The Texas Commission on Environmental Quality (TCEQ, agency, or commission) adopts amendments to 30 Texas Administrative Code (TAC) §§115.10, 115.110 - 115.112, 115.114 - 115.119, 115.121 - 115.123, 115.125 - 115.127, 115.129, 115.131, 115.132, 115.135 - 115.137, 115.139, 115.142, 115.144, 115.146, 115.147, 115.149, 115.161, 115.162, 115.164 - 115.167, 115.169 - 115.172, 115.177, 115.183, 115.211 - 115.214, 115.216, 115.217, 115.219, 115.221, 115.222, 115.224, 115.226, 115.227, 115.229, 115.234, 115.235, 115.237, 115.239, 115.311, 115.312, 115.315, 115.316, 115.319, 115.352 - 115.357, 115.359, 115.410 - 115.413, 115.415, 115.416, 115.419, 115.420, 115.422, 115.423, 115.425 - 115.427, 115.429, 115.430 - 115.432, 115.435, 115.436, 115.439 - 115.443, 115.445, 115.446, 115.449 - 115.451, 115.453, 115.458 - 115.461, 115.463, 115.465, 115.468 - 115.471, 115.473, 115.475, 115.478, 115.479, 115.510, 115.512, 115.515 - 115.517, 115.519, 115.531, 115.532, 115.534 - 115.537, 115.539, 115.901, and 115.911. TCEQ also repeals §115.173; and simultaneously adopts new §115.173.

The amendments to §§115.111, 115.171, 115.172, 115.173, 115.219, 115.419, 115.450, 115.459, 115.461, 115.469, 115.479, and 115.519 are adopted *with changes* to the proposed text and will be republished.

All other amendments are adopted *without changes* to the proposed text as published in the December 15, 2023, issue of the *Texas Register* (48 TexReg 7290) and, therefore, will not be republished.

All amended sections, and the repealed and new section, will be submitted to the United States Environmental Protection Agency (EPA) as revisions to the State Implementation Plan (SIP).

Background and Summary of the Factual Basis for the Adopted Rules

These adopted rules will address federal Clean Air Act (FCAA) reasonably available control technology (RACT) requirements for Bexar County under the 2015 eight-hour ozone National Ambient Air Quality Standard (NAAQS) of 0.070 parts per million (ppm) as well as FCAA RACT and SIP contingency requirements for the Dallas-Fort Worth (DFW) and Houston-Galveston-Brazoria (HGB) nonattainment areas under the 2008 eight-hour ozone NAAQS of 0.075 ppm. The adopted rulemaking will also amend previously adopted rules that addressed EPA's 2016 Control Techniques Guidelines for the Oil and Natural Gas Industry in the DFW and HGB 2008 ozone NAAQS nonattainment areas (Rule Project No. 2020-038-115-AI, adopted June 30, 2021).

The following portion of the Background and Summary addresses the RACT update for Bexar County.

Effective November 7, 2022, EPA reclassified nonattainment areas under the 2015 eight-hour ozone NAAQS (87 *Federal Register* (FR) 60897). Bexar County was reclassified from marginal to moderate nonattainment with a 2023 attainment year and an attainment deadline of September 24, 2024. Ozone nonattainment areas classified as moderate and above are required to meet the mandates of FCAA under §172(c)(1) and §182(b)(2). According to the EPA's Implementation of the 2015 National Ambient Air Quality Standards for Ozone: State Implementation Plan Requirements: Final Rule (2015 eight-hour ozone standard SIP requirements rule) published in the *Federal Register* (83 FR 62998), states containing areas classified as moderate ozone nonattainment or higher must submit a SIP revision to fulfill RACT requirements for all source

categories addressed by control techniques guidelines (CTG) or alternative control techniques (ACT) as well as any non-ACT/CTG category sources that are classified as major stationary sources of nitrogen oxides (NO_X) or volatile organic compounds (VOC) (83 FR 62998). Specifically, the SIP revision must contain adopted RACT regulations, certifications where appropriate that existing provisions are RACT, and/or negative declarations that there are no sources in the nonattainment area covered by a specific CTG source category (80 FR 12264).

Bexar County's reclassification to moderate ozone nonattainment triggered emission control evaluation, emission reduction quantification, rule writing, and submission requirements for attainment demonstration (AD) and reasonable further progress (RFP) SIP revisions. However, neither EPA's reclassification schedule nor its SIP requirements submittal deadline of January 1, 2023, provided sufficient time to implement new VOC emission reduction controls prior to the beginning of the attainment year ozone season in Bexar County, which was March 1, 2023. The portions of this adopted rulemaking affecting Bexar County, along with the concurrently adopted Bexar County RACT Update SIP Revision (Non-rule Project No. 2023-132-SIP-NR), are intended to address the emission control and RACT analysis requirements.

On October 12, 2023, Texas Governor Greg Abbott signed and submitted a letter to EPA to reclassify the Bexar County, DFW, and HGB moderate 2015 eight-hour ozone NAAQS nonattainment areas to serious. On October 18, 2023, EPA published a finding of failure to submit the required moderate AD SIP revisions for all three areas. The commission is proceeding with this rulemaking that addresses RACT in Bexar County since RACT is required for both moderate and serious nonattainment classifications.

All Bexar County VOC emission source categories addressed by CTG and ACT documents were evaluated. 30 TAC Chapter 115 or other approved regulations were developed to update and fulfill RACT requirements. RACT requirements are fulfilled for all non-CTG and non-ACT major VOC emission sources—those for which VOC controls are technologically and economically feasible—by new, updated, or existing 30 TAC Chapter 115 rules and other federally enforceable measures, as documented in the concurrently adopted SIP revision.

The rule revisions to update RACT requirements in Bexar County are adopted in 19 divisions of Chapter 115. Subchapter B, Division 1 Storage of Volatile Organic Compounds, Division 2 Vent Gas Control, Division 3 Water Separation, Division 4 Industrial Wastewater, Division 6 Batch Processes, and Division 7 Oil and Natural Gas Service in Ozone Nonattainment Areas contain adopted revisions. Subchapter C contains adopted revisions in Division 1 Loading and Unloading of Volatile Organic Compounds, Division 2 Filling of Gasoline Storage Vessels (Stage I) for Motor Vehicle Fuel Dispensing Facilities, and Division 3 Control of Volatile Organic Compound Leaks from Transport Vessels. Subchapter D contains adopted revisions in Division 1 Process Unit Turnaround and Vacuum-Producing Systems in Petroleum Refineries, and Division 3 Fugitive Emission Control in Petroleum Refining, Natural Gas/Gasoline Processing, and Petrochemical Processes in Ozone Nonattainment Areas. In Subchapter E, adopted revisions are in Division 2 Surface Coating Processes, Division 3 Flexographic and Rotogravure Printing, Division 4 Offset Lithographic Printing, Division 5 Control Requirements for Surface Coating Processes, Division 6 Industrial Cleaning Solvents, and Division 7 Miscellaneous Industrial Adhesives. Subchapter F, Division 1 Cutback Asphalt, and Division 2 Pharmaceutical

Manufacturing Facilities contain adopted revisions. In these divisions, applicability and compliance provisions for existing RACT rules are amended to add provisions for Bexar County. Adopted changes are also made in Subchapter A, Definitions, and Subchapter J, Division 1 Alternative Means of Control to implement these RACT updates in Bexar County. Revisions to Subchapter B, Division 1 in the DFW area implement major source RACT at the lower 25 tons per year (tpy) major source threshold for the severe nonattainment classification and in Bexar County at the 100 tpy threshold for moderate areas. Likewise, Subchapter B, Division 2 revisions implement RACT for bakery vents at the major source thresholds in DFW and Bexar County. In all other divisions, Bexar County is added to rule provisions with the most stringent requirements for RACT implementation. All adopted regulations have a compliance date of January 1, 2025.

In addition to the adopted rules to address RACT for the Bexar County 2015 ozone NAAQS moderate nonattainment area, the adopted rulemaking will address RACT requirements for the DFW 2008 ozone NAAQS severe nonattainment area and contingency requirements for the DFW and HGB 2008 ozone NAAQS severe nonattainment areas. Effective November 7, 2022, EPA reclassified nonattainment areas under the 2008 ozone NAAQS (87 FR 60926). A 10-county DFW area (Collin, Dallas, Denton, Ellis, Johnson, Kaufman, Parker, Rockwall, Tarrant, and Wise Counties) and an eight-county HGB area (Brazoria, Chambers, Fort Bend, Galveston, Harris, Liberty, Montgomery, and Waller Counties) were reclassified from serious to severe nonattainment with a 2026 attainment year and an attainment deadline of July 20, 2027. Reclassification to severe nonattainment triggers emission control evaluation, emission reduction quantification, rule writing, and SIP submission requirements for the DFW and HGB

2008 ozone NAAQS nonattainment areas that must be submitted to EPA by May 7, 2024, the deadline established in EPA's reclassification action for the 2008 ozone NAAQS. This adopted rulemaking will amend Subchapter B, Division 1 VOC storage provisions to address RACT in the DFW 2008 ozone NAAQS severe nonattainment area and will amend rules in Subchapters E and F to address SIP contingency requirements for the DFW and HGB 2008 ozone NAAQS nonattainment areas.

The adopted rulemaking will add provisions for six measures to be implemented if needed for SIP contingency purposes in the DFW and/or HGB 2008 ozone NAAQS nonattainment areas. Contingency measures are control requirements that will take effect and result in emissions reductions if an area fails to attain a NAAQS by the applicable attainment date or fails to demonstrate RFP. Requirements for SIP contingency are established under FCAA, §172(c)(9) and §182(c)(9). Requirements for five contingency measures are adopted in Subchapter E: degreasing contingency rules are adopted in Division 1; industrial maintenance coatings and traffic marking coatings contingency rules are adopted in Division 5; industrial cleaning solvents contingency rules are adopted in Division 6; and industrial adhesives contingency rules are adopted in Division 7. A sixth contingency measure is adopted in Subchapter F, Division 6 for emulsified asphalt paving in the DFW and/or HGB 2008 ozone NAAQS severe nonattainment areas. Adopted contingency measures will apply independent of each other and separately for the DFW and/or HGB 2008 ozone NAAQS severe nonattainment areas. Implementation of a contingency measure will be triggered upon EPA publication of a notice in the *Federal Register* that the specified area(s) failed to attain the applicable ozone NAAQS by the applicable attainment date or failed to demonstrate RFP, and the commission's subsequent

publication in the *Texas Register* that compliance with the contingency measures is required. Affected sources will be required to comply with the contingency rules by no later than 270 days after *Texas Register* publication.

Staff inadvertently omitted some source categories and incorrectly stated multiple VOC content limits for other source categories in the industrial adhesives contingency measure of this rule proposal. This resulted in less emissions reductions available to fulfill contingency requirements in the DFW and HGB areas. The Executive Director intends to immediately initiate rulemaking for commission consideration to restore the missing and incorrect VOC content limits to achieve the reductions originally intended.

In addition to adopted amendments to address SIP contingency requirements for the DFW and HGB 2008 ozone NAAQS nonattainment areas, to address RACT requirements for the Bexar County 2015 ozone NAAQS moderate nonattainment area, and to address RACT requirements for the DFW 2008 ozone NAAQS severe nonattainment area, this adopted rulemaking will also amend Subchapter B, Division 7 to clarify provisions adopted June 30, 2021 (Project No. 2020-038-115-AI) to implement the EPA's 2016 Control Techniques Guidelines for the Oil and Natural Gas Industry. The adopted amendments will also delete rule provisions that would be triggered by the action of Wise County no longer being designated as nonattainment under the 2008 ozone NAAQS. This action will not occur because the petition for review seeking reversal of the nonattainment designation was denied on June 2, 2015, by the U.S. Court of Appeals for the District of Columbia Circuit (Mississippi v. EPA, 790 F.3d. 138). Similarly, the adopted amendments will delete rule provisions that would be triggered by reclassification of the DFW

area to severe nonattainment for the 1997 eight-hour ozone NAAQS because the 1997 eight-hour ozone NAAQS was revoked when the 2008 ozone NAAQS was implemented.

Demonstrating Noninterference under Federal Clean Air Act, §110(l)

Under FCAA, §110(l), EPA cannot approve a SIP revision if it "would interfere with any applicable requirement concerning attainment and reasonable further progress, or any other applicable requirement of." The commission provides the following information to demonstrate why the adopted changes to the Subchapter B, Division 7 and Subchapter E, Division 7 rules and associated Chapter 115 VOC control requirements will not: negatively impact the status of the state's progress towards attainment, interfere with control measures, or prevent reasonable further progress toward attainment of the ozone NAAQS in the HGB, DFW, or Bexar County nonattainment areas.

On June 30, 2021, the commission adopted rules in 30 TAC §§115.170 - 115.183 (Rule Project No. 2020-038-115-AI) to implement the EPA's 2016 Control Techniques Guidelines for the Oil and Natural Gas Industry (EPA-453/B-16-0012016/10). These adopted rules in Chapter 115 concerning RACT requirements for sources covered by EPA's 2016 oil and gas CTG became effective on July 21, 2021, and they were approved by EPA as a revision to the SIP on August 15, 2023, with an effective date of September 14, 2023 (88 FR 55379). The 2016 oil and gas CTG required covered sources in the DFW and HGB ozone nonattainment areas to comply with specified emissions limitations and control requirements for the oil and natural gas industry sector by January 1, 2023. The Chapter 115 rules currently applicable to oil and gas industry

operations in the HGB and DFW nonattainment areas inadvertently omit three CTG recommended exemptions, consolidate control provisions in a format that could be interpreted to deviate from EPA's centrifugal and reciprocating compressor CTG, and fail to include a CTG recommended incentive to maintain good fugitive monitoring performance. The adopted 30 TAC Chapter 115, Subchapter B, Division 7 revisions will add §115.172 CTG recommended exemptions, clarify §115.173 compressor control requirements, and amend §115.177 fugitive emission monitoring provisions to establish rule language that more accurately reflects EPA's 2016 oil and gas CTG rule guidelines.

The commission adopts a §115.172(a)(9) exemption for fugitive components in heavy liquid service from routine §115.177 instrument monitoring requirements provided they are monitored weekly by a visual, audio, and olfactory (OVA) survey as the CTG recommends. The OVA monitoring surveys will identify heavy liquid service leaks quicker than instrument monitoring, because they occur more frequently and typically document leak evidence before an instrument reading above the 10,000 ppm leak definition is observed. Therefore, the adopted §115.172(a)(9) exemption will enable heavily liquid service fugitive component leaks to be identified and repaired sooner to reduce natural gas processing plant VOC emissions.

In §115.172(a)(10), the commission adopts a similar CTG recommended exemption from routine instrument monitoring for natural gas plant light liquid service fugitive components that route potential VOC leaks through a closed vent system to a control device, process or fuel gas system provided weekly OVA survey are conducted. The higher potential emissions from light liquid service components and §115.172(a)(10) control requirement will result in potential

VOC emission reductions that are an order of magnitude or larger than produced by the adopted §115.172(a)(9) heavy liquid service exemption.

The commission adopts an exemption for wellhead(s)-only sites from instrument monitoring provisions under new §115.172(a)(11), since they have very limited quantities of fugitive components and associated VOC emissions. Any insignificant VOC emissions increase that may result from the adopted CTG recommended wellhead-only exemption will be more than offset by VOC emission reductions from the new implementation of more frequent OVA monitoring provisions adopted in §115.172(a)(9) and (10). The addition of new §115.172(a)(9)-(11) exemptions will not produce a net increase in VOC emissions or negatively impact the status of the state's progress towards attainment.

The commission inadvertently combined CTG recommended centrifugal and reciprocating compressor classification specific control provisions and created unnecessary confusion over the requirements that apply to each compressor type. The commission's adopted revisions to §115.173 will place the centrifugal and reciprocating compressor control provisions in separate §115.173(a) and §115.173(b) subsections, respectively, with the individual compressor type control provisions specified for each compressor type as recommended in the CTG. The adopted updates will clarify each compressor type's specific control requirements to more precisely conform to CTG RACT guidance. The reformatting of §115.173 compressor control requirements according to compressor type will not increase CTG RACT baseline VOC emissions or negatively impact the status of the state's progress towards attainment.
The commission's existing §115.177 fugitive emission monitoring provisions require natural

gas plant fugitive components that include light liquid service valves to be initially instrument monitored on a monthly basis and provide an option for quarterly monitored components with good monitoring and repair histories to be monitored less frequently in accordance with CTG recommendations. An oversight in the commission's regulatory language does not currently provide a pathway for fugitive emission components to transition from a monthly to a quarterly monitoring schedule as the CTG recommends as an incentive to encourage good leak repair performance that will reduce VOC emissions. The commission adopts the CTG recommended monitoring schedule pathway as an incentive for industry to expedite the location and repair fugitive component leaks to qualify for pathway access. The commission anticipates that the adopted monitoring schedule pathway requirement to implement and maintain the "good monitoring program practices" will reduce VOC emissions below the current rule's baseline level as a result of the expedited detection and repair practices needed to satisfy qualification criteria. The adopted §115.177 fugitive monitoring pathway language will not produce an increase in VOC emissions or negatively impact the status of the state's progress towards attainment.

The applicability of Subchapter B, Division 7 revisions is limited to the Bexar County, DFW, and HGB areas. The commission's adopted regulatory updates more precisely incorporate CTG RACT recommendations, increase RACT rule effectiveness and result in net VOC emission reductions for the HGB and DFW nonattainment areas. The adopted Subchapter B, Division 7 amendments also implement VOC RACT in Bexar County, which is a requirement of the FCAA and intended to help the area reach attainment, and will not affect Chapter 115 requirements for other areas in Texas. The adopted rulemaking will not negatively impact the state's progress

towards attainment of the 2008 and 2015 eight-hour ozone NAAQS, reasonable further progress toward attainment, or any other applicable requirement of the FCAA.

The commission adopts changes to Subchapter E, Division 7, Miscellaneous Industrial Adhesives, to implement a contingency measure required by FCAA, §172(c)(9) and §182(c)(9). This measure, if triggered, would reduce VOC emissions in the DFW and/or HGB areas by revising VOC content limits on various types of industrial adhesives. The changes add new VOC content limits in 30 TAC §115.473(e) and (f) which would apply if the contingency measure were triggered for the DFW or HGB area, respectively. These limits would, upon triggering, replace the current Chapter 115 VOC content limits in the DFW and/or HGB areas with limits taken from South Coast Air Quality Management District (SCAQMD) Rule 1168, as amended November 4, 2022.

Existing TCEQ RACT limits for industrial adhesives are based on the 2008 EPA CTG for Industrial Adhesives. The emission limit recommended in the CTG is based on the 2006 version of SCAQMD Rule 1168. Since 2006, SCAQMD Rule 1168 has been amended twice to establish emission limits for bonding specific substrates. These amendments have accommodated stated industry concerns with the limits in the 2006 version of Rule 1168. Four of the SCAQMD Rule 1168 changes since 2006 have increased the emission limit beyond the limit in existing TCEQ rules. These changes are for pressure sensitive adhesive primers, adhesives to join two specialty plastics, adhesives used in the manufacturing of computer diskettes, and adhesives for structural wood components. The adhesive applications in these categories were new subcategories of previous SCAQMD Rule 1168 and TCEQ adhesive rule categories. TCEQ chose

its industrial adhesive contingency measure VOC content limits to equal the SCAQMD Rule 1168 limits adopted November 4, 2022 because TCEQ agrees with SCAQMD's analysis on technological feasibility for these limits. SCAQMD's analysis can be found in SCAQMD's *Preliminary Draft Staff Report for Rule 1168 – Adhesive and Sealant Applications* dated August 2022.

Calculated emissions reductions for this measure sum the reductions in some adhesive categories and the increases in other categories to produce net emission reductions. In the current rulemaking, TCEQ provides the contingency measure emission reductions in a manner that avoids negatively impacting the status of the state's progress towards attainment or preventing reasonable further progress toward attainment of the ozone NAAQS in the HGB and DFW nonattainment areas or any other applicable requirement of the FCAA.

Section by Section Discussion

In addition to the information provided above for a background and summary of the adopted rules, including a demonstration of noninterference with §110(l) of the FCAA, the commission also adopts non-substantive changes to update the rules in accordance with current *Texas Register* style and format requirements, improve readability, establish consistency in the rules, and conform to the standards in the Texas Legislative Council Drafting Manual, September 2020. The specific substantive changes are discussed in greater detail in this Section by Section Discussion in the corresponding portions related to the affected rule sections.

Regarding the divisions of 30 TAC Chapter 115 that include adopted amendments, the commission additionally adopts the replacement of the term "Houston-Galveston" with the term

"Houston-Galveston-Brazoria." The latter term reflects how the eight-county nonattainment area is commonly referenced in other parts of Chapter 115 by regulated entities and the commission. Other existing references to "Houston-Galveston" in parts of Chapter 115 that are not included in this adopted rulemaking may be addressed in a future rule project. For purposes of being consistent with other formatting styles of Chapter 115, the commission adopts the replacement of "/" with "-" in "Beaumont/Port Arthur," "Dallas/Fort Worth," and "Houston/Galveston," respectively. The commission additionally adopts the replacement of “nine months” in the proposed rule with “270 days” in the adopted rule in order to clarify the compliance date for contingency measures in the event that they are triggered. Number of days is more precise than months and allows for consistency in application and alleviates confusion associated with calculating a nine-month period that may begin and/or end outside of a defined calendar month. These formatting updates are made in sections §§115.419, 115.459, 115.463, 115.469, 115.479, and 115.519 in this adopted rulemaking.

SUBCHAPTER A: DEFINITIONS

§115.10 Definitions

The commission adopts the change to the introductory paragraph of §115.10 to update a reference to the Texas Clean Air Act and make other non-substantive wording changes to be more precise and consistent.

The commission adopts a new definition for the Bexar County area in §115.10(3) to establish the affected area for the adopted Bexar County nonattainment rules. Former §115.10(3) and subsequent definitions are renumbered accordingly but are not otherwise revised, with the

exception of the definitions for covered attainment counties currently in §115.10(10) and Dallas-Fort Worth (DFW) area currently in §115.10(11). For the definition of covered attainment counties, the commission adopts the insertion of "before January 1, 2025" immediately after "Bexar" to make it clear that Bexar County is subject to applicable covered attainment county rules before January 1, 2025, which is the compliance date for the adopted rules applicable in the Bexar County ozone nonattainment area to implement RACT. For the definition of DFW area, the commission adopts the removal of a definition of the DFW area currently in §115.10(11)(B)(iii) that excludes Wise County and applies to Flexographic and Rotogravure Printing in Subchapter E, Division 3. Removal of this definition is necessary to allow the rules in Subchapter E, Division 3 for flexographic and rotogravure printing to apply in Wise County. The clauses in subparagraph (B) of the definition are renumbered accordingly.

SUBCHAPTER B: GENERAL VOLATILE ORGANIC COMPOUND SOURCES

DIVISION 1: STORAGE OF VOLATILE ORGANIC COMPOUNDS

§115.110 Applicability and Definitions

To switch Bexar County's applicability under the volatile organic compounds (VOC) storage rules in Subchapter B, Division 1, the commission adopts new applicability requirements in §115.110(a)(2) to signify the Bexar County area's status as a nonattainment area for which VOC storage rules for nonattainment areas will apply. Bexar County is currently listed along with other attainment counties for which VOC storage rules for attainment counties apply. Subsequently listed areas are renumbered.

