

local agency, the State Board, or the regional board determines that the information is not a trade secret, it shall act in accordance with Subsection (c) of this section.

prevent disclosure of information pursuant to other provisions of law.

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

Authority: H&S 24299.5

Reference: H&S 25290

(f) Information which has been found to be confidential or regarding which a final determination has not been made 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 should be filed with the remainder of the 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 only in connection with the State Board's, the regional board's, or the local 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

APPENDIX I, TABLE A
 SUGGESTED SPECIFICATIONS
 APPLICABLE TO REGULATORY REQUIREMENTS

SECTION NUMBER

2631(j)(1)	ASTM D-814,	"Rubber Property - Vapor Transmission of Volatile Liquids"
2631(j)(2)(A)	ASTM D-543,	"Resistance of Plastics to Chemical Reagents"
2631(j)(2)(B)	ASTM D-751,	"Coated Fabrics"
2631(j)(2)(C)	ASTM D-2240,	"Rubber Property--Durometer Hardness"
2631(j)(2)(D)	ASTM D-2684,	"Determining Permeability of Thermoplastic Containers"
2635(b)(1)	ASME,	"ASME Pressure Vessel Code, Section VIII, Division T, Boiler and Pressure Vessel Code"
	UL58,	"Steel Underground Tanks for Flammable and Combustible Liquids"
	UL1316,	"Glass Fiber Reinforced Plastic Underground Storage Tanks for Petroleum Products"
	ULC-3615-1977,	"Standard for Reinforced Plastic Underground Tanks for Petroleum Products"
2635(b)(2)	ASTM G-1-72,	"Standard Recommended Practice for Preparing, Cleaning, and Evaluating Test Specimens"
	ASTM G-31-72,	"Standard Recommended Practice for Laboratory Immersion Corrosion Testing of Metals"
	ASTM D-4021-81,	"Standard Specifications for

2661(c)(2)(B)

2663(b)

NACE TM-10-69,

NACE TM-02-70,

API 1631,

NFPA 329-1983

Glass-Fiber- Reinforced Polyester Underground Petroleum Storage Tanks"

"Laboratory Corrosion Testing of Metals for the Processing Industry"

"Method for Conducting Controlled Velocity Laboratory Corrosion Tests"

"Recommended Practice for the Interior Lining of Existing Steel Underground Storage Tanks"

"Recommended Practice for Handling Underground Leakage of Flammable and Combustible Liquid"

APPENDIX I, TABLE B

ORGANIZATIONS PROVIDING SPECIFICATIONS APPLICABLE
TO REGULATORY REQUIREMENTS

ANSI American National Standards Institute
1430 Broadway
New York, NY 10018
(212) 354-3473

API American Petroleum Institute
2101 L Street, N.W.
Washington, D.C. 20037
(202) 457-7000

ASME The American Society of Mechanical Engineers
345 East 47th Street
New York, NY 10017
(215) 299-5400

ASTM American Society for Testing and Materials
1916 Race Street
Philadelphia, PA 19103
(215) 299-5400

NACE National Association of Corrosion Engineers
P.O. Box 986
Katy, TX 77450
(713) 492-0535

NFPA National Fire Protection Association
Batterymarch Park
Quincy, MA 02269
(617) 328-9290

UL Underwriters Laboratories
333 Pfingsten Road
Northbrook, IL 60062
(312) 272-8800

ULC Underwriters Laboratories of Canada, Inc.
7 Crouse Road
Scarborough, Ontario

STI Steel Tank Institute
666 Dundee Road, Suite 705
Northbrook, IL 60062
(312) 498-1980

C. Errata Sheets

1. Errata sheet draft dated
November 9, 1984

Vol 4

UNDERGROUND TANK REGULATIONS

CALIFORNIA ADMINISTRATIVE CODE

TITLE 23 WATERS

CHAPTER 3 WATER RESOURCES CONTROL BOARD

SUBCHAPTER 16 UNDERGROUND TANK REGULATIONS

ERRATA: November 9, 1984 DRAFT

- page 3.4 Subsection (h) should read
 "Secondary containers shall be equipped with a collection system capable of removing for the removal of any precipitation, subsurface infiltration, or hazardous substance released from the primary container.

