

Chapter 115. Volatile Organic Compounds

Storage of Volatile Organic Compounds in Bexar, Brazoria, Dallas, Ector, El Paso, Galveston, Gregg, Harris, Jefferson, Nueces, Orange, Tarrant, and Victoria Counties

As a result of the evaluation of comments received on the proposed rules and further consideration, significant changes have been made to the original proposed revisions as published in the March 28, 1980, issue of the *Texas Register* (5 TexReg 1182). Since section number changes and additions are also involved, a brief summary is presented for each major deviation from the proposed rules.

In §115.101 (131.07.51.101), the requirements for secondary seals on storage tanks have been removed from §115.103 and incorporated within Table I and Table II of this section in order to list all storage tank control devices including secondary seals in the same tabular format.

In §115.102 (131.07.51.102), secondary seal requirements and maximum gap allowed were proposed as §115.102 (.102(b)) and have been adopted with only minor changes.

Section 115.103 is a new section for secondary seal inspection. Secondary seal inspection requirements have been placed in a separate section to emphasize an important control requirement. The proposed §115.103 (.103) (title: Double Seal Requirements) is withdrawn and a new §115.103 (title: Inspection Requirements), adopted.

Section 115.104 is a new section added as a result of comments received on the proposed sections, which requires that

records be kept concerning the storage of certain types of volatile organic compounds. Proposed §115.104 (.104) (title: Exemptions) is withdrawn and this new §115.104 (title: Record Keeping Requirements) adopted.

Section 115.105 (131.07.51.104) text has not been changed from that proposed as §115.104 (.104), but the number has been changed to §115.105 (.104) to provide for the insertion of the new §115.104. Section 115.105 (.105) (title: Counties and Compliance Schedules) is withdrawn, and re-established as §115.106 (.105), and the new §115.105 (.104) (title: Exemptions) adopted.

Section 115.106 (131.07.51.105) was proposed as §115.105 (.105), but has been renumbered to provide for the insertion of new §115.104. The compliance date for retrofit with double seals has been changed from December 31, 1983, to December 31, 1982, as the result of comments received on the proposed section.

These sections are adopted under the authority of Article 4477-5, Vernon's Texas Civil Statutes, Texas Clean Air Act.

§115.101 (131.07.51.101). Control Requirements. No person shall place, store, or hold in any stationary tank, reservoir, or other container any volatile organic compound (VOC) with a true vapor pressure equal to or greater than 1.5 psia (10.3 kPa) unless such container is capable of maintaining working pressure sufficient at all times to prevent any vapor or gas loss to the atmosphere, or is equipped with at least the control device specified in Table I (for VOC other than crude oil and condensate) or Table II (for crude oil and condensate) or any other control device which will provide substantially equivalent control and is approved by the executive director.

TABLE I

REQUIRED CONTROL DEVICES FOR STORAGE TANKS FOR
VOC OTHER THAN CRUDE OIL AND CONDENSATE

True Vapor Pressure of Compound at Storage Conditions	Nominal Storage Capacity	Tank Type	Minimum Emission Control Requirements
< 1.5 psia (10.3 kPa)	Any	Any	None
> 1.5 psia (10.3 kPa) and < 4 psia (28 kPa)	< 1,000 gal (3,800 l)	Any	None
	> 1,000 gal (3,800 l) < 25,000 gal (94,600 l)	Any	Submerged fill
	> 25,000 gal (94,600 l) < 42,000 gal (159,000 l)	Any	Internal or external floating roof (any type)
	> 42,000 gal (159,000 l)	Welded	Internal floating roof or External floating roof with metallic-type shoe seal, or liquid-mounted, liquid filled seal, or liquid mounted foam seal or External floating roof with vapor mounted primary seal <u>and</u> secondary seal
	> 42,000 gal (159,000 l)	Riveted	Internal floating roof or External floating roof with primary seal (any type) <u>and</u> secondary seal

TABLE I (continued)

