

(3) Storage containers which have a capacity of less than 25,000 gallons (94,625 liters) located at motor vehicle fuel dispensing facilities are exempt from the requirements of this undesignated head (concerning Storage of Volatile Organic Compounds).

(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 requirement for retrofitting with a rim-mounted secondary seal if the shoe-mounted secondary seal was installed or scheduled for installation before August 22, 1980.

(5) External floating roof tanks storing waxy, high pour point crude oils are exempt from any secondary seal requirements of §115.112(a) of this title (relating to Control Requirements).

(6) Any welded tank storing volatile organic compounds having a true vapor pressure less than 4 psia (27.6 kPa) is exempt from any external secondary seal requirement if any of the following types of primary seals have been installed before August 22, 1980:

(A) a metallic-type shoe seal;

(B) a liquid-mounted foam seal; or

(C) a liquid-mounted liquid filled type seal.

(7) Any welded tank storing crude oil having a true vapor pressure equal to or greater than 4.0 psia (27.6 kPa) and less than 6.0 psia (41.4 kPa) is exempt from any external secondary seal requirement if any of the following types of primary seals have been installed before December 10, 1982:

(A) a metallic-type shoe seal;

(B) a liquid-mounted foam seal; or

(C) a liquid-mounted liquid filled type seal.

(b) For all persons in the counties referenced in §115.119(b) of this title (relating to Counties and Compliance Schedules) the following exemptions apply.

(1) Any volatile organic compound (VOC) with a true vapor pressure less than 1.5 psia (10.3 kPa) is exempt from the requirements of this undesignated head (concerning Storage of Volatile Organic Compounds).

(2) Slotted sampling and gauge pipes installed in any floating roof storage tank are exempt from the provisions of

§115.112(b) of this title (relating to Control Requirements).

(3) Storage tanks with nominal capacities between 1,000 gallons (3,785 liters) and 25,000 gallons (94,625 liters) are exempt from the requirements of §115.112(b)(1) of this title (relating to Control Requirements) if construction began before May 12, 1973.

(4) Storage tanks with a nominal capacity of 420,000 gallons (1,589,700 liters) or less are exempt from the requirements of §115.112(b)(3) of this title (relating to Control Requirements).

§115.119. Counties and Compliance Schedules.

(a) All affected persons within Brazoria, Dallas, El Paso, Galveston, Gregg, Harris, Jefferson, Nueces, Orange, Tarrant, and Victoria Counties shall be in compliance with this undesignated head (concerning Storage of Volatile Organic Compounds) in accordance with the following schedules.

(1) All affected persons shall be in compliance with all compliance schedules which have expired prior to the effective date of the adoption of this section, in accordance with §115.930 of this title (relating to Compliance Dates).

(2) All persons in Brazoria, Dallas, El Paso, Galveston, Harris, Jefferson, Orange, or Tarrant Counties affected by the provisions of §115.116 of this title (relating to Recordkeeping Requirements) shall be in compliance with this section as soon as practicable but no later than December 31, 1990.

(b) All affected persons within Aransas, Bexar, Calhoun, Hardin, Matagorda, Montgomery, San Patricio, and Travis Counties shall be in compliance with this undesignated head (concerning Storage of Volatile Organic Compounds) in accordance with all compliance schedules which have expired prior to the effective date of the adoption of this section, in accordance with §115.930 of this title (relating to Compliance Dates).

This agency hereby certifies that the proposal has been reviewed by legal counsel and found to be within the agency's authority to adopt.

Issued in Austin, Texas on July 19, 1989.

