Texas Commission on Environmental Quality

5 Chapter 115 - Control of Air Pollution from Volatile Organic Compounds

5F SUBCHAPTER F: MISCELLANEOUS INDUSTRIAL SOURCES

5F3 Division 3 : Degassing of Storage Tanks, Transport Vessels, and Marine Vessels.
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Error in September 23, 2015 Federal Register amendatory language table on page 80 FR 57034 -- Division 3 title should be:
"Division 3: Degassing of Storage Tanks, Transport Vessels, and Marine Vessels",
NOT "Division 3: Degassing or Cleaning of Stationary, Marine, and Transport Vessels".

Outline:

**********end outline tx5F3-TXd171**********w1a****
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SUBCHAPTER F: MISCELLANEOUS INDUSTRIAL SOURCES
DIVISION 3: DEGASSING OF STORAGE TANKS, TRANSPORT VESSELS, AND MARINE VESSELS
§§115.540 - 115.542, 115.543, 115.544, 115.545, 115.546, 115.547, 115.549
Effective February 17, 2011

§115.540. Applicability and Definitions.

(a) Applicability. Except as specified in §115.547 of this title (relating to Exemptions), this division applies to degassing during, or in preparation of, cleaning any storage tank, transport vessel, or marine vessel containing volatile organic compounds with a true vapor pressure greater than or equal to 0.5 pounds per square inch absolute under actual storage conditions. In this division, the operator of any storage tank, transport vessel, or marine vessel refers to the regulated entity performing or outsourcing the degassing operation.

(1) In the Beaumont-Port Arthur area, as defined in §115.10 of this title (relating to Definitions), this division applies to any storage tank, transport vessel, or marine vessel.

(2) In the Dallas-Fort Worth area, as defined in §115.10 of this title, this division applies to any storage tank or transport vessel in Collin, Dallas, Denton, and Tarrant Counties. This division does not apply to any tank or vessel in Ellis, Johnson, Kaufman, Parker, or Rockwall Counties.

(3) In the El Paso area, as defined in §115.10 of this title, this division applies to any storage tank or transport vessel.

(4) In the Houston-Galveston-Brazoria area, as defined in §115.10 of this title, this division applies to any storage tank, transport vessel, or marine vessel.

(b) Definitions. Unless specifically defined in the Texas Clean Air Act (Texas Health and Safety Code, Chapter 382) or in §3.2, §101.1, or §115.10 of this title (relating to Definitions), the terms in this division have the meanings commonly used in the field of air pollution control. In addition, the following meanings apply in this division unless the context clearly indicates otherwise.

(1) **Cleaning--**The process of washing or rinsing a storage tank, transport vessel, or marine vessel, or removing sludge or rinsing liquid from a storage tank, transport vessel, or marine vessel.

(2) **Degassing**--The process of removing volatile organic compounds vapor from a storage tank, transport vessel, or marine vessel during, or in preparation of, cleaning.

(3) **Drain-dry floating roof tank**--A floating roof tank designed to completely drain its entire contents to a sump in a manner that leaves no free-standing liquid in the tank or the sump.

(4) **Recirculation system**--A vapor-tight system that is composed of piping, ductwork, connections, flow inducing devices, and a control device. The recirculation system conducts volatile organic compounds vapor from a storage tank, transport vessel, or marine vessel to a control device and conducts the exhaust from the outlet of the control device back into the same tank or vessel. The recirculation system does not include the storage tank, transport vessel, or marine vessel that is being degassed .

(5) **Storage capacity**--The volume of a storage tank as determined by multiplying the internal cross-sectional area of the tank by the average internal height of the tank shell or the volume of a transport vessel or marine vessel as determined by the manufacturer's original design capacity.

(6) **Storage tank**--A stationary vessel, reservoir, or container used to store volatile organic compounds. This definition does not include: components that are not directly involved in the containment of liquids or vapors; subsurface caverns or porous rock reservoirs; or process tanks or vessels.

(7) **Vapor-tight**--A condition that exists when no component of a system has a leak greater than 500 parts per million expressed as methane measured using Method 21 (40 Code of Federal Regulations Part 60, Appendix A-7).

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§115.541. Emission Specifications.

