

NOTICE OF INTENT

Department of Environmental Quality Office of Air Quality and Radiation Protection Air Quality Division

Storage of Volatile Organic Compounds (LAC 33:III.2103) (AQ137)

Under the authority of the Louisiana Environmental Quality Act, R.S. 30:2001 et seq., and in accordance with the provisions of the Administrative Procedure Act, R.S. 49:950, et seq., the secretary gives notice that rulemaking procedures have been initiated to amend the Air Quality Division Regulations, LAC 33:III.2103 (AQ137).

This rule revision clarifies that the requirements for internal floating roofs must be implemented at the next maintenance turnaround unless that turnaround occurs after December 1, 2005. The previous language implied that the requirements could be met at either the next turnaround or by the deadline, at the choice of the facility. This revision also provides a definition of mechanical shoe seal and liquid mounted seal, where the terms had been open to misinterpretation before this revision. The nonattainment parishes are listed by name in this revision, so that they will be subject to the rule even if their attainment status is downgraded. Other changes are made to improve clarity and readability.

This revision is necessary because the rule has been misinterpreted by the facilities regarding 1) types of seal required, and 2) deadlines for internal floating roof compliance.

This proposed rule meets the exceptions listed in R.S. 30:2019(D)(3) and R.S. 49:953(G)(3), therefore, no report regarding environmental/health benefits and social/economic costs is required.

Title 33

ENVIRONMENTAL QUALITY

Part III. Air

Chapter 21. Control of Emission of Organic Compounds

Subchapter A. General

§2103. Storage of Volatile Organic Compounds

A. No person shall place, store, or hold in any stationary tank, reservoir, or other container of more than 250 gallons (950 liters) and up to 40,000 gallons (151,400 liters) nominal capacity any volatile organic compound, having a true vapor pressure of 1.5 Pia or greater at storage conditions, unless such tank, reservoir, or other container is designed and equipped with a submerged fill pipe or a vapor loss control system, as defined in Subsection E of this Section, or is a pressure tank capable of maintaining working pressures sufficient at all times under normal operating conditions to prevent vapor or gas loss to the atmosphere.

B. No person shall place, store, or hold in any stationary tank, reservoir, or other container of more than 40,000 gallons (151,400 liters) nominal capacity any volatile organic compound having a true vapor pressure of 1.5 Pia or greater at storage conditions unless such tank, reservoir, or other container is a pressure tank capable of maintaining working pressures sufficient at all times under normal operating conditions to prevent vapor or gas loss to the atmosphere or is designed and equipped with a submerged fill pipe and one or more of the vapor loss control devices described in Subsections C, D, and E of this Section.

C. **Internal Floating Roof.** An internal floating roof consists of a pontoon type roof, double deck type roof, or internal floating cover which will rest or float on the surface of the liquid contents and is equipped with a closure seal to close the space between the roof edge and tank wall.

1. In the parishes of Ascension, Calcasieu, East Baton Rouge, Iberville, Livingston, Pointe Coupee, and West Baton Rouge, this closure seal shall consist of either:

- a. a liquid mounted seal consisting of a foam- or liquid-filled seal mounted in contact with the liquid between the wall of the storage vessel and the floating roof continuously around the circumference of the tank;
- b. a mechanical shoe seal (metallic-type shoe seal) consisting of a metal sheet held vertically against the wall of the storage vessel by springs or weighted levers and connected by braces to the floating roof. A flexible coated fabric (envelope) spans the annular space between the metal sheet and the floating roof; or
- c. two seals mounted one above the other so that each forms a continuous closure that completely covers the space between the wall of the storage vessel and the edge of the internal floating roof. The lower seal may be vapor-mounted, but both must be continuous.

