Texas Commission on Environmental Quality

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

5D Subchapter D : Petroleum Refining, Natural Gas Processing, and Petrochemical Processes

5D3 DIVISION 3 : FUGITIVE EMISSION CONTROL IN PETROLEUM REFINING, NATURAL GAS/ GASOLINE PROCESSING, AND PETROCHEMICAL PROCESSES IN OZONE NONATTAINMENT AREAS
As approved by EPA February 26, 2015 (80 FR 10352), effective April 27, 2015 (TXd166), Regulations.gov docket EPA-R06-OAR-2010-0611 [TX108].

Section 359:
As adopted by TCEQ November 15, 2006 effective December 7, 2006 (5-84).
Approved by EPA July 17, 2008 (73 FR 40972), effective September 15, 2008 (TXd90). Regulations.gov document EPA-R06-OAR-2006-1029-0003 [TX055.01]

Sections 352, 353, 354, 355, 356, 357, 358:
As adopted by TCEQ June 2, 2010 effective June 24, 2015 (5-89).
Approved by EPA February 26, 2015 (80 FR 10352), effective April 27, 2015 (TXd166), Regulations.gov document EPA-R06-OAR-2010-0611-0004 [TX108.04].

Struck-out text not in SIP.

Outline:

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~~monitoring of air contaminant emissions and §382.021, concerning Sampling Methods and Procedures, that authorizes the commission to prescribe the sampling methods and procedures to determine compliance with its rules. The amended and new sections are also adopted under FCAA, 42 USC, §§7401, *et seq.*, which requires states to submit SIP revisions that specify the manner in which the NAAQS will be achieved and maintained within each air quality control region of the state.~~

~~The amended and new sections implement THSC, §§382.002, 382.011, 382.012, 382.016, 382.017, and 382.021, and FCAA, 42 USC, §§7401 *et seq.*~~

§115.352. Control Requirements.

For the Beaumont-Port Arthur, Dallas-Fort Worth, El Paso, and Houston-Galveston-Brazoria areas as defined in §115.10 of this title (relating to Definitions), no person shall operate a petroleum refinery; a synthetic organic chemical, polymer, resin, or methyl-tert-butyl ether manufacturing process; or a natural gas/gasoline processing operation, as defined in §115.10 of this title, without complying with the following requirements.

(1) Except as provided in paragraph (2) of this section, no component may be allowed to have a volatile organic compound (VOC) leak for more than 15 calendar days after the leak is found that meets the following:

(A) for all components except pump seals and compressor seals, a screening concentration greater than 500 parts per million by volume (ppmv) above background as methane, or the dripping or exuding of process fluid based on sight, smell, or sound;

(B) for pump seals and compressor seals, a screening concentration greater than 10,000 ppmv above background as methane, or the dripping or exuding of process fluid based on sight, smell, or sound; and

(C) if the owner or operator elects to use the alternative work practice in §115.358 of this title (relating to Alternative Work Practice), any leak detected as defined in §115.358 of this title, including any leak detected using the alternative work practice on a component that is subject to the requirements of this division (relating to Fugitive Emission Control in Petroleum Refining, Natural Gas/Gasoline Processing, and Petrochemical Processes in Ozone Nonattainment Areas) but not specifically selected for alternative work practice monitoring.

(2) A first attempt at repair must be made no later than five calendar days after the leak is found and the component must be repaired no later than 15 calendar days after the leak is found, unless the repair of the component would require a unit shutdown that would create more emissions than the repair would eliminate. A component in gas/vapor or light liquid service is considered to be repaired when it is monitored with an instrument using Method 21 in 40 Code of Federal Regulations (CFR) Part 60, Appendix A-7 (October 17, 2000) and shown to no longer have a leak after adjustments or alterations to the component. A component in heavy liquid service is considered to be repaired when it is inspected by audio, visual, and olfactory means and shown to no longer have a leak after adjustments or alterations to the component. For any component that the owner or operator monitors using the alternative work practice in §115.358 of this title, the component is considered repaired when the component is demonstrated to no longer have a leak after adjustments or alterations to the component by

either screening using an optical gas imaging instrument as specified in §115.358 of this title or by the normal monitoring method required under this division. If the repair of a component within 15 days after the leak is detected would require a process unit shutdown that would create more emissions than the repair would eliminate, the repair may be delayed until the next scheduled process unit shutdown.

(A) Delay of repair beyond a process unit shutdown will be allowed for a component if that component is isolated from the process and does not remain in VOC service.