(a) All volatile organic compounds (VOC) vapors from a storage tank, transport vessel, or marine vessel subject to this division must be routed to a control device in accordance with the requirements in §115.542 of this title (relating to Control Requirements) during degassing operations unless the VOC concentration, measured in accordance with the procedure described in §115.544(b)(3) of this title (relating to Inspection, Monitoring, and Testing Requirements), is less than 34,000 parts per million by volume (ppmv) expressed as methane or 50% of the lower explosive limit.

(b) The intentional bypassing of a control device used to comply with this division is prohibited. Any visible VOC leak originating from the control device, or other associated product recovery device, must be repaired as soon as practical.

(c) No avoidable liquid or gaseous leaks, as detected by sight or sound, may originate from the degassing operation.

(d) In addition to the requirements in subsections (a) - (c) of this section, a transport vessel must be kept vapor-tight at all times until the VOC vapors are routed to a control device.

(e) In addition to the requirements in subsections (a) - (c) of this section, a marine vessel must:

(1) have all cargo tank closures properly secured or maintain a negative pressure within the vessel when a closure is opened; and

(2) have all pressure or vacuum relief valves operating within certified limits, as specified by classification society or flag state, until the VOC vapors are routed to a control device.

(f) In addition to the requirements in subsections (a) - (c) of this section, all VOC vapors from a floating roof storage tank that is not a drain-dry floating roof storage tank must be routed to a control device as soon as practical but no later than:

(1) 24 hours after the tank has been emptied to the extent practical or the drain pump loses suction for a floating roof storage tank containing VOC liquids with a true vapor pressure greater than or equal to 1.5 pounds per square inch absolute (psia) under actual storage conditions;

(2) 72 hours after the tank has been emptied to the extent practical or the drain pump loses suction for a floating roof storage tank containing VOC liquids with a true vapor pressure less than 1.5 psia under actual storage conditions; or;

(3) the time limit specified in a permit issued under Chapter 116 of this title (relating to Control of Air Pollution by Permits for New Construction or Modification) up to a maximum of 72 hours after the tank has been emptied to the extent practical or the drain pump loses suction.

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§115.542. Control Requirements.

(a) A control device used to comply with §115.541 of this title (relating to Emission Specifications) must meet one of the following conditions at all times when volatile organic compounds (VOC) vapors are routed to the device.

(1) The control device must maintain a control efficiency of at least 90% and must be operated in a manner consistent with how the device was operated during the control efficiency demonstration required in §115.544(c) of this title (relating to Inspection, Monitoring, and Testing Requirements).

(2) The control device must be a flare that is designed and operated in accordance with 40 Code of Federal Regulations §60.18(b) - (f) (as amended through December 22, 2008 (73 FR 78209)) and is lit at all times when VOC vapors are routed to the flare.

(3) The control device must be a recirculation system that does not cause the pressure inside the tank or vessel to increase by more than one inch water pressure above atmospheric pressure at any time during the degassing operation.

(4) The VOC concentration at the outlet of the control device must be less than 500 parts per million by volume (ppmv) at 0% oxygen, dry basis, expressed as methane.

(b) All VOC vapors must be routed to a control device until the VOC concentration is less than 34,000 ppmv expressed as methane or less than 50% of the lower explosive limit . After one of the conditions has been satisfied, the tank or vessel may be vented to the atmosphere without control for the remainder of the degassing operation, except as specified in §115.544(b)(4) of this title.

(c) Degassing equipment must be designed and operated to prevent avoidable liquid or gaseous VOC leaks.

(d) When degassing is effected through the hatches or manways of a storage tank, all lines must be equipped with fittings that make vapor-tight connections .

(e) When degassing is effected through the hatches of a transport vessel with a loading arm equipped with a vapor collection adapter, then pneumatic, hydraulic, or other mechanical means must be provided to force a vapor-tight seal between the adapter and the hatch. A means must be provided to minimize liquid drainage from the degassing equipment when it is removed from the hatch or to accomplish drainage before such removal.

(f) When degassing is effected through the hatches of a marine vessel with a loading arm equipped with a vapor collection adapter, then pneumatic, hydraulic, or other mechanical means must be provided to force a vapor-tight seal between the adapter and the hatch, or a negative pressure inside the cargo tank must be maintained. A means must be provided to minimize liquid drainage from the degassing equipment when it is removed from the hatch or to accomplish drainage before such removal.

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§115.543. Alternate Control Requirements.

For the owner or operator of a storage tank, transport vessel, or marine vessel subject to this division, alternate methods of demonstrating and documenting continuous compliance with the applicable control requirements or exemption criteria in this division may be approved by the executive director in accordance with §115.910 of this title (relating to Availability of Alternate Means of Control) if emission reductions are demonstrated to be substantially equivalent.