TRD-8906423

Allen Ell Ball
Executive Director
Texas Air Control Board

Proposed date of adoption: December 15, 1989

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

Subchapter B. General Volatile Organic Compound Sources Vent Gas Control

• 31 TAC §§115.121-115.123, 115.125-115.127, 115.129

The Texas Air Control Board (TACB) proposes new §§115.121-115.123, 115.125-115.127, and 115.129, concerning vent gas control, which combine the provisions of existing §§115.41-115.45, concerning vent gas control in Aransas, Bexar, Calhoun, Hardin, Matagorda, Montgomery, San Patricio, and Travis Counties, and §§115.161-115.164, concerning vent gas control in Brazoria, Dallas, El Paso, Galveston, Harris, Jefferson, Nueces, Orange, Tarrant, and Victoria Counties. This new undesignated head will be included in a proposed new Subchapter B, concerning general volatile organic compound sources. While in most instances the proposal does not involve new requirements, the sections have been significantly reorganized to reduce the inconsistencies which have developed as a result of numerous independent revisions in the past. Several substantive changes, however, are also proposed in order to respond to the Environmental Protection Agency requirements of Phase I of the post-87 state implementation plan (SIP) revisions.

These changes are a part of a series of substantial proposed revisions to Chapter 115, concerning control of air pollution from volatile organic compounds. Since the proposed changes are extensive, the staff has determined that it would be administratively more efficient to propose concurrently the repeal of the existing Chapter 115 in its entirety and the addition of a new Chapter 115.

The proposed new §115.121, concerning emission specifications, establishes emission limits for specified volatile organic compounds (VOC) from affected sources. The proposed new §115.122, concerning control requirements, specifies the applicable equipment and procedural requirements. The proposed new §115.123, concerning alternate control requirements, provides for executive director approval for the use of alternate technology which will result in equivalent VOC emission reductions. The proposed new §115.125, concerning testing requirements, identifies federally approved test methods and procedures to be used to determine compliance with applicable controls or exemptions. The proposed new §115.126, concerning recordkeeping requirements, specifies the type of records to be kept to document satisfaction of exemption criteria or performance of applicable control devices. The proposed new §115.127, concerning exemptions, specifies the types of facilities which are exempted from the requirements of these sections. The proposed new §115.129, concerning counties and compliance schedules, requires all affected facilities to be in compliance in accordance with all expired and pending schedules. Furthermore, affected sources in Brazoria, El Paso, Galveston, Harris, Jefferson, and Orange Counties must comply with applicable recordkeeping requirements by December 31, 1990.

Bonnie Engelke, Director of management and staff services, has determined that for the first five years the proposed sections are in effect,

there would be no fiscal implications for state and local government or for small businesses. Economic costs to individuals and businesses required to implement the proposed measures are associated only with recordkeeping requirements and are estimated as follows: annual cost per facility for fiscal year 1990 will be \$0, and for fiscal years 1991-1994 will be \$5,000.

Les Montgomery, P.E., director of the Technical Support and Regulation Development Program, has determined that for each of the first five years the sections as proposed are in effect, the public benefit anticipated as a result of implementing the sections will be more effective and consistent enforcement associated with the control of VOC. In addition, these measures are necessary to address the requirements of Phase I of the post-87 SIP revisions.

Public hearings on this proposal are scheduled for the following times and places: August 15, 1989, 10 a.m., Texas Air Control Board Auditorium, 6330 Highway 290 East, Austin; August 15, 1989, 7 p.m., City of Houston Pollution Control Building Auditorium, 7411 Park Place Boulevard, Houston; August 16, 1989, 7 p.m., City Council Chambers, Second Floor, 2 Civic Center Plaza, El Paso; and August 17, 1989, 4 p.m., Arlington Public Library, 101 East Abram, Arlington.

Copies of the proposed sections are available at the central office of the TACB, 6330 Highway 290 East, Austin, Texas 78723, and at all TACB regional offices. Public comment, both oral and written, on the proposed changes is invited at the hearings. The TACB would appreciate receiving five copies of testimony prior to or at the hearings. Written testimony received by the Regulation Development Section by 4 p.m. on August 25, 1989, at the TACB central office will be included in the hearing record.

The new sections are proposed under Texas Civil Statutes, Article 4477-5, §3.09(a), which provides the TACB with the authority to make rules and regulations consistent with the general intent and purposes of the Texas Clean Air Act and to amend any rule or regulation the TACB makes.

§115.121. Emission Specifications.

(a) For persons in the counties referenced in §115.129(a) of this title (relating to Counties and Compliance Schedules) the following emission specifications shall apply.