(B) Valves that can be safely repaired without a process unit shutdown may not be placed on the shutdown list.

(C) Delay of repair will be allowed for pumps, compressors, or agitators if the repair is completed as soon as practicable, but not later than six months after the leak was detected, and the repair requires replacing the existing seal design with:

(i) a dual mechanical seal system that includes a barrier fluid system;

(ii) a system that is designed with no externally actuated shaft penetrating the housing; or

(iii) a closed-vent system and control device that meets the requirements of §115.122(a)(2) of this title (relating to Control Requirements).

(3) All leaking components, as defined in paragraph (1) of this section, that cannot be repaired until a process unit shutdown must be identified for such repair by tagging. The executive director may require an early process unit shutdown or other appropriate action based on the number and severity of tagged leaks awaiting a process unit shutdown.

(4) No valves may be installed or operated at the end of a pipe or line containing VOC unless the pipe or line is sealed with a second valve, a blind flange, or a tightly-fitting plug or cap. The sealing device may be removed only while a sample is being taken or during maintenance operations, and when closing the line, the upstream valve must be closed first.

(5) Construction of new and reworked piping, valves, and pump and compressor systems must conform to applicable American National Standards Institute, American Petroleum Institute, American Society of Mechanical Engineers, or equivalent codes.

(6) New and reworked underground process pipelines must contain no buried valves such that fugitive emission monitoring is rendered impractical.

(7) To the extent that good engineering practice will permit, new and reworked components must be so located to be reasonably accessible for leak-checking during plant operation. A difficult-to-monitor component is a component that cannot be inspected without elevating the monitoring personnel more than two meters above a permanent support surface or that requires a permit for confined space entry as defined in 29 CFR §1910.146 (December 1, 1998). Difficult-to-monitor components must be identified in a list to be made available upon request as specified in §115.356(5) of this title (relating to Recordkeeping Requirements).

(8) New and reworked piping connections must be welded, flanged, or consist of pressed and permanently formed metal-to-metal seals. Screwed connections are permissible only on new piping smaller than two inches in diameter.

(9) For pressure relief valves installed in series with a rupture disk, pin, second relief valve, or other similar leak-tight pressure relief component, a pressure gauge or an equivalent device or system must be installed between the relief valve and the other pressure relief component to monitor for leakage past the first component. When leakage is detected past the first component, that component must be repaired or replaced at the earliest opportunity, but no later than the next process unit shutdown. Equivalent devices or systems must be identified in a list to be made available upon request as specified in §115.356(5) of this title and must have been approved by the methods required by §115.353 of this title (relating to Alternate Control Requirements).

(10) Any petroleum refinery; synthetic organic chemical, polymer, resin, or methyl-tert-butyl ether manufacturing process; or natural gas/gasoline processing operation in the Houston-Galveston-Brazoria area in which a highly-reactive volatile organic compound, as defined in §115.10 of this title, is a raw material, intermediate, final product, or in a waste stream is subject to the requirements of Subchapter H of this chapter (relating to Highly-Reactive Volatile Organic Compounds) in addition to the applicable requirements of this division.

§115.353. Alternate Control Requirements.

(a) For all affected persons in the Beaumont-Port Arthur, Dallas-Fort Worth, El Paso, and Houston-Galveston-Brazoria areas, as defined in §115.10 of this title (relating to

Definitions), any alternate methods of demonstrating and documenting continuous compliance with the applicable control requirements or exemption criteria in this division (relating to Fugitive Emission Control in Petroleum Refining, Natural Gas/Gasoline Processing, and Petrochemical Processes in Ozone Nonattainment Areas) 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.

(b) The owner or operator of a site subject to the requirements of this division may use the alternative work practice in §115.358 of this title (relating to Alternative Work Practice) as an optional alternative to hydrocarbon gas analyzer monitoring required under this division.

§115.354. Monitoring and Inspection Requirements.

All affected persons in the Beaumont-Port Arthur, Dallas-Fort Worth, El Paso, and Houston-Galveston-Brazoria areas, as defined in §115.10 of this title (relating to Definitions), shall conduct a monitoring and inspection program consistent with the following provisions.

