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Department of Environmental Quality
Office of the Secretary
Legal Affairs Division

Secondary Containment for UST Systems—Advanced Notice
of Rulemaking and Solicitation of Comments
(LAC 33:XI.103, 301, 303, 507, 509, and 701) (UT014)
(0711Pot1)

Under the authority of the Louisiana Environmental Quality Act, R. S. 30:2001 et seq., the secretary gives notice that the Office of Environmental Assessment, Underground Storage Tank Division, is giving advanced notice of proposed rulemaking for rules governing secondary containment requirements for UST systems, LAC 33:XI.103, 301, 303, 507, 509, and 701 (UT014).

On August 8, 2005, the Energy Policy Act of 2005 was signed into law. Among other things, this law makes amendments to Subtitle I of the Solid Waste Disposal Act. The Solid Waste Disposal Act was the federal legislation that originally created the underground storage tank (UST) program in 1986. The amendments to this program are found in the Underground Storage Tank Compliance Act of 2005 of Title XV, Subtitle B, of the Energy Act. The legislation is aimed at reducing the number of underground storage tank releases to the environment by focusing on preventing releases. In order to successfully implement the changes prescribed by the new legislation, EPA and the state will work closely with tank owners and operators, as well as other stakeholders. This draft rule represents the secondary containment phase of the Underground Storage Tank Compliance Act. It will require owners and/or operators of UST systems to install secondary containment on new installations or replacements of tanks and piping. The rule will require secondary containment for repairs to tanks or piping as defined. The difference between “repair” and “replacement” is defined.

The department is soliciting comments to the draft proposed rule for secondary containment for UST systems. Written comments concerning the draft rule are due no later than 4:30 p.m., January 31, 2008, and should be submitted to Sharon Parker, Office of the Secretary, Legal Affairs Division, Box 4302, Baton Rouge, LA 70821-4302 or to FAX (225) 219-3582 or by e-mail to sharon.parker@la.gov. Persons commenting should reference this document as UT014. Copies of the draft rule can be purchased by contacting the DEQ Public Records Center at (225) 219-3168. Check or money order is required in advance for each copy of UT014. This draft rule is available on the Internet at www.deq.louisiana.gov/portal/tabid/1669/default.aspx.

The draft rule is available for inspection at the following DEQ office locations from 8 a.m. until 4:30 p.m.: 602 N. Fifth Street, Baton Rouge, LA 70802; 1823 Highway 546, West Monroe, LA 71292; State Office Building, 1525 Fairfield Avenue, Shreveport, LA 71101; 1301 Gadwall Street, Lake Charles, LA 70615; 111 New Center Drive, Lafayette, LA 70508; 110 Baratara Street, Lockport, LA 70374; 645 N. Lotus Drive, Suite C, Mandeville, LA 70471.

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Title 33
ENVIRONMENTAL QUALITY

Part XI. Underground Storage Tanks

Chapter 1. Program Applicability and Definitions

§103. Definitions

A. For all purposes of these rules and regulations, the terms defined in this Section shall have the following meanings, unless specifically defined otherwise in LAC 33:XI.1105 or 1303.

* * *

Install—the process of placing a UST system in the ground and preparing it to be put into service.

* * *

Pipe or Piping—a hollow cylinder or tubular conduit that is constructed of non-earthen materials and that routinely contains and conveys regulated substances from a UST to a dispenser or other end-use equipment. Such piping includes any elbows, couplings, unions, valves, or other in-line fixtures that contain and convey regulated substances from the UST to the dispenser. This definition does not include vent, vapor recovery, or fill lines.

* * *

Replace or Replacement—to remove an existing UST and install a new UST in substantially the same location as the removed tank, or to remove and replace 25 percent or more of piping associated with a single UST.

* * *

Secondary Containment—a containment system that utilizes an outer or secondary container or impervious liner designed to prevent releases of regulated substances from the primary container from reaching the surrounding environment for a time sufficient to allow for detection and control of the released product. Such systems include, but are not limited to, double-wall tanks and piping, jacketed tanks and piping that have an interstitial space that allows for interstitial monitoring, and any other secondarily-contained system approved by the department prior to installation.

* * *

Under-Dispenser Containment—a containment system beneath a dispenser designed to prevent releases of regulated substances from the dispenser or contained piping from reaching the surrounding environment for a time sufficient to allow for detection and control of the released product. Such containment must be liquid-tight on its sides, bottom, and at any penetrations, and must allow for visual inspection and access to the components in the containment system or be regularly monitored.