(1) No person may allow a vent gas stream to be emitted from any process vent containing one or more of the following volatile organic compounds or classes of volatile organic compounds unless the vent gas stream is burned properly in accordance with §115.122(a)(1) of this title (relating to control Requirements):

(A) emissions of ethylene associated with the formation, handling, and storage of solidified low-density polyethylene;

(B) emissions of the following specific volatile organic compounds:

ethylene, butadiene, isobutylene, styrene, isoprene, propylene, methylstyrene; and

(C) emissions of specified classes of volatile organic compounds, including aldehydes, alcohols, aromatics, ethers, olefins, peroxides, amines, acids, esters, ketones, sulfides, and branched chain hydrocarbons (C8 and above).

(2) Except for process vent gas streams affected by the provisions of paragraph (3) of this subsection, no person may allow a vent gas stream to be emitted from any process vent located in Dallas, Harris, and Tarrant Counties containing volatile organic compounds unless the vent gas stream is burned properly in accordance with §115.122(a)(1) of this title (relating to control Requirements).

(3) No person may allow a vent gas stream to be emitted from any air oxidation synthetic organic chemical manufacturing process, any liquid phase polyethylene manufacturing process, any liquid phase slurry high-density polyethylene manufacturing process, or any continuous polystyrene manufacturing process located in Harris County unless the vent gas stream is controlled to a volatile organic compound emission rate of no more than 20 ppm or is burned properly in accordance with §115.122(a)(2) of this title (relating to control Requirements).

(b) For persons in the counties referenced in §115.129(b) of this title (relating to Counties and Compliance Schedules) the following emission specifications shall apply.

(1) No person may allow a vent gas stream to be emitted from any process vent containing one or more of the specific volatile organic compounds listed in subparagraphs (A) and (B) of this paragraph, or one or more compounds which are members of one or more of the classes of volatile organic compounds listed in subparagraph (C) of this paragraph unless the vent gas stream is burned properly in accordance with §115.122(b)(1) of this title (relating to control Requirements):

(A) emission of ethylene associated with the formation, handling, and storage of solidified low-density polyethylene;

(B) emission of the following specific volatile organic compounds: ethylene, butadiene, isobutylene, styrene, isoprene, propylene, and methylstyrene; and

(C) emissions of specified classes of volatile organic compounds, including aldehydes, alcohols, aromatics, ethers, olefins, peroxides, amines, acids, esters, ketones, sulfides, and branched chain hydrocarbons (C8 and above).

(2) No person may allow a vent gas stream to be emitted from any catalyst regeneration of a petroleum or chemical process system, basic oxygen furnace, or fluid coking unit into the atmosphere unless the vent gas stream is properly burned in accordance with §115.122(b)(2) of this title (relating to control Requirements).

(3) No person may allow a vent gas stream to be emitted from any iron cupola into the atmosphere unless the vent gas stream is properly burned in accordance with §115.122(b)(3) of this title (relating to control Requirements).

(4) Vent gas streams from blast furnaces shall be burned properly in accordance with §115.122(b)(4) of this title (relating to control Requirements).

§115.122. Control Requirements.

(a) For persons in the counties referenced in §115.129(a) of this title (relating to Counties and Compliance Schedules) the following control requirements shall apply.

(1) Any vent gas streams affected by §115.121(a)(1) and (2) of this title (relating to Emission Specifications) must be burned properly at a temperature equal to or greater than 1,300°F (704°C) in a smokeless flare or a direct-flame incinerator with a destruction efficiency of at least 90%.

(2) Any vent gas streams affected by §115.121(a)(3) of this title (relating to Emission Specifications) must be burned properly in a smokeless flare or a direct-flame incinerator with a destruction efficiency of at least 98%.

(b) For persons in the counties referenced in §115.129(b) of this title (relating to Counties and Compliance Schedules) the following control requirements shall apply.

(1) Any vent gas streams affected by §115.121(b)(1) of this title (relating to Emission Specifications) must be burned properly at a temperature equal to or greater than 1,300°F (704°C) in a smokeless flare or a direct-flame incinerator.

(2) Any vent gas streams affected by §115.121(b)(2) of this title (relating to Emission Specifications) must be burned properly at a temperature equal to or greater than 1,300°F (704°C) in a direct-flame incinerator or boiler.