The commission appends "as defined for covered attainment counties in §115.10 of this title

(relating to Definitions)" to the end of the current §115.110(a)(5) language and renumbers it as §115.110(a)(6) to specify that Bexar County will be removed from this attainment county applicability list on January 1, 2025 when the area is required to comply with the newly adopted nonattainment county storage tank rules.

§115.111 Exemptions

The commission adopts exemptions in §115.111(a) for the Bexar County ozone nonattainment area on the compliance date for the rules in Subchapter B, Division 1. The exemptions are for adopted nonattainment rules and not existing covered attainment county regulations. Specifically, the commission adopts the application of the existing exemptions in paragraphs (2), (4), (6), and (7) to affected sources in the Bexar County area. Upon the compliance date for the adopted rules in Division 1 that apply in Bexar County, the commission adopts the addition of the Bexar County area for the following exemptions: in paragraph (2), an exemption from Division 1 requirements for tanks with a capacity less than 210,000 gallons that store crude oil or condensate prior to custody transfer; in paragraph (4), an exemption from the requirement to retrofit with a rim-mounted secondary seal under specific circumstances for welded storage tanks with a mechanical shoe primary seal that have a shoe-mounted secondary seal; in paragraph (6), an exemption from any external floating roof secondary seal requirement under specific circumstances for welded storage tanks storing VOC with a true vapor pressure less than 4.0 pounds per square inch absolute (psia); and in paragraph (7), an exemption from any external floating roof secondary seal requirement under specific circumstances for welded storage tanks storing crude oil with a true vapor pressure equal to or greater than 4.0 psia and less than 6.0 psia.

The commission adopts revised §115.111(a)(10) to update regulatory references, remove a severe nonattainment reclassification scenario (since DFW has already been reclassified as severe nonattainment), and add a November 7, 2025 exemption expiration date when the DFW area must comply with severe nonattainment requirements and may no longer use this exemption.

The commission adopts a November 7, 2025 start date in place of "the date specified in §115.119(b)(1)(C)" to activate the §115.111(a)(11) DFW exemption to appropriately reflect its recent severe nonattainment redesignation and not the prior serious nonattainment compliance date. The commission adopts an update to the §115.111(a)(11) exemption requirement reference to the more appropriate §115.112(e)(4)(B) since prior §115.112(e)(4)(B)(ii) control requirement is also removed, as discussed elsewhere in this Section by Section Discussion.

The commission adopts an update to the §115.111(a)(12) exemption requirement reference from §115.112(e)(4)(C) to 115.112(e)(4)(C)(i).

The commission adopts a revision to existing §115.111(a)(13) to exempt Wise County condensate storage tanks and tank batteries with 12-month throughputs greater than 3,000 barrels (126,000 gallons) from §115.112(e)(4)(C)(ii) flash gas control requirements for the period July 20, 2021 until November 7, 2025 if the owner demonstrates the aggregate 12-month rolling storage tank VOC emissions are less the 50 tons per year (tpy).

The commission adopts new §115.111(a)(14) requirements that will exempt Wise County condensate storage tanks and tank batteries with 12-month throughputs greater than 1,500 barrels (63,000 gallons) from §115.112(e)(4)(D) flash gas control requirements, on and after November 7, 2025, if the owner demonstrates the aggregate 12-month rolling storage tank VOC emissions are less the 25 tpy.

The commission adopts new §115.111(a)(15) requirements that will exempt Bexar County condensate storage tanks and tank batteries with 12-month throughputs greater than 6,000 barrels (252,000 gallons) from §115.112(e)(4)(E) flash gas control requirements, on and after January 1, 2025, if the owner demonstrates the aggregate 12-month rolling storage tank VOC emissions are less the 100 tpy.

The commission adopts the revised exemption in former §115.111(a)(14), adopted to be renumbered as §115.111(a)(16), to add Bexar County tanks that store crude oil or condensate and that are also subject to Subchapter B, Division 7 compliance requirements. The commission adopts removal of the reference to the January 1, 2023 compliance date for the DFW and HGB areas to comply with Division 7 requirements and replace it with a reference to the initial compliance schedules for Division 7 rules provided in §115.183. This revision is adopted because the January 1, 2023 compliance date is only applicable in the DFW and HGB areas and not in the Bexar County area. Referring to the initial compliance dates in §115.183 provides an appropriate source for determining the status of this exemption by area.

The commission adopts revisions to existing §115.111(c) stating that the Bexar County

exemptions in this subsection no longer apply after December 31, 2024 when affected Bexar County storage tanks are required to meet §115.111(a) provisions to qualify for an exemption.

§115.112 Control Requirements

The commission adopts added language to §115.112(c) to specify that Bexar County area storage tanks are only subject to these requirements through December 31, 2024. On and after January 1, 2025, affected Bexar County storage tanks must comply with adopted §115.112(e) RACT requirements instead of §115.112(c).

The commission adopts the addition of the Bexar County area in §115.112(e) so that Bexar County must comply with current DFW and HGB RACT requirements beginning on January 1, 2025. To clarify the applicability transition from subsection (e) requirements to those in Division 7 for crude oil and condensate storage tanks, the commission adopts the removal of the reference to the January 1, 2023 compliance date for Division 7 and replace it with a reference to the compliance schedule provisions for Division 7 in §115.183. This change is required because Bexar County sources have a later Division 7 compliance date than DFW and HGB.

The commission adopts new §115.112(e)(3)(A)(iv) for the Bexar County area to designate the same minimum RACT efficiency for control devices in the Bexar County area as the HGB and DFW nonattainment areas.

The commission adopts revisions in §115.112(e)(4)(B) and (C) and a new §115.112(e)(4)(D) to

lower the throughput flow rate that triggers fixed roof condensate storage tank flash gas control requirements in the DFW area to 1,500 barrels (or 63,000 gallons) per year by November 7, 2025. This throughput is consistent with the severe nonattainment 25 ton major source threshold when using the default VOC content for condensate. Each monthly throughput for the 12 calendar months immediately before any date that a fixed roof condensate storage tank is potentially subject to flash gas control requirements shall be added together to derive the appropriate 12-month value for comparison with the throughput limit. To accomplish this, the provision in former §115.112(e)(4)(B)(i) that established the current 3,000 barrels flash gas control throughput limit for condensate storage tanks prior to custody transfer is consistent with the serious nonattainment 50-ton major source threshold and is moved under subparagraph (B) with an end date before November 7, 2025.

The before November 7, 2025 end date is also added to existing §115.112(e)(4)(C)(ii), which established the current 3,000 barrel limit for Wise County. The commission's adopted Wise County rules in §115.112(e)(4)(C)(ii) specify the last period where the current 3,000 barrel throughput limit will be applicable as the 12 whole calendar months immediately before November 7, 2025 (November 2024 through October 2025). The throughput data are adjusted to the start of the month because production and disposition data covering a calendar month are reported to the Railroad Commission of Texas.

Adopted §115.112(e)(4)(D) reduces the existing 3,000 barrel 12-month rolling average throughput limit requiring flash gas controls on fixed roof condensate storage tanks prior to custody transfer to 1,500 barrels in the entire DFW area beginning on November 7, 2025. To

account for how data are reported, compliance with this limit is to be determined using throughput data beginning November 1, 2025.

The commission adopts additional adjustments to §115.112(e)(4)(B)(ii) and §115.112(e)(4)(C)(i). The provision in §115.112(e)(4)(B)(ii) is removed because the DFW area will not be reclassified to severe for the 1997 ozone standard, which has been revoked. The provision in §115.112(e)(4)(C)(i) is amended to specify the end date for the previous 6,000 barrel 12-month rolling average throughput limit for Wise County, which was July 20, 2021.

The commission adopts new §115.112(e)(4)(E) that requires compliance with flash gas emission vapor control system requirements beginning January 1, 2025 for Bexar County area fixed roof tanks with an annual throughput greater than 252,000 gallons that store condensate prior to custody transfer.

The commission adopts revisions in §115.112(e)(5) concerning the VOC emission control trigger levels for a fixed roof tank or tank batteries that store crude oil or condensate prior to custody transfer or at a pipeline breakout station to add a Bexar County trigger level and revises the DFW area trigger level beginning on November 7, 2025 to coincide with the 25-ton major source threshold for severe nonattainment areas.

The commission adopts consolidation of the existing emission trigger level for the DFW area except Wise County into §115.112(e)(5)(B) after moving the 50-ton limit in deleted clause (i) into (5)(B) and deleting clause (ii) which can no longer be applicable due to revocation of the 1997

NAAQS. The trigger in revised §115.112(e)(5)(B) lasts until November 7, 2025. The commission also adopts a November 7, 2025 end date for the same 50-ton limit in §115.112(e)(5)(C)(ii) and also specifies the end date for the previous 100-ton limit in Wise County, which was July 20, 2021.

The commission adopts new §115.112(e)(5)(D) to lower rolling 12-month uncontrolled VOC emission control trigger levels for a fixed roof tank or tank batteries that store crude oil or condensate prior to custody transfer or at a pipeline breakout station in the DFW area to 25 tons. This unifies the control requirements across the DFW area into one provision beginning November 7, 2025.

The commission adopts new §115.112(e)(5)(E) that requires a flash gas emission vapor control system for Bexar County area fixed roof tanks or tank batteries with uncontrolled annual emissions greater than or equal to 100 tpy at a pipeline breakout station or that store crude oil prior to custody transfer. The compliance date for these new Bexar County requirements is January 1, 2025, as specified in §115.183.

The commission adopts the addition of the Bexar County area to the existing §115.112(e)(7) DFW area and HGB area compliance provisions so that on and after January 1, 2025, affected Bexar County area fixed roof tanks that store condensate or crude oil prior to custody transfer must route vapors to a vapor recovery unit, in accordance with manufacturer instructions or industry standards consistent with good engineering practices.

§115.114 Inspection and Repair Requirements

The commission adopts revised §115.114(a) to apply the inspection requirements in that subsection to affected sources located in the Bexar County area. The compliance date for these new Bexar County requirements is January 1, 2025.

The commission adopts the addition of the Bexar County area to existing inspection requirements for fixed roof storage tanks subject to the requirements of §115.114(a)(5). Affected sources located in the Bexar County area are subject to these inspection and repair requirements starting January 1, 2025.

The commission adopts revised §115.114(c) to remove Bexar County area applicability for the storage tank inspection and repair obligations as a covered attainment county on January 1, 2025.

§115.115 Monitoring Requirements

The commission adopts the addition of the Bexar County area to the monitoring requirements in §115.115(a). The requirements apply in Bexar County beginning January 1, 2025.

§115.116 Testing Requirements

The commission adopts the addition of the Bexar County area to the current Beaumont-Port Arthur (BPA), DFW, El Paso, and HGB area VOC emission test requirements in §115.116(a). As specified in adopted §115.119(g), the requirements apply in Bexar County beginning January 1, 2025.

§115.117 Approved Test Methods

The commission adopts the addition of the Bexar County area to the list of areas for which the test methods in §115.117 apply.

§115.118 Recordkeeping Requirements

The commission adopts the addition of the Bexar County area to the list of areas for which the recordkeeping requirements in §115.118 apply. The Bexar County area is also included with the areas for which additional records must be kept to comply with §115.118(a)(6). These adopted requirements apply in Bexar County beginning January 1, 2025. Finally, an adopted provision is added to §115.118(a)(7) to require maintenance of applicable records in Bexar County for at least five years, beginning January 1, 2025.

§115.119 Compliance Schedules

For sources subject to the requirements in Subchapter B, Division 1, the commission adopts a compliance schedule for Bexar County to transition from existing requirements that apply to Bexar County as a covered attainment county to RACT requirements that apply to the Bexar County 2015 ozone NAAQS nonattainment area. Likewise, the commission adopts a compliance schedule for the DFW area to transition from RACT requirements that establish a level of control for an ozone NAAQS nonattainment area classified as serious to a level of control required for a severe ozone NAAQS nonattainment area. The commission also adopts removal of §115.119(b)(1)(C) because the compliance requirements it references are also removed due to revocation of the 1997 ozone NAAQS.

The commission adopts revised §115.119(e) to clarify that Bexar County is no longer subject to the compliance schedule for storage tank requirements in attainment counties beginning January 1, 2025, at which time, the compliance schedule in new §115.119(g) applies. Adopted new §115.119(g) specifies a compliance date that is no later than January 1, 2025 for the new Bexar County nonattainment area storage tank requirements, and existing §115.119(g) and (h) are renumbered accordingly.

The commission adopts revised §115.119(f) to specify November 7, 2025 as the compliance date for storage tanks in Wise County. Existing compliance requirements continue, and new control requirements are included in adopted new §115.112(e)(4)(D) and (5)(D).

DIVISION 2: VENT GAS CONTROL

§115.121 Emission Specifications

The commission adopts revised §115.121(a) to specify that sources with affected vent gas streams located in the Bexar County area are subject to the existing emissions specifications of the subsection, which address VOC vent gas control RACT requirements. Owners or operators of affected vent gas streams located in the Bexar County 2015 ozone NAAQS nonattainment area must comply with the emission specifications in the subsection beginning January 1, 2025, the compliance date specified in adopted new §115.129(g).

The commission adopts revised §115.121(a)(3) to specify that bakeries with affected vent gas streams located in the Bexar County area will be subject to the existing control requirements

under §115.122(a)(3).

The commission adopts revised §115.121(c) to clarify that the emission specifications for vent gas control applicable in attainment counties, which currently includes Bexar County, will no longer apply in Bexar County beginning January 1, 2025. Instead, the emissions specifications in subsection (a) apply to affected sources located in the Bexar County area beginning January 1, 2025.

§115.122 Control Requirements

The commission adopts revision of the vent gas control requirements in §115.122(a) to incorporate nonattainment area VOC RACT requirements for the Bexar County area as well as the DFW 2008 ozone NAAQS severe nonattainment area. The Bexar County area is added to the list of areas for which the control requirements in §115.122(a) apply to ensure that sources in the Bexar County area will become subject to RACT requirements for VOC from affected vent gas streams. The commission adopts changes to make Bexar County area bakeries with bakery oven vent gas streams affected by §115.121(a)(3) subject to the existing control requirements in §115.122(a)(3) so the Bexar County area is added to the list of areas for which §115.122(a)(3) applies.

The commission also adopts revised §115.122(a)(3) to address severe ozone classification requirements for the DFW 2008 ozone NAAQS nonattainment area. Existing §115.122(a)(3)(B) is amended to establish that the existing control requirements for affected bakery oven vent gas streams located in the DFW area, which were established to meet serious classification

requirements, will continue to apply through November 6, 2025. Beginning November 7, 2025, each bakery oven with an affected vent gas stream located in the DFW 2008 ozone NAAQS severe nonattainment area must reduce uncontrolled VOC emissions by at least 80%. This change is necessary to address sources that become new major sources in the DFW area due to the change in major source threshold as a result of the reclassification from serious to severe nonattainment for ozone. On the compliance date for these adopted severe area RACT provisions, affected sources in the entire DFW 2008 ozone NAAQS nonattainment area, including Wise County, become subject to the adopted severe RACT requirements in §115.122(a)(3)(B).

Existing §115.122(a)(3)(C) is amended to clarify that the requirement to reduce uncontrolled VOC emissions by at least 30% from an affected bakery's 1990 emission inventory, for those sources located in the DFW area with uncontrolled VOC emissions equal to or greater than 25 tons per calendar year and less than 50 tons per calendar year, will no longer apply to those affected sources beginning November 7, 2025. This former requirement is less stringent than the adopted severe RACT requirements in §115.122(a)(3)(B).

The commission adopts a new subparagraph for Bexar County to establish a 100 tpy RACT uncontrolled bakery oven VOC emission rate trigger that requires Bexar County sources to reduce VOC emissions by a minimum of 80%. The adopted new subparagraph is added as §115.122(a)(3)(E), and the provision formerly in §115.122(a)(3)(E) is renumbered to subparagraph (F). Adopted new §115.122(a)(3)(E) establishes control requirements for affected vent gas streams from affected bakery ovens located in the Bexar County area similar to the

control requirements for sources located in the HGB and DFW areas, provided in §115.122(a)(3)(A) and (B).

Adopted renumbered §115.122(a)(3)(F), clarifies that VOC emission reductions in the 30% to 90% range will continue to not be creditable for purposes of 30 TAC Chapter 101, Subchapter H, Division 1 for those bakeries located in the DFW area that have uncontrolled VOC emissions equal to or greater than 50 tons per calendar year through November 6, 2025, an emission control trigger transitions to 25 tons per calendar year beginning November 7, 2025. This adopted change addresses the reclassification from serious to severe ozone nonattainment for sources located in the DFW 2008 ozone NAAQS severe nonattainment area and the change in major source threshold from 50 to 25 tons per year of VOC.

Adopted renumbered §115.122(a)(3)(F) is also amended to add new clause (iv) to establish a 100 tpy VOC uncontrolled bakery oven emission control trigger for sources in the Bexar County area. This adopted change is necessary to address newly affected sources located in the Bexar County area and to specify that these sources will be subject to the same prohibition on creditable VOC emission reductions as those located in other ozone nonattainment areas.

The commission adopts revised §115.122(c) to stipulate that vent gas control requirements applicable in attainment counties will continue to apply in Bexar County through December 31, 2024. Beginning January 1, 2025, sources located in the Bexar County area with affected vent gas streams must comply with the requirements of §115.122(a).

§115.123 Alternate Control Requirements

The commission amends the nonattainment area alternate vent gas control VOC RACT requirements in §115.123(a) to include the Bexar County area. The commission also adopts amended §115.123(c) to specify that the alternate methods in that subsection no longer be available to persons in Bexar County beginning January 1, 2025, the date the provisions in existing §115.123(a) are applicable in the Bexar County 2015 ozone NAAQS nonattainment area. Though the alternate control requirements for vent gas streams for sources located in the Bexar County area under adopted revised §115.123(a) are similar to those in §115.123(c), the adopted change is necessary to transition the provisions applicable in Bexar County from those associated with ozone attainment counties to those required for ozone nonattainment areas.

§115.125 Testing Requirements

The commission adopts the addition of the Bexar County area in the existing flare performance test requirements in §115.125(3)(C) and the vapor combustor performance test requirements in §115.125(3)(D). These requirements will apply for sources in Bexar County beginning January 1, 2025.

§115.126 Monitoring and Recordkeeping Requirements

The commission adopts amended requirements in §115.126 to reflect Bexar County's transition from an attainment county to an ozone NAAQS nonattainment area. This includes removing Bexar County from the list of attainment counties subject to the requirements of the section and adding the Bexar County area to the list of nonattainment areas subject to the requirements of the section. Additionally, owners or operators of vapor control systems for

affected sources located in the Bexar County area will be subject to the requirements in §115.126(1), including the existing requirements for continuous monitoring and recording under subparagraph (A) and the existing requirements for flares under subparagraph (B). Owners or operators of vapor control systems for affected sources located in the Bexar County area are required to comply beginning January 1, 2025.

§115.127 Exemptions

The commission adopts revised §115.127(a) to apply the exemptions in the subsection to the Bexar County ozone nonattainment. Section 115.127(c), which currently applies to persons in Bexar County, will be amended to apply only in Aransas, Calhoun, Matagorda, San Patricio, and Travis Counties. Persons located in Bexar County who own or operate the streams identified in §115.127(c) will no longer qualify for the exemptions listed in the subsection beginning January 1, 2025, the adopted compliance date for affected sources in the Bexar County ozone nonattainment area.

§115.129 Counties and Compliance Schedules

Existing §115.129(a) specifies that the compliance date for the attainment counties listed in the subsection, which includes Bexar County, has passed and that the owner or operator of an affected source must continue to comply with the existing provisions of Division 2. Subsection (a) is adopted and revised to include a reference to adopted new §115.129(g), which provides compliance dates for owners or operators of affected sources in the Bexar County 2015 ozone NAAQS nonattainment area, to clarify that owners or operators of affected sources in Bexar County are required to continue to demonstrate compliance with the applicable provisions for

attainment counties of Subchapter B, Division 2 through December 31, 2024. To address RACT requirements that apply to newly affected sources in the Bexar County 2015 ozone NAAQS nonattainment area, owners or operators of affected sources are required to demonstrate compliance with all applicable requirements of Division 2 by no later than January 1, 2025.

The commission adopts the addition of Bexar County to the list of counties in existing §115.129(f) to specify that for an owner or operator of an affected vent gas stream that becomes subject to the vent gas control requirements on or after their compliance date specified in adopted new §115.129(g) for sources located in the Bexar County area, the owner or operator is required to comply with the requirements of the division as soon as practicable but no later than 60 days after becoming subject. Additionally, a new subsection is added to establish a January 1, 2025 compliance date in the Bexar County area for owners or operators of vent gas sources that will become subject to the requirements in Subchapter B, Division 2. The adopted compliance schedule specifies that affected entities in Bexar County must comply with existing Division 2 provisions applicable for attainment counties through December 31, 2024, and that by no later than January 1, 2025, affected entities must comply with all new adopted Division 2 provisions applicable in the Bexar County 2015 ozone NAAQS nonattainment area. The Bexar County area compliance date provision is adopted as §115.129(g), and the provision formerly in §115.129(g) is removed as obsolete since Wise County's nonattainment status has been resolved.

DIVISION 3: WATER SEPARATION

§115.131 Emission Specifications

The commission adopts revised §115.131(a) to include the Bexar County area to apply RACT for VOC water separators to affected sources located in the Bexar County ozone nonattainment area. This adopted change will subject affected sources located in the area to the existing emission specifications of the subsection beginning January 1, 2025, which is the adopted compliance date for the Bexar County area specified in adopted new §115.139(e).

The commission adopts revised §115.131(c) to clarify that VOC water separation attainment county requirements under existing subsection (c) will remain in effect for sources in Bexar County through December 31, 2024. On January 1, 2025, the emission specifications provided for under subsection (a) will apply in the Bexar County 2015 ozone nonattainment area.

§115.132 Control Requirements

The commission adopts the addition of the Bexar County area to the list of areas subject to the control requirements in §115.132(a). This change is necessary to apply ozone nonattainment area RACT requirements for VOC water separators in the Bexar County 2015 ozone NAAQS nonattainment area.

Because owners or operators of affected sources are required to comply with the control techniques to satisfy RACT specified in §115.132(a)(1) – (4) by the compliance date specified in adopted new §115.139(e), the commission adopts added language to §115.132(c) to clarify that compliance with the control requirements of that subsection for attainment counties is no

longer required for sources located in Bexar County beginning January 1, 2025. The commission adopts amendments to punctuation throughout the subsection. These adopted changes do not alter the meaning or intent of the existing rules in §115.132(c) and are adopted only to clarify meaning with appropriate sentence structure and punctuation.

§115.135 Testing Requirements

The commission adopts the addition of the Bexar County area to the list of areas subject to §115.135(a) to clarify that the Bexar County area will be subject to the existing testing requirements that currently exist for other ozone nonattainment areas under Subchapter B, Division 3. Affected sources located in the Bexar County area will become subject to the testing requirements of Division 3 beginning January 1, 2025, at which time, owners or operators of these sources will be required to begin using these methods and procedures.

§115.136 Monitoring and Recordkeeping Requirements

The commission adopts the addition of the Bexar County area to the list of areas subject to §115.136(a) to clarify that sources in the Bexar County area will be subject to the VOC water separation monitoring and recordkeeping requirements that currently exist for other ozone nonattainment areas under Subchapter B, Division 3. Owners or operators of affected sources in the affected ozone nonattainment area must conduct the appropriate monitoring and develop and maintain the appropriate records beginning January 1, 2025, as specified in adopted new §115.139(e).