* * *

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2001 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Underground Storage Tank Division, LR 16:614 (July 1990), amended LR 17:658 (July 1991), LR 18:727 (July 1992), amended by the Office of Environmental Assessment, Environmental Planning Division, LR 26:2558 (November 2000), LR 27:520 (April 2001), amended by the Office of Environmental Assessment, LR 31:1065

(May 2005), LR 31:1577 (July 2005), repromulgated LR 31:2002 (August 2005), amended by the Office of the Secretary, Legal Affairs Division, LR 34:**.

Chapter 3. Registration Requirements, Standards, and Fee Schedule

§301. Registration Requirements

A. – B.1. ...

a. tank and piping installation in accordance with LAC 33:XI.303.B.64, including secondary containment of new and replacement tanks and/or piping, under-dispenser containment, and submersible pump containment;

b. – d. ...

2. All owners of new UST systems must ensure that the installer certifies on the registration form that the methods used to install the tanks and piping comply with the requirements of LAC 33:XI.303.B.64.a. Beginning January 20, 1992, registration forms shall include the name and department-issued certificate number of the individual exercising supervisory control over *installation-critical junctures* (as defined in LAC 33:XI.1303) of a UST system.

C. – C.4. ...

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2001 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Underground Storage Tank Division, LR 11:1139 (December 1985), amended LR 16:614 (July 1990), LR 17:658 (July 1991), LR 18:727 (July 1992), LR 20:294 (March 1994), amended by the Office of Environmental Assessment, Environmental Planning Division, LR 26:2558 (November 2000), LR 28:475 (March 2002), amended by the Office of Environmental Assessment, LR 31:1066 (May 2005), amended by the Office of the Secretary, Legal Affairs Division, LR 31:2520 (October 2005), repromulgated LR 32:393 (March 2006), amended LR 32:1852 (October 2006), LR 33:2171 (October 2007), LR 34:**.

§303. Standards for UST Systems

A. ...

B. Standards for New UST Systems. In order to prevent releases due to structural failure, corrosion, or spills and overfills for as long as the UST system is used to store regulated substances, all owners and operators of new UST systems must meet the requirements of this Subsection. No portion of a new UST system installed between December 22, 1988 and December 20, 2008, shall be installed within 50 feet of an active or abandoned water well unless the entire system meets the requirements of LAC 33:XI.703.C.2.

1. – 1.d.ii ...

e. the tank construction and corrosion protection are determined by the department to be designed to prevent the release or threatened release of any stored regulated substance in a manner that is no less protective of human health and the environment than the constructions listed in Subparagraphs B.1.a-d and f of this Section; and

f. for any UST that is installed or replaced after December 20, 2008, the tank complies with the following:

i. it is an accepted UST design as described in Subparagraphs B.1.a-e of this Section and is of double-walled or jacketed construction in accordance with

Subsection A of this Section and is capable of containing a release from the inner wall of the tank and is designed with release detection in accordance with LAC 33:XI.701.A.6.a; or

ii. it is some other secondarily-contained tank system approved by the department prior to installation.

2. – 2.c.ii. ...

d. the piping construction and corrosion protection are determined by the department to be designed to prevent the release or threatened release of any stored regulated substance in a manner that is no less protective of human health and the environment than the requirements in Subparagraphs B.2.a-c, e, and f of this Section; or

e. the piping is of double-walled non-metallic flexible or semi-rigid construction; and

f. if 25 percent or more of the piping to any one UST is replaced after December 20, 2008, or if all piping connected to a UST is installed or replaced after December 20, 2008, it complies with Clause B.2.f.i or ii of this Section. If a new motor fuel dispenser is installed at an existing UST facility and new piping is added to the UST system to connect the new dispenser to the existing system, then the new piping shall comply with Clause B.2.f.i or ii of this Section. Suction piping that meets the requirements of LAC 33:XI.703.B.2.b.i–v and suction piping that manifolds two or more tanks together are not required to meet the secondary containment requirements outlined in this Paragraph. Piping, other than suction piping that meets the requirements of LAC 33:XI.703.B.2.b.i–v and suction piping that manifolds two or more tanks together, shall comply with the following:

i. any of the accepted piping designs listed in Subparagraphs B.2.a-e of this Section shall be fabricated with double-walled or jacketed construction in accordance with Subsection A of this Section and shall be capable of containing a release from the inner wall of the piping and shall be designed with release detection in accordance with LAC 33:XI.701.B.4; or

ii. the piping system shall have some other form of secondary containment system approved by the department prior to installation.