REQUIRED CONTROL DEVICES FOR STORAGE TANKS FOR
VOC OTHER THAN CRUDE OIL AND CONDENSATE

True Vapor Pressure of Compound at Storage Conditions	Nominal Storage Capacity	Tank Type	Minimum Emission Control Requirements
≥ 4 psia (28 kPa) and < 11 psia (76 kPa)	$\leq 1,000$ gal (3,800 l)	Any	None
	$> 1,000$ gal (3,800 l) $\leq 25,000$ gal (94,600 l)	Any	Submerged fill
	$> 25,000$ gal (94,600 l) $\leq 42,000$ gal (159,000 l)	Any	Internal or external floating roof (any type)
	$> 42,000$ gal (159,000 l)	Any	Internal floating roof or External floating roof with primary seal (any type) and secondary seal
≥ 11 psia (76 kPa)	$\leq 1,000$ gal (3,800 l)	Any	None
	$> 1,000$ gal (3,800 l) $\leq 25,000$ gal (94,600 l)	Any	Submerged fill
	$> 25,000$ gal (94,600 l)	Any	vapor recovery system

TABLE II

REQUIRED CONTROL DEVICES FOR STORAGE TANKS
FOR CRUDE OIL AND CONDENSATE

True Vapor Pressure of Compound at Storage Conditions	Nominal Storage Capacity	Tank Type	Minimum Emission Control Requirements
< 1.5 psia (10.3 kPa)	Any	Any	None
> 1.5 psia (10 kPa) and < 4 psia (28 kPa)	≤ 1,000 gal (3,800 l)	Any	None
	≥ 1,000 gal (3,800 l) ≤ 42,000 gal (159,000 l)		Submerged fill
	> 42,000 gal (159,000 l)	Welded	Internal floating roof or External floating roof with metallic-type shoe seal, or liquid-mounted, liquid filled seal, or liquid mounted foam seal or External floating roof with vapor mounted primary seal <u>and</u> secondary seal
		Riveted	Internal floating roof or External floating roof with primary seal (any type) <u>and</u> secondary seal

TABLE II (continued)

REQUIRED CONTROL DEVICES FOR STORAGE TANKS
FOR CRUDE OIL AND CONDENSATE

True Vapor Pressure of Compound at Storage Conditions	Nominal Storage Capacity	Tank Type	Minimum Emission Control Requirements
≥ 4 psia (28 kPa) and < 11 psia (76 kPa)	$\leq 1,000$ gallons (3,800 l)	Any	None
	$> 1,000$ gallons (3,800 l) $\leq 42,000$ gallons (159,000 l)	Any	Submerged fill
	$> 42,000$ gallons (159,000 l)	Any	Internal floating roof or External floating roof with primary seal (any type) and secondary seal
≥ 11 psia (76 kPa)	$\leq 1,000$ gallons (3,800 l)	Any	None
	$> 1,000$ gallons (3,800 l) $\leq 42,000$ gallons (159,000 l)	Any	Submerged fill
	$> 42,000$ gallons (159,000 l)	Any	vapor recovery system

§115.102 (131.07.51.102). Floating Roof Storage Tank Requirements. For floating roof storage tanks subject to the provisions of §115.101 (.101) of this title (relating to control requirements), the following requirements shall apply:

(1)-(5) (No change.)

(6) For secondary-seals, the seal shall be continuous from the floating roof to the tank wall (rim-mounted secondary seal), with an accumulated area of gaps that exceed 1/8-inch (0.3 cm) in width between the secondary seal and tank wall no greater than 1.0 inch² per foot (21.2 cm²/meter) of tank diameter.

§115.103. Inspection Requirements. The following inspection requirements apply to secondary seals required by §115.101 (.101) of this title (relating to control requirements):

(1) all secondary seals shall be inspected annually to insure compliance with §115.102(5) (.102(5)) of this title (relating to floating roof storage tank requirements).

(2) If the primary seal is vapor mounted, secondary seal gap measurements shall be conducted annually to insure compliance with §115.102(6) (.102(6)) of this title (relating to floating roof storage tank requirements).

§115.104. Record Keeping Requirements. The owner or operator of any storage vessel with an external floating roof used to store petroleum liquids with a true vapor pressure of greater than 1.0 psia (6.9 kPa) shall maintain records of the type of VOC stored and the average monthly true vapor pressure of the stored liquid, as well as the results of any inspections required by §115.103 of this title (relating to inspection requirements). Records shall be maintained for two years and be made available for review by authorized representatives of the Texas Air Control Board and/or pollution control agencies.