§115.137 Exemptions

The commission adopts the addition of the Bexar County area to the list of areas subject to §115.137(a). This adopted change applies the exemptions that currently exist for other ozone nonattainment areas covered by Subchapter B, Division 3 to affected sources located in the Bexar County 2015 ozone NAAQS nonattainment area. Owners or operators of affected sources in the nonattainment area will be able to claim the existing exemptions under subsection (a) for their affected sources beginning January 1, 2025. These exemptions are already available for affected sources located in other ozone nonattainment areas subject to Subchapter B, Division 3 requirements.

The commission adopts revised §115.137(c) to clarify that beginning January 1, 2025, the exemptions identified in that subsection, which are associated with attainment counties, no longer apply in Bexar County.

§115.139 Counties and Compliance Schedules

Existing §115.139(a) specifies that the compliance date for the attainment counties listed in the subsection, which includes Bexar County, has passed and that the owner or operator of an affected source must continue to comply with the existing provisions of Division 3. Subsection (a) is adopted with revisions to include a reference to adopted new §115.139(e), which provides compliance dates for owners or operators of affected sources in the Bexar County 2015 ozone NAAQS nonattainment area, to clarify that owners or operators of affected sources in Bexar County are required to continue to demonstrate compliance with the applicable provisions for attainment counties of Subchapter B, Division 3 through December 31, 2024. To address RACT

requirements that apply to newly affected sources in the Bexar County 2015 ozone NAAQS nonattainment area, owners or operators of affected sources are required to demonstrate compliance with all applicable requirements of Division 3 by no later than January 1, 2025.

The commission adopts the addition of Bexar County to the list of counties specified in existing §115.139(d) to specify that for an owner or operator of an affected water separator in the Bexar County area who becomes subject to the water separation requirements on or after the compliance date specified in adopted new §115.139(e), the owner or operator is required to comply with the requirements of the division as soon as practicable but no later than 60 days after becoming subject. Additionally, new subsection (e) is adopted, establishing a January 1, 2025 compliance date in the Bexar County area for owners or operators of water separator sources subject to the requirements in Subchapter B, Division 3. The Bexar County area compliance date provision is adopted as new §115.139(e), and the provision formerly in §115.139(e) is removed as obsolete since Wise County's nonattainment status has been resolved. Adopted new §115.139(e) specifies that the owner or operator of each VOC water separator subject to Subchapter B, Division 3 in the Bexar County nonattainment area is required to comply with the requirements of existing §§115.131(c), 115.132(c), and 115.137(c) through December 31, 2024. Beginning January 1, 2025, owners or operators of affected VOC water separators are required to comply with all other applicable requirements of Division 3.

DIVISION 4: INDUSTRIAL WASTEWATER

§115.142 Control Requirements

The commission adopts amendments to §115.142 to add the Bexar County area to the list of

areas subject to the industrial wastewater control requirements in the section. This adopted change requires an owner or operator of an affected source category in the Bexar County ozone nonattainment area to control VOCs pursuant to the methods and techniques specified in the section, to the performance levels specified in the section, or both, as applicable.

In §115.142(1)(D)(ii), the commission adopts the addition of the Bexar County area to the list of areas subject to the requirements in §115.142(1)(D)(ii)(I) and (II). This adopted change is necessary to specify that the Bexar County area will be subject to the existing VOC industrial wastewater system requirements for junction boxes and vented covers that currently exist for nonattainment areas. These control requirements will apply to sources located in the Bexar County area beginning January 1, 2025.

In existing §115.142(3), the commission adopts the inclusion of the Bexar County area. This adopted change is necessary to specify that the Bexar County area will become subject to the existing VOC industrial wastewater system requirements for biotreatment units that currently exist for the other ozone nonattainment areas. These control requirements will apply to sources located in the Bexar County area beginning January 1, 2025.

§115.144 Inspection and Monitoring Requirements

The commission adopts the addition of the Bexar County area in §115.144. This adopted change ensures that owners or operators of affected sources in the Bexar County area will follow the same inspection and monitoring requirements that apply for sources in other ozone nonattainment areas covered by the division to demonstrate compliance with VOC industrial

wastewater RACT requirements. These inspection and monitoring requirements will apply to sources located in the Bexar County area beginning January 1, 2025.

Paragraph (4) is revised to add the Bexar County area to the list of areas subject to the compliance measurement and inspection requirements in §115.144(4) for industrial wastewater systems. This change is necessary to apply requirements related to RACT to newly affected sources located in the Bexar County area.

§115.146 Recordkeeping Requirements

The commission adopts revisions to §115.146 to add the Bexar County area. Beginning January 1, 2025, an owner or operator of an affected source located in the Bexar County area will be required to compile and maintain records demonstrating compliance with the applicable requirements of Subchapter B, Division 4. These requirements currently exist for other ozone nonattainment areas subject to Subchapter B, Division 4.

§115.147 Exemptions

The commission adopts revisions to §115.147 to provide operators in the Bexar County area with an option to claim an exemption from the control requirements that will otherwise be applicable to affected sources under industrial wastewater rule requirements. These exemptions are currently available for other ozone nonattainment areas under Subchapter B, Division 4 RACT rules. Owners or operators of affected sources located in the Bexar County area will be able to claim these same exemptions, if applicable, beginning January 1, 2025.

§115.149 Counties and Compliance Schedules

The commission adopts new §115.149(c) to establish a compliance date of January 1, 2025 for affected sources in the Bexar County area to comply with the applicable revised industrial wastewater rules in Subchapter B, Division 4.

DIVISION 6: BATCH PROCESSES

§115.161 Applicability

The commission adopts the addition of the Bexar County area to the existing applicability provisions in §115.161(a). Affected vent gas streams at batch process operations in the Bexar County area will become subject to the applicable requirements of Subchapter B, Division 6 beginning January 1, 2025.

§115.162 Control Requirements

The commission adopts revised §115.162 to add the Bexar County area to the list of areas subject to the control requirements in the section to specify that affected sources located in the area will be subject to the existing VOC RACT control requirements for batch process operation. Beginning January 1, 2025, affected sources must comply with the requirements for process vents, aggregate streams within a process, and once-in-always-in criteria as applicable.

§115.164 Determination of Emissions and Flow Rates

The commission adopts revised §115.164 to specify that Bexar County area affected sources are required to comply with the determination and estimation methods of §115.164 for batch process operations. These requirements for affected sources in the Bexar County area will begin

on January 1, 2025.

§115.165 Approved Test Methods and Testing Requirements

The commission adopts revised §115.165 to apply the specified test methods and testing requirements of the section to affected sources located in the Bexar County area. The same test methods and testing requirements to assess batch process rule compliance apply for other ozone nonattainment areas subject to Subchapter B, Division 6. For the Bexar County area, these requirements will apply beginning January 1, 2025.

§115.166 Monitoring and Recordkeeping Requirements

The commission adopts revised existing §115.166 to specify that affected sources located in the Bexar County area are required to monitor and keep records for at least five years at the affected source to demonstrate compliance with the applicable requirements of Subchapter B, Division 6. These monitoring and recordkeeping requirements already apply in other ozone nonattainment areas covered by the division for vapor control systems and process vents.

§115.167 Exemptions

The commission adopts the addition of a new §115.167(1)(C) to exempt Bexar County area batch process operations that have total VOC emissions, determined before control but after the last recovery device, of less than 100 tpy from all otherwise applicable batch process requirements of the division, except for §115.161(b) and §115.161(c). These exemptions already apply in the BPA ozone maintenance area and the HGB ozone nonattainment area, and these exemptions will apply to affected sources located in the Bexar County area with the VOC

emissions threshold beginning on January 1, 2025.

§115.169 Counties and Compliance Schedules

The commission adopts a new §115.169(d) that establishes a compliance date of January 1, 2025 for affected Bexar County area batch process operations that become newly subject to the requirements of Subchapter B, Division 6.

DIVISION 7: OIL AND NATURAL GAS SERVICE IN OZONE NONATTAINMENT AREAS

§115.170 Applicability

The commission adopts the addition of the Bexar County area to the applicability section of existing §115.170 of Subchapter B, Division 7. This adopted change makes existing applicable equipment in the Bexar County ozone nonattainment area subject to existing RACT requirements for sources covered by EPA's 2016 oil and gas CTG. Newly affected sources in the Bexar County area will be subject to the existing control requirements in the division beginning January 1, 2025.

§115.171 Definitions

The commission adopts a revised definition for heavy liquid service in §115.171(6) to match the criteria for heavy liquid in §115.10, which establishes a maximum combined VOC true vapor pressure limit of 0.044 pounds per square inch absolute (psia). This revision allows for consistency between the definitions in §115.10 and §115.171(6) and exemption provisions adopted in new §115.172(a)(9). The commission adopts a new definition in §115.171(17) to clarify the meaning of "wellhead" in alignment with EPA's 2016 oil and gas CTG.

The commission adopts a revised definition for intermittent bleed pneumatic controller in §115.171(9)(B) to exempt these controllers from existing bleed rate emission standards in §115.174(b)(2). This exemption aligns with EPA's 2016 oil and gas CTG and provides clarity to regulated entities to distinguish intermittent bleed from continuous bleed pneumatic controllers.

§115.172 Exemptions

The commission adopts new §115.172(a)(9)(A) – (D) to add an instrument monitoring exemption for heavy liquid service components for affected equipment in the areas listed in adopted §115.170. EPA's 2016 oil and gas CTG recommended including a heavy liquids service exemption, but this exemption was inadvertently excluded from the 2021 rulemaking to establish rules to implement the CTG (Rule Project No. 2020-038-115-AI).

The commission adopts an update to the proposed §115.172(a)(10) monitoring exemption for pressure relief devices. The revision more precisely aligns with EPA's 2016 oil and gas CTG guidance and exempts relief valves, which are routed through a closed vent system to a control device, process, or fuel gas system from the instrument monitoring requirements in §115.177(b) if an owner or operator conducts OVA inspections of affected components according to the inspection schedules and procedures in §115.177(b) and complies with either §115.172(a)(10) subparagraphs (A), (C) and (D) or subparagraph (B) repair protocol requirements. This is a change from proposal, where the owners or operators were required to comply with §115.172(a)(10) subparagraphs (A), (B), (C) and (D). The revised wording

harmonizes the rule with the EPA's CTG document, whereas the proposal wording did not match the CTG and was logically inconsistent.

The commission adopts new §115.172(e) to add an exemption from §115.177(b) instrument monitoring requirements for well sites that only contain one or more wellheads and no other additional equipment. The 2016 oil and gas CTG recommended including a fugitive monitoring exemption for these limited well sites, but this exemption was inadvertently excluded from the 2021 rulemaking that added Chapter 115, Subchapter B, Division 7 requirements (Rule Project No. 2020-038-115-AI).

The commission adopts new §115.172(f) to exempt pressure relief valves that are vented to a process or to a fuel gas system, and those that are equipped with a closed vent system routed to a control device that meets the requirements of §115.175(a)(2) and (4) of Subchapter B, Division 7, from the monitoring requirements of §115.177(b). This exemption aligns with EPA's 2016 oil and gas CTG. Addition of this new exemption is adopted to correct an error of omission in Rule Project No. 2020-038-115-AI. For closed vent systems to qualify under this adopted new subsection (f), the closed vent system must be monitored according to the requirements of §115.177.

§115.173 Compressor Control Requirements

The commission repeals former §115.173 and simultaneously adopts new §115.173 to separate centrifugal and reciprocating compressor control requirements that were recommended in

EPA's 2016 oil and gas CTG. The purpose of this adopted change is to organize the requirements in a format that makes them easier to identify and less likely to be misinterpreted. The commission adopts the reformat of this rule for clarification and correction purposes and is not adopting any changes to the existing requirements that are not recommended by the CTG. All existing control requirements specific to centrifugal compressors are adopted as new §115.173(a)(1) - (2). All existing control requirements specific to reciprocating compressor control requirements are adopted as new §115.173(b)(1) – (3). The reformatted compressor control device options and requirements are adopted as new §115.173(c)(1) – (5).

As noted in the preceding §115.170 applicability discussion, affected sources in the Bexar County area will become subject to the compressor control requirements beginning January 1, 2025. With the exception of the phrase "or rod packing" the provisions from former §115.173(1) are adopted as new §115.173(a)(1). The provisions from former §115.173(2) are adopted as new §115.173(a)(2).

The provisions from former §115.173(3)(A) are adopted as new §115.173(c). The provisions from current §115.173(3)(A)(i) are adopted as new §115.173(c)(1). The provisions from former §115.173(3)(A)(ii) are adopted as new §115.173(c)(2). The provisions from current §115.173(3)(B) are adopted as new §115.173(c)(3). The provisions from former §115.173(3)(C) are adopted as new §115.173(c)(4).

The provisions from former §115.173(3)(D) are adopted as new §115.173(b)(1). The provisions

of former §115.173(3)(E) are adopted as new §115.173(b)(2). The commission adopts a new paragraph (3) in adopted new subsection (b) to specify that owners or operators of reciprocating compressors must route VOC gases, vapors, and fumes from the equipment through a closed vent system under negative pressure at the inlet for vapors to a control device that meets the requirements of adopted new subsection (c), if the owner or operator elects to use this method as opposed to replacing the rod packing. This option is not new and was already provided for reciprocating compressors in former §115.173(3) and is also in-line with the previous requirements for routing VOC emissions to a control device or to a process under former §115.173(1).

The provisions from former §115.173(4) are adopted as new §115.173(c)(5). The provisions from former §115.173(4)(A) are adopted as new §115.173(c)(5)(A). The provisions from former §115.173(4)(B) are adopted as new §115.173(c)(5)(B).

With these adopted changes, the commission is clarifying that for both centrifugal and reciprocating compressors subject to the requirements of Subchapter B, Division 7, control of VOC emissions must employ the use of a closed vent system that is designed and operated to route all gases, vapors, and fumes from the applicable equipment to the control device under normal operation and further operated under negative pressure at the inlet for all gases, vapors, and fumes.

§115.177 Fugitive Emission Component Requirements

The commission adopts revised §115.177(b)(7) to allow a valve subject to Subchapter B,

Division 7 EPA Method 21 initial fugitive emission monitoring requirements and found not leaking during the most recent two successive monitoring surveys to be subsequently monitored on a quarterly rather than monthly basis beginning with the first month of the next calendar quarter after no leak was detected for two successive monitoring surveys. However, if the same valve were found to be leaking after initiation of monitoring on a quarterly basis, the component will have to return to its original monthly monitoring schedule and will be required to stay on this schedule until it was determined to not be leaking again for two successive months using EPA Method 21. This establishes a pathway for a less frequent monitoring schedule based on good performance. This pathway was recommended in EPA's 2016 oil and gas CTG and was intended to be included in the rules for this section adopted June 30, 2021 (Rule Project No. 2020-038-115-AI); however, the provision was inadvertently excluded from that rulemaking.

The commission adopts revised §115.177(b)(7) to codify an owner's or operator's option to satisfy the 2-year monitoring data requirement of the skip period request with valid historical monitoring data in accordance with the original rule's intent. It would be wasteful and unduly burdensome on regulated entities to disregard up to two years of valid data and require an additional two years of monitoring data when sufficient valid data is already available. This rulemaking also includes §115.177(b)(7) updates to clarify that EPA Method 21 must be used to qualify for a less frequent monitoring schedule in existing subparagraphs (A) and (B), aligning them with recommendations in EPA's 2016 oil and gas CTG.

§115.183 Compliance Schedules

The compliance schedule provisions in §115.183 were originally adopted without reference to applicable areas because only the DFW and HGB areas were subject to the rules in Division 7. Affected entities in both areas were required to comply by no later than January 1, 2023. With the adopted addition of the Bexar County area as subject to Subchapter B, Division 7 requirements, the compliance provisions must differentiate between the existing compliance schedules for the DFW and HGB areas and the adopted compliance schedule for the Bexar County area. The commission adopts amended subsections (a), (b), (d), and (e) to specify that these provisions apply in only the DFW and HGB areas. The compliance schedule for the Bexar County area is added as new subsection (g) to specify that affected Bexar County area equipment is required to comply with Subchapter B, Division 7 requirements no later than January 1, 2025.

No changes are adopted in subsections (c) and (f) because the existing compliance provisions, as written, apply to affected sources located in the Bexar County area. An owner or operator who becomes subject to the requirements of the division on or after the date specified for adopted new subsection (g) is required to comply with the requirements of Division 7 no later than 60 days after becoming subject. Demonstration of compliance with the recordkeeping required under existing §115.180(8) is required no later than 30 days after compliance with Division 7 is achieved. Finally, upon the date an owner or operator could no longer claim the exceptions in existing §115.174(e), the owner or operator is required to comply with the appropriate control requirement within 60 days.

SUBCHAPTER C: VOLATILE ORGANIC COMPOUND TRANSFER OPERATIONS

DIVISION 1: LOADING AND UNLOADING OF VOLATILE ORGANIC COMPOUNDS

§115.211 Emission Specifications

The commission adopts the addition of the Bexar County area to the list of areas subject to the emissions specifications in §115.211. The commission also adopts the addition of the Bexar County area to the list of areas subject to §115.211(1) requirements specifying a 0.09 pounds VOC per 1,000 gallons of gasoline loaded into transport vessel emission specification, which represents current RACT.

The commission adopts the addition of language to §115.211(2) referencing the definition of covered attainment counties in §115.10. This adopted addition indicates that Bexar County is not subject to the 0.17 pounds per 1,000 gallons of gasoline loaded emission specification once it is no longer defined as an attainment county, after December 31, 2024. At that time, beginning January 1, 2025, the more stringent 0.09 pounds per 1,000 gallons emission specification for the Bexar County 2015 ozone NAAQS nonattainment area is required.

§115.212 Control Requirements

The commission adopts the addition of the Bexar County area to the list of areas subject to §115.212 loading and unloading control requirements.

The commission adopts the addition of language to §115.212(b)(1) referencing the definition of covered attainment counties in §115.10to indicate that less stringent control requirements are no longer applicable in Bexar County beginning January 1, 2025. At that time, the new, more

stringent control requirements in subsection (a) apply in the Bexar County 2015 ozone NAAQS nonattainment area.

§115.213 Alternate Control Requirements

The commission adopts the addition of the Bexar County area to the list of areas subject to existing §115.213(b) requirements.

Owners and operators of loading operations in the Beaumont-Port Arthur, Dallas-Fort Worth, El Paso, and Houston-Galveston-Brazoria ozone nonattainment areas have complied with these minimum 90% overall efficient VOC loading alternative control requirements for many years. This supports the commission's determination that the minimum 90% overall efficient alternate control requirement is presumed to represent current RACT for affected Bexar County area VOC loading sources.

The commission adopts revised §115.213(c) to end the overall control option for Bexar County on January 1, 2025 when sources in the county transition from compliance with §115.212(b)(1) to §115.212(a)(1).

§115.214 Inspection Requirements

The commission adopts the addition of the Bexar County area to the list of areas subject to existing §115.214(a) inspection requirements. Additionally, the commission adopts the addition of language to §115.214(b) and §115.214(b)(1) referencing the definition of covered attainment counties in §115.10. These adopted additions indicate that once Bexar County is no longer

defined as an attainment county, after December 31, 2024, it is no longer subject to the inspection requirements in subsection (b). At that time, beginning January 1, 2025, the inspection requirements in subsection (a) apply in the Bexar County 2015 ozone NAAQS nonattainment area.

The commission adopts revised §115.214(b)(1) to state that the inspection requirements no longer apply in Bexar County beginning January 1, 2025.

§115.216 Monitoring and Recordkeeping Requirements

The commission adopts the addition of the Bexar County area to existing §115.216 monitoring and recordkeeping requirements. Bexar County is subject to this section as an attainment county, but it will no longer be defined as an attainment county after December 31, 2024.

§115.217 Exemptions

The commission adopts revisions to §115.217(a) exemptions to provide operators in the Bexar County area with an option to claim that exemption. Additionally, the commission adopts the addition of language to §115.217(b) referencing the definition of covered attainment counties in §115.10. This adopted addition indicates that once Bexar County is no longer defined as an attainment county, after December 31, 2024, exemptions in subsection (b) no longer apply. At that time, beginning January 1, 2025, the exemptions in subsection (a) apply in the Bexar County 2015 ozone NAAQS nonattainment area.

The commission also adopts revised §115.217(b)(1) to clarify that Bexar County is no longer

included in the exception from the covered attainment county exemption beginning January 1, 2025.

§115.219 Counties and Compliance Schedules

The commission adopts renumbering former §115.219(f) as new §115.219(g) with adopted language revisions and adopts new §115.219(f) that specifies affected sources in the Bexar County area must be in compliance with adopted Subchapter C, Division 1 VOC transfer operations, transport vessel and marine transfer equipment requirements no later than January 1, 2025. The adopted §115.219 revisions maintain the Bexar County compliance schedule for currently affected sources until January 1, 2025, when affected Bexar County sources must comply with the new adopted §115.219(f) provisions.

The commission adopts replacement of former §115.219(g), which is no longer a potential scenario, with a compliance schedule for sources that become subject to VOC loading and unloading provisions on or after the designated Subchapter C, Division 1 compliance date. Adopted new §115.219(g) provides a maximum 60 days for affected sources, which become subject to Subchapter C, Division 1 on or after their appropriate §115.219 compliance date, to comply with these VOC transfer operation requirements.

DIVISION 2: FILLING OF GASOLINE STORAGE VESSELS (STAGE I) FOR MOTOR VEHICLE FUEL DISPENSING FACILITIES

§115.221 Emission Specifications

The commission adopts the addition of the Bexar County area to the list of areas subject to

Stage I Motor Vehicle Fuel Dispensing Facilities RACT specifications in §115.221.

§115.222 Control Requirements

The commission adopts the addition of the Bexar County area to the list of areas subject to VOC control requirements during gasoline transfer specified in §115.222(5). These control requirements already apply to existing affected sources located in other ozone nonattainment areas covered by Subchapter C, Division 2.

The commission also adopts the addition of the Bexar County area to the list of areas subject to the VOC control requirements for storage tanks in §115.222(9). Additionally, the commission adopts added language to §115.222(10) indicating that the requirements in that paragraph, which applies in attainment counties, will no longer apply in Bexar County after December 31, 2024. This adopted addition indicates that once Bexar County is no longer defined as an attainment county, it is no longer subject to the control requirements in paragraph (10) for attainment counties.

§115.224 Inspection Requirements

The commission adopts the addition of the Bexar County area to the list of areas subject to the inspection requirements in §115.224. This amendment ensures the area will remain subject to the Stage I inspection requirements after Bexar County ceases to be defined as a covered attainment county.

§115.226 Recordkeeping Requirements

The commission adopts the addition of the Bexar County area to the list of areas subject to the recordkeeping requirements in §115.226. This amendment ensures the area will remain subject to the Stage I recordkeeping requirements after Bexar County ceases to be defined as a covered attainment county.

§115.227 Exemptions

The commission adopts the addition of the Bexar County area to the listed areas to which §115.227(1) applies. This provides Bexar County owners and operators with an option to claim exemptions from Stage I nonattainment rules, which are already available in the Beaumont-Port Arthur, Dallas-Fort Worth, El Paso and Houston-Galveston-Brazoria nonattainment areas.

