates of training for all facility employees, and the hiring dates for all facility employees hired on or after July 1, 2005.

(g) Any person(s) installing underground storage tank systems or components shall be certified or licensed by the Contractors State License Board.

(h) Any individual(s) installing underground storage tank system components shall meet the following requirements, or work under the direct and personal supervision of an individual physically present at the work site who meets the following requirements:

(1) The individual has been adequately trained as evidenced by a certificate of training issued by the manufacturer(s) of the underground storage tank system components. On and after July 1, 2001, this certification shall be renewed by completion of manufacturer's refresher training at the time interval recommended by the manufacturer, or every 36 months, whichever is shorter.

(2) Effective January 1, 2005, the individual shall possess a current underground storage tank system installer certificate from the International Code Council (ICC), indicating that the individual has passed the ICC UST Installation/Retrofitting exam. The individual shall renew the ICC certification, by passing the ICC UST Installation/Retrofitting exam, every 24 months.

(i) Any individual performing the work of a service technician must meet all of the following requirements:

(1) Possess or be employed by a person who possesses a current Class “A” General Engineering Contractor License, C-10 Electrical Contractor License, C-34 Pipeline Contractor License, C-36 Plumbing Contractor License, or a C-61 (D40) Limited Specialty Service Station Equipment and Maintenance Contractor License issued by the Contractors State License Board, as applicable. Individuals who possess a tank testing license issued by the State Water Resources Control Board satisfy the licensing requirement of this paragraph.

(2) Be trained and certified by the manufacturer of the equipment as follows:

(A) For service technicians conducting secondary containment testing pursuant to section 2637(a), this training and certification may be obtained through the developer of the testing equipment or test method being used, or through the manufacturer of the secondary containment system being tested, as applicable.

(B) For service technicians performing work on monitoring equipment, training and certification shall be obtained from the manufacturer of the monitoring equipment.

(C) In the event that no training or certification exists that would satisfy the criteria of subparagraph (i)(2)(A) or (B), the local agency may approve comparable alternate training or certification.

(3) Renew all training and certifications issued by the manufacturer, through completion of a manufacturer's refresher course, at the time interval recommended by the manufacturer, or every 36 months, whichever is shorter.

(4) Effective July 1, 2005, service technicians shall possess or work under the direct and personal supervision of an individual physically present at the work site who possesses a current certificate from the International Code Council (ICC), indicating he or she has passed the California UST Service Technician exam. If the California UST Service Technician exam is not available by July 1, 2004, this requirement shall be effective twelve months after the date the exam is available. The individual shall renew the ICC certification, by passing the California UST Service Technician exam, every 24 months.

(j) Local agency inspectors or special inspectors conducting underground storage tank inspections must meet the following requirements:

(1) Effective September 1, 2005, these individuals shall possess a current inspector certificate issued by the International Code Council (ICC), indicating he or she has passed the ICC California UST Inspector exam. Local agency inspectors hired on or after September 1, 2005, are subject to this requirement 180 days from the date of hire. If the ICC California UST Inspector exam is not available by September 1, 2004, this requirement shall be effective twelve months after the date the exam is available.

(2) These individuals shall renew the California inspector certificate every 24 months, by either passing the ICC California UST Inspector exam or satisfying equivalent criteria as approved by the Division of Water Quality Underground Storage Tank Program Manager.

Authority cited: Section 25299.3, Health and Safety Code.
Reference: Sections 25281, ~~and~~ 25284.1 and 25404, Health and Safety Code; and 40 CFR § 280.20.

§ 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~~ Removal of free product. Free product removal must comply with the applicable provisions of Section 2655 of Article 5;

(2) ~~enhanced~~ Enhanced biodegradation to promote bacterial decomposition of contaminants;

(3) ~~excavation~~ Excavation and disposal of contaminated soil;

(4) ~~excavation~~ Excavation and treatment of contaminated soil;

(5) ~~vacuum~~ Vacuum extraction of contaminants from soil or ground water; and

(6) ~~pumping~~ Pumping and treatment of ground water to remove dissolved contaminants.

(c) The responsible party shall submit a workplan through GeoTracker 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~~ For proposed activities under the Preliminary Site Assessment Phase, if directed by the regulatory agency; and

(2) ~~before~~ 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 ~~reponsible~~ responsible party is otherwise directed in writing by the regulatory agency. Before beginning these activities, the responsible party shall:

(1) ~~notify~~ Notify the regulatory agency of the intent to initiate the proposed actions included in the workplan submitted; and

(2) ~~comply~~ Comply with any conditions set by the regulatory agency, including mitigation of adverse consequences from cleanup activities.

Authority cited: ~~Section~~ Sections 25299.3 and 25299.77, Health and Safety Code.
Reference: Sections 25295, 25296.35, 25297, 25299.14, 25299.37 and 25299.78, Health and Safety Code; ~~and 40 CFR Sections 280.53 and 280.60 through 280.66, and~~ Section 13267, Water Code; and 40 CFR §§ 280.53, 280.60, 280.61, 280.62, 280.63, 280.64, 280.65 and 280.66.

§ 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 ex -tent of the unauthorized 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 through GeoTracker 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~~ An assessment of the impacts listed in ~~subsection~~ subdivision (e) of this Section;

(2) ~~a~~ A feasibility study, in accordance with ~~subsection~~ subdivision (f) of this Section; and

(3) ~~applicable~~ Applicable cleanup levels, in accordance with ~~subsection~~ subdivision (g) of this Section.

(e) An assessment of the impacts shall include, but is not limited to, the following:

(1) 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;

(2) The hydrogeologic characteristics of the site and the surrounding area where the unauthorized release has migrated or may migrate;

(3) The proximity and quality of nearby surface water or ground water, and the current and potential beneficial uses of these waters;

(4) 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~~ subdivision.

(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~~ subdivision (e) of this Section.

Authority cited: ~~Section~~ Sections 25299.3 and 25299.77, Health and Safety Code.
Reference: Sections 25296.35, 25299.37 and 25299.57, Health and Safety Code.

§ 2726. Corrective Action Plan 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~~ submit the results of implementation of the Corrective Action Plan through GeoTracker 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 through GeoTracker 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~~ Notify the regulatory agency of its intention to begin cleanup; and

(2) ~~comply~~ 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 cited: ~~Section~~ Sections 25299.3 and 25299.77, Health and Safety Code.
Reference: ~~Section~~ Sections 25296.35 and 25299.37, Health and Safety Code; 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~~ through GeoTracker on a schedule and for a duration agreed to by the regulatory agency.

Authority cited: ~~Section~~ Sections 25299.3 and 25299.77, Health and Safety Code.
Reference: ~~Section~~ Sections 25296.35 and 25299.37, Health and Safety Code; and 40 CFR ~~Section~~§ 280.65.