

**Proposed Amendments  
to the  
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**

**INITIAL  
STATEMENT OF REASONS**

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

#### **SECTION 2631. DESIGN AND CONSTRUCTION REQUIREMENTS FOR NEW UNDERGROUND STORAGE TANKS.**

The State Water Resources Control Board (State Water Board) proposes to amend California Code of Regulations, title 23, division 3, chapter 16, article 3, section 2631 relating to design and construction requirements for new underground storage tanks (USTs). The proposed regulation provides an option for compliance with existing independent testing and approval requirements so that UST owners and operators can store alternative fuels in USTs in a manner that does not create any significant risk of adverse impacts to water quality. Because the proposed regulation provides an option for compliance with existing independent testing and approval requirements it will not have a significant, statewide adverse economic impact directly affecting business, including the ability of California businesses to compete with businesses in other states. Nor will the proposed regulatory action adversely affect small businesses in California.

The State Water Board relied upon the United States Environmental Protection Agency's (U.S. EPA) guidance, "Compatibility of Underground Storage Tank Systems with Biofuel Blends," dated July 5, 2011, to amend the regulation.<sup>1</sup> The proposed amendment does not mandate the use of specific technologies or equipment, nor does it unnecessarily duplicate or conflict with federal law. The State Water Board does not propose to adopt any regulation inconsistent with those contained in the Code of Federal Regulations.

The State Water Board has determined that no reasonable alternative would be more or equally effective in carrying out the purpose for which the proposed regulation is intended or less burdensome to affected private persons than the proposed action.

#### Public Problem, Administrative Requirement, or Other Condition or Circumstance that the Proposed Regulations are Intended to Address

Chapter 6.7 of the Health and Safety Code requires that the primary containment of a UST be compatible with the hazardous substance stored (such as a fuel and/or fuel additive), and that the secondary containment is constructed to prevent structural weakening because of contact with any released substance. (See Health & Saf. Code, §§ 25290.1, subd. (c)(1), 25290.2, subd. (c)(1), & 25291, subd. (a)(1).) Federal regulations also require UST owners and operators to use USTs that are made of or lined with materials that are compatible with the substance stored. (40 CFR 280.32.)

To implement these requirements, existing section 2631 provides that the design and construction of a UST and UST components must be approved by an independent testing laboratory (e.g., Underwriter's Laboratory (UL)). Existing section 2631.1 further provides that a UST owner or operator must use a UST system made of, or lined with, materials that are compatible with the hazardous substances stored in the tank. Existing section 2634 requires that the release detection method for the UST system be tested by an independent testing

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<sup>1</sup> Guidelines for Compatibility of Underground Storage Tank Systems with Biofuel Blends (76 Fed Reg. 39095 et seq. (July 5, 2011), as revised 76 FR 46798 (dated August 3, 2011)), at <<http://www.epa.gov/oust/altfuels/biofuelsguidance.htm>> [as of Oct. 17, 2011].

laboratory and be approved to function with the hazardous substance stored. UL is the independent testing organization that has issued approvals for USTs that are used in California.

In 2007, Governor Schwarzenegger signed Executive Order S-01-07. This executive order finds that greenhouse gas (GHG) emissions pose a serious threat to the health of California's citizens and the quality of the environment, that California's transportation sector is the leading source of CHG emissions, and that alternative fuels can reduce CHG emissions. The executive order directed, in addition to other things, that a statewide goal be established to reduce the carbon intensity of transportation fuels by at least 10 percent by 2020 and that a Low Carbon Fuel Standard for transportation fuels be established.

One way to reduce GHG emissions is to displace the use of traditional vehicle fuels and increase the use of alternative fuels, such as biodiesel. The most appropriate mechanism for storing many alternative fuels is USTs. On January 7, 2009, UL determined that biodiesel blends up to 5 percent biodiesel (B5) by volume fall within the certification for petroleum diesel. Resolving UST storage issues will result in the increase use of alternative fuels.