The commission adopts amended §115.227(3) and (4) to clarify that affected owners and operators in Bexar County area have the option to claim the current exemption until they must comply with Stage I RACT rules on January 1, 2025.

§115.229 Counties and Compliance Schedules

The commission adopts the addition of language to existing §115.229(c) to specify that Bexar County is no longer subject to the attainment county compliance schedule in the subsection beginning January 1, 2025, the date by which affected sources in the Bexar County 2015 ozone NAAQS nonattainment area must instead comply with the nonattainment area RACT requirements in Division 2.

The commission adopts removal of former §115.229(f) that contains obsolete language (since Wise County's nonattainment status has been resolved) and insertion of new §115.229(f) language with a deadline no later than January 1, 2025 for affected sources in the Bexar County area to comply with the adopted Stage I moderate nonattainment rule requirements.

DIVISION 3: CONTROL OF VOLATILE ORGANIC COMPOUND LEAKS FROM TRANSPORT VESSELS

§115.234 Inspection Requirements

The commission adopts the addition of the Bexar County area to the listed areas subject to §115.234(a). This implements RACT and makes affected sources in the Bexar County area subject to existing transport vessel VOC leak inspection requirements currently applicable in the BPA, DFW, El Paso, and HGB areas.

§115.235 Approved Test Methods

The commission adopts the addition of the Bexar County area to the list of areas subject to testing requirements in §115.235(a) to mandate test methods required by that subsection when conducting annual vapor-tightness tests on affected Bexar County area transport vessels. Additionally, the commission adopts added language to §115.235(b),indicating that the requirements in that paragraph, which apply in attainment counties, will no longer apply in Bexar County after December 31, 2024.

The test methods are the same for §115.235(a) and (b) so affected sources will be able to use

the same test methods under each subsection.

§115.237 Exemptions

The commission adopts revisions to §115.237(a) to provide the opportunity for affected Bexar County area sources to claim the same transport vessel leak inspection exemptions provided in this subsection. Additionally, the commission adopts added language to §115.237(b), indicating that the requirements in that paragraph, which apply in attainment counties, will no longer apply in Bexar County after December 31, 2024.

§115.239 Counties and Compliance Schedules

The commission adopts new §115.239(e) to establish January 1, 2025 as the date by which owners and operators of transport vessels in the Bexar County area must comply with adopted Subchapter C, Division 3 rules. Deletion of former §115.239(e) is adopted because the status of Wise County nonattainment classification has been decided.

SUBCHAPTER D: PETROLEUM REFINING, NATURAL GAS PROCESSING AND PETROCHEMICAL PROCESSES

DIVISION 1: PROCESS UNIT TURNAROUND AND VACUUM-PRODUCING SYSTEMS IN PETROLEUM REFINERIES

§115.311 Emission Specifications

The commission adopts the addition of the Bexar County area to §115.311(a) VOC RACT emission specifications for process unit turnaround and vacuum-producing systems.

§115.312 Control Requirements

The commission adopts the addition of the Bexar County area to §115.312(a) VOC RACT emission control requirements for process unit turnaround and vacuum-producing systems. These same control requirements to satisfy RACT also apply for affected sources located in other ozone nonattainment areas currently covered by Subchapter D, Division 1. The commission also adopts the addition of a reference to §115.10, relating to Definitions, for the listed areas subject to subsection (a).

§115.315 Testing Requirements

The commission adopts the addition of the Bexar County area to existing §115.315(a) testing requirements. These same testing requirements apply for affected sources located in other ozone nonattainment areas currently covered under Subchapter D, Division 1.

§115.316 Monitoring and Recordkeeping Requirements

The commission adopts the addition of the Bexar County area to existing §115.316(a) monitoring and recordkeeping requirements. Beginning January 1, 2025, the adopted compliance date for the Bexar County ozone nonattainment area as specified in adopted new §115.139(c), owners or operators of affected sources in the area must conduct the appropriate monitoring and develop and maintain sufficient records to demonstrate compliance with all applicable requirements of Subchapter D, Division 1.

§115.319 Counties and Compliance Schedules

The commission adopts new §115.319(c) to establish a compliance schedule for affected

entities in the Bexar County 2015 ozone NAAQS nonattainment area. Compliance with the adopted Subchapter D, Division 1 rules is required for affected Bexar County sources by no later than January 1, 2025.

DIVISION 3: FUGITIVE EMISSION CONTROL IN PETROLEUM REFINING, NATURAL GAS/GASOLINE PROCESSING, AND PETROCHEMICAL PROCESSES ON OZONE NONATTAINMENT AREAS

§115.352 Control Requirements

The commission adopts the addition of the Bexar County area to §115.352 VOC RACT control requirements for fugitive emissions.

§115.353 Alternate Control Requirements

The commission adopts the addition of the Bexar County area to existing §115.353(a) nonattainment area alternate control requirements.

§115.354 Monitoring and Inspection Requirements

The commission adopts the addition of the Bexar County area to existing §115.354 VOC RACT monitoring and inspection provisions.

§115.355 Approved Test Methods

The commission adopts the addition of the Bexar County area to existing §115.355 petroleum refining, natural gas/gasoline processing and petrochemical processes approved test methods in determining compliance with Subchapter D, Division 3 provisions.

§115.356 Recordkeeping Requirements

The commission adopts the addition of the Bexar County area to existing in §115.356 petroleum refining, natural gas/gasoline processing and petrochemical processes recordkeeping requirements.

§115.357 Exemptions

The commission adopts the addition of the Bexar County area to existing §115.357 exemptions for petroleum refining, natural gas/gasoline processing, and petrochemical process sources that are able to meet specified conditions.

The commission adopts revised §115.357(15) to extend this exemption to Bexar County sources and ensure that affected sources that comply with one division of Chapter 115 regulations will not be required to comply with duplicative requirements from other Chapter 115 divisions. The paragraph references the Subchapter B, Division 7 compliance schedules in §115.183 and the revisions remove the former reference to the January 1, 2023 compliance date for the Subchapter B, Division 7 rules adopted in 2021 (2020-038-115-AI). The commission additionally adopts the addition of language indicating an affected operation must be subject to and must comply with the requirements in Subchapter B, Division 7 to be exempt from the requirements in Subchapter D, Division 3.

§115.359 Counties and Compliance Schedules

The commission adopts a new subsection §115.359(e) establishing a compliance schedule for

affected sources in the Bexar County area. Under new subsection §115.359(e), Bexar County sources subject to adopted Subchapter D, Division 3 requirements must comply no later than January 1, 2025. By adding Bexar County to §115.359(d), sources newly subject after January 1, 2025 will have 60 days to come into compliance. Additionally, the commission adopts removal of former §115.359(e) because Wise County's nonattainment status has been resolved.

SUBCHAPTER E: SOLVENT USING PROCESSES

DIVISION 1: DEGREASING PROCESSES

Contingency Measure: Degreasing VOC Limit

The commission adopts amended Subchapter E, Division 1 to establish a new limit for VOC-containing solvent for cold solvent degreasing processes, open-top vapor degreasing processes, and conveyorized degreasing processes. The adopted limit will be implemented in the DFW and/or HGB 2008 ozone NAAQS nonattainment areas when triggered for SIP contingency purposes.

§115.410 Applicability and Definitions

New language is adopted and added to the applicability requirements in §115.410(a) to indicate that the contingency requirements in Division 1 will not apply until the commission publishes notice in the *Texas Register* that the contingency measure is triggered and subsequently applies for affected sources located in the DFW area, the HGB area, or both the DFW and HGB areas. The existing control requirements of §115.412(b) will be triggered for and apply to affected sources in the DFW ozone nonattainment area upon publication in the *Texas Register* by the commission as provided in adopted renumbered §115.419(f). The existing control requirements

of §115.412(c) will be triggered for and apply to affected sources in the HGB ozone nonattainment area upon publication in the *Texas Register* by the commission as provided in adopted new §115.419(g).

The change to remove Bexar County from the list of individual counties and add the Bexar County area to the list of nonattainment areas is adopted by the commission. This change is necessary to include the Bexar County area in the list of current nonattainment areas for ozone subject to the requirements of Subchapter E, Division 1 due to the area's designation under the 2015 ozone NAAQS.

§115.411 Exemptions

The commission adopts a new subsection (b) to §115.411, to move existing rule requirements of §115.411 under an adopted new §115.411(a). This change is adopted to distinguish between the existing requirements of the section and the adopted new requirements under adopted new subsection (b) of §115.411. The existing rule requirements of §115.411 that are moved to adopted new subsection (a) are also revised to add the Bexar County ozone nonattainment area to the list of ozone nonattainment areas currently covered under Subchapter E, Division 1. This change is necessary due to the area's designation of nonattainment under the 2015 ozone NAAQS. Further, Bexar County is removed from the list of individual covered attainment counties in the existing provisions of §115.411, now adopted as new §115.411(a). The existing exemptions under §115.411, now adopted as new §115.411(a), for Bexar County as a covered attainment county will continue to apply in the Bexar County 2015 ozone NAAQS nonattainment area.

The existing rules in subsection (a) are also revised to indicate that the exemptions in that subsection will no longer be available for affected sources and operations subject to the requirements of §115.412(b) in the DFW area, of §115.412(c) in the HGB area, or of both §115.412(b) and (c) in the DFW and HGB areas, respectively, upon the compliance schedules for contingency measures specified in adopted renumbered §115.419(f), for the DFW area, or in adopted new §115.419(g), for the HGB area.

Under adopted new subsection (a)(1), the former reference to §115.412(1)(B) is adopted as §115.412(a)(1)(B). Similarly, in adopted new subsection (a)(2), the former reference to §115.412(1)(E) is adopted as §115.412(a)(1)(E). Under adopted new §115.411(a)(3), the former reference to §115.412(3)(A) is adopted as §115.412(a)(3)(A). Finally, the former reference to §115.412(1) is adopted as §115.412(a)(1) in adopted new §115.411(a)(4). See the discussion for §115.412 for similar restructuring of existing rule provisions.

Adopted new subsection (b) adds exemptions that will apply under a triggered SIP contingency requirement. If triggered, these will apply instead of the exemptions under former §115.411, now adopted as new §115.411(a), in the DFW, the HGB, or both the DFW and HGB 2008 ozone NAAQS nonattainment areas. The exemptions adopted in new §115.411(b)(1) - (3) are consistent with the existing exemptions in former §115.411(1) - (2) and (4), now adopted as new §115.411(a)(1) – (2) and (4), with the exception that, as of the compliance date in adopted renumbered §115.419(f) or in adopted new §115.419(g), or both, operations will be required to use a solvent with a VOC content of 25 grams per liter (g/l) or less. Additional minor formatting

and reference revisions are adopted to align the adopted rules with the revised structure of the section.

§115.412 Control Requirements

The commission adopts new subsections (b) and (c) in §115.412, and moves rule requirements of former §115.412(a) under adopted new §115.412(a). This change is adopted to distinguish between the former requirements of the section and the adopted new contingency measures requirements under subsections (b) and (c) of §115.412. The rule requirements of §115.412 that are moved to adopted new subsection (a) are also revised to add the Bexar County ozone nonattainment area to the list of ozone nonattainment areas currently covered under Subchapter E, Division 1. This change is necessary due to the area's designation of nonattainment under the 2015 ozone NAAQS. Further, Bexar County is removed from the list of individual covered attainment counties in former §115.412, now adopted as new §115.412(a). The control requirements under former §115.412, now adopted as new §115.412(a), for Bexar County as a covered attainment county continue to apply in the Bexar County area until December 31, 2024. Newly affected sources located in the Bexar County ozone nonattainment area will be required to demonstrate compliance with the control requirements of this section beginning January 1, 2025.

Adopted new subsection (b) establishes a VOC content limit of 25 g/l for solvent used in cold solvent cleaning, open-top vapor degreasing, and conveyorized degreasing for operations in the DFW area according to the compliance schedule in adopted renumbered §115.419(f). Adopted new subsection (c) establishes the same requirements for contingency purposes in the HGB area

according to the compliance schedule in adopted new §115.419(g). The new control requirements adopted under subsections (b) and (c), respectively, will apply in addition to existing control measures in §115.412, now adopted as §115.412(a), if triggered for contingency purposes. Additional minor formatting and reference revisions are adopted to align the adopted rules with the existing structure of the section and to make non-substantive formatting corrections.

§115.413 Alternate Control Requirements

The commission adopts a new exception to the existing alternate control requirements in §115.413 to allow for new alternate control requirements to apply in the DFW area and/or HGB area if the contingency measure for degreasing operations under Subchapter E, Division 1, is triggered. Additionally, the Bexar County ozone nonattainment area is added to the list of ozone nonattainment areas currently covered under Subchapter E, Division 1. Further, Bexar County is also removed from the list of individual covered attainment counties in existing §115.413. These alternate control requirements for owners or operators of affected sources located in the Bexar County ozone nonattainment area will take effect beginning January 1, 2025. Since only the DFW and/or HGB areas will be subject to the adopted new alternate control requirement provisions in adopted new paragraph (4), adopted language is added to §115.413 excepting paragraph (4) from applicability to all the areas subject to the section.

Pursuant to changes for the restructuring of existing rule provisions under §115.412, the commission adopts revised references to former §115.412(1) to new §115.412(a)(1) under existing paragraph (2) of §115.413. The former references to §115.412(2)(D) and §115.412(3)(A) in paragraph (3) of §115.413 are adopted as new §115.412(a)(2)(D) and (a)(3)(A), respectively.

To address SIP contingency control-related requirements under new subsections (b) and (c) of §115.412, the commission adopts a new paragraph (4) under §115.413 to specify alternate control requirements applicable in the DFW area, the HGB area, or both the DFW and HGB areas if one or both of the areas becomes subject to the control requirements in adopted new §115.412(b) and/or (c), respectively. The adopted alternate contingency control requirements will allow the use of an airless/air-tight or other alternate cleaning system approved by EPA under specified conditions if it achieves equivalent emissions reductions and is approved by the executive director of the commission.

Conditions for use of the alternate method are added under adopted new §115.413(4)(A) - (E) and relate to equipment operation, waste storage, spill cleanup, and equipment maintenance. Additional minor formatting and reference revisions are adopted to align the adopted rules with the existing structure of the section.

§115.415 Testing Requirements

To address the Bexar County area's designation as nonattainment for ozone under the 2015 ozone NAAQS, the commission adopts the inclusion of the Bexar County area in the list of ozone nonattainment areas currently subject to Subchapter E, Division 1. This change is necessary to subject affected sources located in the Bexar County area to the existing testing requirements of §115.415 for owners or operators to demonstrate compliance with the RACT requirements of the division. Bexar County is removed from the list of current attainment counties in the introductory paragraph of §115.415. There is no change to testing requirements

for owners or operators of affected sources located in the Bexar County ozone nonattainment area.

The former reference to §115.412(1) in paragraph (1) of the section is revised to §115.412(a)(1). The former references to §115.412(2)(D)(iv) and (3)(A)(ii) are also revised to new §115.412(a)(2)(D)(iv) and (a)(3)(A)(ii), respectively, in paragraph (2) of §115.415. These changes are adopted to align with the restructuring of other rule sections under Subchapter E, Division 1.

New testing provisions are adopted to establish VOC-content testing requirements to demonstrate compliance with the SIP contingency control requirements adopted in new §115.412(b) and (c). The adopted new test methods are EPA's Method 24 or alternative procedures described in 40 Code of Federal Regulations (CFR) §60.446. The adopted new test methods are added as §115.415(3), and existing paragraph (3) is renumbered to paragraph (4). Owners or operators of affected sources located in the DFW area, the HGB area, or both the DFW and HGB areas will be required to comply with these new testing requirements to verify compliance with new contingency measures, if triggered.

§115.416 Recordkeeping Requirements

To ensure compliance with the RACT requirements of Subchapter E, Division 1 for affected sources located in the Bexar County ozone nonattainment area, the commission adopts the inclusion of the Bexar County area in the list of ozone nonattainment areas currently covered under Subchapter E, Division 1 recordkeeping requirements. Bexar County is removed from the

current list of covered attainment counties concerning recordkeeping requirements for those attainment counties. Owners or operators of affected sources located in the Bexar County ozone nonattainment area are required to demonstrate compliance the recordkeeping requirements of the section beginning January 1, 2025.

In paragraph (2), the commission adds a reference to adopted new paragraph (3) of §115.415. The former reference to §115.411(5) in paragraph (3) of the section is adopted as §115.411(a)(5).

§115.419 Counties and Compliance Schedules

Bexar County is currently subject to Subchapter E, Division 1 requirements as an attainment county. The existing requirements for Bexar County as a covered attainment county will continue to apply in the Bexar County area until December 31, 2024. The commission adopts administrative changes to the compliance schedules in §115.419 to address Bexar County's change in status from a covered attainment county to an ozone nonattainment area. The existing reference to Bexar County in §115.419(b) is removed to clarify that the area is no longer part of the covered attainment counties that are listed in that subsection. Bexar County is added to the list in §115.419(a) of counties within ozone nonattainment and maintenance areas. Existing §115.419(a) specifies that the compliance date for the counties listed in that subsection has passed and that the owner or operator of an affected source must continue to comply with the existing provisions of Division 1. Including Bexar County in subsection (a) ensures there is no gap in compliance for affected sources in Bexar County during the transition time from covered attainment county to ozone nonattainment area. The compliance

obligations in Bexar County are not changed, only the area's status listing in the section.

This adopted rulemaking removes existing §115.419(f) because Wise County's attainment status has been resolved as described elsewhere in the section by section discussion. The commission adopts new subsections (f) and (g) to establish the compliance schedules for the contingency requirements for degreasing operations applicable in the DFW area, the HGB area, or both the DFW and HGB areas.

Adopted new subsections (f) and (g) provide that applicable operations in the affected area(s) must comply with the contingency control requirements, if triggered, for degreasing operations by no later than 270 days after the commission publishes notification in the *Texas Register* that the contingency measure is necessary. Adopted new subsection (f) will apply in the DFW area and adopted new subsection (g) will apply in the HGB area. The commission adopts the replacement of "nine months" in proposed section §115.419 with "270 days" in the adopted section in order to clarify the compliance date for contingency measures in the event that they are triggered. Number of days is more precise than months and allows for consistency in application and alleviates confusion associated with calculating a nine-month period that may begin and/or end outside of a defined calendar month.

The adopted rulemaking also adds a new subsection (h) to specify that an owner or operator of an affected source in the Bexar County area that becomes subject to the requirements of the division must demonstrate compliance with all applicable requirements of the division no later than 60 days after triggering applicability to the requirements of this division.

DIVISION 2: SURFACE COATING PROCESSES

§115.420 Applicability and Definitions

The commission adopts the inclusion of the Bexar County area in §115.420(a) to ensure that Division 2 surface coating process RACT requirements are applicable to affected sources in the Bexar County area. Bexar County owners or operators are required to comply with these requirements beginning January 1, 2025. The commission adopts the addition of "Bexar County" to the applicability designations in §115.420(a)(3), (5) – (7), (9), and §115.420(a)(11) - (15). Bexar County sources will be required to comply with the following current Division 2 VOC RACT surface coating categories that are not addressed in current Subchapter E, Division 5: Coil coating, Fabric coating, Vinyl coating, Can coating, Vehicle refinishing coating (body shops), Factory surface coating of flat wood paneling, Aerospace coating, Mirror backing coating, Wood parts and products coating, and Wood manufacturing coating. TCEQ was unable to confirm that applicable sources do not exist in Wise County because sources above the CTG applicability threshold may be small enough to not require registered air permits or emission inventory reporting.

The commission adopts the removal of the exceptions for Wise County in §115.420(a)(9), (10), and (13) – (15). This makes Wise County subject to the same vehicle refinishing coating (body shops), miscellaneous metal parts and products coating, mirror backing coating, wood parts and products coating, and wood manufacturing coating VOC RACT surface coating requirements as the other DFW 2008 ozone NAAQS nonattainment area counties.

§115.422 Control Requirements

The commission adopts the addition of the Bexar County area to §115.422 to make these existing surface coating VOC RACT control requirements applicable to affected sources in the Bexar County 2015 ozone NAAQS nonattainment area. The adopted rulemaking adds the Bexar County area to §115.422(6) to make these existing surface coating VOC RACT control requirements applicable to affected sources in the Bexar County area.

The commission also adopts the addition of the Bexar County area to §115.422(7) to make these existing VOC RACT control requirements applicable to paper surface coating lines, which incorporate work practices to limit VOC emissions, applicable to affected sources in the Bexar County 2015 ozone NAAQS nonattainment area.

Owners or operators of affected sources located in the Bexar County ozone nonattainment area are required to demonstrate compliance with the control requirements for surface coating processes beginning January 1, 2025. The RACT control requirements of §115.422 already exist for other ozone nonattainment areas currently covered under Subchapter E, Division 2.

§115.423 Alternate Control Requirements

The commission adopts the addition of the Bexar County area in §115.423 to make these existing surface coating VOC RACT alternate control requirements available to affected sources in the Bexar County ozone nonattainment area beginning January 1, 2025.

The commission adopts the addition of the Bexar County area in §115.423(3)(B) to make these existing surface coating efficiency testing requirements applicable to affected sources in the

Bexar County ozone nonattainment area.

§115.425 Testing Requirements

The commission adopts the addition of the Bexar County area to §115.425 and makes these existing surface coating testing and test method requirements applicable to affected sources in the Bexar County area. These testing requirements currently apply to other ozone nonattainment areas and include specified test methods, test methods for demonstrating compliance with the alternate control requirements of §115.423(3), and test methods for demonstrating compliance with the alternate emission limits of §115.421(11). Owners or operators of affected sources located in the Bexar County ozone nonattainment area are required to comply beginning January 1, 2025.

The commission adopts the addition of the Bexar County area to existing paragraph (4) which currently applies to other ozone nonattainment areas covered under Subchapter E, Division 2. The adopted revision applies existing procedures and testing requirements for determining capture efficiency to affected sources in the Bexar County ozone nonattainment area. The commission adopts amended §115.425(4)(C)(ii) to add a compliance schedule for initial capture efficiency testing for the Bexar County area of 180 days prior to the adopted compliance deadline for the Bexar County ozone nonattainment area in adopted new §115.429(f). This makes the effective deadline for affected facilities in the Bexar County 2015 ozone NAAQS nonattainment to complete such capture efficiency testing July 1, 2024, six months prior to the adopted rulemaking compliance deadline of January 1, 2025.

§115.426 Monitoring and Recordkeeping Requirements

The commission adopts the addition of the Bexar County area to §115.426 and makes these existing surface coating monitoring and recordkeeping requirements applicable to affected sources in the Bexar County ozone nonattainment area. These requirements already apply in other ozone nonattainment areas covered under Subchapter E, Division 2 and are necessary for owners or operators to demonstrate compliance with the VOC RACT requirements of the division for affected sources.

§115.427 Exemptions

The commission adopts the addition of Bexar County to §115.427 to clarify that Bexar County is now a defined ozone nonattainment area. The commission adopts the addition of Bexar County to §115.427(1)(B), and §115.427(3) to provide newly affected sources in the Bexar County ozone nonattainment area with the existing surface coating exemptions that are currently available in other ozone nonattainment areas covered under Subchapter E, Division 2. The commission adopts the deletion of the exception for Wise County in §115.427(9) and provides owners or operators of affected sources in Wise County with the option to claim an exemption that is currently available to the other Dallas-Fort Worth area counties with the same ozone nonattainment classification.