(1) Monitor yearly (with a hydrocarbon gas analyzer) the emissions from all:

(A) process drains that receive or contact affected volatile organic compound wastewater streams as defined in Subchapter B, Division 4 of this chapter (relating to Industrial Wastewater);

(B) difficult-to-monitor components as identified in §115.352(7) of this title (relating to Control Requirements) that would otherwise be subject to more frequent monitoring under paragraph (2) of this section; and

(C) unsafe-to-monitor components that would otherwise be subject to more frequent monitoring. An unsafe-to-monitor component is a component that the owner or operator determines is unsafe to monitor because monitoring personnel would be exposed to an immediate danger as a consequence of conducting the monitoring. Components that are unsafe to monitor must be identified in a list made available upon request as specified in §115.356(5) of this title (relating to Recordkeeping Requirements). If an unsafe-to-monitor component is not considered safe to monitor within a calendar year, then it must be monitored as soon as possible during times that are safe to monitor.

(2) Monitor each calendar quarter (with a hydrocarbon gas analyzer) the screening concentration from all:

(A) compressor seals;

(B) pump seals;

(C) accessible valves; and

(D) pressure relief valves in gaseous service.

(3) Inspect weekly, by visual, audio, and/or olfactory means, all flanges, excluding flanges that are monitored at least once each calendar year using Method 21 in 40 Code of Federal Regulations Part 60, Appendix A-7 (October 17, 2000) and excluding flanges that are unsafe to inspect. Flanges that are unsafe to inspect must be identified in a list made available upon request. If an unsafe-to-inspect flange is not considered safe to inspect within the required weekly time frame, then it must be inspected as soon as possible during a time that it is safe to inspect.

(4) Monitor (with a hydrocarbon gas analyzer) emissions from any relief valve that has vented to the atmosphere within 24 hours of the release, excluding relief valves that are unsafe to monitor or difficult to monitor. Relief valves that are unsafe to monitor must be monitored as soon as possible after relieving during times that are safe to monitor. Relief valves that are difficult to monitor must be monitored within 15 days after a release.

(5) Upon the detection of a leaking component, affix to the leaking component a weatherproof and readily visible tag, bearing an identification number and the date the leak was detected. This tag must remain in place until the leaking component is repaired. Tagging of difficult-to-monitor leaking components may be done by reference tagging. The reference tag should be located as close as possible to the leaking component and should clearly identify the leaking component and its location.

(6) The monitoring schedule of paragraphs (1) - (3) of this section may be modified to require an increase in the frequency of monitoring in a given process area if the executive director determines that there is an excessive number of leaks in that process area.

(7) After completion of the required quarterly valve monitoring for a period of at least two years, the operator of a petroleum refinery; synthetic organic chemical, polymer, resin, or methyl-tert-butyl ether manufacturing process; or a natural gas/gasoline processing operation, as defined in §115.10 of this title, may request in writing to the executive director that the valve monitoring schedule be revised based on the percent of valves leaking. The percent of valves leaking must be determined by dividing the sum of valves leaking during the current monitoring period and valves for which repair has been delayed (including valves that have been classified as non-repairable under §115.357(8) of this title (relating to Exemptions)) by the total number of valves subject to the requirements. This request must include all data that have been developed to justify the following modifications in the monitoring schedule.

(A) After two consecutive quarterly leak detection periods with the percent of valves leaking equal to or less than 2.0%, an owner or operator may begin to skip one of the quarterly leak detection periods for the valves in gas/vapor and light liquid service.

(B) After five consecutive quarterly leak detection periods with the percent of valves leaking equal to or less than 2.0%, an owner or operator may begin to skip three of the quarterly leak detection periods for the valves in gas/vapor and light liquid service.

(8) Alternate monitoring schedules approved before November 15, 1996, under §§115.324(a)(8)(A), 115.334(3)(A), and 115.344(3)(A) of this title (relating to Inspection Requirements), as in effect December 3, 1993, are approved monitoring schedules for the purposes of paragraph (7) of this section.

(9) All component monitoring must occur when the component is in contact with process material and the process unit is in service. If a unit is not operating during the required monitoring period but a component in that unit is in contact with process fluid that is circulating or under pressure, then that component is considered to be in service and is required to be monitored. Valves must be in gaseous or light liquid service to be considered in the total valve count for alternate valve monitoring schedules of paragraph (7) of this section.

(10) Monitored screening concentrations must be recorded for each component in gaseous or light liquid service. Notations such as "pegged," "off scale," "leaking," "not leaking," or "below leak definition" may not be substituted for hydrocarbon gas analyzer results. For readings that are higher than the upper end of the scale (i.e., pegged) even when using the highest scale setting or a dilution probe, record a default pegged value of 100,000 parts per million by volume. This requirement does not apply to monitoring using an optical gas imaging instrument in accordance with §115.358 of this title (relating to Alternative Work Practice).

