

**Upgrade, New Construction, and Compatibility Requirements
California Code of Regulations, Title 23, Division 3, Chapter 16,
Sections 2631(l), 2635(d), 2636(f)(5), 2640.1, 2665(b), (c), 2666(b)(2), (e)(2), & (f),
2711(c), & 2712(b)(5)**

Upgrade Requirements

Buried Single-Walled Piping

Can buried single-walled piping be repaired or replaced on or after October 1, 2018?

No. If any portion of buried single-walled piping requires repair or replacement, then the entire length of buried single-walled piping must be upgraded to double-walled continuously monitored piping. This requirement does not include vent, vapor recovery, tank riser, or safe suction piping. Repair is required when the piping either: 1) has caused a release of a hazardous substance from the underground storage tank (UST) system; or 2) has ceased to function properly and causes the UST system to be out of compliance with UST requirements.

[References cited: California Code of Regulations, tit. 23, div. 3, ch. 16,¹ §§ 2611, def. of "Repair," 2636(a), 2666(b)(2) and Health and Safety Code, div. 20, ch. 6.7, § 25281.5(a)(4).]

Line Leak Detectors (LLD) for Emergency Generator Tank Systems (EGTSs)

Must underground pressurized piping connected to EGTSs be retrofitted with a LLD?

Yes. USTs installed before October 1, 2018 defined as EGTSs in Health and Safety Code, division 20, chapter 6.7, section 25281.5(c) with connected underground pressurized piping must be retrofitted with an LLD in accordance with section 2636(f)(5).

(For more information see the informational document *Emergency Generator Tank System Line Leak Detector Requirements* (September 2018, v 1.0).)

[References cited: §§ 2636(f)(5)(A) & 2666(f).]

Overfill Prevention Systems

Can flow restrictors installed on vent piping (ball floats) used to meet the overfill prevention system requirement be repaired or replaced on or after October 1, 2018?

No. After October 1, 2018, ball floats used to meet the overfill prevention system requirement cannot be repaired or replaced to meet the overfill prevention system requirement. USTs equipped with ball floats to meet the overfill prevention system requirement before October 1, 2018 may continue to use ball floats to meet the overfill

¹ All citations are from California Code of Regulations, title 23, division 3, chapter 16 unless specified otherwise.

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2711(c), & 2712(b)(5)**

prevention system requirement until and unless the ball floats require repair or replacement. Repair is required when it is discovered that the ball floats are not set at the appropriate level or will not activate when the substance stored reaches the appropriate level. When repair or replacement of a ball float is required, the UST must be retrofitted with overfill prevention system that does not use ball floats to meet the overfill prevention system requirement.

(For more information on overfill prevention system requirements see the informational document *Overfill Prevention Equipment Inspection Requirements* (October 2018, v 1.0) and Local Guidance Letter 150-2.)

[References cited: §§ 2611, def. of “Repair” & 2665(b) & (c).]

New Construction Requirements

Overfill Prevention Systems

Can ball floats be used to meet the overfill prevention requirement when a UST is installed on or after October 1, 2018?

No. For USTs installed on and after October 1, 2018, ball floats cannot be used to meet the overfill prevention system requirement of section 2635(c).

(For more information on overfill prevention system requirements see the informational document *Overfill Prevention Equipment Inspection Requirements* (October 2018, v 1.0) and Local Guidance Letter 150-2.)

[Reference cited: § 2635(d).]

Line Leak Detectors for EGTSS

Are LLDs required on underground pressurized piping connected to EGTSS installed on and after October 1, 2018?

Yes. Beginning October 1, 2018, USTs defined as EGTSS in Health and Safety Code, division 20, chapter 6.7, section 25281.5(c) with connected underground pressurized piping must be equipped with an LLD in accordance with section 2636(f)(5) at the time of installation.

(For more information see the informational document *Emergency Generator Tank System Line Leak Detector Requirements* (September 2018, v 1.0).)

[Reference cited: § 2636(f)(5).]

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2711(c), & 2712(b)(5)**

Compatibility Requirements

Upon Installation

Are additional compatibility documents required prior to constructing a UST system?

Yes. For all USTs installed on or after October 1, 2018, the UST owner or operator must demonstrate compatibility at the time of installation for all components of the UST system that may come into contact with the substance stored. The additional components for which compatibility must be demonstrated include, but are not limited to, spill containers, overfill prevention equipment, and ancillary equipment.