- page 3.19 The reference to "Section 2631 (j)(1)" in Subsection (e)(1) should be "Section 2631 (j)(1)".

- page 3.22 The references to "Sections 2632 and 2633" in this paragraph should be "Sections 2633 and 2634".

- page 3.24 Subsections (b) and (c) should read, in part:
 "(b) The floor of the leak interception and detection system shall be constructed on a firm base and sloped to a specific location or collection sump.
 (c) Access casing(s) shall be installed to intercept in the collection sump or specific location. The access casing shall be:...."

- page 3.26 The first sentence in Subsection (g) should be replaced with the following:
 "(g) All piping shall be tested using one of the following methods within 24 hours of completion of Subsection (f)(5).
 A. Isolate the piping and conduct a hydrostatic pressure test at 50 psi (2600 mm Hg) or greater. If the pressure drops more than 5 psi (260 mm Hg) per minute, it indicates the probability of a leak in the line. Repeat the test at least once to ensure against compression of entrained air. Any pressure drop less than 5 psi (260 mm Hg) per minute is inconclusive as it may be caused by cooling. If the test continues to indicate a leak, appropriate action must be taken.

B. Quite often pumps are located in the tank, or, on some rare occasions, just above the tank but remote from the dispensing devices. In such cases, the pipe to the dispensing equipment operates under pressure. A leak in this line will cause rapid loss of pressure after the pump is turned off. This can be checked in the following manner.

page 3.30

The second line of Subsection (g) should read

"... developed prior to installation for any leak interception and detection ..."

page 3.35

The second sentence of Subsection (7) should be replaced with the following:

Pressure piping shall be hydrostatically tested to 150 percent of the maximum anticipated pressure of the system, or pneumatically tested to 110 percent of the maximum anticipated pressure of the system, but not less than 5 lbs per sq in (34.48 kPa) gage at the highest point of the system. This test shall be maintained for a sufficient time to complete visual inspection of all joints and connections, but for at least 10 minutes. In lieu of the above a test using accepted engineering practices shall be used. Acceptable test methods for testing pipelines are provided in Appendix I.

page 3.36

Subsection (A) should read as follows and Subsection (D) should be deleted

"(A) A level sensing devise that continuously monitors and indicates the liquid level in the tank and either (B) or (C) or both. A spill catchment basin which surrounds the fill pipe and prevents the inflow of the hazardous substance into the subsurface environment."

page 3.37

Subsection (B) should read as follows:

"(B) The available capacity of the tank to be filled is determined immediately prior to filling to be at least 103 percent of the volume of the entire tank compartment to be delivered or the volume of the entire tank compartment to be filled plus 200 gallons, whichever is less, as determined by tank gauging, or"

page 3.39

The last sentence in Subsection (1) should read:

"The secondary containment shall extend an additional distance beyond the vertical planes described above equal to the radius of lateral spread plus one foot."

page 4.6 through 4.14 should be deleted. They are duplicative of pages 4.32 through 4.40.

page 4.19 The reference to "No. 3." in the first line on the page should be "No. 2."

page 4.20 The reference to "Subsection (1)" in the first line on the page should be "Subsection (p)."

page 4.23 The first line in Subsection (iv) should read
"(iv) The throughput error shall be the measured

page 4.24 Table 4.2 should read

Tank Size*	Allowable Measurement Error*
<4000	25
4000 to <8000	50
8000 to <12000	75
>12000	100

* all values in gallons"

page 4.26 The reference to "Subsection (d) of Subsection (5)" in Subsection (D) should be "Subsection (5)(D) of this Subsection."

page 4.43 The reference to "Subsection (g)" in Subsection (g) should be "Subsection (5)."

page 4.50 The reference to "Sections 2648 (p) and (q)" in Subsection (f) should be

"Subsections (t) and (u) of Section 2643 of this Article."

page 4.55 The word "section" in the last line of Subsection (c) should be "segment."

page 4.56 Subsection (e) should read:

"(e) Subsurface vadose zone monitoring systems shall, if possible, be located within the backfill surrounding the tank."