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§115.544. Inspection, Monitoring, and Testing Requirements.

(a) Inspection requirements. The following inspection requirements apply during the degassing of any storage tank, transport vessel, or marine vessel subject to this division.

(1) Inspection for visible liquid leaks, visible fumes, or significant odors resulting from volatile organic compounds (VOC) transfer operations must be conducted during each degassing operation.

(2) Degassing through the affected transfer lines must be discontinued when a leak is observed and the leak cannot be repaired within a reasonable length of time.

(b) Monitoring requirements. The following monitoring requirements apply during the degassing of any storage tank, transport vessel, or marine vessel subject to this division. Monitoring at least once every 15 minutes is sufficient to demonstrate compliance with the continuous monitoring requirements in this subsection.

(1) Any monitoring device used to comply with this subsection must be installed, calibrated, maintained, and operated according to the manufacturer's instructions.

(2) The owner or operator shall monitor any operational parameters necessary to demonstrate the proper functioning of a control device used to comply with this division at all times when VOC vapors are routed to the device.

(A) For a carbon adsorption system, the owner or operator shall continuously monitor the exhaust gas VOC concentration of any carbon adsorption system that regenerates the carbon bed directly to determine breakthrough. Alternatively, the owner or operator shall periodically monitor the exhaust gas VOC determine breakthrough and switch the exhaust gas flow to fresh carbon for any carbon adsorption system that does not regenerate the carbon bed directly, as specified by 40 Code of Federal Regulations (CFR) §61.354(d) (as amended through October 17, 2000 (65 FR 62160)), except that any monitoring must be conducted at intervals no greater than 20% of the design carbon replacement interval. For the purpose of this division, breakthrough is defined as a measured VOC concentration exceeding 100 parts per million by volume (ppmv) above background expressed as methane.

(B) For a catalytic incinerator, the owner or operator shall continuously monitor the inlet and outlet gas temperature.

(C) For a condensation system, the owner or operator shall continuously monitor the outlet gas temperature to ensure the temperature is below the manufacturer's recommended operating temperature for controlling the VOC vapors routed to the device.

(D) For a direct-flame incinerator, the owner or operator shall continuously monitor the exhaust gas temperature immediately downstream of the device.

(E) For a flare, the owner or operator shall use one of the following methods to demonstrate compliance with the requirements in 40 CFR §60.18 (as amended through December 22, 2008 (73 FR 78209)).

(i) The owner or operator shall continuously monitor the net heating value of the gas stream routed to the flare.

(ii) The owner or operator shall continuously monitor the total volume of supplemental fuel added to the gas stream routed to the flare and continuously maintain sufficient supplemental fuel to meet the minimum net heating value requirements in 40 CFR §60.18 assuming that the net heating value contribution from the degassed VOC vapor is equivalent to a level corresponding to 50% of the lower explosive limit (LEL). The owner or operator may estimate the volumetric flow rate from the tank or vessel for the purpose of this calculation if the flow rate of the degassed VOC vapor is not directly monitored.

(iii) The owner or operator shall use calculations to demonstrate that for the material stored in the tank or vessel the net heating value of the gas stream routed to the flare cannot drop below the minimum net heating value requirements in 40 CFR §60.18 until the concentration of VOC in the vapors being routed to the flare is less than the concentration limits in §115.542(b) of this title (relating to Control Requirements).

(iv) If the flare is a non-assisted flare that qualifies for the provisions in 40 CFR §60.18(c)(3)(i), the owner or operator may elect to continuously monitor the hydrogen content of the gas stream routed to the flare and continuously meet the minimum 8.0% by volume hydrogen content requirement in lieu of the requirements in clauses (i) - (iii) of this subparagraph.

(F) For any control device used to comply with the optional exhaust gas concentration limit in §115.542(a)(4) of this title, the owner or operator shall monitor the exhaust gas VOC concentration within one hour after beginning the degassing operation. The VOC concentration measurement must be a one-hour test run using one of the following methods:

(i) the integrated bag sampling procedure in Method 18 (40 CFR Part 60, Appendix A), §§8.2.1.1 - 8.2.1.4, and a total hydrocarbon analyzer that meets instrument and calibration specifications in Method 21; or

(ii) Method 25A (40 CFR Part 60, Appendix A) to monitor the exhaust gas VOC concentration.