Effective June 1, 2009, section 2631.2 provides for a temporary variance of up to 36 months from certain provisions of sections 2631, 2631.1, and 2643, which allows UST owners to store biodiesel blends up to 20 percent biodiesel (B20) by volume in USTs before testing by an independent testing organization has been completed. The section 2631.2 variance will sunset on June 1, 2012.

Various equipment and methods of leak detection equipment have been tested and have been approved for use with various blends of biodiesel. The mechanisms are now in place for release detection equipment manufacturers and fuel suppliers to test and obtain approval for release detection equipment for other alternative fuels in a timely manner. Therefore, UST owners and operators can meet the requirements in section 2643.

At the time that it adopted section 2631.2, information available indicated that 36 months was a reasonable time period to complete required UST testing and obtain necessary approvals so that UST owners and operators could meet the requirements in sections 2631 and 2631.1. UL's material compatibility testing and approval for biodiesel blends greater than B5 have not been completed and will likely not be completed for several years. To the State Water Board's knowledge UL has not begun to actively address other alternative fuels in their standards development process, and therefore a testing completion date for compatibility of alternate fuels is unknown. Therefore, UST owners and operators will be unable to meet the requirements in section 2361 after the variance expires.

#### Specific Purpose and Necessity of the Proposed Action

The most appropriate mechanism for storing many alternative fuels is USTs. UL material compatibility testing and approval is a lengthy process. The delay in waiting for UL material compatibility testing and approval is reducing the use of alternative fuels. The State Water Board wishes to provide an alternative to UL's material compatibility testing and approval to facilitate the use of alternative fuels in California and reduce GHG emissions, while also minimizing the risk of UST failures and, therefore, harm to water quality.

The State Water Board is proposing to amend section 2631(b) and adopting subsections (j) and (k) of section 2631 to allow UST owners and operators with USTs that meet construction requirements contained in Health and Safety Code section 25291, subdivision (a), paragraphs

(1) – (6) and subdivisions (b) – (i), inclusive, section 25290.1 or section 25290.2 to demonstrate compliance with the statutory performance standards by submitting to the local agency a written, affirmative statement of compatibility for the specific hazardous substance from the manufacturer(s) of the containment or components when the independent testing organization approval for containment or UST components does not include the compatibility of the hazardous substance stored or to be stored.

The proposed regulation only allows the submittal of a written, affirmative statement of compatibility from the manufacturer when the independent testing organization approval does not include the specific hazardous substance stored or to be stored, therefore if at any time an independent testing organization determines whether the containment or UST components are compatible with the specific hazardous substance then the manufacturer's affirmative statement of compatibility can no longer be used to demonstrate compatibility. Using the option of a written, affirmative statement from the manufacturer(s) of the containment or components to demonstrate UST compatibility will remove the delay caused by the lengthy UL material compatibility testing and approval process and allow for the lawful storage of alternative fuels.

The proposed regulation for compatibility is consistent with the U.S. EPA's guidance, "Compatibility of Underground Storage Tank Systems with Biofuel Blends," dated July 5, 2011, cited above, finding that a written, affirmative statement of compatibility for the specific hazardous substance from the manufacturer(s) of the containment or component is an acceptable method of complying with federal requirements to demonstrate UST system compatibility with the hazardous substance stored or to be stored. Because the UL's material compatibility testing and approval process can take several years and UL does not retroactively apply compatibility approvals to previously manufactured products, the proposed regulation is necessary to allow UST owners and operators to store various fuels in UST systems that are determined to be compatible.

In order to reduce the risk of any impact to ground water quality from a direct release from a single walled UST, only double walled USTs are eligible for the existing temporary variance. Releases from single walled UST releases enter the environment; releases from double walled UST, on the other hand, are contained and detected before they enter the environment. The proposed regulation is consistent with the variance in that it limits the option to double walled USTs.

The State Water Board has determined that the proposed regulation supports and facilitates the use of various alternative fuels and also minimizes the risk of UST failures and, therefore, harm to water quality.