(3) Any vent gas streams affected by §115.121(b)(3) of this title (relating to Emission Specifications) must be burned properly at a temperature equal to or greater than 1,300°F (704°C) in an afterburner having a retention time of at least one-fourth of a second, and having a steady flame that is not affected by the cupola charge and relights automatically if extinguished.

(4) Any vent gas streams affected by §115.121(b)(4) of this title (relat-

ing to Emission Specifications) must be burned properly in a smokeless flare or in a combustion device used in a heating process associated with the operation of a blast furnace.

§115.123. Alternate Control Requirements.

(a) For all persons in the counties referenced in §115.129(a) of this title (relating to Counties and Compliance Schedules) alternate methods of demonstrating and documenting continuous compliance with the applicable control requirements or exemption criteria in this section may be approved by the executive director in accordance with §115.910 of this title (relating to Alternate Means of Control) if emission reductions are demonstrated to be substantially equivalent. Direct-flame incineration specified for vent gas control in this undesignated head (concerning Vent Gas Control) is not intended as an exclusive emission control method for volatile organic compounds. In no event shall a vent gas stream be direct-flame incinerated without heat recovery if the incineration will have no practical effect in reducing the emission of air contaminants or will result in an actual degradation of air quality. In all such cases, application shall be made to the executive director for approval of an alternate method of control. The executive director may approve such alternate method if it represents the best alternative. The executive director may grant the specific vent gas stream exemption if it can be demonstrated that there will be an insignificant contribution of air contaminants in the atmosphere.

(b) For all persons in the counties referenced in §115.129(b) of this title (relating to Counties and Compliance Schedules) alternate methods of demonstrating and documenting continuous compliance with the applicable control requirements or exemption criteria in this section may be approved by the executive director in accordance with §115.910 of this title (relating to Alternate Means of control) if emission reductions are demonstrated to be substantially equivalent. Direct-flame incineration specified for vent gas control in this undesignated head (concerning Vent Gas Control) is not intended as an exclusive emission control method for volatile organic compounds. In no event shall a vent gas stream be direct-flame incinerated without heat recovery if the incineration will have no practical effect in reducing the emission of air contaminants or will result in an actual degradation of air quality. In all such cases, application shall be made to the executive director for approval of an alternate method of control. The executive director may approve such alternate method if it represents the best alternative. The executive director may grant the specific vent gas stream exemption if it can be demonstrated that there will be an insignificant contribution of air contaminants in the atmosphere.

§115.125. *Testing Requirements.* For the counties referenced in 115.129(a) of this title (relating to Counties and Compliance Schedules) compliance with §115.121(a) of this title (relating to Emission Specifications) shall be determined by applying the following test methods, as appropriate:

(1) Test Method 22 (40 Code of Federal Regulations 60, Appendix A) for visual determination of fugitive emissions from material sources and smoke emissions from flares;

(2) additional test method requirements for flares described in 40 Code of Federal Regulations 60.18(F);

(3) Test Methods 1-4 (40 Code of Federal Regulations 60, Appendix A) for determining flow rate, as necessary;

(4) Test Method 18 (40 Code of Federal Regulations 60, Appendix A) for determining gaseous organic compound emissions by gas chromatography;

(5) Test Method 25 (40 Code of Federal Regulations 60, Appendix A) for determining total gaseous nonmethane organic emissions as carbon;

(6) Test Methods 25A or 25B (40 Code of Federal Regulations 60, Appendix A) for determining total gaseous organic concentrations using flame ionization or nondispersive infrared analysis; or

(7) modifications to these test methods approved by the executive director.

§115.126. *Recordkeeping Requirements.* For the counties referenced in §115.129(a)(2)(B) of this title (relating to Counties and Compliance Schedules) the owner or operator of any facility which emits volatile organic compounds through a stationary vent shall maintain records at the facility for at least two years and shall make such records available to representatives of the Texas Air Control Board, United States Environmental Protection Agency, or local air pollution control agency having jurisdiction in the area, upon request. These records shall include, but not be limited to, the following:

(1) Records for each vent required to satisfy the provisions of §115.121(a)(2) of this title (relating to Emission Specifications) shall be sufficient to demonstrate the proper functioning of applicable control equipment to design specifications, including:

(A) the exhaust gas temperature immediately downstream of a direct-flame incinerator;

(B) the date and reason for any maintenance and repair of the required control devices and the estimated quantity and duration of volatile organic compound emissions during such activities; and

(C) the results of any testing of any vent conducted at an affected facility in accordance with the provisions specified in §115.125 of this title (relating to Testing Requirements).