- page 4.57 The reference to "Sections 2648 (p) and (q)" should be "Subsections (t) and (u) of Section 2648."
- page 4.63 The second line on the page should read:
"... water table, laterally extensive and at least 5 feet thick. In ..."
- page 4.63 The "5 feet" in Subsection (d) should be "1 foot".
- page 4.63 The word "screens" in the fourth line of Subsection (e) should be "casing".
- page 4.63 Subsection (g) should read:
"(g) Filter pecks shall extend at least 2 feet above the top of the perforated zone."
- page 4.64 Subsection (j) should read:
"(j) Borings shall be described in accordance with the provisions of Subsections (t) and (h) of Section 2648 of this Article."
- page 4.74 The reference to "Sections 2647 and 2648" in Subsection (4) should be "this Section and Section 2647."
- page 4.84 The reference to "Section 2648 (m) and (n)" in Subsection (5) should be
"Subsections (q) and (s) of Section 2648 of this Article."
- page 4.75 The first line on the page should read:
"... the boring which is below the monitoring interval sealed..."
- page 5.6 The word "leak" in the second line of the Subsection (d) should be deleted.
- page 5.6 The fourth line in Subsection (b) should read:
"... have been detected using required monitoring, the operator shall ..."

- page 5.9 The third and fourth line of Subsection (4), should read:
"... ground water or surface water (include an indication of whether a hazardous waste manifest(s) is ...)"
- page 6.3 The words "adequate rationale" in the seventh line of Subsection (a) should be replaced with "grounds".
- page 6.4 The word "wall" in Subsection (4) should be "weld."
- page 6.5 The first line of Subsection (c) should read:
"If a tank repair is approved by the local agency based on satisfactory ..."
- page 6.5 The last sentence in Subsection (b) should be deleted.
- page 6.5 The words "whichever is later" should be added to the last sentence of Subsection (d).
- page 7.3 The last sentence in the first paragraph on the page should read:
"In this situation, the underground storage tank owner shall submit the required proposal within 14 days of either the discovery of an unauthorized release, or actions taken to prevent or minimize the effects of the unauthorized release."
- page 8.4 Subsection (5) should read:
"(5) A list including names and addresses of all persons known to the applicant who may be affected by or may be interested in the variance request."
- page 8.4 The following part of Subsection (c) should be deleted:
"before the public hearing ... on the application."
- page 8.7 The last line on the page should read:
"Local agencies shall modify or revoke all permits ..."
- page 9.2 The word "will" in the first line of Subsection (b) should be "shall".

-- page 9.2.

The following part of Subsection (b) should be deleted:

"before the public hearing ... on the application."

page 9.4

The word "will" in the second line on the page should be "shall".

page 10.1

The following part of Subsection (b) should be deleted:

"and the requirements ... State Board."

page 10.1

The third line of Subsection (c) should read:

"... conditions which local agencies must meet prior to permit ..."

page 10.2

The words "both tank owners and" should be deleted from the first line on the page.

page 10.10

Subsection (h) should be deleted.

2. Errata sheet draft dated
December 28, 1984

ERRATA: DECEMBER 28, 1984 DRAFT
UNDERGROUND TANK REGULATIONS

CALIFORNIA ADMINISTRATIVE CODE
TITLE 23 WATERS
CHAPTER 3 WATER RESOURCES CONTROL BOARD
SUBCHAPTER 16 UNDERGROUND TANK REGULATIONS

Page 3.22: The following should be added to subsection (c) at the end of this page:

"than those specified in 2633(b) shall be subject to "

Page 3.40: The first and third sentences of subsection (4) should read:

(4) Single-wall primary containers of steel which are not clad with glass fibre reinforced plastic, with or without coatings, shall be protected by either a properly installed, maintained, and monitored cathodic protection system.

...

Underground storage tanks with listed corrosion resistant materials, non-metallic glass fibre reinforced plastic coatings, composites, or equivalent systems shall be holiday tested immediately prior to installation."