(11) All new connectors must be checked for leaks within 30 days of being placed in volatile organic compound service by monitoring with a hydrocarbon gas analyzer for components in light liquid and gas service and by using visual, audio, and/or olfactory means for components in heavy liquid service. Components that are unsafe to monitor or inspect are exempt from this requirement if they are monitored or inspected as soon as possible during times that are safe to monitor.

(12) All exemptions for valves with a nominal size of two inches or less expired on July 31, 1992 (final compliance date).

(13) For any components that the owner or operator elects to use the alternative work practice in §115.358 of this title, the following provisions apply.

(A) The frequency for monitoring any components listed in this section must be the frequency determined according to §115.358 of this title, except as specified in subparagraph (C) of this paragraph.

(B) The alternative monitoring schedules allowed under paragraphs (7) and (8) of this section are not allowed.

(C) If the owner or operator elects to use the alternative work practice in §115.358 of this title to satisfy the hydrocarbon gas analyzer monitoring requirements of paragraphs (4) or (11) of this section, the time limitations specified in paragraphs (4) and (11) of this section on performing the monitoring continue to apply.

(D) If the component is within a class of equipment (e.g., valves, flanges, etc.) that the owner or operator has elected to use the alternative work practice in §115.358 of this title and the component meets all other conditions specified in §115.358 of this title for acceptable use of the alternative work practice, then the component may not be classified as difficult to monitor under §115.352(7) of this title unless in order to image the component as required by §115.358 of this title the monitoring personnel would have to be elevated more than two meters above a permanent support surface or would require a permit for confined space entry as defined in 29 Code of Federal Regulations §1910.146 (December 1, 1998). If the component does qualify as difficult to monitor using the alternative work practice, the owner or operator may use either Method 21 or the alternative work practice at the monitoring frequency

specified in paragraph (1) of this section. Any components classified as difficult to monitor under the alternative work practice must be identified as such in the list required in §115.352(7) of this title.

(E) The owner or operator that elects to use the alternative work practice in §115.358 of this title may still classify a component as unsafe to monitor as allowed under paragraph (1)(C) of this section if the component cannot be safely monitored using either a hydrocarbon gas analyzer or the alternative work practice. The owner or operator may use either Method 21 or the alternative work practice at the monitoring frequency specified in paragraph (1) of this section. Any components classified as unsafe to monitor under the alternative work practice must be identified as such in the list required in paragraph (1)(C) of this section.

(F) If the executive director determines that there is an excessive number of leaks in any given process area that the alternative work practice in §115.358 of this title is used, the executive director may require an increase in the frequency of monitoring under the alternative work practice in that process area.

§115.355. Approved Test Methods.

For all affected persons in the Beaumont-Port Arthur, Dallas-Fort Worth, El Paso, and Houston-Galveston-Brazoria areas, as defined in §115.10 of this title (relating to Definitions), compliance with this division (relating to Fugitive Emission Control in Petroleum Refining, Natural Gas/Gasoline Processing, and Petrochemical Processes in Ozone Nonattainment Areas) must be determined by applying the following test methods, as appropriate:

(1) Method 21 in 40 Code of Federal Regulations Part 60, Appendix A-7 (October 17, 2000) for determining volatile organic compound leaks;

(2) determination of true vapor pressure using American Society for Testing and Materials Test Methods D323, D2879, D4953, D5190, or D5191 for the measurement of Reid vapor pressure, adjusted for 68 degrees Fahrenheit (20 degrees Celsius) in accordance with American Petroleum Institute Publication 2517, Third Edition, 1989;

(3) the alternative work practice in §115.358 of this title (relating to Alternative Work Practice);

(4) minor modifications to these test methods approved by the executive director; or

(5) equivalent determinations using published vapor pressure data or accepted engineering calculations.

§115.356. Recordkeeping Requirements.

All affected persons in the Beaumont-Port Arthur, Dallas-Fort Worth, El Paso, and Houston-Galveston-Brazoria areas as defined in §115.10 of this title (relating to Definitions), shall maintain the following records, either electronically or in hard copy form, except for any video records required by paragraph (4) of this section, which must be maintained electronically.