(2) Records for each vent exempted from control requirements in accordance with §115.127(a) of this title (relating to Exemptions) shall be sufficient to demonstrate compliance with applicable exemption limits, including:

(A) the pounds of ethylene emitted per 1,000 pounds of low-density polyethylene produced;

(B) the combined weight of volatile organic compounds of each vent gas stream on a daily basis;

(C) the true partial pressure of volatile organic compounds in each vent gas stream on a daily basis; and

(D) the results of any testing of any vent conducted at an affected facility in accordance with the provisions specified in this section.

(3) Records for each vent exempted from control requirements in accordance with §115.127(a) of this title (relating to Exemptions) and having a volatile organic compound emission rate and concentration less than 50% of the applicable exemption limits at maximum actual operating conditions shall be sufficient to demonstrate continuous compliance with the applicable exemption limit, including:

(A) complete information from either test results or appropriate calculations which clearly documents that the emission characteristics at maximum actual operating conditions are less than 50% of the applicable exemption limits; and

(B) daily operating parameters which may affect volatile organic compound emissions from the vent sufficient to demonstrate that the maximum actual operating conditions represented for the affected facility have not been exceeded.

§115.127. Exemptions.

(a) For persons in the counties referenced in §115.129(a) of this title (relating to Counties and Compliance Schedules) the following exemptions apply.

(1) A vent gas stream from a low-density polyethylene plant is exempt from the requirements of §115.121(a)(1) of this title (relating to Emission Specifications) if no more than 1.1 pounds of ethylene per 1,000 pounds (1.1 kg/1000 kg) of product are emitted from all the vent gas

streams associated with the formation, handling, and storage of solidified product.

(2) The following vent gas streams are exempt from the requirements of §115.121(a)(1) of this title (relating to Emission Specifications):

(A) a vent gas stream having a combined weight of the volatile organic compounds or classes of compounds specified in §115.121(a)(1)(B) and (C) of this title (relating to Emission Specifications) equal to or less than 100 pounds (45.4 kg) in any continuous 24-hour period; and

(B) a vent gas stream with a concentration of the volatile organic compounds or classes of compounds specified in §115.121(a)(1)(B) and (C) of this title (relating to Emission Specifications) less than 0.44 psia true partial pressure (30,000 ppm).

(3) The following vent gas streams in Dallas, Harris, and Tarrant counties are exempt from the requirements of §115.121(a)(2) of this title (relating to Emission Specifications):

(A) a vent gas stream having a combined weight of volatile organic compounds equal to or less than 100 pounds (45.4 kg) in any continuous 24-hour period;

(B) a vent gas stream specified in §115.121(a)(2) of this title (relating to Emission Specifications) and located in Harris County with a concentration of volatile organic compounds less than 0.44 psia true partial pressure (30,000 ppm); and

(C) a vent gas stream specified in §115.121(a)(2) of this title (relating to Emission Specifications) and located in Dallas or Tarrant counties with a concentration of volatile organic compounds less than 0.009 psia true partial pressure (612 ppm).

(4) The following vent gas streams in Harris County are exempt from the requirements of §115.121(a)(3) of this title (relating to Emission Specifications):

(A) a vent gas stream from any air oxidation synthetic organic chemical manufacturing process with a concentration of volatile organic compounds less than 0.009 psia true partial pressure (612 ppm); and

(B) a vent gas stream from any liquid phase polypropylene manufacturing process, any liquid phase slurry high density polyethylene manufacturing process, and any continuous polystyrene manufacturing process with a concentration of volatile organic compounds less than 0.006 psia true partial pressure (408 ppm).