§115.429 Counties and Compliance Schedules

The commission adopts a new subsection to establish a compliance schedule for the new Bexar County ozone nonattainment area. The adopted new subsection specifies that an owner or operator of an affected surface coating process in the Bexar County area is required to

demonstrate compliance with all applicable requirements of the division by no later than January 1, 2025. The adopted new subsection also specifies that the owner or operator of a surface coating process in the Bexar county ozone nonattainment area that becomes subject to the requirements of Subchapter E, Division 2 on or after the adopted compliance date of January 1, 2025 is required to comply with all applicable requirements of the division as soon as practicable but no later than 60 days after triggering applicability to the rules of the division. The commission also adopts removal of former §115.429(f) because Wise County's nonattainment designation under the 2008 ozone NAAQS has been resolved. The new subsection applicable for the Bexar County area is added as adopted new §115.429(f).

DIVISION 3: FLEXOGRAPHIC AND ROTOGRAVURE PRINTING

§115.430 Applicability and Definitions

The commission adopts the addition of the Bexar County area to §115.430(a) to make flexographic and rotogravure printing process VOC RACT requirements under Subchapter E, Division 3 applicable to affected sources in the Bexar County area that become newly subject to the division beginning January 1, 2025.

§115.431 Exemptions

The commission adopts the addition of the Bexar County area to §115.431(a) to provide owners and operators in the Bexar County area with an option to claim exemptions from flexographic and rotogravure printing process ozone nonattainment area regulations that will otherwise apply to newly affected sources upon triggering applicability under adopted revised §115.430. These exemptions currently exist for owners or operators of affected sources located in other

ozone nonattainment areas currently covered by Subchapter E, Division 3. The adopted rulemaking also adds the DFW 2008 ozone NAAQS severe nonattainment area to §115.431(a)(2) to lower the 10-county DFW area exemption limit to its new 25 tpy major source threshold for a severe nonattainment area. This change is necessary to address the change in the area's major source threshold of VOC from 50 to 25 tpy based on the area's reclassification from serious to severe ozone nonattainment under the 2008 ozone NAAQS.

The commission adopts application of the exemption in §115.431(a)(3) to the Bexar County area to provide owners or operators of affected sources in the Bexar County area with an option to exempt all flexible package printing lines and associated cleaning operations, that will have a combined weight of total actual VOC emissions for all coatings less than 3.0 tpy, from the existing control requirements of §115.432(c) and (d). This exemption is available for other ozone nonattainment areas with affected sources subject to the control requirements of Subchapter E, Division 3.

The commission adopts revised §115.431(a)(4) to provide owners or operators the option to exempt affected sources in the Bexar County area from the existing control requirements of §115.432(c). These newly affected sources are sources that have an uncontrolled maximum potential to emit VOC of less than 25 tpy for all coatings from newly subject flexible package printing lines. This exemption is available for other affected sources located in other ozone nonattainment areas covered under Subchapter E, Division 3.

§115.432 Control Requirements

The commission adopts the addition of the Bexar County area to §115.432(a) and makes these

existing publication and packaging rotogravure and flexographic printing process VOC RACT control requirements applicable to affected sources in the Bexar County area.

The commission adopts the inclusion of the Bexar County area to §115.432(c) and makes these existing flexible packaging printing process VOC RACT control requirements applicable to affected sources in the Bexar County area. Owners or operators of affected sources in the Bexar County area are required to comply with these existing control requirements, which currently apply for affected sources located in other ozone nonattainment areas covered under Subchapter E, Division 3, beginning on the adopted compliance date specified in adopted revised §115.439. To be consistent with a rule start date in existing subsection (c) for other ozone nonattainment areas subject to the requirements of the subsection, the commission adopts a start date of January 1, 2025 for when the control requirements of the subsection will begin to apply for the Bexar County area.

§115.435 Testing Requirements

The commission adopts the addition of the Bexar County area to §115.435(a) and makes the existing testing and test method requirements of the section applicable to affected sources in the Bexar County area. This change is necessary to ensure that affected sources in the Bexar County ozone nonattainment area will be able to demonstrate compliance with the existing flexographic and rotogravure printing process VOC RACT requirements of the division.

These requirements exist for other ozone nonattainment areas currently covered by Division 3.

§115.436 Monitoring and Recordkeeping Requirements

The commission adopts changes to make the existing flexographic and rotogravure printing line monitoring and recordkeeping requirements in §115.436(a) applicable to affected sources in the Bexar County area by including the Bexar County area in §115.436(a).

The commission adopts changes to make the existing flexible package printing line monitoring and recordkeeping requirements in §115.436(c) applicable to affected sources in the Bexar County area by including the Bexar County area in §115.436(c). This change is necessary to ensure that owners or operators of affected sources, specifically flexible package printing lines, in the Bexar County area are required to conduct appropriate and sufficient monitoring and to develop and maintain appropriate and sufficient records of such actions to ensure compliance with the existing flexographic and rotogravure printing process VOC RACT requirements of Subchapter E, Division 3. Compliance is required beginning January 1, 2025. These requirements exist for other ozone nonattainment areas currently covered by Division 3.

§115.439 Counties and Compliance Schedules

The commission adopts the addition of "Bexar County" in §115.439(d) to clarify that the owner or operator of an affected source that becomes subject to the requirements of Subchapter E, Division 3 on or after its applicable compliance date must demonstrate compliance with the requirements of Division 3 as soon as practicable but no later than 60 days after the source becomes subject to the division. For affected sources in the other ozone nonattainment areas covered under Subchapter E, Division 3, the applicable compliance date of March 1, 2013 has passed, and owners or operators of sources in these other areas that become newly subject will

have up to 60 days to demonstrate compliance with the division. For newly affected sources in the Bexar County area, the adopted compliance date is specified in adopted new subsection (e). Similarly, owners or operators of sources in the Bexar County area that become newly subject to the requirements of Division 3 on or after the date specified in adopted new §115.439(e) will have up to 60 days to demonstrate compliance with the division.

The commission adopts a new §115.439(e) to establish a compliance schedule for affected sources that become newly subject to the new Bexar County ozone nonattainment area rules. Owners or operators of flexographic or rotogravure printing processes in the Bexar County area that become subject to the requirements of Division 3 must comply with the applicable requirements no later than January 1, 2025.

DIVISION 4. OFFSET LITHOGRAPHIC PRINTING

§115.440 Applicability and Definitions

The commission adopts the addition of the Bexar County area to §115.440(a) to make offset lithographic printing process VOC RACT requirements under Subchapter E, Division 4 applicable to affected sources in the Bexar County area that become newly subject to the division beginning January 1, 2025.

The commission adopts revised §115.440(b)(8)(A) by lowering the amount of VOC emissions in the definition for major printing sources for Dallas-Fort Worth counties, except Wise County, from the previous 50 tpy threshold to a 25 tpy threshold. This adopted decrease in the uncontrolled emission threshold for affected major printing sources in the DFW area excluding

Wise County takes effect on November 7, 2025. This change is necessary to address the area's severe ozone nonattainment reclassification from serious ozone nonattainment under the 2008 ozone NAAQS. The threshold of 50 tpy for purposes of subparagraph (A) continues to apply through November 6, 2025, after which the threshold of 25 tpy applies.

The commission adopts revised §115.440(b)(8)(C) to lower the amount of VOC emissions in the definition for major printing sources in Wise County to a 25 tpy threshold. This adopted decrease in the uncontrolled emission threshold for major printing sources in Wise County requires compliance on November 7, 2025. This change is necessary to align the major source threshold for Wise County with the rest of the DFW area. The threshold of 100 tpy for purposes of subparagraph (C) continues to apply through November 6, 2025, after which the threshold of 25 tpy applies.

To address the Bexar County area's designation of nonattainment for the 2015 ozone NAAQS, the commission also adopts the addition of a new §115.440(b)(8)(D) that establishes a major printing source threshold of 100 tons of VOC per calendar year for affected sources located in the Bexar County ozone nonattainment area. This applicability threshold for sources in the area applies beginning on January 1,2025.

The commission adopts revised §115.440(b)(9)(A) to lower the amount of VOC emissions in the definition for minor printing sources for Dallas-Fort Worth counties, except Wise County, from the previous threshold of less than 50 tpy to a threshold of less than 25 tpy. This adopted decrease in the uncontrolled emission threshold for affected minor printing sources in the DFW

area, excluding Wise County, takes effect on November 7, 2025. This change is necessary to address the area's severe ozone nonattainment reclassification from serious ozone nonattainment under the 2008 ozone NAAQS. The threshold of less than 50 tpy for purposes of subparagraph (A) of paragraph (9) continues to apply through November 6, 2025, after which the threshold of less than 25 tpy applies.

The commission adopts revised §115.440(b)(9)(C) to lower the amount of VOC emissions in the definition for minor printing sources in Wise County to a threshold of less than 25 tpy. This adopted decrease in the uncontrolled emission threshold for minor printing sources in Wise County requires compliance on November 7, 2025. This change is necessary to align the major source threshold for Wise County with the rest of the DFW area. The threshold of less than 100 tpy for purposes of subparagraph (C) of paragraph (9) continues to apply through November 6, 2025 after which the threshold of less than 25 tpy applies.

To address the Bexar County area's designation of nonattainment for the 2015 ozone NAAQS, the commission also adopts the addition of a new §115.440(b)(9)(D) that establishes a minor printing source threshold at less than 100 tons of VOC per calendar year for affected sources located in the Bexar County ozone nonattainment area. This applicability threshold for sources in the area applies beginning on January 1, 2025.

§115.441 Exemptions

The commission adopts the addition of the Bexar County area to §115.441(a) and provides owners or operators of affected sources in the Bexar County area with an option to exempt all

offset lithographic printing lines, with combined VOC emissions for all coatings of less than 3.0 tons per year, when uncontrolled, from the existing monitoring and recordkeeping requirements of §115.446 for offset lithographic printing processes. This exemption is available for affected sources located in other ozone nonattainment areas currently covered by Subchapter E, Division 4.

The commission adopts the addition of the Bexar County area to §115.441(b) to allow owners or operators of minor printing sources in the Bexar County area to claim exemptions from otherwise applicable control requirements under §115.442(c). These same exemptions currently exist for similar affected sources located in other ozone nonattainment areas that are also covered by Subchapter E, Division 4. Owners or operators of affected sources located in the Bexar County area will be able to claim these exemptions beginning January 1, 2025.

§115.442 Control Requirements

The commission adopts the addition of the Bexar County area to §115.442(b) to specify that the major source offset lithographic printing process VOC RACT control requirements applies to affected sources in the Bexar County area that become newly subject to the requirements of the division after triggering applicability under §115.440. This change is necessary to include the newly designated Bexar County ozone nonattainment area for purposes of the 2015 ozone NAAQS.

The commission adopts the addition of the Bexar County area to §115.442(c) to specify that the minor source offset lithographic printing process material VOC limits apply to affected sources

in the Bexar County area upon those sources triggering applicability under §115.440 and becoming newly subject to the requirements of Division 4. This change is necessary to include the newly designated Bexar County ozone nonattainment area for purposes of the 2015 ozone NAAQS.

These control requirements apply to owners or operators of affected sources in the Bexar County area subject to the requirements of the division beginning on January 1, 2025.

§115.443 Alternate Control Requirements

The commission adopts the addition of the Bexar County area to §115.443 and enables affected sources in the Bexar County area to comply with lithographic printing process alternative control requirements approved by the executive director. This offset lithographic printing alternative control requirement compliance option is already available for affected sources located in other ozone nonattainment areas covered under Subchapter E, Division 4. These alternate control provisions apply beginning January 1, 2025.

§115.445 Approved Test Methods

The commission adopts the addition of the Bexar County area to §115.445 to make the current testing and test method requirements of the section applicable to affected sources in the Bexar County area. This change is necessary to ensure that affected sources in the Bexar County ozone nonattainment area demonstrate compliance with the existing offset lithographic printing process VOC RACT requirements of the division.

These requirements exist for other ozone nonattainment areas currently covered by Division 4. Owners or operators must use these methods and procedures beginning January 1, 2025.

§115.446 Monitoring and Recordkeeping Requirements

The commission adopts the addition of the Bexar County area to §115.446(b) to specify that owners or operators of affected sources in the Bexar County area are required to conduct monitoring and develop and maintain records according to the existing requirements of §115.446(b). This adopted change is necessary to ensure compliance with the existing offset lithographic printing process VOC RACT requirements of Subchapter E, Division 4. The monitoring and recordkeeping requirements are already applicable to other affected offset lithographic printing sources in other ozone nonattainment areas covered under Division 4. Compliance with these requirements for the Bexar County area begins January 1, 2025.

§115.449 Compliance Schedules

The commission adopts the addition of a new subsection to establish a compliance schedule for the Bexar County 2015 ozone NAAQS nonattainment area that requires compliance with applicable requirements of Subchapter E, Division 4 by no later than January 1, 2025. This adopted new subsection is added as subsection (h), and former subsection (h) is renumbered to subsection (i). The compliance schedule in adopted renumbered §115.449(i) is revised to add Bexar County to the list of counties subject to the compliance provisions for affected sources that become subject to the requirements of Subchapter E, Division 4 on or after the applicable compliance date. The reference in adopted renumbered subsection (i) to §115.449 subsections covered under that provision is revised to include the adopted new subsection (h) compliance

schedule for Bexar County. Former §115.449(i), which previously provided for the publication in the *Texas Register* by the commission and the litigation concerning Wise County for the 2008 Eight-Hour Ozone NAAQS, is removed since the Wise County litigation has been resolved and this provision is no longer relevant.

DIVISION 5. CONTROL REQUIREMENTS FOR SURFACE COATING PROCESSES

The commission adopts amended Subchapter E, Division 5 to establish new traffic marking coating provisions that will be implemented in the DFW and/or HGB 2008 ozone NAAQS nonattainment areas if triggered for SIP contingency purposes. The commission adopts changes to make the current surface coating process VOC RACT requirements in this division applicable to affected sources in the Bexar County area.

§115.450 Applicability and Definitions

The commission adopts the addition of the Bexar County area in §115.450(a) and §115.450(a)(6) to expand these current surface coating process VOC RACT requirements in this division to affected sources in the Bexar County area. Owners or operators of affected sources in the Bexar County ozone nonattainment area are required to comply with the applicable requirements of the division beginning January 1, 2025.

Two exceptions are adopted in subsection (a) of §115.450 to allow for the potential applicability of contingency control measures for sources that meet either of the new specific surface coating definitions that are adopted in §115.450(c) for industrial maintenance coatings and traffic marking coatings. These contingency measures will be applicable in either or both the

DFW and HGB areas, if triggered. The adopted applicability provisions are added as new §115.450(a)(7) for industrial maintenance coatings and as §115.450(a)(8) for traffic marking coatings. Adopted formatting adjustments will be made to subsection (a) for clarity purposes.

No general definitions are adopted for subsection (b), but two new specific surface coating definitions are adopted for subsection (c). An adopted definition for industrial maintenance coating is added as §115.450(c)(3) to apply for the adopted industrial maintenance coating contingency measure in Subchapter E, Division 5. The adopted new definition for industrial maintenance coatings does not apply to coatings applied to items that meet the definition for Miscellaneous metal parts and products in §115.450(c)(6)(Q). The new adopted definition for traffic marking coating is added as §115.450(c)(10) to apply for the adopted traffic marking coating contingency measure in Subchapter E, Division 5. The adopted new definitions reflect the definitions used in national rules and the rules of other states. The existing definitions are renumbered to accommodate the adopted new definitions.

§115.451 Exemptions

Revisions to the exemptions in §115.451 are adopted to accommodate the two contingency control requirements adopted in Subchapter E, Division 5. An exception is adopted in subsection (a) to allow for the potential that the current exemptions will not apply under a contingency scenario, and new paragraphs (4) and (5) are adopted to stipulate that exemptions in existing §115.451(a)(1) – (3) will no longer apply for industrial maintenance coatings and traffic marking coatings, respectively, once either or both contingency measures are applicable in either or both the DFW and HGB areas. Additionally, a revision is adopted for the exemption

for aerosol coatings in §115.451(l) to remove that exemption for the industrial maintenance and traffic marking coatings because many of the industrial maintenance and traffic marking coatings are available in both aerosol and non-aerosol forms and the aerosol forms are commonly above the VOC limit.

For owners or operators of affected sources in the Bexar County ozone nonattainment area that become newly subject to the requirements of Subchapter E, Division 5, affected persons will be able to claim applicable exemptions beginning January 1, 2025.

§115.453 Control Requirements

Revisions are adopted to the control requirements in §115.453 to accommodate the two contingency control requirements adopted in Division 5. A provision is added to existing subsection (a) to clarify that the two adopted contingency control requirements in adopted new §115.453(f) – (i) will apply in addition to those in subsection (a) upon the compliance date specified in adopted new §115.459(e) – (h). Emissions limits for industrial maintenance coatings are adopted as new subsections (f) and (g), and emissions limits for traffic marking coatings are adopted as new subsections (h) and (i), to establish control requirements for contingency purposes applicable to certain surface coating processes in Subchapter E, Division 5.

The contingency control requirement for industrial maintenance coatings, if triggered, will set a VOC limit of 2.1 pounds per gallon or 250 grams per liter of coating (minus water and exempt solvent) to be met by applying low-VOC coatings. The limits of 2.1 pounds per gallon and 250 grams per liter are considered equivalent. The contingency control requirement for traffic

marking coatings will set a VOC content limit of 100 grams of VOC per liter of coating (minus water and exempt solvent) to be met by applying low-VOC coatings. Adopted new subsection (f) will set the industrial maintenance coatings limit for the DFW area, and adopted new subsection (g) will set the industrial maintenance coatings limit for the HGB area. Likewise, adopted new subsection (h) will set the traffic marking coatings limit for the DFW area, and adopted new subsection (i) will set the traffic marking coatings limit for the HGB area. The adopted limits, if either or both are necessary, will help achieve required emissions reductions for SIP contingency purposes.

The existing control requirements in §115.453 apply to the areas listed in the applicability provisions in §115.450, which are amended to include the Bexar County area. As such, owners or operators of affected sources in the Bexar County ozone nonattainment area must comply with the applicable control requirements in §115.453 beginning January 1, 2025.

§115.458 Monitoring and Recordkeeping Requirements

Under the monitoring and recordkeeping requirements for surface coating processes in §115.458, references to the contingency control requirements in adopted new §115.453(f) – (i) are adopted in §115.458(b)(1), recordkeeping requirements. The references are added to require that records must demonstrate compliance with the applicable VOC limits, whether the existing limits or those applicable if either or both contingency measures are triggered in either or both the DFW and HGB areas.

The existing monitoring and recordkeeping requirements in §115.458 apply to the areas listed

in the applicability provisions in §115.450, which are amended to include the Bexar County area. As such, owners or operators of affected sources in the Bexar County ozone nonattainment area are subject to the monitoring and recordkeeping requirements in §115.458 beginning January 1, 2025.

§115.459 Compliance Schedules

This adopted rulemaking amends subsection (a) to clarify that compliance with the contingency measures in adopted new §115.453(f) - (i) will not be required until the commission publishes notification in the *Texas Register* of its determination that a contingency rule is necessary. The adopted rulemaking also revises existing subsection (b), for Wise County, to clarify that the compliance date in that subsection will not apply for the adopted new contingency requirements under adopted new subsections (f) through (i) of adopted revised §115.453.

The commission adopts a new subsection to establish a compliance schedule for the Bexar County 2015 ozone NAAQS nonattainment area that requires compliance with applicable requirements of Subchapter E, Division 5 by no later than January 1, 2025. This adopted new subsection is added as subsection (c), and existing subsection (c) is renumbered to subsection (d). Adopted revisions remove existing §115.459(d) because Wise County's attainment status has been resolved, and Wise County remains designated nonattainment for the 2008 eight-hour ozone NAAQS.

Adopted new subsections (e) – (h) are added to establish the compliance schedules for the industrial maintenance coating and traffic marking coating contingency requirements that will

be applicable, if triggered, in the DFW area, the HGB area, or both areas. Adopted new subsections (e) and (f) provide that surface coating processes in the DFW area must comply with the industrial maintenance coating and/or traffic marking coating contingency control requirements, respectively, by no later than 270 days after the commission publishes notification in the *Texas Register* that one or both of the contingency measures are necessary. The commission adopts the replacement of "nine months" in proposed section §115.459 with "270 days" in the adopted section in order to clarify the compliance date for contingency measures in the event that they are triggered. Number of days is more precise than months and allows for consistency in application and alleviates confusion associated with calculating a nine-month period that may begin and/or end outside of a defined calendar month. Adopted new subsections (g) and (h) provide that surface coating processes in the HGB area must comply with the industrial maintenance coating and/or traffic marking coating contingency control requirements, respectively, by no later than 270 days after the commission publishes notification in the *Texas Register* that one or both of the contingency measures are necessary.

DIVISION 6. INDUSTRIAL CLEANING SOLVENTS

The commission adopts amended Subchapter E, Division 6 to establish a new limit for industrial cleaning solvents to be implemented in either the DFW or HGB or both 2008 ozone NAAQS nonattainment areas if triggered for SIP contingency purposes. The commission also adopts amendments to Division 6 to make the current surface coating process VOC RACT requirements in this division applicable to affected sources in the Bexar County area.

§115.460 Applicability and Definitions

The commission adopts the addition of the Bexar County area in §115.460(a) to make these existing VOC RACT requirements for industrial cleaning solvents applicable to affected sources in the Bexar County area. Owners or operators of affected sources in the Bexar County ozone nonattainment area must comply with the applicable requirements of the division beginning January 1, 2025.

Adopted language is added to the contingency rule definitions in §115.460(b) to clarify and support new industrial cleaning solvent contingency rule provisions. Adopted revisions to existing §115.460(b) contain new and amended definitions for the following: application device; application line; blanket; blanket wash; cured coating, cured ink, or cured adhesive; electronic component, electron beam ink; facility; grams of VOC per liter of material; graphic arts; gravure printing; high precision optic; hot-line tool; letterpress printing; liquid-tight food container; lithographic printing; maintenance cleaning; manufacturing process; medical device; medical or pharmaceutical work surface; non-absorbent container; on-press component; on-press screen cleaning; packaging printing; pharmaceutical product; photocurable resin; printing; removable press component; repair cleaning; repair process; roller wash; scientific instrument; screen printing; solvent cleaning operation; solvent flushing; specialty flexographic printing; stereolithography; stripping; surface preparation; and ultraviolet ink. Additionally, some of the existing definitions in §115.460 are reordered and renumbered alphabetically.

The adopted new definition for medical device is a replacement of the previous version to improve readability. The adopted revised definition for electrical and electronic components

includes new language specifying how electronic component and electrical component are defined differently for the purpose of the contingency measure provisions of the division. This allows continued use of the existing definition for existing uses while specifying a different definition as used in the rules of other states when describing use in the contingency measure portions of this division. The term solvent cleaning operation also receives additional adopted phrasing in its definition that is applicable only in the context of the contingency measure provisions to harmonize with its use in the rules of other states.

§115.461 Exemptions

The commission adopts the renumbering of the former §115.461(e) aerosol can exemption as §115.461(f) and concurrently adopts a new subsection (e) that specifies exemption provisions that will become applicable to affected sources or activities in the DFW area, the HGB area, or both, if the contingency requirements of Subchapter E, Division 6 are triggered as provided for in adopted new §115.469(d), for the DFW area, in §115.469(e) for the HGB area.