2. All tank gauging and sampling devices shall be gas tight except when gauging or sampling is taking place. Each opening (except rim space vents and automatic bleeder vents) shall be provided with a projection below the liquid surface. In addition, each opening (except for leg sleeves, bleeder vents, rim space vents, column wells, ladder wells, sample wells, and stub drains) shall be provided with a cover equipped with a gasket. Automatic bleeder vents and rim space vents shall be gasketed and ladder wells shall be equipped

with a sliding cover. This control equipment shall not be permitted if the organic compounds have a vapor pressure of 11.0 pounds per square inch absolute or greater under actual storage conditions.

3. If the internal floating roof does not meet the specifications of this rule, then the specifications shall be met at the earlier of either the next scheduled maintenance turnaround or December 1, 2005. Any request for an extension beyond December 1, 2005, shall be examined on a case-by-case basis and must be approved by the administrative authority*.

D. External Floating Roof. An external floating roof consists of a pontoon type roof, double deck type roof, or external floating cover which will rest or float on the surface of the liquid contents and is equipped with a primary closure seal to close the space between the roof edge and tank wall and a continuous secondary seal (a rim mounted secondary) extending from the floating roof to the tank wall. The primary closure seal shall consist of a liquid mounted seal or a mechanical shoe seal, as defined in Subsection C.1.a and b of this Section. Installation of the primary and secondary seals shall be within the same time limitation as mentioned in Subsection C of this Section.

* * *

[See Prior Text in D.1]

a. the tank is a welded tank storing a VOC with a vapor pressure at storage conditions less than 4.0 Pia and is also equipped with liquid mounted seals, mechanical shoe seals, or equivalent.

* * *

[See Prior Text in D.1.b]

c. a mechanical shoe seal is used in a welded tank which also has a secondary seal from the top of the shoe seal to the tank wall (i.e., a shoe-mounted secondary).

* * *

[See Prior Text in D.1.d-D.2.e]

3. Requirements for Covering Openings. All openings in the external floating roof, except for automatic bleeder vents, rim space vent, and leg sleeves, are to provide a projection below the liquid surface. Except for automatic bleeder vents, rim space vents, roof drains, and leg sleeves, each opening in the roof is to be equipped with a gasketed cover, seal, or lid that is to be maintained in a closed position at all times (i.e., no visible gap) except when the device is in actual use. Automatic bleeder vents must be closed at all times except when the roof is floated off or landed on the roof leg supports. Rim vents must be set to open when the roof is being floated off the roof leg supports or at the manufacturer's recommended setting. Automatic bleeder vents and rim space vents are to be gasketed. Any emergency roof drain must be equipped with a slotted membrane fabric cover or equivalent cover that covers at least 90 percent of the opening.

4. Requirements for Guide Poles and Stilling Well Systems. Emissions from guide pole systems must be controlled for external floating roof storage tanks with a capacity greater than 40,000 gallons (approximately 151 m³) and which store a liquid having a total vapor pressure of 1.5 Pia or greater. This requirement shall only apply in the parishes of Ascension, Calcasieu, East Baton Rouge, Iberville, Livingston, Pointe Coupee, and West Baton Rouge.

a. Controls for nonslotted guide poles and stilling wells shall include pole wiper and gasketing between the well and sliding cover. Controls for slotted guide poles shall include a float with wiper, pole wiper, and gasketing between the well and sliding cover. The description of the method of control and supporting calculations based upon the Addendum to American Petroleum Institute Publication Number 2517 Evaporative Loss from External Floating Roof Tanks, (dated May 1994) shall be submitted to the administrative authority for approval prior to installation.

b. Alternate methods of controls are acceptable if demonstrated to be equivalent to the controls in Subsection D.4.a of this Section. The administrative authority* must approve alternate methods of control.

c. Installation of controls required by Subsection D.4 of this Section shall be required by November 15, 1996. Requests for extension of the November 15, 1996, compliance date will be considered on a case-by-case basis for situations which require the tank to be removed from service to install the controls and must be approved by the administrative authority*.

d. Control systems required by Subsection D.4 of this Section shall be inspected semiannually for rips, tears, visible gaps in the pole or float wiper, and/or missing sliding cover gaskets. Any rips, tears, visible gaps in the pole or float wiper, and/or missing sliding cover gaskets shall be repaired in accordance with this Paragraph in order to avoid noncompliance. Repairs must be initiated by ordering appropriate parts within seven working days after a defect listed in this Subparagraph is identified. Repairs shall be completed within three months of the ordering of the repair parts. However, if it can be demonstrated that additional time for repair is needed, the administrative authority may extend this deadline.