(G) For a thermal oxidizer or vapor combustor, the owner or operator shall continuously monitor the combustion chamber temperature. If necessary to demonstrate compliance with subsection (c)(3) of this section, the owner or operator shall also continuously monitor the gas flow rate into the thermal oxidizer or vapor combustor to determine the combustion chamber residence time.

(H) For a recirculation system, the owner or operator shall:

(i) continuously monitor the pressure inside the tank or vessel or continuously monitor the gas flow rate at the inlet and outlet of the control device; and

(ii) monitor all components of the recirculation system, including all valves and connectors, for VOC leaks using the procedure in Method 21 (40 CFR Part 60, Appendix A-7) and begin this monitoring within one hour after beginning

any degassing operation. A leak is defined as a screening concentration greater than 500 ppmv above background as methane for all components.

(I) For an internal combustion engine, the owner or operator shall continuously monitor the engine exhaust gas oxygen content throughout the degassing operation.

(J) For a control device not listed in this paragraph, the owner or operator shall continuously monitor one or more operational parameters sufficient to demonstrate proper functioning of the control device to design specifications.

(3) The owner or operator shall monitor the VOC concentration to demonstrate compliance with the VOC concentration or percent LEL thresholds in §115.542(b) of this title and determine if the storage tank, transport vessel, or marine vessel can be vented to the atmosphere without control for the remainder of the degassing operation, except as specified in paragraph (4) of this subsection. The VOC concentration must be monitored:

(A) once per minute for at least five minutes and all measurements must be less than the VOC concentration limits in §115.542(b) of this title; or

(B) over a five-minute period using the integrated bag sampling procedure in Method 18 (40 CFR Part 60, Appendix A) §§8.2.1.1 - 8.2.1.4 and the integrated measurement must be less than the VOC concentration limits in §115.542(b) of this title.

(4) After demonstrating compliance with the applicable VOC concentration or percent LEL thresholds in §115.542(b) of this title in accordance with paragraph (3) of this subsection, the owner or operator of any storage tank, transport vessel, or marine vessel shall comply with one of the following conditions.

(A) The VOC concentration inside the tank or vessel must be monitored once every 12 hours while venting to the atmosphere without control until five consecutive measurements collected at 12 hour intervals are measured to be less than 34,000 ppmv expressed as methane or less than 50% of the LEL . The VOC concentration measurement required by paragraph (3) of this subsection may be considered the first of these five consecutive measurements.

(i) If venting to the atmosphere without control has been suspended for more than four hours, the VOC concentration inside the tank or vessel must be measured upon restart of the degassing operation.

(ii) If any of the VOC concentration measurements equal or exceed 34,000 ppmv expressed as methane or 50% of the LEL , the tank or vessel must be routed to the control device until the VOC concentration is below 34,000 ppmv expressed as methane or less than 50% of the LEL as determined by subsection (b)(3) of this section.

(iii) If the measured VOC concentration is less than 6,800 ppmv expressed as methane or 10% of the LEL then no further VOC concentration measurements are required.

(B) The storage tank, transport vessel, or marine vessel can be vented to the atmosphere without control for the remainder of the degassing operation and no further VOC measurements are required if the VOC concentration inside the tank or vessel is less than 6,800 ppmv expressed as methane or 10% of the LEL before the owner or operator stops routing the VOC vapors to a control device in accordance with §115.541 of this title (relating to Emission Specifications) and §115.542 of this title.

(5) Minor modifications to the monitoring methods specified in this section may be approved by the executive director. Monitoring methods other than those specified in this section may be used if approved by the executive director and validated by 40 CFR Part 63, Appendix A, Method 301.

(6) The sampling location for monitoring the VOC concentration as required by subsection (b)(3) of this section should be immediately before the control device or in the transfer line connecting from the tank or vessel to the control device. The owner or operator may elect to monitor the VOC concentration at a location inside the vapor space of the tank or vessel provided the location is representative of the VOC concentration entering the control device.

(c) Testing requirements. The following testing requirements apply to the owner or operator of any storage tank, transport vessel, or marine vessel subject to the requirements in this division if a control device is used to comply with the emission specifications in §115.541 of this title.

(1) For a control device used to comply with the requirements in §115.542(a)(1) of this title, an initial control efficiency demonstration must be conducted in accordance with the approved test methods in §115.545 of this title (relating to Approved Test Methods) and the device must be retested after any modification that could reasonably be expected to decrease the efficiency of a control device within 60 days after the modification or before being used to comply with the requirements in §115.542(a)(1) of this title, whichever is longer.