3. – 3.a. ...

i. spill prevention equipment that will prevent release of product to the environment when the transfer hose is detached from the fill pipe (for example, a spill bucket attachment basin). Spill buckets shall have liquid-tight sides and bottoms and be maintained free of regulated substances. Regulated substances spilled into any spill bucket shall be immediately removed by the UST owner and/or operator or the bulk fuel distributor. The presence of regulated substances in a spill bucket is a violation this Section and may result in issuance of an enforcement action to the UST owner and/or operator and the bulk fuel distributor; and

a.ii. – b.ii. ...

4. Under-Dispenser Containment. Under-dispenser containment sumps installed after December 20, 2008, shall have liquid-tight sides and bottoms and be maintained free of storm water and debris. Regulated substances spilled into any under-dispenser containment sump shall be immediately removed upon discovery to the maximum extent practicable.

a. After December 20, 2008, under-dispenser containment sumps are required in the following conditions:

i. any installation of a new dispenser at a new facility;

ii. any installation of a new dispenser at an existing facility where new piping is added to the UST system to connect the new dispenser to the existing system;

iii. any installation of a replacement dispenser at an existing facility where the piping that connects the dispenser to the existing piping is replaced. Replacing the metal flexible connector, riser, or other transitional components that are beneath the dispenser and that connect the dispenser to the piping requires addition of a containment sump.

b. Replacing an existing dispenser where no piping and none of the piping that connects the dispenser to the existing piping are replaced does not require the addition of an under-dispenser containment sump.

5. Submersible Turbine Pump (STP) Secondary Containment. STP secondary containment can consist of either a built-in secondary containment system or a STP containment sump. STP containment sumps installed after December 20, 2008, shall have liquid-tight sides and bottoms and be maintained free of storm water and debris. Regulated substances spilled into any STP containment sump shall be immediately removed upon discovery to the maximum extent practicable.

a. After December 20, 2008, secondary containment is required for submersible pumps in the following conditions:

i. any installation of a new STP at a new facility;

ii. any installation of an STP (the entire STP, STP housing, and riser pipe) at an existing facility where new piping is added to the UST system to connect the new STP to the existing system;

iii. any installation of a replacement STP (the entire STP, STP housing, and riser pipe) at an existing facility where the piping that connects the STP to the existing piping is replaced. Replacing the metal flexible connector with a single-walled flexible connector requires the addition of a containment sump. Replacing the metal flexible connector with a double-walled flexible connector does not require the addition of a containment sump as long as the newly-installed STP is secondarily contained.

b. Replacing an existing STP where no piping is replaced does not require the addition of STP secondary containment.

64. Installation Procedures

a. Installation. All tanks and piping must be installed in accordance with Subsection A of this Section and in accordance with the manufacturer's instructions.

b. Certification of Installation and Verification of Installer

Certification

i. From the date of promulgation of these regulations until January 20, 1992, owners and operators must certify installations as follows. All owners and operators must ensure that one or more of the following methods of certification, testing, or inspection is used to demonstrate compliance with Subparagraph B.64.a of this Section by providing a certification of compliance on the UST registration form (UST-REG-02) in accordance with LAC 33:XI.301:

(a). the installer has been certified by the tank and piping manufacturers; or

(b). the installation has been inspected and certified by a registered professional engineer with education and experience in UST system installation; or

(c). the installation has been inspected and approved by

the department; or

(d). all work listed in the manufacturer's installation checklists has been completed; or

(e). the owner and operator have complied with another method for ensuring compliance with Subparagraph B.64.a of this Section that is determined by the department to be no less protective of human health and the environment.

ii. Beginning January 20, 1992, all owners and operators must ensure that the individual exercising supervisory control over *installation critical-junctures* (as defined in LAC 33:XI.1303) of a UST system is certified in accordance with LAC 33:XI.Chapter 13. To demonstrate compliance with Subparagraph B.64.a of this Section, all owners and operators must provide a certification of compliance on the UST Registration of Technical Requirements Form (UST-REG-02) within 60 days of the introduction of any regulated substance. Forms shall be filed with the Office of Environmental Assessment.

c. Notification of Installation. The owner and operator must notify the Office of Environmental Assessment in writing at least 30 days before beginning installation of a UST system by:

i. completing the Installation, Renovation and Upgrade Notification Form (UST-ENF-04);

ii. notifying the appropriate regional office of the Office of Environmental Assessment by mail or fax seven days prior to commencing the installation and before commencing any *installation-critical juncture* (as defined in LAC 33:XI:1303);

iii. including in the notification a statement of the number of active or abandoned water wells within 50 feet of the UST system and the type of system to be installed; and

iv. including in the notification the methods to be used to comply with LAC 33:XI.Chapter 7.