Upon triggering of the contingency requirements under adopted new §115.463(e), these new exemptions under adopted new §115.461(e) will replace those in existing §115.461(a) - (d). The commission makes clear that the provisions of adopted new subsection (e) will apply if contingency requirements are triggered, and adopted renumbered (f) will also continue to apply; otherwise, the existing provisions of subsections (a) – (d), and now adopted renumbered (f), will apply. Adopted revisions to the last sentence of existing §115.461(a) will reflect that industrial cleaning solvent emissions currently exempted under existing §115.461(b) - (d) and (e), which is concurrently adopted as renumbered (f), will continue to not count towards the 3.0

tons of VOC per calendar year exemption limit under §115.461(a).

Adopted new subsection (e)(1) specifies the types of cleaning that will be exempt in the DFW area, through adopted new subparagraphs (A) – (L), and adopted new subsection (e)(2) specifies the types of cleaning that will be exempt in the HGB area, through adopted new subparagraphs (A) – (L). In a change from proposal, §115.461(e)(2) is revised to refer to the correct cleaning solvent content limits for the HGB area in §115.463(e)(2).

For owners or operators of affected sources in the Bexar County ozone nonattainment area that become newly subject to the requirements of Subchapter E, Division 6, affected persons will be able to claim applicable exemptions beginning January 1, 2025.

§115.463 Control Requirements

Existing §115.463(a)(1) and (2) provisions limit the industrial cleaning solvent VOC content to 0.42 pounds per gallon (lb VOC/gal), which is equivalent to 50 grams/liter (g/l) or a composite partial pressure of 8.0 millimeters of mercury (mmHg) at 20 degrees Celsius, respectively. The adopted rulemaking adds a new §115.463(e) to include new requirements concerning SIP contingency measures and requirements. Adopted new §115.463(e) contains new VOC content limits listed in adopted new Figure: 30 TAC §115.463(e) that will become effective upon EPA publication of a notice in the *Federal Register* that the specified area(s) failed to attain the applicable ozone NAAQS by the attainment date or failed to demonstrate RFP, and the commission's subsequent publication in the *Texas Register* confirming that compliance with the DFW and/or HGB contingency measures is required. Compliance will be required by no later

than 270 days after *Texas Register* publication as stated in §115.469 Compliance Schedules. The commission adopts the replacement of "nine months" in proposed section §115.463 with "270 days" in the adopted section in order to clarify the compliance date for contingency measures in the event that they are triggered. Number of days is more precise than months and allows for consistency in application and alleviates confusion associated with calculating a nine-month period that may begin and/or end outside of a defined calendar month.

Owners or operators of affected sources in the Bexar County ozone nonattainment area must comply with the applicable control requirements of this division beginning January 1, 2025.

§115.465 Approved Test Methods and Testing Requirements

Minor revisions are adopted in §115.465 to update the section references to align with the structure of adopted Subchapter E, Division 6. Existing test methods and requirements in §115.465 are adopted to incorporate test methods and testing requirements for the industrial cleaning solvent contingency control measure. This includes industrial cleaning solvent VOC content and vapor pressure test methods. These requirements exist for other ozone nonattainment areas currently subject to Subchapter E, Division 6. Owners or operators of affected sources in the Bexar County 2015 ozone NAAQS nonattainment area must use these methods and procedures beginning January 1, 2025.

§115.468 Monitoring and Recordkeeping Requirements

Revisions to the existing monitoring and recordkeeping requirements in §115.468 are adopted to incorporate recordkeeping requirements for the industrial cleaning solvents contingency control measure. The recordkeeping requirements in §115.468(b)(1) are amended to specify

that records must be kept that demonstrate continuous compliance with the applicable new §115.463(e) requirements. Owners or operators of affected sources in the Bexar County ozone nonattainment area are subject to the monitoring and recordkeeping requirements of this division beginning January 1, 2025.

§115.469 Compliance Schedules

The commission adopts to combine existing §115.469(a) and (b) under adopted §115.469(a) to clarify that compliance requirements that are applicable to Wise County are identical to the requirements that are applicable to the nonattainment counties comprising the 10-County DFW nonattainment area for the 2008 severe ozone NAAQS. These same compliance requirements for the 10-county DFW 2008 ozone NAAQS severe nonattainment area are also identical to the requirements that are applicable to the eight-county HGB 2008 ozone NAAQS severe nonattainment area. In all these counties, the compliance date has passed and compliance is required, except for the adopted contingency measures, as stated in adopted new subsections (d) and (e) of this section.

The commission adopts a new §115.469(b) that establishes a compliance schedule for newly affected sources located in the Bexar County ozone nonattainment area that will become subject to the requirements of Subchapter E, Division 6 on January 1, 2025. Owners or operators of newly affected sources subject to the industrial cleaning solvent requirements of the division must comply with all applicable requirements of the division no later than January 1, 2025.

This adopted rulemaking removes existing §115.469(d) because Wise County's attainment status has been resolved, and Wise County remains designated nonattainment for the 2008 eight-hour ozone NAAQS.

The commission adopts new §115.469(d) and (e) that establishes the compliance schedules for the SIP contingency requirements concerning industrial cleaning solvents that, if triggered, will be applicable in the DFW and/or HGB area. Adopted new subsection (d) and adopted new subsection (e) specify that applicable operations in the affected area(s) will be required to comply with the new contingency control requirements adopted in new §115.463(e) for industrial cleaning solvents by no later than 270 days after the commission publishes notification in the *Texas Register* that the contingency measure is necessary. Adopted new subsection (d) will apply in the DFW area, and adopted new subsection (e) will apply in the HGB area. The commission adopts the replacement of “nine months” in proposed section §115.469 with “270 days” in the adopted section in order to clarify the compliance date for contingency measures in the event that they are triggered. Number of days is more precise than months and allows for consistency in application and alleviates confusion associated with calculating a nine-month period that may begin and/or end outside of a defined calendar month.

DIVISION 7. MISCELLANEOUS INDUSTRIAL ADHESIVES

The commission adopts changes to make the current surface coating process VOC RACT requirements in this division applicable to affected sources in the Bexar County area beginning January 1, 2025.

The commission also amends Subchapter E, Division 7 to establish a new limit for industrial adhesives to be implemented in the DFW and/or HGB 2008 ozone NAAQS nonattainment areas if triggered for SIP contingency purposes.

During review of comments submitted, TCEQ staff realized that they had omitted a portion of the intended VOC content limit tables from this proposed rulemaking, as published in the *Texas Register* on December 15, 2023 (48 TexReg 7290). The omitted content limits were included in the emissions reductions calculation in the concurrently proposed DFW and HGB Attainment Demonstration and RFP SIP revisions. In addition, staff inadvertently used inconsistent VOC content limits in the proposed rule language and the emissions reductions calculations.

As proposed and adopted in this rulemaking and the concurrently adopted DFW and HGB Attainment Demonstration and RFP SIP revisions, the VOC emissions reductions from the industrial adhesives contingency measure are documented as 1.05 tons per day (tpd) in the DFW area and 0.99 tpd in the HGB area. The Executive Director intends to immediately initiate an Industrial Adhesives Contingency Measure Corrections rulemaking (corrections rulemaking) for commission consideration to amend the adhesive VOC content limits in this newly adopted rulemaking to match the originally intended limits and to add additional source categories that were inadvertently excluded from the industrial adhesives category.

If adopted, the potential corrections rulemaking would result in additional VOC emissions reductions of 2.26 tpd in the DFW area and 2.13 tpd in the HGB area resulting in final emissions

reductions of 3.31 tpd in the DFW area and 3.12 tpd in the HGB area. Therefore, if adopted, the corrections rulemaking would restore the emissions reductions to the amounts described in the contingency plan narratives in the concurrently proposed and adopted DFW AD SIP revision (Project 2023-107-SIP-NR), the HGB AD SIP revision (Project 2023-110-SIP-NR), and the DFW-HGB RFP SIP revision (Project 2023-108-SIP-NR).

If proposed and adopted, the corrections rulemaking would amend Table 1 of Figures 30 TAC §115.473(e) and (f) as shown below by adding underlined text, deleting text marked with strikethrough, and revising the first column name for clarity. If proposed and adopted, the corrections rulemaking would also add definitions to 30 TAC §115.470(b) for adhesive categories inadvertently omitted.

Table 1.	
Application Specific Adhesives	Grams of volatile organic compounds (VOC) per liter adhesive
Architectural Applications	
Building Envelope Membrane Adhesive	250
Carpet Pad Adhesive	50
Ceramic Glass, Porcelain, & Stone Tile Adhesive	65
Cove Base Adhesive	50
Dry Wall and Panel Adhesive	50
Multi-Purpose Construction Adhesives	70
Roofing	
Hot Applied Modified Bitumen/Built Up Roof Adhesive	30
EPDM/TPO Single Ply Roof Membrane Adhesive	250
Single Ply Roof Membrane Adhesive (Except EPDM/TPO)	250
Shingle Laminating Adhesive	30

Table 1.	
Application Specific Adhesives	Grams of volatile organic compounds (VOC) per liter adhesive
All Other Roof Adhesives	250
Rubber Floor Adhesive	60
Structural Glazing Adhesive	100
Structural Wood Member Adhesive	140
Subfloor Adhesive	50
VCT and Asphalt Tile Adhesive	50
Wood Flooring Adhesive	20
All Other Indoor Floor Covering Adhesives	50
All Other Outdoor Floor Covering Adhesives	50
Computer Diskette Manufacturing Adhesive	350
Contact Adhesive	80
Edge Glue Adhesive	250
Plastic Welding Cement	
ABS Welding Cement	325
ABS to PVC Transition Cement	425
CPVC Welding Cement	400
CPVC For Life-Safety Systems	490
Higher Viscosity CPVC	400
PVC Welding Cement	425
All Other Plastic Welding Cements	100
Rubber Vulcanization Adhesive	250
Special Purpose Contact Adhesive	250
Thin Metal Laminating Adhesive	780
Tire Tread Adhesive	100
Top and Trim Adhesive	250
Waterproof Resorcinol Glue	170
All Other Adhesives	250

Since the fiscal note information published in the proposal for the 30 TAC Chapter 115

rulemaking (Project No. 2023-116-115-AI), reflected the cost per ton of VOC to achieve the intended emissions reductions, as documented in the concurrently proposed DFW and HGB Attainment Demonstration and RFP SIP revisions, the public has already been informed of all expected costs to affected businesses that would result if the corrections rulemaking were proposed and adopted.

§115.470 Applicability and Definitions

The commission adopts the addition of the Bexar County area in §115.450(a) to make these current industrial adhesives VOC RACT requirements applicable to affected sources in the Bexar County area beginning January 1, 2025.

Adopted language is added to expand applicability from application processes in §115.473(a) to all of §115.473 with the adopted revision of the citation in §115.470(a) from §115.473(a) to §115.473. This expansion allows applicability to be extended to the adopted new adhesives contingency measure, if triggered. Also, under §115.470, a new term and definition are adopted as §115.470(b)(43) for specialty adhesives, and the existing definitions are renumbered accordingly.

§115.471 Exemptions

Exceptions to the existing exemptions in §115.471(a) – (c) are adopted to allow for the potential that existing exemptions will not apply under a contingency scenario, and the term "applicable" is added to existing subsection (c) to clarify that the appropriate VOC content limit must be considered to determine whether an adhesive application process qualifies for exemption.

Adopted new §115.471(d) is added to stipulate that the exemptions in §115.471(a) – (c) will no longer be available under a contingency scenario in either the DFW or HGB area, or both areas, and to allow exemptions for applicable processes if the adhesives contingency control requirements apply. Adopted exemptions are listed in new paragraphs (1) and (2) of adopted new §115.471(d) and include an exemption in new paragraph (1) from all but the applicable monitoring and recordkeeping requirements if it can be demonstrated that the total volume of noncompliant products is less than 55 gallons per calendar year. Adopted new paragraph (1) also stipulates that the paragraph may not be used to exclude noncompliant adhesives used in architectural applications; contact adhesives; special purpose contact adhesives; adhesives used on porous substrates; rubber vulcanization adhesives, and top and trim adhesives. Finally, adopted new paragraph (2) provides exemptions for 10 adhesive application processes if the adhesives contingency control requirements apply.

§115.473 Control Requirements

Adopted contingency control requirements are added to §115.473 for adhesive application processes. To allow for the contingency control requirements to apply, an adopted provision is added to the existing subsection (a) requirements to clarify that the requirements in that subsection will be replaced by the contingency requirements in adopted new subsections (e) or (f) if they are required for contingency purposes in the DFW area or HGB area, respectively. Adopted emissions limits for contingency are added as subsection (e) for the DFW area and (f) for the HGB area. The adopted contingency control requirements are the same for both areas and establish VOC emissions limits for application processes specified in the tables in adopted §115.473(e) and §115.473(f) for which adhesives and adhesive primers are used. The adopted

control requirements also specify that the limits must be met by applying low-VOC adhesives or adhesive primers.

§115.475 Approved Test Methods and Testing Requirements

Revisions to the existing test methods and requirements in §115.475 are adopted to incorporate test methods and testing requirements for the adhesives contingency control measure. This includes test methods for reactive adhesives, subparagraph (B), and all other applicable adhesives, paragraph (1).

§115.478 Monitoring and Recordkeeping Requirements

Revisions to the existing monitoring and recordkeeping requirements in §115.468 are adopted to incorporate recordkeeping requirements for the miscellaneous industrial adhesives contingency control measure. The recordkeeping requirements in §115.478(b)(1) are amended to specify that records must be kept that demonstrate continuous compliance with the applicable new §115.473(e) – (f) requirements.

§115.479 Compliance Schedules

The commission adopts removal of former subsection (b) and adds Wise County to the list of counties covered under existing subsection (a) to further specify that the compliance date for all listed counties has passed, and compliance is required, except for the adopted contingency measures, as stated in adopted new subsections (c) and (d) of this section. Former subsection (c) is concurrently adopted to be renumbered as subsection (b).

This adopted rulemaking removes existing §115.479(d) because Wise County's attainment status has been resolved, and Wise County remains designated nonattainment for the 2008 eight-hour ozone NAAQS. The removal of this language allows for greater clarity in the rules for this division and removes any doubt concerning the nonattainment status of Wise County.

Adopted new subsections (c) and (d) are added to establish the compliance schedules for the adhesives contingency requirements that, if a triggered as contingency, will be applicable in the DFW area, the HGB area, or both areas. Adopted new subsections (c) and (d) provide that applicable operations in the affected area(s) must comply with the adhesives contingency control requirements by no later than 270 days after the commission publishes notification in the *Texas Register* that the contingency measure is required. Adopted new subsection (c) will apply in the DFW area, and adopted new subsection (d) will apply in the HGB area. The commission adopts the replacement of “nine months” in proposed section §115.479 with “270 days” in the adopted section in order to clarify the compliance date for contingency measures in the event that they are triggered. Number of days is more precise than months and allows for consistency in application and alleviates confusion associated with calculating a nine-month period that may begin and/or end outside of a defined calendar month.

The commission adopts a new §115.479(e) rule to establish a compliance schedule for the new Bexar County area industrial adhesives nonattainment rules. Owners or operators of affected sources that become subject to the applicable requirements of Subchapter E, Division 7 must demonstrate compliance with all applicable requirements of the division beginning January 1,

2025.

SUBCHAPTER F. MISCELLANEOUS INDUSTRIAL SOURCES.

DIVISION 1. USE OF ASPHALT

Division Title

The commission adopts amended Subchapter F, Division 1 to change the name from "Cutback Asphalt" to "Use of Asphalt." Since its inception, the division has contained requirements pertaining to the use of both cutback and emulsified asphalt, not just cutback asphalt. This name change brings the division title in line with its content and alleviates confusion with its applicability to the production of various types of asphalt.

Contingency Measure: Emulsified Asphalt

The commission adopts amended Subchapter F, Division 1 to define and establish a new contingency rule limit for emulsified asphalt in the DFW and/or HGB 2008 ozone nonattainment areas.

§115.510 Cutback Asphalt Definitions

The commission adopts the deletion of "Cutback Asphalt" and "Cutback" from the title and first line of adopted §115.510, respectively, to clarify that both cutback and emulsified asphalt materials are subject to the commission's adopted Subchapter F, Division 1 requirements. The commission adopts insertion of "Use of" immediately after "relating to" in the first line of adopted §115.510 for clarification purposes. The commission also adopts a revision to the existing §115.510(1) definition to clarify that emulsified asphalt is an interchangeable term for

asphalt emulsion.

§115.512 Control Requirements

The commission adopts the division of §115.512 into subsections (a) and (b) that contain existing control provisions and new contingency control requirements, respectively. The commission adopts the addition of the Bexar County area to §115.512(a) and makes these existing cutback asphalt VOC RACT control requirements applicable to affected sources in the Bexar County area. Additionally, the commission adopts the addition of the Bexar County area to §115.512(a)(2) and makes these existing cutback asphalt VOC RACT control requirements applicable to affected sources in the Bexar County area.

The commission adopts new language at the beginning of §115.512(a)(3) to clarify that the existing rule for emulsified asphalt VOC content limits no longer applies when a VOC contingency rule is triggered. Finally, non-substantive changes are adopted in §115.512(a)(3)(B) – (D) to align terms in the existing asphalt emulsion VOC limits with industry standard terminology and with terms used in the adopted contingency measure subsection §115.512(b).

The commission adopts new subsection (b) language to establish and differentiate more stringent contingency rule control requirements from existing §115.512(a) VOC content limits during the local ozone season. Adopted new §115.512(b) language specifies that the asphalt contingency rule VOC content limits are applicable when the commission publishes notification in the *Texas Register*. Newly Adopted §115.512(b)(1) and (2) provisions establish an emulsified asphalt 0.5% by volume VOC contingency limit in the DFW and HGB areas during their unique

ozone season, respectively. The non-ozone season emulsified asphalt limits for the DFW area are the same as §115.512(a)(3) and are repeated in §115.512(b)(1) as new subparagraphs (A) – (D) for clarity. The non-ozone season limits include the same industry standard terminology updates adopted in §115.512(a)(3)(B) – (D). Since the HGB area has a year-round ozone season, there is no need to specify non-ozone season limits. The DFW area ozone season is March 1 through November 30. This is a change from the applicability period for the current non-contingency cutback asphalt regulations of April 15 to September 15. This change is necessary to align applicability of the two limits and to update the DFW ozone season to the current EPA definition.

§115.515 Testing Requirements

The commission adopts the division of §115.515 into subsections (a) and (b) that contain current test method language updates and new contingency test methods, respectively. Subsection (a) contains clarification language for existing test methods and renumbers existing paragraph (3), which allows minor test method modifications approved by the executive director, to paragraph (4). Former paragraph (3) is replaced with language allowing the use of additional test methods validated by 40 CFR 63, Appendix A, Test Method 301 and approved by the executive director.

The commission adopts new §115.515(b) to establish test methods for the contingency measure in this division. These new contingency test methods are specified in adopted §115.515(b)(1), (2), and (3). Use of American Association of State Highway and Transportation Officials (AASHTO) Test Method AASHTO T 59 is adopted because it is used in state and local emulsified

asphalt specifications to quantify VOC content by volume percent.

§115.516 Recordkeeping Requirements

The commission adopts the addition of the Bexar County area to §115.516 and makes the current cutback asphalt or asphalt emulsion recordkeeping requirements applicable to affected sources in the Bexar County area. The requirements are already applicable to affected cutback asphalt or asphalt emulsion sources in the Nueces, Bastrop, Caldwell, Hays, Travis, and Williamson Counties and the Beaumont-Port Arthur, Dallas-Fort Worth, El Paso, and Houston-Galveston areas under current VOC RACT rules.

§115.517 Exemptions

The commission adopts the addition of the Bexar County area to §115.517 and provides affected sources in the Bexar County area with the exemptions that are already applicable to affected asphalt sources located in other ozone nonattainment areas currently covered under Subchapter F, Division 1.

§115.519 Counties and Compliance Schedules

The commission adopts the consolidation of some expired DFW area RACT compliance schedules, the deletion of outdated subsections and language, the insertion of Bexar County RACT compliance schedule, and the addition of new contingency rule compliance schedules to §115.519, to harmonize the section title with the standard form used in other divisions of this chapter.

The adopted rulemaking clarifies in §115.519(a) that control requirements for cutback asphalt remain in place if a contingency measure is triggered. Compliance requirements for all ozone nonattainment counties for which the compliance date has passed are consolidated into revised §115.519(a) by adding Ellis, Johnson, Kaufman, Parker, and Rockwall Counties from current §115.519(c) and Wise County from current §115.519(d). The adopted rulemaking removes current §115.519(c) and (d) as part of the adopted consolidation.

This adopted rulemaking also removes existing §115.519(e) because Wise County's attainment status has been resolved, and Wise County remains designated nonattainment for the 2008 eight-hour ozone NAAQS. The removal of this language allows for greater clarity in the rules for this division and removes any doubt concerning the nonattainment status of Wise County.

Adopted new subsections (c) and (d) are added to establish the compliance schedules for the emulsified asphalt contingency requirements applicable in the DFW and/or HGB areas. Adopted subsections (c) and (d) provide that applicable operations in the affected area(s) must comply with the emulsified asphalt contingency control requirements by no later than 270 days after the commission publishes notification in the *Texas Register* that the contingency measure is necessary. Adopted new subsection (c) will apply in the DFW area and adopted new subsection (d) will apply in the HGB area. The commission adopts the replacement of “nine months” in proposed section §115.519 with “270 days” in the adopted section in order to clarify the compliance date for contingency measures in the event that they are triggered. Number of days is more precise than months and allows for consistency in application and alleviates confusion associated with calculating a nine-month period that may begin and/or end outside of a defined

calendar month.

The commission adopts a new §115.519(e) to establish a compliance schedule for the new Bexar County area asphalt nonattainment rules. The new compliance schedule requires compliance with the division by no later than January 1, 2025.

The commission adopts a new §115.519(f) to establish a compliance schedule for persons newly subject to the division after the applicable compliance date. Such persons have 60 days to achieve compliance after becoming subject to this division. This provision is adopted to be consistent with compliance schedule provisions in the other divisions of this subchapter.

DIVISION 2. PHARMACEUTICAL MANUFACTURING FACILITIES

§115.531 Emissions Specifications

The commission adopts the addition of Bexar County to §115.531(a) and requires affected sources in the Bexar County area to meet emission specifications applicable to synthesized pharmaceutical manufacturing facilities. These same emission specifications currently apply to similar facilities located in other ozone nonattainment areas covered by Subchapter F, Division 1 to satisfy VOC RACT requirements.

§115.532 Control Requirements

The commission adopts the addition of Bexar County in §115.532(a) and makes affected Bexar County sources subject to current nonattainment area pharmaceutical manufacturing facility VOC RACT control requirements beginning January 1, 2025.

§115.534 Inspection Requirements

The commission adopts the addition of Bexar County to §115.534(a) and makes affected sources in the Bexar County area subject to existing inspection requirements of the subsection. These requirements currently apply to affected sources located in other ozone nonattainment areas covered by the division. This adopted change is necessary to ensure that owners or operators of affected sources in the Bexar County area use the appropriate procedures necessary to show compliance with the applicable emission specifications and control requirements of the division.