(2) For a portable control device used to comply with the requirements in §115.542(a)(1) of this title, a periodic control efficiency demonstration must be conducted at least once every 60 months in accordance with the approved test methods in §115.545 of this title.

(3) For a portable thermal oxidizer or vapor combustor used to comply with the requirements in §115.542(a)(1) of this title, the periodic control efficiency demonstration in paragraph (2) of this subsection will not be required if the combustion chamber temperature is at least 1,400 degrees Fahrenheit and the flow rate of the VOC vapors routed to the device is limited to assure at least a 0.5 second combustion chamber residence time at all times when the device is in use.

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§115.545. Approved Test Methods.

Compliance with the requirements in this division must be determined by applying one or more of the following test methods or procedures, as appropriate.

(1) Methods 1 - 4 (40 Code of Federal Regulations (CFR) Part 60, Appendix A) must be used for determining flow rates.

(2) Methods 3, 3A, or 3B (40 CFR Part 60, Appendix A) must be used to determine exhaust gas oxygen (O_2) concentration for making any O_2 corrections necessary for §115.542(a)(4) of this title (relating to Control Requirements).

(3) Method 18 (40 CFR Part 60, Appendix A) must be used for determining gaseous organic compound emissions by gas chromatography.

(A) If Method 18 is used to demonstrate compliance with the volatile organic compounds (VOC) concentration monitoring requirements in §115.542(b) of this title and §115.544(b)(4) of this title (relating to Inspection, Monitoring, and Testing Requirements), only one bag sample needs to be collected for each concentration measurement.

(B) If Method 18 is used to demonstrate compliance with the VOC concentration monitoring requirements in §115.544(b)(2)(F) of this title for an internal combustion engine or any control device used to comply with the option in §115.542(a)(4) of this title to limit exhaust concentration, the VOC concentration must be determined by using the integrated bag sampling procedure in Method 18, §§8.2.1.1 - 8.2.1.4.

(4) Method 19 (40 CFR Part 60, Appendix A) may be used for determining exhaust gas flow rates on combustion control devices in lieu of using Methods 1 - 4.

(5) Method 21 (40 CFR Part 60, Appendix A-7) must be used for determining VOC leaks. An instrument meeting the specifications and calibration requirements in Method 21 may be used for demonstrating compliance with the VOC concentration monitoring requirements in §115.542(b) and §115.544(b)(3) and (4) of this title with the provision that the instrument response factor criteria in §8.1 of Method 21 may be determined using the average composition of the liquid in the tank rather than for each individual liquid.

(6) Method 25 (40 CFR Part 60, Appendix A) must be used for determining total gaseous nonmethane organic emissions as carbon.

(7) Methods 25A or 25B (40 CFR Part 60, Appendix A) must be used for determining total gaseous organic concentrations using flame ionization or nondispersive infrared analysis.

(8) Method 27 (40 CFR Part 60, Appendix A) must be used for determining tank-truck leaks.

(9) A portable O_2 analyzer that is calibrated, maintained, and operated according to the manufacturer's instructions may be used to determine exhaust gas O_2 concentration for making any O_2 corrections necessary for §115.542(a)(4) of this title in lieu of using Methods 3, 3A, or 3B.

(10) Additional test procedures described in 40 CFR §60.503(b) - (d) (effective February 14, 1989) must be used for determining compliance for bulk gasoline terminals.

(11) True vapor pressure must be determined using standard reference texts or American Society for Testing and Materials Test Method D323, D2879, D4953, D5190, or D5191 for the measurement of Reid vapor pressure, adjusted for actual storage temperature in accordance with American Petroleum Institute Publication 2517, Third Edition, 1989. For the purposes of temperature correction, the owner or operator shall use the actual storage temperature. Actual storage temperature of an unheated tank or vessel may be determined using the maximum local monthly average ambient temperature as reported by the National Weather Service. Actual storage temperature of a heated tank or vessel must be determined using either the measured temperature or the temperature set point of the tank or vessel.

(12) The test procedures in 40 CFR §63.565(c) or §61.304(f) must be used for determination of marine vessel vapor tightness.

(13) Lower explosive limit (LEL) detectors may be used for the percent LEL concentration measurement required by §115.542(b) and §115.544(b)(3) and (4) of this title, if the detector is calibrated and maintained according to manufacturer's specifications.

