#### § 280.30

the tanks and piping complies with the requirements in § 280.20(d).

(g) Beginning October 24, 1988, any person who sells a tank intended to be used as an underground storage tank must notify the purchaser of such tank of the owner's notification obligations under paragraph (a) of this section. The form provided in appendix III of this part may be used to comply with this requirement.

# Subpart C—General Operating Requirements

#### § 280.30 Spill and overfill control.

(a) Owners and operators must ensure that releases due to spilling or overfilling do not occur. The owner and operator must ensure that the volume available in the tank is greater than the volume of product to be transferred to the tank before the transfer is made and that the transfer operation is monitored constantly to prevent overfilling and spilling.

Note: The transfer procedures described in National Fire Protection Association Publication 385 may be used to comply with paragraph (a) of this section. Further guidance on spill and overfill prevention appears in American Petroleum Institute Publication 1621, "Recommended Practice for Bulk Liquid Stock Control at Retail Outlets," and National Fire Protection Association Standard 30, "Flammable and Combustible Liquids Code."

(b) The owner and operator must report, investigate, and clean up any spills and overfills in accordance with §280.53.

## § 280.31 Operation and maintenance of corrosion protection.

All owners and operators of steel UST systems with corrosion protection must comply with the following requirements to ensure that releases due to corrosion are prevented for as long as the UST system is used to store regulated substances:

- (a) All corrosion protection systems must be operated and maintained to continuously provide corrosion protection to the metal components of that portion of the tank and piping that routinely contain regulated substances and are in contact with the ground.
- (b) All UST systems equipped with cathodic protection systems must be

inspected for proper operation by a qualified cathodic protection tester in accordance with the following requirements:

- (1) Frequency. All cathodic protection systems must be tested within 6 months of installation and at least every 3 years thereafter or according to another reasonable time frame established by the implementing agency; and
- (2) Inspection criteria. The criteria that are used to determine that cathodic protection is adequate as required by this section must be in accordance with a code of practice developed by a nationally recognized association.

NOTE: National Association of Corrosion Engineers Standard RP-02-85, "Control of External Corrosion on Metallic Buried, Parially Buried, or Submerged Liquid Storage Systems," may be used to comply with paragraph (b)(2) of this section.

- (c) UST systems with impressed current cathodic protection systems must also be inspected every 60 days to ensure the equipment is running properly.
- (d) For UST systems using cathodic protection, records of the operation of the cathodic protection must be maintained (in accordance with §280.34) to demonstrate compliance with the performance standards in this section. These records must provide the following:
- (1)  $\tilde{T}$ he results of the last three inspections required in paragraph (c) of this section; and
- (2) The results of testing from the last two inspections required in paragraph (b) of this section.

### § 280.32 Compatibility.

Owners and operators must use an UST system made of or lined with materials that are compatible with the substance stored in the UST system.

NOTE: Owners and operators storing alcohol blends may use the following codes to comply with the requirements of this section:

- (a) American Petroleum Institute Publication 1626, "Storing and Handling Ethanol and Gasoline-Ethanol Blends at Distribution Terminals and Service Stations"; and
- (b) American Petroleum Institute Publication 1627, "Storage and Handling of Gasoline-Methanol/Cosolvent Blends at Distribution Terminals and Service Stations."

#### § 280.33 Repairs allowed.

Owners and operators of UST systems must ensure that repairs will prevent releases due to structural failure or corrosion as long as the UST system is used to store regulated substances. The repairs must meet the following requirements:

(a) Repairs to UST systems must be properly conducted in accordance with a code of practice developed by a nationally recognized association or an independent testing laboratory.

NoTE: The following codes and standards may be used to comply with paragraph (a) of this section: National Fire Protection Association Standard 30, "Flammable and Combustible Liquids Code"; American Petroleum Institute Publication 2200, "Repairing Crude Oil, Liquified Petroleum Gas, and Product Pipelines"; American Petroleum Institute Publication 1631, "Recommended Practice For the Interior Lining of Existing Steel Underground Storage Tanks"; and National Leak Prevention Association Standard 631, "Spill Prevention, Minimum 10 Year Life Extension of Existing Steel Underground Tanks by Lining Without the Addition of Cathodic Protection."

- (b) Repairs to fiberglass-reinforced plastic tanks may be made by the manufacturer's authorized representatives or in accordance with a code of practice developed by a nationally recognized association or an independent testing laboratory.
- (c) Metal pipe sections and fittings that have released product as a result of corrosion or other damage must be replaced. Fiberglass pipes and fittings may be repaired in accordance with the manufacturer's specifications.
- (d) Repaired tanks and piping must be tightness tested in accordance with §280.43(c) and §280.44(b) within 30 days following the date of the completion of the repair except as provided in paragraphs (d) (1) through (3), of this section:
- (1) The repaired tank is internally inspected in accordance with a code of practice developed by a nationally recognized association or an independent testing laboratory; or
- (2) The repaired portion of the UST system is monitored monthly for releases in accordance with a method specified in §280.43 (d) through (h); or
- (3) Another test method is used that is determined by the implementing

agency to be no less protective of human health and the environment than those listed above.