§115.105 (131.07.51.104). Exemptions. The following are exemptions to the requirements of §§115.101 and 115.102 (.101, .102) of this title (relating to required control devices and floating roof storage tank requirements):

(1) Crude oil and condensate, prior to custody transfer, are exempt from all provisions of §115.101 (.101) of this title (relating to control requirements) if stored in tanks with a nominal capacity less than 210,000 gallons (795,000 liters).

(2) Slotted sampling and gauge pipes installed in any floating roof storage tank are exempt from the provisions of §115.102(1) (.102(1)) of this title (relating to floating roof storage tank requirements).

(3) Storage containers which have a capacity of less than 25,000 gallons (95,000 liters) located at motor vehicle fuel dispensing facilities are exempt from the requirements of §115.101 (.101) of this title (relating to control requirements).

(4) A welded tank with a metallic-type shoe primary seal which has a secondary seal from the top of the shoe seal to the tank wall (a shoe-mounted secondary seal is exempt from the requirements of §115.101 (.101) of this title (relating to control requirements) for retrofit with a rim-mounted secondary seal if the shoe-mounted secondary seal is installed or scheduled for installation before the effective date of this section.

(5) External floating roof tanks storing waxy, high pour point crude oils are exempt from any secondary seal requirements of §115.101 (.101) of this title (relating to control requirements).

(6) All persons in Ector County are exempt from any double seal requirement of §115.101 (.101) of this title (relating to control requirements).

§115.106 (131.07.51.105). Counties and Compliance Schedules.

(a) The provisions of §§115.101-115.104 (.101, .102) of this title (relating to control requirements, floating roof storage tank requirements, inspection requirements, and record keeping requirements) shall apply to Bexar, Brazoria, Dallas, Ector, El Paso, Galveston, Gregg, Harris, Jefferson, Nueces, Orange, Tarrant, and Victoria Counties.

(b) All persons affected by §115.101 (.101) of this title (relating to control requirements) shall submit a final control plan for compliance no later than December 31, 1979, and shall be in compliance as soon as practicable but no later than December 31, 1982, with the exception noted in subsection (c) of this section.

Issued in Austin, Texas, on July 30, 1980.

Doc. No. 805956 Bill Stewart, P.E.
Executive Director
Texas Air Control Board

Effective Date: August 22, 1980

Proposal Publication Date: March 28, 1980

For further information, please call (512) 451-5711, ext. 354.

Facilities for Loading and Unloading of Volatile Organic Compounds in Bexar, Brazoria, Dallas, Ector, El Paso, Galveston, Gregg, Harris, Jefferson, Nueces, Orange, Tarrant, and Victoria Counties

The proposed §115.111(2) (131.07.52.101(2)) included a new vapor-tightness requirement which was added by reference to proposed §§115.261-115.265. As a result of evaluation of the public hearing comments and further TACB consideration, these rules have been specifically listed in §115.111 (.101). The new requirements have been added in §115.111 (.101)(4) and (5) and concern vapor recovery requirements and tank-truck tank leak test certification. The December 31, 1983, compliance date has also been changed to December 31, 1982, in §115.113 (.104) for paragraphs (4) and (5) of §115.111 (.101).

These sections are adopted under the authority of Article 4477-5, Vernon's Annotated Texas Civil Statutes.

§115.111 (131.07.52.101). Throughput and Control Requirements. No person shall permit the loading or unloading to or from any facility having 20,000 gallons (75,700 liters) or more throughput per day (averaged over any consecutive 30-day period) of volatile organic compounds with a true vapor pressure equal to or greater than 1.5 psia (10.3 kPa) under actual storage conditions, unless the following emission control requirements are met by the dates specified in §115.113 (.104) of this title (relating to compliance schedule and counties):

(1) (No change.)

(2) Volatile organic compound vapors from gasoline terminals shall be reduced to a level not to exceed 0.67 pounds of volatile organic compounds per 1,000 gallons (80 mg/liter) of gasoline transferred. Prior to December 31,