(14) Minor modifications to the test methods in this section may be used if approved by the executive director.

(15) Test methods other than those specified in this section may be used if validated by 40 CFR Part 63, Appendix A, Test Method 301 and approved by the executive director.

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§115.546. Recordkeeping and Notification Requirements.

(a) Recordkeeping requirements. The owner or operator of any volatile organic compounds (VOC) storage tank, transport vessel, or marine vessel subject to the requirements in this division shall maintain the following records on site for at least two years. Any records created on or after March 1, 2009, must be maintained on site for at least five years. The owner or operator shall make these records available upon request to authorized representatives of the executive director, the United States Environmental Protection Agency, or any local air pollution control agency with jurisdiction.

(1) For storage tank, transport vessel, or marine vessel degassing operations subject to the requirements in this division, the owner or operator shall maintain records of:

(A) the type and number of storage tanks, transport vessels, and marine vessels that are degassed;

(B) the chemical name and estimated liquid quantity of VOC contained in each storage tank, transport vessel, or marine vessel prior to degassing ;

(C) the chemical name and estimated liquid quantity of VOC removed from each storage tank, transport vessel, or marine vessel;

(D) the VOC concentration or percent of lower explosive limit measurements required in §115.544(b)(3) of this title (relating to Inspection,

Monitoring, and Testing Requirements) to determine when the storage tank, transport vessel, or marine vessel can be vented to the atmosphere without control; and

(E) the VOC concentration or percent of lower explosive limit measurements required by §115.544(b)(4) of this title.

(2) For a control device used to comply with the requirements in this division, the owner or operator shall maintain records of any operational parameter monitoring required in §115.544(b)(2) of this title. These records must include, but are not limited to, the following.

(A) For a carbon adsorption system, the owner or operator shall maintain records of the VOC concentration measurements required by §115.544(b)(2)(A) of this title.

(B) For a catalytic incinerator, the owner or operator shall maintain records of the continuous temperature monitoring required in §115.544(b)(2)(B) of this title.

(C) For a condensation system, the owner or operator shall maintain records of the continuous temperature monitoring required in §115.544(b)(2)(C) of this title.

(D) For a direct-flame incinerator, the owner or operator shall maintain records of the continuous temperature monitoring required in §115.544(b)(2)(D) of this title.

(E) For a flare, the owner or operator shall maintain records of the continuous monitoring or calculations required in §115.544(b)(2)(E) of this title.

(F) For any control device used to comply with the optional exhaust concentration limit in §115.542(a)(4) (relating to Control Requirements) of this title, the owner or operator shall maintain records of the VOC concentration measurement required in §115.544(b)(2)(F) of this title and records of the monitoring method used.

(G) For a thermal oxidizer or vapor combustor, the owner or operator shall maintain records of the continuous temperature monitoring required in §115.544(b)(2)(G) of this title. If necessary to demonstrate compliance with §115.544(c)(3) of this title, the owner or operator shall maintain records of the continuous monitoring of the gas flow rate into the thermal oxidizer or vapor combustor to determine the combustion chamber residence time.

(H) For a recirculation system, the owner or operator shall maintain records of the continuous pressure or flow rate monitoring required in §115.544(b)(2)(H)(i) of this title and records of the VOC leak monitoring required in §115.544(b)(2)(H)(ii) of this title, including the VOC measurements and the time the monitoring began.

(I) For an internal combustion engine, the owner or operator shall maintain records of the continuous engine exhaust gas oxygen content monitoring required in §115.544(b)(2)(I) of this title.

(J) For a control device not listed in this paragraph, the owner or operator shall maintain records of the continuous operational parameter monitoring required in §115.544(b)(2)(J) of this title sufficient to demonstrate proper functioning of the control device to design specifications.

(3) The owner or operator shall maintain records of the results of any leak inspection and repair conducted in accordance with the requirements in §115.544(a) of this title.

(4) The owner or operator shall maintain records of any control efficiency demonstration required in §115.544(c) of this title and the results of any testing conducted in accordance with the provisions specified in §115.545 of this title (relating to Approved Test Methods). The records must contain all applicable requirements from the commission's *Sampling Procedures Manual, Chapter 14.0, Contents of Sampling Reports* (January 2003, revision one).