* * *

[See Prior Text in E-G]

1. existing and new storage tanks, located in any parish other than the parishes of Ascension, Calcasieu, East Baton Rouge, Iberville, Livingston, Pointe Coupee, and West Baton Rouge, used for crude oil or condensate and having a nominal storage capacity of less than 420,000 gallons (1,589,900 liters) unless such new tanks are subject to New Source Performance Standards;

2. tanks 420,000 gallons (1,589,900 liters) or greater, located in any parish other than the parishes of

Ascension, Calcasieu, East Baton Rouge, Iberville, Livingston, Pointe Coupee, and West Baton Rouge, used to store produced crude oil or condensate prior to lease custody transfer unless such tanks are subject to New Source Performance Standards;

3. existing and new storage tanks in the parishes of Ascension, Calcasieu, East Baton Rouge, Iberville, Livingston, Pointe Coupee, and West Baton Rouge that are used for crude oil or condensate prior to lease custody transfer and that have a nominal storage capacity of less than 420,000 gallons (1,589,900 liters) unless such new tanks are subject to New Source Performance Standards; and

* * *

[See Prior Text in G.4-I.5]

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2054.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Air Quality and Nuclear Energy, Air Quality Division, LR 13:741 (December 1987), amended, LR 15:1061 (December 1989), amended by the Office of Air Quality and Radiation Protection, Air quality Division, LR 17:360 (April 1991), LR 18:1121 (October 1992), LR 20:1376 (December 1994), LR 21:1223 (November 1995), repromulgated LR 21:1333 (December 1995), amended LR 22:

A public hearing will be held on March 28, 1996, at 1:30 p.m. in the Maynard Ketcham Building, Room 326, 7290 Bluebonnet Boulevard, Baton Rouge, LA 70810. Interested persons are invited to attend and submit oral comments on the proposed amendments. Should individuals with a disability need an accommodation in order to participate please contact Patsy Deaville at the address given below or at (504) 765-0399.

All interested persons are invited to submit written comments on the proposed regulations. Commentors should reference this proposed regulation by AQ137. Such comments should be submitted no later than April 4, 1996, at 4:30 p.m., to Patsy Deaville, Investigations and Regulation Development Division, Box 82282, Baton Rouge, LA, 70810 or to FAX number (504) 765-0486.

Dale Givens
Secretary

**FISCAL AND ECONOMIC IMPACT STATEMENT
FOR ADMINISTRATIVE RULES
RULE TITLE: Storage of Volatile Organic Compounds**

- I. ESTIMATED IMPLEMENTATION COSTS (SAVINGS) TO STATE OR LOCAL GOVERNMENTAL UNITS (Summary)
There will be no costs or savings to state or local governmental units for this proposal.
- II. ESTIMATED EFFECT ON REVENUE COLLECTIONS OF STATE OR LOCAL GOVERNMENTAL UNITS (Summary)
There will be no effect on revenue collections of state or local governmental units as a result of this rule.
- III. ESTIMATED COSTS AND/OR ECONOMIC BENEFITS TO DIRECTLY AFFECTED PERSONS OR NONGOVERNMENTAL GROUPS (Summary)
There will be no cost or economic benefit to directly affected persons or nongovernmental groups.
- IV. ESTIMATED EFFECT ON COMPETITION AND EMPLOYMENT (Summary)
This proposal will not have any known effect on competition or employment.

J. Dale Givens
Secretary
9602#065

Richard W. England
Assistant to the
Legislative Fiscal Officer