Compatibility for the above listed components may be demonstrated through a written approval from an independent testing organization, a California registered professional engineer, or the manufacturer of the component. The approval must indicate that the components are compatible with the specific substance to be stored. The documents demonstrating compatibility must be provided to the Unified Program Agency (UPA) as part of the application for a UST operating permit and must be retained by the UST owner or operator for as long as the UST stores that specific substance. The acceptable mechanisms to demonstrate compatibility for each UST component type can be found in the table in Appendix 1 of this document.

[References cited: §§ 2631(l) & 2712(b)(5).]

Changing the Substance Stored

Are compatibility documents required to be submitted prior to changing the substance stored in the UST system?

Yes. UST owners or operators must notify the UPA in writing at least 30 days prior to changing the substance stored in the UST and identify the substance to be stored, the date when that substance will begin to be stored, and provide compatibility documentation for all components of the UST system that may come into contact with the substance to be stored. These UST components include, but are not limited to, primary containment, secondary containment, spill containers, overfill prevention equipment, ancillary equipment, and leak detection equipment. The compatibility documentation must be maintained for as long as the specific substance is being stored. The acceptable mechanisms to demonstrate compatibility for each UST component type can be found in the table in Appendix 1 of this document.

[References cited: §§ 2711(c) & 2712(b)(5).]

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2711(c), & 2712(b)(5)**

Can a single-walled UST change to a motor vehicle fuel containing a concentration greater than ten percent ethanol or five percent biodiesel?

Yes. However, at least 30 days prior before changing the motor vehicle fuel stored to a motor vehicle fuel greater than ten percent ethanol or five percent biodiesel, UST owners or operators must provide to the UPA an approval from an independent testing organization that covers the substance to be stored. The acceptable mechanisms to demonstrate compatibility for each UST component type can be found in the table in Appendix 1 of this document.

[References cited: §§ 2640.1 & 2711(c).]

If there are further questions regarding the new construction, upgrade, or compatibility requirements, please contact UST Leak Prevention Unit staff at:

https://www.waterboards.ca.gov/water_issues/programs/ust/contacts/ust_staff.shtml.

Enclosure (1)

1. Appendix 1: *Acceptable Mechanisms to Demonstrate Compatibility for Underground Storage Tanks*

Documents with Superseded Content	
<i>Local Guidance (LG) Letter -159: Annual Underground Storage Tank Compliance Inspection Handbook</i>	May 2011
<i>Overview of UST Containment and Monitoring Requirements</i>	June 2008
<i>UST Facility Inspection Handbook</i>	August 2000
<i>UST Regulatory Compliance / Inspection Training</i>	September 2004
<i>LG 150-2 and Enclosure: Underground Storage Tank Overfill Prevention Systems</i>	July 2007
<i>LG 166: Guidelines for Testing Spill Buckets</i>	January 2006
<i>LG 167: Qualifications & Scope of Work for UST Installers and Service Technicians</i>	March 2006
<i>Compatibility of Underground Storage Tanks Storing Gasoline with Ethanol</i>	July 2015
<i>Alternative Compatibility Options</i>	June 2012
<i>Understanding Line Leak Detection Systems</i>	June 2008

Appendix 1

Acceptable Mechanisms to Demonstrate Compatibility for Underground Storage Tanks

		Construction Type	
		Single-Walled Tank	Double-Walled Tank
Component Type			
Tank			
Primary Containment (includes any integral secondary containment)	I §§ 2633(b) & 2640.1	I or I & M §§ 2631(b) & (j)	
Non-Integral Secondary Containment (vaults)		E § 2631(d)	
Piping			
Primary Containment (includes any integral secondary containment)	I §§ 2633(b) & 2640.1	I or I & M §§ 2631(b) & (j)	
Non-Integral Secondary Containment (under-dispenser containment and sumps)	E §§ 2631(d) & 2666(b)(2)	E § 2631(d)	
Spill Containers, Overfill Prevention Equipment, and Ancillary Equipment	I, E, or M §§ 2631(l) & 2665(b)	I, E, or M § 2631(l)	
Leak Detection	I or I & M §§ 2630(d), 2638(a), & 2643(f)	I or I & M §§ 2630(d) & 2638(a)	

Key	
I	Independent testing organization approval
E	California professional engineering statement
M	Manufacturer's statement of compatibility