(1) The owner or operator shall maintain records identifying each process unit subject to fugitive monitoring in accordance with this division (relating to Fugitive Emission Control in Petroleum Refining, Natural Gas/Gasoline Processing, and Petrochemical Processes in Ozone Nonattainment Areas) including, at a minimum, the following information:

(A) the name of each process unit;

(B) a scale plot plan showing the location of each process unit;

(C) process flow diagrams for each process unit showing the general process streams and major equipment on which the components are located; and

(D) the expected volatile organic compound emissions if the process unit is shut down for repair of components or other equipment, including:

(i) the total emissions;

(ii) the calculations used; and

(iii) engineering assumptions applied.

(2) The owner or operator shall maintain records on components and process areas that contain, at a minimum, the following data:

(A) the name of the process unit where the component is located;

(B) the type of component (e.g., pump, compressor, valve, pressure relief valve, etc);

(C) all data collected in accordance with the monitoring and inspection requirements of §115.354 of this title (relating to Monitoring and Inspection Requirements) for each component required to be monitored with a hydrocarbon gas analyzer;

(D) the calibration of the monitoring instrument;

(E) if a component is found leaking, if applicable:

(i) the component identification and method of leak determination (Method 21 in 40 Code of Federal Regulations Part 60, Appendix A-7 (October 17, 2000), the alternative work practice in §115.358 of this title (relating to Alternative Work Practice), sight/sound/smell, or inert gas or hydraulic testing);

(ii) the date that a leaking component is discovered;

(iii) the date that a first attempt at repair was made to a leaking component;

(iv) the date that a leaking component is repaired;

(v) the date and instrument reading of the recheck procedure after a leaking component is repaired;

(vi) the date that the leaking component is placed on the shutdown list; and

(vii) the date that the leaking component was taken out of service; and

(F) records of any audio, visual, and olfactory inspections of connectors, but only if a leak is detected.

(3) The owner or operator shall maintain records by process unit identifying and justifying each:

(A) unsafe-to-monitor component and unsafe-to-inspect flange;

(B) difficult-to-monitor component; and

(C) exemption by component claimed under §115.357 of this title (relating to Exemptions). The components may be identified by one or more of the following methods:

(i) a plant site plan;

(ii) color coding;

(iii) a written or electronic database;

(iv) designation of process unit boundaries;

(v) some form of weatherproof identification; or

(vi) process flow diagrams that exhibit sufficient detail to identify major pieces of equipment, including major process flows to, from, and within a process unit. Major equipment includes, but is not limited to, columns, reactors, pumps, compressors, drums, tanks, and exchangers.

(4) If an owner or operator elects to use the alternative work practice in §115.358 of this title, the following records must be maintained in addition to the records required by paragraphs (1) - (3) of this section.

(A) The owner or operator shall maintain a list of all components that are monitored according to the alternative work practice in §115.358 of this title.

(B) The owner or operator shall maintain records of the detection sensitivity level selected from the table in §115.358(e)(1) of this title.

(C) The owner or operator shall maintain records of the analysis to determine the component in contact with the lowest mass fraction of chemicals that are

detectable, as required by the daily instrument check procedure referenced in §115.358(c)(2) of this title.

(D) The owner or operator shall maintain records of the technical basis for the mass fraction of detectable chemicals used for daily instrument check procedure referenced in §115.358(c)(2) of this title.

(E) The owner or operator shall maintain records of each daily instrument check required by §115.358(c)(2) of this title. These records include:

(i) the flow meter reading of the leak used in the daily instrument check and the distance from which the leak was imaged;

(ii) a video record, with a date and time stamp, of the daily instrument check for each configuration and operator of the optical gas imaging instrument used during monitoring; and

(iii) the name of each operator performing the daily instrument check.

(F) The owner or operator shall maintain records of the leak survey results as follows for all components that the owner or operator monitors using the alternative work practice in §115.358 of this title.

(i) A video record must be used to document the leak survey results and the results of the recheck to verify the leak has been repaired, if the alternative work practice in §115.358 of this title is used to perform the recheck. The video record must meet the following requirements.

(I) The video record must include a time and date stamp for each monitoring event.

(II) Each component must be identifiable in the video record.

(ii) The records must include the name of each operator performing the leak survey for each monitoring event.

(G) The owner or operator shall maintain records of the annual Method 21 screening required by §115.358(f) of this title, including:

(i) the components screened according to Method 21;

(ii) the concentration measured according to Method 21;

(iii) the date and time of the Method 21 screening; and

(iv) the calibrations required by Method 21.