§115.535 Testing Requirements

The commission adopts the addition of Bexar County in §115.535(a) and makes affected sources in the Bexar County area subject to existing nonattainment area pharmaceutical manufacturing facility VOC RACT testing requirements.

§115.536 Monitoring and Recordkeeping Requirements

The commission adopts the addition of Bexar County to §115.536(a) and requires an owner or operator of an affected source located in the Bexar County ozone nonattainment area to conduct the appropriate monitoring and to develop and maintain the appropriate records necessary to demonstrate compliance with applicable emission specifications and control requirements of Subchapter F, Division 2. These same requirements apply to affected sources located in other ozone nonattainment areas covered by the division.

§115.537 Exemptions

The commission adopts the addition of Bexar County to §115.537(a) and makes the pharmaceutical manufacturing facility exemptions available to affected sources located in the Bexar County ozone nonattainment area. These same exemptions are currently available to affected sources located in other ozone nonattainment areas covered under Subchapter F, Division 2.

§115.539 Counties and Compliance Schedules

The commission adopts a new §115.539(c) rule to establish a compliance schedule for the adopted Bexar County area pharmaceutical manufacturing facility requirements that is added to this division. The new §115.539(c) requires affected persons in Bexar County to comply with requirements in Subchapter F, Division 2 as soon as practicable, but no later than January 1, 2025.

SUBCHAPTER J. ADMINISTRATIVE PROVISIONS

DIVISION 1. ALTERNATE MEANS OF CONTROL

§115.901 Insignificant Emissions

The commission adopts to insert the language “as defined in §115.10 of this title (relating to Definitions)" immediately after "Travis Counties" in §115.901 and specify that this section no longer applies in Bexar County after December 31, 2024 when it no longer meets the definition of a covered attainment county. This clarifies that adopted §115.901, which authorizes the executive director to provide an exemption for certain insignificant emissions, no longer applies in Bexar County once Bexar County is required to comply with the VOC requirements

beginning on January 1, 2025.

§115.911 Criteria for Approval of Alternate Means of Control Plans

The commission adopts the addition of a reference to the definitions in §115.10 after each specific ozone nonattainment area reference in §115.911(3) for clarification purposes. The commission adopts the increase of the appropriate applicable emission reduction factor in §115.911(3)(B) to 1.3, since the Dallas-Fort Worth area has been reclassified as severe nonattainment for ozone under the 2008 standard. The commission adopts the renumbering of existing §115.911(3)(E) as §115.911(3)(F) and inserts a new §115.911(3)(E) provision that specifies the appropriate Bexar County area 1.15 emission reduction factor for a moderate ozone nonattainment area.

Final Regulatory Impact Determination

The commission reviewed the rule adoption in light of the regulatory impact analysis requirements of Texas Government Code, §2001.0225, and determined that the rule adoption does not meet the definition of a major environmental rule as defined in that statute, and in addition, if it did meet the definition, will not be subject to the requirement to prepare a regulatory impact analysis. A major environmental rule means a rule, the specific intent of which is to protect the environment or reduce risks to human health from environmental exposure, and that may adversely affect in a material way the economy, a sector of the economy, productivity, competition, jobs, the environment, or the public health and safety of the state or a sector of the state. Additionally, the rule adoption does not meet any of the four applicability criteria for requiring a regulatory impact analysis for a major environmental rule,

which are listed in Tex. Gov't Code Ann., §2001.0225(a). Section 2001.0225 of the Texas Government Code applies only to a major environmental rule, the result of which is to: 1) exceed a standard set by federal law, unless the rule is specifically required by state law; 2) exceed an express requirement of state law, unless the rule is specifically required by federal law; 3) exceed a requirement of a delegation agreement or contract between the state and an agency or representative of the federal government to implement a state and federal program; or 4) adopt a rule solely under the general powers of the agency instead of under a specific state law.

The specific intent of these adopted rules is to comply with federal requirements for the implementation of control strategies necessary to attain and maintain the National Ambient Air Quality Standards (NAAQS) for ozone mandated by 42 United States Code (USC), 7410, Federal Clean Air Act (FCAA), §110, and required to be included in operating permits by 42 USC, §7661a, FCAA, §502, as specified elsewhere in this preamble. The adopted rule addresses contingency measure requirements for the DFW and HGB 2008 eight-hour ozone nonattainment areas, RACT requirements for the Bexar County 2015 eight-hour ozone nonattainment area, and clarifications to rules previously adopted to address EPA's 2016 control techniques guidelines for oil and gas sources, as discussed elsewhere in this preamble. States are required to adopt State Implementation Plans (SIPs) with enforceable emission limitations and other control measures, means, or techniques, as well as schedules and timetables for compliance, as may be necessary or appropriate to meet the applicable requirements of the FCAA. As discussed in the FISCAL NOTE portion of the preamble to the proposed rulemaking associated with this adopted rulemaking action, the adopted rules are not anticipated to add any significant additional costs

to affected individuals or businesses, beyond what is necessary to attain the ozone NAAQS, on the economy, a sector of the economy, productivity, competition, jobs, the environment, or the public health and safety of the state or a sector of the state.

If a state does not comply with its obligations under 42 USC, §7410, FCAA, §110 to submit SIPs, states are subject to discretionary sanctions under 42 USC, §7410(m) or mandatory sanctions under 42 USC, §7509, FCAA, §179; as well as the imposition of a federal implementation plan (FIP) under 42 USC, §7410, FCAA, §110I. Under 42 USC, §7661a, FCAA, §502, states are required to have federal operating permit programs that provide authority to issue permits and assure compliance with each applicable standard, regulation, or requirement under the FCAA, including enforceable emission limitations and other control measures, means, or techniques, which are required under 42 USC, §7410, FCAA, §110. Similar to requirements in 42 USC, §7410, FCAA, §110, states are not free to ignore requirements in 42 USC, §7661a, FCAA, §502 and must develop and submit programs to provide for operating permits for major sources that include all applicable requirements of the FCAA. Lastly, states are also subject to the imposition of sanctions under 42 USC, §7661a(d) and (i), FCAA, §502(d) and (i) for failure to submit an operating permits program, the disapproval of any operating permits program, or failure to adequately administer and enforce the approved operating permits program.

The requirement to provide a fiscal analysis of regulations in the Texas Government Code was amended by Senate Bill (SB) 633 during the 75th legislative session in 1997. The intent of SB 633 was to require agencies to conduct a regulatory impact analysis of extraordinary rules. These are identified in the statutory language as major environmental rules that will have a

material adverse impact and will exceed a requirement of state law, federal law, or a delegated federal program, or are adopted solely under the general powers of the agency. With the understanding that this requirement would seldom apply, the commission provided a cost estimate for SB 633 that concluded "based on an assessment of rules adopted by the agency in the past, it is not anticipated that the bill will have significant fiscal implications for the agency due to its limited application." The commission also noted that the number of rules that would require assessment under the provisions of the bill was not large. This conclusion was based, in part, on the criteria set forth in the bill that exempted rules from the full analysis unless the rule was a major environmental rule that exceeds a federal law. Because of the ongoing need to meet federal requirements, the commission routinely proposes and adopts rules incorporating or designed to satisfy specific federal requirements. The legislature is presumed to understand this federal scheme. If each rule proposed by the commission to meet a federal requirement was considered to be a major environmental rule that exceeds federal law, then each of those rules would require the full regulatory impact analysis (RIA) contemplated by SB 633. Requiring a full RIA for all federally required rules is inconsistent with the conclusions reached by the commission in its cost estimate and by the Legislative Budget Board (LBB) in its fiscal notes. Since the legislature is presumed to understand the fiscal impacts of the bills it passes, and that presumption is based on information provided by state agencies and the LBB, the that the intent of SB 633 was only to require the full RIA for rules that are extraordinary in nature. While the adopted rules may have a broad impact, that impact is no greater than is necessary or appropriate to meet the requirements of the FCAA, and in fact creates no additional impacts since the adopted rules do not impose burdens greater than required to demonstrate attainment of the ozone NAAQS as discussed elsewhere in this preamble. For these reasons, the

adopted rules fall under the exception in Texas Government Code, §2001.0225(a), because they are required by, and do not exceed, federal law.

The commission has consistently applied this construction to its rules since this statute was enacted in 1997. Since that time, the legislature has revised the Texas Government Code, but left this provision substantially unamended. It is presumed that "when an agency interpretation is in effect at the time the legislature amends the laws without making substantial change in the statute, the legislature is deemed to have accepted the agency's interpretation." (Central Power & Light Co. v. Sharp, 919 S.W.2d 485, 4 89 (Tex. App. Austin 1995), writ denied with per curiam opinion respecting another issue, 960 S.W.2d 617 (Tex. 1997); Bullock v. Marathon Oil Co., 798 S.W.2d 353, 357 (Tex. App. Austin 1990, no writ). Cf. Humble Oil & Refining Co. v. Calvert, 414 S.W.2d 172 (Tex. 1967); Dudney v. State Farm Mut. Auto Ins. Co., 9 S.W.3d 884, 893 (Tex. App. Austin 2000); Southwestern Life Ins. Co. v. Montemayor, 24 S.W.3d 581 (Tex. App. Austin 2000, pet. denied); and Coastal Indust. Water Auth. v. Trinity Portland Cement Div., 563 S.W.2d 916 (Tex. 1978).) The commission's interpretation of the RIA requirements is also supported by a change made to the Texas Administrative Procedure Act (APA) by the legislature in 1999. In an attempt to limit the number of rule challenges based upon APA requirements, the legislature clarified that state agencies are required to meet these sections of the APA against the standard of "substantial compliance" (Texas Government Code, §2001.035). The legislature specifically identified Texas Government Code, §2001.0225 as falling under this standard.

As discussed in this analysis and elsewhere in this preamble, the commission has substantially complied with the requirements of Texas Government Code, §2001.0225. The adopted rules

implement the requirements of the FCAA as discussed in this analysis and elsewhere in this preamble. The adopted rules were determined to be necessary to attain the ozone NAAQS and are required to be included in permits under 42 USC, §7661a, FCAA, §502, and will not exceed any standard set by state or federal law. These adopted rules are not an express requirement of state law. The adopted rules do not exceed a requirement of a delegation agreement or a contract between state and federal government, as the adopted rules, if approved by EPA, will become federal law as part of the approved SIP required by 42 U.S.C. §7410, FCAA, §110. The adopted rules were not developed solely under the general powers of the agency but are authorized by specific sections of Texas Health and Safety Code, Chapter 382 (also known as the Texas Clean Air Act), and the Texas Water Code, which are cited in the STATUTORY AUTHORITY section of this preamble, including Texas Health and Safety Code, §§382.011, 382.012, and 382.017. Therefore, this adopted rulemaking action is not subject to the regulatory analysis provisions of Texas Government Code, §2001.0225(b).

The commission invited public comment regarding the draft regulatory impact analysis determination during the public comment period. No comments were received regarding the regulatory impact analysis determination.

Takings Impact Assessment

Under Texas Government Code, §2007.002(5), taking means a governmental action that affects private real property, in whole or in part or temporarily or permanently, in a manner that requires the governmental entity to compensate the private real property owner as provided by the Fifth and Fourteenth Amendments to the United States Constitution or §17 or §19, Article I,

Texas Constitution; or a governmental action that affects an owner's private real property that is the subject of the governmental action, in whole or in part or temporarily or permanently, in a manner that restricts or limits the owner's right to the property that would otherwise exist in the absence of the governmental action; and is the producing cause of a reduction of at least 25 percent in the market value of the affected private real property, determined by comparing the market value of the property as if the governmental action is not in effect and the market value of the property determined as if the governmental action is in effect. The commission completed a takings impact analysis for the adopted rulemaking action under the Texas Government Code, §2007.043.

The primary purpose of this adopted rulemaking action, as discussed elsewhere in this preamble, is to meet federal requirements for the implementation of control strategies necessary to attain and maintain the National Ambient Air Quality Standards (NAAQS) for ozone mandated by 42 United States Code (USC), 7410, Federal Clean Air Act (FCAA), §110, and required to be included in operating permits by 42 USC, §7661a, FCAA, §502. The adopted rule addresses contingency measure requirements for the DFW and HGB 2008 eight-hour ozone nonattainment areas, RACT requirements for the Bexar County 2015 eight-hour ozone nonattainment area, and clarifications to rules previously adopted to address EPA's 2016 control techniques guidelines for oil and gas sources, as discussed elsewhere in this preamble.

States are required to adopt State Implementation Plans (SIPs) with enforceable emission limitations and other control measures, means, or techniques, as well as schedules and timetables for compliance, as may be necessary or appropriate to meet the applicable

requirements of the FCAA. If a state does not comply with its obligations under 42 USC, §7410, FCAA, §110 to submit SIPs, states are subject to discretionary sanctions under 42 USC, §7410(m) or mandatory sanctions under 42 USC, §7509, FCAA, §179; as well as the imposition of a FIP under 42 USC, §7410, FCAA, §110(c). Under 42 USC, §7661a, FCAA, §502, states are required to have federal operating permit programs that provide authority to issue permits and assure compliance with each applicable standard, regulation, or requirement under the FCAA, including enforceable emission limitations and other control measures, means, or techniques, which are required under 42 USC, §7410, FCAA, §110. Similar to requirements in 42 USC, §7410, FCAA, §110, regarding the requirement to adopt and implement plans to attain and maintain the national ambient air quality standards, states are not free to ignore requirements in 42 USC, §7661a, FCAA, §502 and must develop and submit programs to provide for operating permits for major sources that include all applicable requirements of the FCAA. Lastly, states are also subject to the imposition of sanctions under 42 USC, §7661a(d) and (i), FCAA, §502(d) and (i) for failure to submit an operating permits program, the disapproval of any operating permits program, or failure to adequately administer and enforce the approved operating permits program.

The adopted rules will not create any additional burden on private real property beyond what is required under federal law, as the rules, when adopted by the commission and approved by EPA, will become federal law as part of the approved SIP required by 42 U.S.C. §7410, FCAA, §110. The adopted rules will not affect private real property in a manner that will require compensation to private real property owners under the United States Constitution or the Texas Constitution. The adoption also will not affect private real property in a manner that restricts

or limits an owner's right to the property that will otherwise exist in the absence of the governmental action. Therefore, the adopted rulemaking will not cause a taking under Texas Government Code, Chapter 2007.

Consistency with the Coastal Management Program

The commission reviewed the adopted rulemaking and found that the adoption is subject to the Texas Coastal Management Program (CMP) in accordance with the Coastal Coordination Act, Texas Natural Resources Code, §§33.201 et seq., and therefore must be consistent with all applicable CMP goals and policies. The commission conducted a consistency determination for the adopted rules in accordance with Coastal Coordination Act Implementation Rules, 31 TAC §505.22 and found the adopted rulemaking is consistent with the applicable CMP goals and policies. The CMP goal applicable to the adopted rulemaking is the goal to protect, preserve, and enhance the diversity, quality, quantity, functions, and values of coastal natural resource areas (31 TAC §501.12(l)). The CMP policy applicable to the adopted rulemaking is the policy that commission rules comply with federal regulations in 40 CFR, to protect and enhance air quality in the coastal areas (31 TAC §501.32). The adopted rulemaking will not increase emissions of air pollutants and is therefore consistent with the CMP goal in 31 TAC §501.12(1) and the CMP policy in 31 TAC §501.32. Promulgation and enforcement of these rules will not violate or exceed any standards identified in the applicable CMP goals and policies because the adopted rules are consistent with these CMP goals and policies and because these rules do not create or have a direct or significant adverse effect on any coastal natural resource areas. Therefore, in accordance with 31 TAC §505.22(e), the commission affirms that this rulemaking action is consistent with CMP goals and policies.

The commission invited public comment regarding the consistency with the coastal management program during the public comment period. No comments were received regarding the CMP.

Effect on Sites Subject to the Federal Operating Permits Program

Chapter 115 is an applicable requirement under 30 TAC Chapter 122, Federal Operating Permits Program. Once adopted, owners or operators of affected sites subject to the federal operating permit program must, consistent with the revision process in Chapter 122, upon the effective date of the rulemaking, revise their operating permit to include the new Chapter 115 requirements.

Public Comment

The commission held a public hearing on January 4, 2024, in Houston and a public hearing on January 11, 2024, in Arlington. A hearing was also offered on January 9, 2024, in San Antonio. The comment period opened on December 1, 2023, and closed on January 16, 2024. The commission received comments from Baker Botts LLP (Baker Botts) on behalf of their clients in the Dallas Fort Worth ozone nonattainment area, Environmental Protection Agency (EPA) Region 6, Green Environmental Consulting, Inc, North Central Texas Council of Governments (NCTCOG), Office of the Harris County Attorney, the Texas Pipeline Association (TPA), and one individual. Two commenters were in support of the proposed rulemaking action. Two commenters were against portions of the proposed rulemaking action concerning adequacy, timing and implementation of contingency measures. Five commenters provided suggested

changes concerning the correction of errors in or clarification of definitions and exemptions, revisions to proposed rules to make them consistent with the CTG or align TCEQ rules with federal rules, and revisions to allow more flexibility for fugitive monitoring with new technologies.

Response to Comments

Comment:

Baker Botts commented that the 30 TAC §115.171(9)(B) definition of pneumatic controllers contained an error and should be revised in accordance with EPA's 2016 CTG guidance to specify that intermittent pneumatic controller emissions are not subject to 30 TAC §115.174(b) standards. Baker Botts proposed revisions to the 30 TAC §115.171(9)(B) intermittent pneumatic controller definition that would accomplish this objective.

Response:

The commission reviewed the existing description for intermittent bleed or snap-acting pneumatic controller in 30 TAC §115.171(9)(B) as well as EPA's 2016 Oil and Natural Gas Industry CTG guidance. Based on review of the CTG and EPA's guidance and recommendations, TCEQ concluded that the CTG did not intend for intermittent pneumatic controller VOC emissions from required control valve activation activities to be considered when evaluating compliance for pneumatic pumps or pneumatic controllers at locations other than a natural gas processing plant. EPA's guidance recommends a bleed rate limit applies to continuous bleed pneumatic controllers, and EPA's guidance explains that intermittent controllers are assumed to have zero bleed emission due to how these

controllers function. These intermittent controllers do not have a continuous flow of natural gas, only emitting VOC during intermittent actuation, thus there is no continuous bleeding of natural gas. To ensure consistency with the CTG and EPA guidance, the commission amends the description of an intermittent bleed or snap-acting pneumatic controller in 30 TAC §115.171(9)(B) and adds a provision clarifying that these devices are not subject to the bleed rate limits in 30 TAC §115.174(b)(2).

Comment:

Baker Botts commented that TCEQ should authorize more fugitive monitoring technology flexibility in Oil and Natural Gas Industry CTG regulations in order to take advantage of improvements in fugitive monitoring technology. Baker Botts proposed alternative fugitive monitoring methodology language that would authorize substituting New Source Performance Standard (NSPS) OOOOb or other TCEQ approved alternative fugitive monitoring methodologies and frequencies in place of current 30 TAC §115.177(b) provisions.

Response:

The commission reviewed EPA's 2016 oil and gas CTG to determine if it contained provisions to authorize alternative fugitive monitoring methodology or frequencies in addition to those in current 30 TAC §115.177(b) or §115.358. TCEQ did not locate recommendations for fugitive monitoring technologies or frequencies to satisfy fugitive monitoring requirements other than those already authorized under current 30 TAC §115.177(b) or §115.358. The commission notes that the CTG recommends either optical gas imaging (OGI) or Method 21 fugitive monitoring be performed to satisfy affected monitoring

requirements at well site and boosting and gathering stations. No changes were made to the rule in response to this comment.

Comment:

TPA commented that current rule fugitive monitoring requirements go beyond CTG recommendations and should not apply to well sites and gathering and boosting stations due to the undue burden they impose on small and unmanned facilities. TPA further requested that TCEQ limit fugitive monitoring requirements to CTG recommendations and allow OGI technology to be used to satisfy all monitoring activities. TPA commented that by expanding fugitive monitoring requirement applicability to encompass well sites and gathering and boosting stations and by lowering the major source threshold, additional sites previously not subject will become subject to §115.177.

Response:

The commission has no control over the major source threshold, which is stipulated in the federal Clean Air Act and cannot be changed. Only sites intended to be regulated according to the CTG are being regulated under the current TCEQ Chapter 115 rules. The well site and gathering and boosting station fugitive monitoring requirements are derived from pages 9-40 and 9-41 of the CTG recommendations. As provided in existing 30 TAC §115.177(b)(11)(C), the commission already allows an OGI fugitive monitoring option that may be employed for all monitoring activities at well sites and gathering and boosting stations because §115.177(b)(11)(C) does not require annual Method 21 monitoring at well sites or gathering and boosting stations. No changes were made to the rule in response to

this comment.

Comment:

TPA raised a concern about the clarity of exemptions in §115.172(e) and (f), as well as other §115.172 provisions. TPA commented that current §115.172 exemptions have overly broad and unclear references that make them difficult to be fully understood. TPA requested that §115.172 exemptions list each individual citation from which an affected owner is exempt using section and subsection references to avoid ambiguity.

Response:

The exemptions in §115.172(e) and (f) apply to wellhead only sites and pressure relief valves vented to a closed-vent-system and control device components, respectively, which would otherwise be subject to §115.177(b). In response to this comment, the commission revised proposed §115.172(e) and (f) to specify that sites or components are only exempt from the monitoring requirements in §115.177(b), the provision in §115.177 that contains actual fugitive monitoring requirements. Section 115.177(a) provisions require a monitoring plan that must include a list of exemptions. Section 115.177(a) is not covered by the §115.172 exemption provisions. TCEQ has chosen to specify the exemption at the subsection level which includes all rule elements within the subsection rather than each individual citation as requested. This is standard TCEQ rule writing practice. No other changes were made in response to this comment.

Comment:

Green Environmental Consulting, Inc. recommended a revision to the proposed new definition for “Industrial Maintenance Coating” in §115.450(c)(3) to clarify that it only applies to stationary structures and does not include materials or associated activities that meet the definition of "Miscellaneous Metal Parts and Coatings".

Response:

TCEQ agrees with the recommendation and, in response to this comment, updated the §115.450(c)(3) definition to clarify that “Industrial Maintenance Coatings” only applies to stationary structures and does not apply to surface coating of items that meet the definition of "Miscellaneous Metal Parts and Products". The proposed definition listed various stationary structures without explicitly describing them as stationary and did not describe coating of items meeting the definition of "Miscellaneous Metal Parts and Products". Explicitly including this phrasing is acceptable.

Comment:

Green Environmental Consulting, Inc. recommended that the commission adjust the proposed VOC limit for industrial maintenance coatings to the EPA’s 3.8 lb VOC/gal limit cited in 40 CFR §59.402 Subpart D, Table 1. The commenter indicated that the commission’s limit of 2.1 lb of VOC/gal would be exceedingly difficult to attain given the availability of coatings with VOC concentrations below this limit. In addition, it was stated that the coatings below the proposed limit are not sufficiently capable of performing their functions under extreme conditions.

Response:

TCEQ's research on surface coatings provides evidence that the proposed VOC limit is attainable. Similar limits have been established in other states, including Maryland and New York, where manufacturers have been able to meet the proposed VOC limit for surface coatings. No changes were made to the rule in response to this comment.

Comment:

The Office of the Harris County Attorney commented that the six proposed VOC contingency measures are insignificant, not sufficient to enable the DFW and/or HGB 2008 ozone nonattainment areas to demonstrate RFP or attain the 2008 ozone NAAQS and only sufficient to fulfill the federal Clean Air Act requirement to include contingency measures in an AD SIP revision. They additionally requested that since the proposed contingency measures do not conform to EPA guidance, they should be revised to be more effective.