- (e) Within 6 months following the repair of any cathodically protected UST system, the cathodic protection system must be tested in accordance with §280.31 (b) and (c) to ensure that it is operating properly.
- (f) UST system owners and operators must maintain records of each repair for the remaining operating life of the UST system that demonstrate compliance with the requirements of this section.

#### § 280.34 Reporting and recordkeeping.

Owners and operators of UST systems must cooperate fully with inspections, monitoring and testing conducted by the implementing agency, as well as requests for document submission, testing, and monitoring by the owner or operator pursuant to section 9005 of Subtitle I of the Resource Conservation and Recovery Act, as amended.

- (a) *Reporting*. Owners and operators must submit the following information to the implementing agency:
- (1) Notification for all UST systems (§ 280.22), which includes certification of installation for new UST systems (§ 280.20(e)).
- (2) Reports of all releases including suspected releases (§ 280.50), spills and overfills (§ 280.53), and confirmed releases (§ 280.61);
- (3) Corrective actions planned or taken including initial abatement measures (§280.62), initial site characterization (§280.63), free product removal (§280.64), investigation of soil and ground-water cleanup (§280.65), and corrective action plan (§280.66); and
- (4) A notification before permanent closure or change-in-service (§ 280.71).
- (b) Recordkeeping. Owners and operators must maintain the following information:
- (1) A corrosion expert's analysis of site corrosion potential if corrosion protection equipment is not used (§ 280.20(a)(4); § 280.20(b)(3)).
- (2) Documentation of operation of corrosion protection equipment (§ 280.31);
- (3) Documentation of UST system repairs (§ 280.33(f));

#### § 280.40

- (4) Recent compliance with release detection requirements (§ 280.45); and
- (5) Results of the site investigation conducted at permanent closure (§280.74).
- (c) Availability and Maintenance of Records. Owners and operators must keep the records required either:
- (1) At the UST site and immediately available for inspection by the implementing agency; or
- (2) At a readily available alternative site and be provided for inspection to the implementing agency upon request.
- (3) In the case of permanent closure records required under §280.74, owners and operators are also provided with the additional alternative of mailing closure records to the implementing agency if they cannot be kept at the site or an alternative site as indicated above.

### Subpart D—Release Detection

## \$280.40 General requirements for all UST systems.

- (a) Owners and operators of new and existing UST systems must provide a method, or combination of methods, of release detection that:
- (1) Can detect a release from any portion of the tank and the connected underground piping that routinely contains product;
- (2) Is installed, calibrated, operated, and maintained in accordance with the manufacturer's instructions, including routine maintenance and service checks for operability or running condition; and
- (3) Meets the performance requirements in §280.43 or 280.44, with any performance claims and their manner of determination described in writing by the equipment manufacturer or installer. In addition, methods used after the date shown in the following table corresponding with the specified method except for methods permanently installed prior to that date, must be capable of detecting the leak rate or quantity specified for that method in the corresponding section of the rule (also shown in the table) with a probability of detection (Pd) of 0.95 and a probability of false alarm (Pfa) of 0.05.

Method	Section	Date after which Pd/Pfa must be demonstrated	
Manual Tank Gauging.	280.43(b)	December 22, 1990.	
Tank Tightness Testing.	280.43(c)	December 22, 1990.	
Automatic Tank Gauging.	280.43(d)	December 22, 1990.	
Automatic Line Leak Detec- tors.	280.44(a)	September 22, 1991.	
Line Tightness Testing.	280.44(b)	December 22, 1990.	

- (b) When a release detection method operated in accordance with the performance standards in §280.43 and §280.44 indicates a release may have occurred, owners and operators must notify the implementing agency in accordance with subpart E.
- (c) Owners and operators of all UST systems must comply with the release detection requirements of this subpart by December 22 of the year listed in the following table:

SCHEDULE FOR PHASE-IN OF RELEASE DETECTION

Year system was in- stalled	Year when release detection is required (by December 22 of the year indicated)				
	1989	1990	1991	1992	1993
Before 1965 or date unknown.	RD	Р			
1965-69		P/RD			
1970-74		Р	RD		
1975-79		Р		RD	
1980-88		Р			RD

New tanks (after December 22) immediately upon installation.

P=Must begin release detection for all pressurized piping as defined in § 280.41(b)(1). . . . . . . . . . . . . . . . .

RD=Must begin release detection for tanks and suction piping in accordance with §280.41(a), §280.41(b)(2), and §280.42.

(d) Any existing UST system that cannot apply a method of release detection that complies with the requirements of this subpart must complete the closure procedures in subpart G by the date on which release detection is required for that UST system under paragraph (c) of this section.

[53 FR 37194, Sept. 23, 1988, as amended at 55 FR 17753, Apr. 27, 1990; 55 FR 23738, June 12, 1990; 56 FR 26, Jan. 2, 1991]