(H) The owner or operator shall maintain records of the training required by §115.358(h) of this title.

(I) The owner or operator shall maintain records of the optical gas imaging instrument manufacturer's operating parameters.

(5) The owner or operator shall maintain all monitoring records for at least five years and make them available for review upon request by authorized representatives of the executive director, United States Environmental Protection Agency, or local air pollution control agencies with jurisdiction, except that the five-year record retention requirement does not apply to records generated before December 31, 2000.

§115.357. Exemptions.

For all affected persons in the Beaumont-Port Arthur, Dallas-Fort Worth, El Paso, and Houston-Galveston-Brazoria areas, as defined in §115.10 of this title (relating to Definitions), the following exemptions apply.

(1) Components that contact a process fluid containing volatile organic compounds (VOC) having a true vapor pressure equal to or less than 0.044 pounds per square inch absolute (psia) (0.3 kiloPascals) at 68 degrees Fahrenheit (20 degrees Celsius) are exempt from the instrument monitoring (with a hydrocarbon gas analyzer) requirements of §115.354(1) and (2) of this title (relating to Monitoring and Inspection Requirements) if the components are inspected by visual, audio, and/or olfactory means according to the inspection schedules specified in §115.354(1) and (2) of this title.

(2) Conservation vents or other devices on atmospheric storage tanks that are actuated either by a vacuum or a pressure of no more than 2.5 pounds per square inch gauge (psig), pressure relief valves equipped with a rupture disk or venting to a control device, components in continuous vacuum service, and valves that are not externally regulated (such as in-line check valves) are exempt from the requirements of this division (relating to Fugitive Emission Control in Petroleum Refining, Natural Gas/Gasoline Processing, and Petrochemical Processes in Ozone Nonattainment Areas), except that each pressure relief valve equipped with a rupture disk must comply with §115.352(9) and §115.356(3)(C) of this title (relating to Control Requirements and Recordkeeping Requirements).

(3) Compressors in hydrogen service are exempt from the requirements of §115.354 of this title if the owner or operator demonstrates that the percent hydrogen content can be reasonably expected to always exceed 50.0% by volume.

(4) All pumps and compressors that are equipped with a shaft sealing system that prevents or detects emissions of VOC from the seal are exempt from the monitoring requirement of §115.354 of this title. These seal systems may include, but are not limited to, dual pump seals with barrier fluid at higher pressure than process pressure, seals degassing to vent control systems kept in good working order, or seals equipped with an automatic seal failure detection and alarm system. Submerged pumps or sealless pumps (including, but not limited to, diaphragm, canned, or magnetic driven pumps) may be used to satisfy the requirements of this paragraph.

(5) Reciprocating compressors and positive displacement pumps used in natural gas/gasoline processing operations are exempt from the requirements of this division except §115.356(3)(C) of this title.

(6) Components at a petroleum refinery or synthetic organic chemical, polymer, resin, or methyl-tert-butyl ether manufacturing process, that contact a process fluid that contains less than 10% VOC by weight and components at a natural gas/gasoline processing operation that contact a process fluid that contains less than 1.0% VOC by weight are exempt from the requirements of this division except §115.356(3)(C) of this title.

(7) Plant sites covered by a single account number with less than 250 components in VOC service are exempt from the requirements of this division except §115.356(3)(C) of this title.

(8) Components in ethylene, propane, or propylene service, not to exceed 5.0% of the total components, may be classified as non-repairable beyond the second repair attempt at 500 parts per million by volume (ppmv). These components will remain in the fugitive monitoring program and be repaired no later than 15 calendar days after the concentration of VOC detected via Method 21 in 40 Code of Federal Regulations (CFR) Part 60, Appendix A-7 (October 17, 2000) exceeds 10,000 ppmv. For the purposes of this division, components that contact a process fluid with greater than 85% ethylene, propane, or propylene by weight are considered in ethylene, propane, or propylene service, respectively. If the owner or operator elects to use the alternative work practice in §115.358 of this title (relating to Alternative Work Practice), this exemption may not be claimed for any component that is monitored according to the alternative work practice unless the owner or operator demonstrates the leak concentration

does not exceed 10,000 ppmv using Method 21 and the owner or operator continues to monitor the component using both the alternative work practice and Method 21 according to the frequency specified in §115.358 of this title.