C. – C.6.b. ...

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2001 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Underground Storage Tank Division, LR 11:1139 (December 1985), amended LR 16:614 (July 1990), LR 17:658 (July 1991), LR 18:728 (July 1992), amended by the Office of Environmental Assessment, Environmental Planning Division, LR 26:2558 (November 2000), LR 28:475 (March 2002), amended by the Office of Environmental Assessment, LR 31:1066 (May 2005), amended by the Office of the Secretary, Legal Affairs Division, LR 31:2520 (October 2005), LR 33:2171 (October 2007), LR 34:**.

Chapter 5. General Operating Requirements

§507. Repairs Allowed

A. – A.6. ...

7. After December 20, 2008, if any piping repair or replacement impacts 25 percent or more of the UST piping in the repaired piping run, that entire piping run shall be upgraded with secondary containment and meet the requirements of LAC 33:XI.303.B.2 and 701.B.4.

B. ...

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2001 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Underground Storage Tank Division, LR 16:614 (July 1990), amended LR 17:658 (July 1991), amended by the Office of Environmental Assessment, Environmental Planning Division, LR 26:2558 (November 2000), amended by the Office of Environmental Assessment, LR 31:1070 (May 2005), amended by the Office of the Secretary, Legal Affairs Division, LR 33:2172 (October 2007), LR 34:**.

§509. Reporting and Recordkeeping

A. ...

1. registration forms (UST-REG-01 and 02) for all UST systems (LAC 33:XI.301), including certification of installation and verification of installer certification for new UST systems, in accordance with LAC 33:XI.303.B.64.b;

A.2. – B.5. ...

6. documentation of the type and construction of the tank, piping, leak detection equipment, corrosion protection equipment, and spill and overfill protection equipment currently in use at the site; and

B.7. – C. ...

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2001 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Underground Storage Tank Division, LR 16:614 (July 1990), amended LR 18:728 (July 1992), amended by the Office of Environmental Assessment, LR 31:1070 (May 2005), repromulgated by the Office of the Secretary, Legal Affairs Division, LR 32:393 (March 2006), amended LR 34:**.

Chapter 7. Methods of Release Detection and Release Reporting, Investigation, Confirmation, and Response

§701. Methods of Release Detection

A. – A.6. ...

a. For double-walled UST systems, the sampling or testing method used must be capable of detecting a release through the inner wall in any portion of the tank that routinely contains product. ~~The provisions outlined in the Steel Tank Institute’s “Standard for Dual Wall Underground Storage Tanks” may be used as guidance for aspects of the design and construction of underground steel double-walled tanks.~~ Interstitial monitoring of double-walled or jacketed tanks shall either be conducted continuously by means of an automatic leak sensing device that signals to the operator the presence of any regulated substance in the interstitial space, or conducted manually every 30 days by means of a procedure capable of detecting the presence of any regulated substance in the interstitial space.

A.6.b. – B.2. ...

3. Applicable Tank Methods. Any of the methods in Paragraphs A.54-8 of this Section may be used if they are designed to detect a release from any portion of the underground piping that routinely contains regulated substances.

4. Interstitial Monitoring. Interstitial monitoring of double-walled or jacketed piping shall either be conducted continuously by means of an automatic leak sensing device that signals to the operator the presence of any regulated substance in the interstitial space or sump, or conducted manually every 30 days by means of a procedure capable of detecting the presence

of any regulated substance in the interstitial space or sump.

a. The interstitial space or sump shall be maintained free of water, debris, or anything that could interfere with leak detection capabilities.

b. Subparagraph B.4.a of this Section does not apply to containment sumps that were installed prior to December 20, 2008, that do not utilize interstitial monitoring as a piping release detection method.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2001 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Underground Storage Tank Division, LR 16:614 (July 1990), amended by the Office of Environmental Assessment, LR 31:1072 (May 2005), amended by the Office of the Secretary, Legal Affairs Division, LR 33: 2172 (October 2007), LR 34:**.