(b) For persons in the counties referenced in §115.129(b) of this title (relating to Counties and Compliance Schedules) the following exemptions apply.

(1) A vent gas stream from a low-density polyethylene plant is exempt from the requirements of §115.121(b)(1) of this title (relating to Emission Specifications) if no more than 1.1 pounds of ethylene per 1,000 pounds (1.1 kg/1000 kg) of product are emitted from all the vent gas streams associated with the formation, handling, and storage of solidified product.

(2) The following vent gas streams are exempt from the requirements of §115.121(b)(1) of this title (relating to Emission Specifications):

(A) a vent gas stream having a combined weight of the volatile organic compounds or classes of compounds specified in §115.121(b)(1)(B) and (C) of this title (relating to Emission Specifications) equal to or less than 100 pounds (45.4 kg) in any continuous 24-hour period;

(B) a vent gas stream having a concentration of the volatile organic compounds specified in §115.121(b)(1)(B) and (C) of this title (relating to Emission Specifications) less than 0.44 psia true partial pressure (3.0 kPa); and

(C) a vent gas stream from any process referenced in §115.121(b)(2) of this title (relating to Emission Specifications) emitting less than or equal to five tons (4,536 kg) of total uncontrolled volatile organic compounds in any one calendar year.

§115.129. Counties and Compliance Schedules.

(a) All affected persons within Brazoria, Dallas, El Paso, Galveston, Harris, Jefferson, Nueces, Orange, Tarrant, and Victoria Counties shall be in compliance with this undesignated head (concerning Vent Gas Control) in accordance with the following schedules.

(1) all compliance schedules which have expired prior to the effective date of the adoption of this section, in accordance with §115.930 of this title (relating to Compliance Dates); and

(2) the following additional compliance schedules.

(A) All persons in Harris County affected by the provisions of §115.121(a)(3) of this title (relating to Emission Specifications) shall be in compliance with this section as soon as practicable but no later than January 27, 1990.

(B) All persons affected by the provisions of §115.126(a) of this title

(relating to Recordkeeping) shall be in compliance:

(i) in Dallas and Tarrant Counties as soon as practicable but no later than August 31, 1990; and

(ii) in Brazoria, El Paso, Galveston, Harris, Jefferson, and Orange counties as soon as practicable but no later than December 31, 1990.

(b) All affected persons within Aransas, Bexar, Calhoun, Hardin, Matagorda, Montgomery, San Patricio, and Travis Counties shall be in compliance with this undesignated head (concerning Vent Gas Control) in accordance with all compliance schedules which have expired prior to the effective date of the adoption of this section, in accordance with §115.930 of this title (relating to Compliance Dates).

This agency hereby certifies that the proposal has been reviewed by legal counsel and found to be within the agency's authority to adopt.

Issued in Austin, Texas on July 19, 1989.

TRD-8906421

Allan Eli Bell
Executive Director
Texas Air Control Board

Proposed date of adoption: December 15, 1989

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

Subchapter B. General Volatile Organic Compound Sources Water Separation

• 31 TAC §§115.131-115.133, 115.135-115.137, 115.139

The Texas Air Control Board (TACB) proposes new §§115.131-115.133, §§115.135-115.137, and §115.139, concerning water separation, which combine the provisions of existing §§115.31-115.32, concerning water separation in Aransas, Bexar, Calhoun, Hardin, Matagorda, Montgomery, San Patricio, and Travis Counties, and §§115.141-115.144, concerning water separation in Brazoria, Dallas, El Paso, Galveston, Gregg, Harris, Jefferson, Nueces, Orange, Tarrant, and Victoria Counties. This new undesignated head will be included in a proposed new Subchapter B, concerning general volatile organic compound sources. While in most instances the proposal does not involve new requirements, the sections have been significantly reorganized to reduce the inconsistencies which have developed as a result of numerous independent revisions in the past. Several substantive changes, however, are also proposed in order to respond to the Environmental Protection Agency requirements of Phase I of the post-87 state implementation plan (SIP) revisions.

These changes are a part of a series of substantial proposed revisions to Chapter 115, concerning control of air pollution from volatile organic compounds. Since the proposed changes are extensive, the staff has determined that it would be administratively