(9) The following valves are exempt from the requirements of §115.352(4) of this title:

(A) pressure relief valves;

(B) open-ended valves or lines in an emergency shutdown system that are designed to open automatically in the event of an emissions event;

(C) open-ended valves or lines containing materials that would autocatalytically polymerize or would present an explosion, serious overpressure, or other safety hazard if capped or equipped with a double block and bleed system; and

(D) valves rated greater than 10,000 psig.

(10) Instrumentation systems, as defined in 40 CFR §63.161 (January 17, 1997), that meet 40 CFR §63.169 (June 20, 1996) are exempt from the requirements of this division except §115.356(3)(C) of this title.

(11) Sampling connection systems, as defined in 40 CFR §63.161 (January 17, 1997), that meet the requirements of 40 CFR §63.166(a) and (b) (June 20, 1996) are exempt from the requirements of this division except §115.356(3)(C) of this title.

(12) Components that are insulated, making them inaccessible to monitoring with a hydrocarbon gas analyzer, are exempt from the monitoring requirements of §115.354(1), (2), and (4) of this title.

(13) Components/systems that contact a process fluid containing VOC having a true vapor pressure equal to or less than 0.002 psia at 68 degrees Fahrenheit are exempt from the requirements of this division except §115.356(3)(C) of this title.

(14) In the Houston-Galveston-Brazoria area, the requirements of Subchapter H of this chapter (relating to Highly-Reactive Volatile Organic Compounds) may apply to components that qualify for one or more of the exemptions in paragraphs (1) - (11) of this section at any petroleum refinery; synthetic organic chemical, polymer, resin, or methyl-tert-butyl ether manufacturing process; or natural gas/gasoline processing operation in which a highly-reactive volatile organic compound, as defined in §115.10 of this title (relating to Definitions), is a raw material, intermediate, final product, or in a waste stream.

§115.358. Alternative Work Practice.

(a) Alternative work practice applicability. The owner or operator of a site subject to this division (relating to Fugitive Emission Control in Petroleum Refining, Natural Gas/Gasoline Processing, and Petrochemical Processes in Ozone Nonattainment Areas) or any other division of this chapter (relating to Control of Air Pollution from Volatile Organic Compounds), when specifically allowed by that division, may use the alternative work practice of this section as an optional alternative to hydrocarbon gas analyzer monitoring required under the applicable

division. The alternative work practice described in this section may only be used for components with a leak definition specified by a division of this chapter of 500 parts per million by volume (ppmv) or greater.

(b) Definitions. For the purposes of this section, the following terms have the following meanings.

(1) **Imaging**--A means or process of making emissions visible that may otherwise be invisible to the naked eye.

(2) **Optical gas imaging instrument**--An instrument that makes emissions visible that may otherwise be invisible to the naked eye.

(3) **Repair**--The adjustment or alteration of a component in order to eliminate a leak.

(4) **Leak**--A leak is:

(A) any emissions imaged by an optical gas imaging instrument, as defined in paragraph (2) of this subsection;

(B) indications of liquids dripping;

(C) indications by a sensor that a seal or barrier fluid system has failed; or

(D) screening results using Method 21 in 40 Code of Federal Regulations (CFR) Part 60, Appendix A-7 (October 17, 2000) that exceed the leak definition specified for the component by the applicable division of this chapter.

(c) Optical gas imaging instrument specifications.

(1) Any optical gas imaging instrument used for the purposes of this section must meet the requirements of 40 CFR §60.18(i)(1) (December 22, 2008).

(2) The owner or operator shall perform and the optical gas imaging instrument must meet all requirements of the daily instrument check as specified in 40 CFR §60.18(i)(2) (December 22, 2008). In addition, the daily instrument check must be performed by each optical gas imaging instrument operator that will be performing imaging for that day.

(d) Leak survey procedure. The owner or operator shall operate the optical gas imaging instrument to image every component selected for the alternative work practice in this section in accordance with the instrument manufacturer's operating parameters. All emissions imaged by the optical gas imaging instrument are considered to be leaks and subject to repair in accordance with requirements of the applicable division of this chapter. All emissions visible to the naked eye during the leak survey are also considered to be leaks and subject to repair in accordance with the applicable division of this chapter. The operator of the optical gas imaging instrument shall not image a component during the leak survey at a distance greater than the distance demonstrated by that same instrument operator during the daily instrument check for the configuration of the optical gas imaging instrument used in the leak survey.

(e) Frequency. The owner or operator that elects to use the alternative work practice in this section shall perform the leak surveys according to the following.