Table 4.1: The minimum frequency for ground water monitoring in Alternative 4 shall be "monthly" instead of weekly as shown. This corresponds to the text on page 4.13.

Table 4.1: The last sentence in comment no. 1 in Alternative 7 should read as follows to correspond to the text:

"A liquid level difference of 1 percent of the tank volume or ~~50~~ 5 gallons, whichever is less shall be cause for further investigation."

Page 4.15: The last sentence in subsection (iii) should read:

"The period of continuous calculation shall be no greater than ~~30 days~~ one month."

Page 4.19: Subsection (iii) should read:

"(iii) more greater than 30-day variation: 0.5% of throughput or ~~30-day variation~~. 100 gallons whichever is less."

Page 4.42: The first sentence in subsection (6) should read:

"Converted to volume measurements based on a calibration chart ~~provided by for~~ the underground storage tank, ~~manufacturer or supplier~~."

Page 8.4: The second sentence in subsection (c) should read:

"The State Board will bill the applicant for additional ~~anticipated~~ costs or refund any remaining part of the initial fee, if necessary."

Page 8.14: The first sentence in subsection (g) should read:

"(g) The regional board shall consider the local agency's, ~~and the city's, county's, or city and county's~~ recommendations in rendering its decision."

Page 9.2: The second sentence in subsection (b) should read:

"The State Board will bill the applicant for additional ~~anticipated~~ costs or refund any remaining part of the initial fee, if necessary."

APPENDIX I, TABLE B

ORGANIZATIONS PROVIDING SPECIFICATIONS APPLICABLE TO REGULATORY REQUIREMENTS

ANSI	American National Standards Institute 1430 Broadway New York, NY 10018 (212) 354-3473	NFPA	National Fire Protection Association Batterymarch Park Quincy, MA 02269 (617) 328-9290
API	American Petroleum Institute 2101 L Street, N.W. Washington, D.C. 20037 (202) 457-7000	UL	Underwriters Laboratories 333 Pfingsten Road Northbrook, IL 60062 (312) 272-8800
ASME	The American Society of Mechanical Engineers 345 East 47th Street New York, NY 10017 (215) 299-5400	ULC	Underwriters Laboratories of Canada, Inc. 7 Crouse Road Scarborough, Ontario
ASTM	American Society for Testing and Materials 1916 Race Street Philadelphia, PA 19103 (215) 299-5400	STI	Steel Tank Institute 666 Dundee Road, Suite 705 Northbrook, IL 60062 (312) 498-1980
NACE	National Association of Corrosion Engineers P.O. Box 986 Katy, TX 77450 (713) 492-0535		

3. Errata sheet draft dated
January 18, 1985

AS ADOPTED ON JANUARY 18, 1985
ERRATA: JANUARY 18, 1985
UNDERGROUND TANK REGULATIONS

CALIFORNIA ADMINISTRATIVE CODE
TITLE 23 WATERS
CHAPTER 3 WATER RESOURCES CONTROL BOARD
SUBCHAPTER 16 UNDERGROUND TANK REGULATIONS

Page 3.30: The first and third sentences of subsection (4) should read:

"Single-wall primary containers of steel and the outer surface of double-walled underground storage tanks constructed of steel which are not clad with glass fibre reinforced plastic, with or without coatings shall be protected by either a properly installed, maintained, and monitored cathodic protection system."

"Underground storage tanks with listed corrosion resistant materials, non-metallic glass fibre reinforced plastic coatings, composites, or equivalent systems shall be holiday tested immediately prior to installation."

Page 4.15: Subsection (iii) should read:

"more than 30-day variation: + 0.5 percent of throughput or 100 gallons whichever is less"

Page 4.16: Subsection (D) should read:

"All pressurized pipelines and suction pipelines shall be monitored as provided for in Subsection (5)(D) of this subsection."

Page 4.18: Subsection (iv) should read:

"If the liquid level varies by more than 1 percent of the underground storage tank's volume or 5 gallons, whichever is less, between measurements, an unauthorized release shall be..."

March 6, 1985