(5) The owner or operator shall maintain records of the manufacturer's instructions for installation, calibration, maintenance, and operation for any monitoring device used to comply with the requirements in this division.

(b) Notification requirements. In the Houston-Galveston-Brazoria area, upon request by authorized representatives of the executive director, the owner or operator of any storage tank, transport vessel, or marine vessel subject to this division shall notify the appropriate regional office of upcoming degassing operations.

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§115.547. Exemptions.

The following exemptions apply to the owner or operator of any storage tank, transport vessel, or marine vessel subject to this division.

(1) Any storage tank with a storage capacity of less than one million gallons is exempt from this division. After January 1, 2009, in the Houston-Galveston-Brazoria area, the storage tanks listed in subparagraphs (A) and (B) of this paragraph are no longer exempt from this division.

(A) Storage tanks with a storage capacity greater than or equal to 250,000 gallons but less than one million gallons.

(B) Storage tanks with a storage capacity greater than or equal to 75,000 gallons but less than 250,000 gallons storing materials with true vapor pressure greater than 2.6 pounds per square inch absolute.

(2) In the Beaumont-Port Arthur, Dallas-Fort Worth, El Paso, and Houston-Galveston-Brazoria areas, any transport vessel with a storage capacity of less than 8,000 gallons is exempt from this division.

(3) In the Beaumont-Port Arthur and Houston-Galveston-Brazoria areas, any marine vessel with a storage capacity of less than 420,000 gallons is exempt from this division.

(4) Any storage tank is exempt from this division during preventative maintenance, roof repair, primary seal inspection, or removal and installation of a secondary seal, if product is not moved in or out of the storage tank, emissions are minimized, and the repair is completed within seven calendar days.

(5) Any marine vessel that has sustained damage that prevents a cargo tank's opening from being properly secured, causes the onboard vapor recovery system to be inoperative, or prevents the pressure or vacuum relief valves from operating within certified limits as specified by classification society or flag state is exempt from the requirements in §115.541 and §115.542 of this title (relating to Emission Specifications and Control Requirements); however, all reasonable measures must be taken to minimize emissions of volatile organic compounds. This exemption will only apply for 30 calendar days after the damage to the cargo tank is sustained.

(6) Any oceangoing, self-propelled marine vessel is exempt from this division.

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§115.549. Compliance Schedules.

(a) All affected owners or operators in Brazoria, Chambers, Fort Bend, Galveston, Hardin, Harris, Jefferson, Liberty, Montgomery, Orange, and Waller Counties were

required to be in compliance with this division by November 15, 1996, and shall continue to comply with this division.

(b) All affected owners or operators in Collin, Dallas, Denton, and Tarrant Counties shall be in compliance with this division as soon as practicable, but no later than May 21, 2011. If the installation of additional monitoring equipment is necessary to comply with the requirements in §115.544(b)(2)(E) of this title (relating to Inspection, Monitoring, and Testing Requirements), the owner or operator shall comply with the requirements no later than March 1, 2012. Until the monitoring equipment necessary to demonstrate compliance with the requirements in §115.544(b)(2)(E) of this title is installed, the owner or operator shall demonstrate compliance by using engineering calculations or other available monitoring or testing data.

(c) All affected owners or operators in El Paso County shall be in compliance with this division as soon as practicable, but no later than one year, after the commission publishes notification in the *Texas Register* of its determination that this contingency rule is necessary as a result of failure to attain the National Ambient Air Quality Standard for ozone by the attainment deadline or failure to demonstrate reasonable further progress as set forth in the 1990 Amendments to the Federal Clean Air Act, §172(c)(9).

(d) All affected owners or operators in Brazoria, Chambers, Fort Bend, Galveston, Harris, Liberty, Montgomery, and Waller Counties shall comply with the requirements in §§115.542(b), 115.544(b)(4), and 115.546(a)(1)(E) of this title (relating to Control Requirements; Inspection, Monitoring, and Testing Requirements; and Recordkeeping and Notification Requirements) as soon as practicable but no later January 1, 2009. If the installation of additional monitoring equipment is necessary to comply with the requirements in §115.544(b)(2)(E) of this title, the owner or operator shall comply with the requirements no later than March 1, 2012. Until the monitoring equipment necessary to demonstrate compliance with the requirements in §115.544(b)(2)(E) of this title is installed, the owner or operator shall demonstrate compliance by using engineering calculations or other available monitoring or testing data.

Adopted January 26, 2011 Effective February 17, 2011