(1) The frequency for performing leak surveys on each component must be determined by selecting one of the frequencies in the following table, in lieu of the monitoring frequency specified for the component in the applicable division of this chapter.

Figure: 30 TAC §115.358(e)(1)

Monitoring Frequency	Detection Sensitivity Level (Grams per Hour)
Bi-Monthly	60
Semi-Quarterly	85
Monthly	100

Where:

Bi-Monthly = Every other calendar month.

Semi-Quarterly = Twice per calendar quarter, but at least 30 days apart.

Monthly = Once per calendar month.

(2) Alternative monitoring frequencies for good performance (i.e., skip periods) are not allowed for any component that the owner or operator chooses to monitor using the alternative work practice. Alternative frequency for other purposes may be used when specifically allowed by a division of this chapter (e.g., difficult-to-monitor components).

(f) Annual Method 21 screening. Each component that an owner or operator elects to use the alternative work practice in this section must be monitored once per calendar year using Method 21 in 40 CFR Part 60, Appendix A-7 (October 17, 2000) at the leak definition required

in the applicable division of this chapter. The owner or operator may choose the specific monitoring period for the annual Method 21 monitoring; however, subsequent Method 21 monitoring must be conducted every 12 months from the initial period.

(g) Notification. The owner or operator that elects to use the alternative work practice in this section shall provide written notification to the appropriate regional office at least 30 days prior to implementing use of the alternative work practice.

(1) The written notification must include:

(A) identification of each unit that the alternative work practice will be used for;

(B) identification of the specific categories of components that the alternative work practice will be used for (e.g., valves, flanges, etc.);

(C) the total number of components monitored according to the alternative work practice in each of the categories identified as required by subparagraph (B) of this paragraph; and

(D) the date that the owner or operator will begin using the alternative work practice.

(2) After the initial notification required under this subsection, the owner or operator is required to resubmit the notification to the appropriate regional office only if use of

the alternative work practice is expanded to a process unit not included in the initial notification. Renotification must be submitted within 30 days after implementing use of the alternative work practice in the new process unit.

(h) Operator training. Any person that performs the alternative work practice in this section shall comply with the following minimum training requirements.

(1) The operator of the optical gas imaging instrument shall receive a minimum of 24 hours of initial training on the specific make and model of optical gas imaging instrument before using the instrument for the purposes of the alternative work practice.

(2) Operators using optical gas imaging instruments for the alternative work practice shall comply with one of the following requirements for on-going training purposes.

(A) Operators shall attend an annual eight-hour refresher training class on the optical gas imaging instrument used for the alternative work practice. Operators meeting the requirements of paragraph (3) of this subsection meet the requirements of this subparagraph.

(B) Operators shall maintain a minimum of 100 hours per 12 months of hands-on operational experience with the make and model of optical gas imaging instrument used for the alternative work practice. Operators electing this option shall maintain a log of the operator's operational experience with the optical gas imaging instrument.

(3) Prior to using a make and model of optical gas imaging instrument for the alternative work practice in this section on which they have not been trained, operators who have been trained according to paragraph (1) of this subsection shall attend an eight-hour combination update and annual refresher training class on the new make and model of optical gas imaging instrument.

5D3 §115.359. Counties and Compliance Schedules.
5-84: As adopted by TCEQ November 15, 2006 effective December 7, 2006 (5-84). Approved by EPA July 17, 2008 (73 FR 40972), effective September 15, 2008 (TXd90). Regulations.gov docket EPA-R06-OAR-2006-1029 [TX055]

(a) The owner or operator of each affected source in Brazoria, Chambers, Collin, El Paso, Dallas, Denton, Fort Bend, Galveston, Hardin, Harris, Jefferson, Liberty, Montgomery, Orange, Tarrant, and Waller Counties shall continue to comply with this division (relating to Fugitive Emission Control in Petroleum Refining, Natural Gas/Gasoline Processing, and Petrochemical Processes in Ozone Nonattainment Areas) as required by §115.930 of this title (relating to Compliance Dates).

(b) The owner or operator of each affected source in Ellis, Johnson, Kaufman, Parker, and Rockwall Counties shall comply with this division as soon as practicable, but no later than March 1, 2009.

Adopted November 15, 2006, Effective December 7, 2006 (5-84).
*****end tx 115.359***5-84***EPA-R06-OAR-2006-1029***TX055***TXd90***m6s*****