Response:

The commission disagrees that the proposed contingency measures require revision. The measures conform to EPA's 2008 eight-hour ozone standard SIP requirements rule, which requires measures to achieve sufficient VOC reductions to meet the calculated target amount. The 2008 eight-hour ozone standard SIP requirements rule sets the emission reduction amount at a level that EPA claims is sufficient to assist progress toward attainment, which fulfills the FCAA requirement for contingency measures. The 2008 eight-hour ozone standard SIP requirements rule does not require contingency measures to be sufficient for a nonattainment area to attain the NAAQS, but rather to assist progress toward attainment. Control measures designed to accomplish attainment are addressed in

attainment demonstration SIP revisions. See the concurrent DFW AD SIP Revision (2023-107-SIP-NR) and HGB AD SIP Revision (2023-110-SIP-NR) for discussion of the need for such measures. Staff inadvertently omitted some source categories and incorrectly stated multiple VOC content limits for other source categories in the industrial adhesives contingency measure rule proposal. This resulted in less emissions reductions available to fulfill contingency requirements in the DFW and HGB areas. The Executive Director intends to immediately initiate rulemaking for commission consideration to restore the missing and incorrect VOC content limits to achieve the reductions originally intended.
No changes were made to the rule in response to this comment.

Comment:

The Office of the Harris County Attorney commented regarding the timeframe and scope of TCEQ contingency measures. The commentor also stated that after EPA publishes a notice of finding of failure to attain or meeting RFP in the Federal Register, TCEQ must publish a notice in the *Texas Register* stating that compliance with contingency measures is required. The Office of the Harris County Attorney also noted that TCEQ's proposed rules require compliance with these contingency measures no more than nine months after the *Texas Register* publication, whereas new EPA guidance, published in March 2023, recommends contingency measure implementation within 60 days of EPA's publication. The Office of the Harris County Attorney also requested that the rules be revised to align with EPA's guidance and the intended purpose of contingency measures.

Response:

EPA's draft guidance states "actions needed to affect full implementation" of the contingency measures should occur within 60 days of EPA notification of failure to attain. However, EPA states that one year is generally an appropriate timeframe for contingency measures to achieve emission reductions. Contingency measures are intended to bridge the gap between failure to attain or meet an RFP milestone and subsequent corrective action, and 60 days is suggested as a timeline for completion of appropriate administrative and supportive components of a contingency measure. Publication in the *Texas Register* is intended to meet EPA's 60 day requirement to take action to affect full implementation, and the 270 day compliance period is intended to comply with EPA guidance to assure that reductions occur within one year. No changes were made to the rule in response to this comment.

Comment:

TPA recommended that TCEQ evaluate Texas air quality regulations for consistency with new federal regulations like NSPS OOOOb and incorporate changes to CTG-recommended requirements to match other newly promulgated federal rules. TPA specifically requested that the requirement to change reciprocating compressor rod packing every three years or 26,000 operating hours, as recommended in the CTG, be revised to match NSPS OOOOb, which only requires the reciprocating compressor rod packing to be monitored after 8,760 operating hours. TPA noted that NSPS OOOOb only requires the reciprocating compressor rod packing to be changed if warranted by the inspection.

Response:

The 40 CFR part 60, subpart OOOOb rule was published on March 8, 2024, after publication of this proposed Chapter 115 rulemaking to meet RACT and contingency measures requirements. TCEQ may evaluate opportunities to revise RACT requirements to more closely align with other federal requirements, where appropriate, during future rulemaking actions. No changes were made to the rule in response to this comment.

Comment:

EPA commented that TCEQ's process for implementation of contingency measures within the required 60 days was unclear and requested clarification.

Response:

EPA's draft contingency measure guidance states "As discussed in Section 2, in the 1992 General Preamble, EPA did address the question of how soon the for ozone should take effect, and acknowledged that certain actions, such as notification of sources, modification of permits, etc., would probably be needed before a measure could be implemented effectively. There, EPA concluded that in general, actions needed to affect full implementation of the measures should occur within 60 days after EPA notifies the State of its failure (to attain or meet RFP)."

The commission agrees in this situation that "actions needed to affect full implementation of the measures" can occur within 60 days of the EPA notice. For these contingency measures, this action would be notification to affected sources in the *Texas Register* that the measures have been triggered. Permit modifications are not anticipated to be required to

reduce emissions by using materials with lower VOC content such as coatings, degreasing and cleaning solvents, adhesives, and emulsified asphalt because, if mentioned at all, the permit would set a maximum VOC content, not a minimum.

The draft guidance also states, "EPA continues to believe that 1 year is generally the appropriate timeframe for CMs to achieve reductions because of the intended purpose of is to provide emissions reductions to bridge the gap between the failure and the subsequent corrective action." The commission is adopting a compliance date requiring compliance with the contingency measures within 270 days after notice in the *Texas Register*. TCEQ chose to require compliance within 270 days rather than a year to allow time between the EPA notification and the TCEQ notification. The commission is not requiring compliance within 60 days of EPA notice for three reasons. First, the EPA notice would be of EPA's determination of failure to attain or failure to meet an RFP milestone, but a separate notice is required from TCEQ to notify affected sources regarding which contingency measures will be triggered in which nonattainment areas. The TCEQ notice requires additional time, potentially consuming a substantial portion of a 60-day period. Second, once notified, affected sources may need additional time to acquire a supply of compliant, lower VOC materials. Third, the EPA draft guidance recommends that contingency measure reductions occur within one year of EPA notification and the 270-day compliance period will allow sources sufficient time to adjust their operations while assuring that sources are achieving reductions within one year. No changes were made in response to this comment.

SUBCHAPTER A: DEFINITIONS
§115.10

Statutory Authority

The amendments are adopted under Texas Water Code (TWC), §5.102, concerning general powers; §5.103, concerning Rules; TWC, §5.105, concerning General Policy, which authorize the commission to adopt rules necessary to carry out its powers and duties under the TWC; TWC, §7.002, concerning Enforcement Authority, which authorizes the commission to enforce the provisions of the Water Code and the Health and Safety Code within the commission's jurisdiction; and under Texas Health and Safety Code (THSC), §382.017, concerning Rules, which authorizes the commission to adopt rules consistent with the policy and purpose of the Texas Clean Air Act.

The amendments are also adopted under THSC, §382.002, concerning Policy and Purpose, which establishes the commission's purpose to safeguard the state's air resources, consistent with the protection of public health, general welfare, and physical property; THSC, §382.011, concerning General Powers and Duties, which authorizes the commission to control the quality of the state's air; and THSC, §382.012, concerning the State Air Control Plan, which authorizes the commission to prepare and develop a general, comprehensive plan for the proper control of the state's air.

The adopted amendments implement TWC, §§5.102, 5.103, 5.105 and 7.002; and THSC, §§382.002, 382.011, 382.012, and 382.017.

§115.10. Definitions.

Unless specifically defined in the Texas Clean Air Act, the terms in this chapter have the meanings commonly used in the field of air pollution control. Additionally, the following meanings apply unless the context clearly indicates otherwise. Additional definitions for terms used in this chapter are found in §3.2 and §101.1 of this title (relating to Definitions).

(1) Background--The ambient concentration of volatile organic compounds in the air, determined at least one meter upwind of the component to be monitored. Test Method 21 (40 Code of Federal Regulations Part 60, Appendix A) shall be used to determine the background.

(2) Beaumont-Port Arthur area--Hardin, Jefferson, and Orange Counties.

(3) Bexar County or Bexar County area --An area consisting of Bexar County.

(4) Capture efficiency--The amount of volatile organic compounds (VOC) collected by a capture system that is expressed as a percentage derived from the weight per unit time of VOCs entering a capture system and delivered to a control device divided by the weight per unit time of total VOCs generated by a source of VOCs.

(5) Carbon adsorption system--A carbon adsorber with an inlet and outlet for exhaust gases and a system to regenerate the saturated adsorbent.

(6) Closed-vent system--A system that:

(A) is not open to the atmosphere;

(B) is composed of piping, ductwork, connections, and, if necessary, flow-inducing devices; and

(C) transports gas or vapor from a piece or pieces of equipment directly to a control device.

(7) Coaxial system--A type of system consisting of a tube within a tube that requires only one tank opening. The tank opening allows fuel to flow through the inner tube while vapors are displaced through the annular space between the inner and outer tubes.

(8) Component--A piece of equipment, including, but not limited to, pumps, valves, compressors, connectors, and pressure relief valves, which has the potential to leak volatile organic compounds.

(9) Connector--A flanged, screwed, or other joined fitting used to connect two pipelines or a pipeline and a piece of equipment. The term connector does not include joined fittings welded completely around the circumference of the interface. A union connecting two pipes is considered to be one connector.

(10) Continuous monitoring--Any monitoring device used to comply with a continuous monitoring requirement of this chapter will be considered continuous if it can be demonstrated that at least 95% of the required data is captured.

(11) Covered attainment counties--Anderson, Angelina, Aransas, Atascosa, Austin, Bastrop, Bee, Bell, Bexar (before January 1, 2025), Bosque, Bowie, Brazos, Burleson, Caldwell, Calhoun, Camp, Cass, Cherokee, Colorado, Comal, Cooke, Coryell, De Witt, Delta, Falls, Fannin, Fayette, Franklin, Freestone, Goliad, Gonzales, Grayson, Gregg, Grimes, Guadalupe, Harrison, Hays, Henderson, Hill, Hood, Hopkins, Houston, Hunt, Jackson, Jasper, Karnes, Lamar, Lavaca, Lee, Leon, Limestone, Live Oak, Madison, Marion, Matagorda, McLennan, Milam, Morris, Nacogdoches, Navarro, Newton, Nueces, Panola, Polk, Rains, Red River, Refugio, Robertson, Rusk, Sabine, San Augustine, San Jacinto, San Patricio, Shelby, Smith, Somervell, Titus, Travis, Trinity, Tyler, Upshur, Van Zandt, Victoria, Walker, Washington, Wharton, Williamson, Wilson, and Wood Counties.

(12) Dallas-Fort Worth area--As follows:

(A) Collin, Dallas, Denton, and Tarrant Counties for:

(i) Subchapter B, Division 5 of this chapter (relating to Municipal Solid Waste Landfills);

(ii) Subchapter F, Division 3 of this chapter (relating to Degassing of Storage Tanks, Transport Vessels, and Marine Vessels);

(iii) Subchapter F, Division 4 of this chapter (relating to Petroleum Dry Cleaning Systems);

(B) Collin, Dallas, Denton, Ellis, Johnson, Kaufman, Parker, Rockwall, and Tarrant Counties for:

(i) Subchapter B, Division 4 of this chapter (relating to Industrial Wastewater);

(ii) Subchapter D, Division 1 of this chapter (relating to Process Unit Turnaround and Vacuum-Producing Systems in Petroleum Refineries);

(iii) Subchapter F, Division 2 of this chapter (relating to Pharmaceutical Manufacturing Facilities); and

(C) Collin, Dallas, Denton, Ellis, Johnson, Kaufman, Parker, Rockwall, Tarrant, and Wise Counties for all other divisions of this chapter.

(13) Dual-point vapor balance system--A type of vapor balance system in which the storage tank is equipped with an entry port for a gasoline fill pipe and a separate exit port for vapor connection.

(14) El Paso area--El Paso County.

(15) Emergency flare--A flare that only receives emissions during an upset event.

(16) External floating roof--A cover or roof in an open-top tank which rests upon or is floated upon the liquid being contained and is equipped with a single or double seal to close the space between the roof edge and tank shell. A double seal consists of two complete and separate closure seals, one above the other, containing an enclosed space between them. For the purposes of this chapter, an external floating roof storage tank that is equipped with a self-supporting fixed roof (typically a bolted aluminum geodesic dome) shall be considered to be an internal floating roof storage tank.

(17) Fugitive emission--Any volatile organic compound entering the atmosphere that could not reasonably pass through a stack, chimney, vent, or other functionally equivalent opening designed to direct or control its flow.

(18) Gasoline bulk plant--A gasoline loading and/or unloading facility, excluding marine terminals, having a gasoline throughput less than 20,000 gallons (75,708 liters) per day, averaged over each consecutive 30-day period. A motor vehicle fuel dispensing facility is not a gasoline bulk plant.

(19) Gasoline dispensing facility--A location that dispenses gasoline to motor vehicles and includes retail, private, and commercial outlets.

(20) Gasoline terminal--A gasoline loading and/or unloading facility, excluding marine terminals, having a gasoline throughput equal to or greater than 20,000 gallons (75,708 liters) per day, averaged over each consecutive 30-day period.

(21) Heavy liquid--Volatile organic compounds that have a true vapor pressure equal to or less than 0.044 pounds per square inch absolute (0.3 kiloPascal) at 68 degrees Fahrenheit (20 degrees Celsius).

(22) Highly-reactive volatile organic compound--As follows.

(A) In Harris County, one or more of the following volatile organic compounds (VOC): 1,3-butadiene; all isomers of butene (e.g., isobutene (2-methylpropene or isobutylene), alpha-butylene (ethylethylene), and beta-butylene (dimethylethylene, including both cis- and trans-isomers)); ethylene; and propylene.

(B) In Brazoria, Chambers, Fort Bend, Galveston, Liberty, Montgomery, and Waller Counties, one or more of the following VOC: ethylene and propylene.

(23) Houston-Galveston or Houston-Galveston-Brazoria area--Brazoria, Chambers, Fort Bend, Galveston, Harris, Liberty, Montgomery, and Waller Counties.

(24) Incinerator--For the purposes of this chapter, an enclosed control device that combusts or oxidizes volatile organic compound gases or vapors.

(25) Internal floating cover or internal floating roof--A cover or floating roof in a fixed roof tank that rests upon or is floated upon the liquid being contained, and is equipped with a closure seal or seals to close the space between the cover edge and tank shell. For the purposes of this chapter, an external floating roof storage tank that is equipped with a self-supporting fixed roof (typically a bolted aluminum geodesic dome) is considered to be an internal floating roof storage tank.

(26) Leak-free marine vessel--A marine vessel with cargo tank closures (hatch covers, expansion domes, ullage openings, butterworth covers, and gauging covers) that were inspected prior to cargo transfer operations and all such closures were properly secured such that no leaks of liquid or vapors can be detected by sight, sound, or smell. Cargo tank closures must meet the applicable rules or regulations of the marine vessel's classification society or flag state. Cargo tank pressure/vacuum valves must be operating within the range specified by the marine vessel's classification society or flag state and seated when tank pressure is less than 80% of set point pressure such that no vapor leaks can be detected by sight, sound, or smell. As an alternative, a marine vessel operated at negative pressure is assumed to be leak-free for the purpose of this standard.

(27) Light liquid--Volatile organic compounds that have a true vapor pressure greater than 0.044 pounds per square inch absolute (0.3 kiloPascal) at 68 degrees Fahrenheit (20 degrees Celsius), and are a liquid at operating conditions.

(28) Liquefied petroleum gas--Any material that is composed predominantly of any of the following hydrocarbons or mixtures of hydrocarbons: propane, propylene, normal butane, isobutane, and butylenes.

(29) Low-density polyethylene--A thermoplastic polymer or copolymer comprised of at least 50% ethylene by weight and having a density of 0.940 grams per cubic centimeter or less.

(30) Marine loading facility--The loading arm(s), pumps, meters, shutoff valves, relief valves, and other piping and valves that are part of a single system used to fill a marine vessel at a single geographic site. Loading equipment that is physically separate (i.e., does not share common piping, valves, and other loading equipment) is considered to be a separate marine loading facility.

(31) Marine loading operation--The transfer of oil, gasoline, or other volatile organic liquids at any affected marine terminal, beginning with the connections made to a marine vessel and ending with the disconnection from the marine vessel.

(32) Marine terminal--Any marine facility or structure constructed to transfer oil, gasoline, or other volatile organic liquid bulk cargo to or from a marine vessel. A marine terminal may include one or more marine loading facilities.

(33) Metal-to-metal seal--A connection formed by a swage ring that exerts an elastic, radial preload on narrow sealing lands, plastically deforming the pipe being connected, and maintaining sealing pressure indefinitely.

(34) Natural gas/gasoline processing--A process that extracts condensate from gases obtained from natural gas production and/or fractionates natural gas liquids into component products, such as ethane, propane, butane, and natural gasoline. The following

facilities shall be included in this definition if, and only if, located on the same property as a natural gas/gasoline processing operation previously defined: compressor stations, dehydration units, sweetening units, field treatment, underground storage, liquefied natural gas units, and field gas gathering systems.

(35) Petroleum refinery--Any facility engaged in producing gasoline, kerosene, distillate fuel oils, residual fuel oils, lubricants, or other products through distillation of crude oil, or through the redistillation, cracking, extraction, reforming, or other processing of unfinished petroleum derivatives.

(36) Polymer or resin manufacturing process--A process that produces any of the following polymers or resins: polyethylene, polypropylene, polystyrene, and styrenebutadiene latex.

(37) Pressure relief valve or pressure-vacuum relief valve--A safety device used to prevent operating pressures from exceeding the maximum and minimum allowable working pressure of the process equipment. A pressure relief valve or pressure-vacuum relief valve is automatically actuated by the static pressure upstream of the valve but does not include:

(A) a rupture disk; or

(B) a conservation vent or other device on an atmospheric storage tank that is actuated either by a vacuum or a pressure of no more than 2.5 pounds per square inch gauge.

(38) Printing line--An operation consisting of a series of one or more printing processes and including associated drying areas.

(39) Process drain--Any opening (including a covered or controlled opening) that is installed or used to receive or convey wastewater into the wastewater system.

(40) Process unit--The smallest set of process equipment that can operate independently and includes all operations necessary to achieve its process objective.

(41) Rupture disk--A diaphragm held between flanges for the purpose of isolating a volatile organic compound from the atmosphere or from a downstream pressure relief valve.

(42) Shutdown or turnaround--For the purposes of this chapter, a work practice or operational procedure that stops production from a process unit or part of a unit during which time it is technically feasible to clear process material from a process unit or part of a unit consistent with safety constraints, and repairs can be accomplished.

(A) The term shutdown or turnaround does not include a work practice that would stop production from a process unit or part of a unit:

(i) for less than 24 hours; or

(ii) for a shorter period of time than would be required to clear the process unit or part of the unit and start up the unit.

(B) Operation of a process unit or part of a unit in recycle mode (i.e., process material is circulated, but production does not occur) is not considered shutdown.

(43) Startup--For the purposes of this chapter, the setting into operation of a piece of equipment or process unit for the purpose of production or waste management.

(44) Strippable volatile organic compound (VOC)--Any VOC in cooling tower heat exchange system water that is emitted to the atmosphere when the water passes through the cooling tower.

(45) Synthetic organic chemical manufacturing process--A process that produces, as intermediates or final products, one or more of the chemicals listed in 40 Code of Federal Regulations §60.489 (October 17, 2000).

(46) Tank-truck tank--Any storage tank having a capacity greater than 1,000 gallons, mounted on a tank-truck or trailer. Vacuum trucks used exclusively for maintenance and spill response are not considered to be tank-truck tanks.

(47) Transport vessel--Any land-based mode of transportation (truck or rail) equipped with a storage tank having a capacity greater than 1,000 gallons that is used to transport oil, gasoline, or other volatile organic liquid bulk cargo. Vacuum trucks used exclusively for maintenance and spill response are not considered to be transport vessels.

(48) True partial pressure--The absolute aggregate partial pressure of all volatile organic compounds in a gas stream.

(49) Vapor balance system--A system that provides for containment of hydrocarbon vapors by returning displaced vapors from the receiving vessel back to the originating vessel.

(50) Vapor control system or vapor recovery system--Any control system that utilizes vapor collection equipment to route volatile organic compounds (VOC) to a control device that reduces VOC emissions.

(51) Vapor-tight--Not capable of allowing the passage of gases at the pressures encountered except where other acceptable leak-tight conditions are prescribed in this chapter.

(52) Waxy, high pour point crude oil--A crude oil with a pour point of 50 degrees Fahrenheit (10 degrees Celsius) or higher as determined by the American Society for Testing and Materials Standard D97-66, "Test for Pour Point of Petroleum Oils."

SUBCHAPTER B: GENERAL VOLATILE ORGANIC COMPOUND SOURCES
DIVISION 1: STORAGE OF VOLATILE ORGANIC COMPOUNDS
§§115.110 – 115.112, 115.114 – 115.119

Statutory Authority

The amendments are adopted under Texas Water Code (TWC), §5.102, concerning general powers; §5.103, concerning Rules; TWC, §5.105, concerning General Policy, which authorize the commission to adopt rules necessary to carry out its powers and duties under the TWC; TWC, §7.002, concerning Enforcement Authority, which authorizes the commission to enforce the provisions of the Water Code and the Health and Safety Code within the commission's jurisdiction; and under Texas Health and Safety Code (THSC), §382.017, concerning Rules, which authorizes the commission to adopt rules consistent with the policy and purpose of the Texas Clean Air Act.

The amendments are also adopted under THSC, §382.002, concerning Policy and Purpose, which establishes the commission's purpose to safeguard the state's air resources, consistent with the protection of public health, general welfare, and physical property; THSC, §382.011, concerning General Powers and Duties, which authorizes the commission to control the quality of the state's air; THSC, §382.012, concerning the State Air Control Plan, which authorizes the commission to prepare and develop a general, comprehensive plan for the proper control of the state's air; THSC, §382.016, concerning Monitoring Requirements; Examination of Records, which authorizes the commission to prescribe reasonable requirements for measuring and monitoring the emissions of air contaminants; and THSC, §382.021, concerning Sampling Methods and Procedures.

The adopted amendments implement TWC, §§5.102, 5.103 and 7.002; and THSC, §§382.002, 382.011, 382.012, 382.016, 382.017, and 382.021.

§115.110. Applicability and Definitions.

(a) Applicability. Except as specified in §115.111 of this title (relating to Exemptions), this division applies to any storage tank in which volatile organic compounds are placed, stored, or held that is located in:

(1) the Beaumont-Port Arthur area, as defined in §115.10 of this title (relating to Definitions);

(2) the Bexar County area, as defined in §115.10 of this title;

(3) the Dallas-Fort Worth area, as defined in §115.10 of this title;

(4) the El Paso area, as defined in §115.10 of this title;

(5) the Houston-Galveston-Brazoria area, as defined in §115.10 of this title; and

(6) the Bexar County area, as defined in §115.10 of this title; and

(7) Aransas, Bexar, Calhoun, Gregg, Matagorda, Nueces, San Patricio, Travis, and Victoria Counties, as defined for covered attainment counties in §115.10 of this title (relating to Definitions).

(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, respectively), 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) Closure device--A piece of equipment that covers an opening in the roof of a fixed roof storage tank and either can be temporarily opened or has a component that provides a temporary opening. Examples of closure devices include, but are not limited to, thief hatches, pressure relief valves, pressure-vacuum relief valves, and access hatches.

(2) Deck cover--A device that covers an opening in a floating roof deck. Some deck covers move horizontally relative to the deck (i.e., a sliding cover).

(3) Flexible enclosure system--A system that includes all of the following: a flexible device that completely encloses the slotted guidepole and eliminates the hydrocarbon vapor emission pathway from inside the tank through the guidepole slots to the outside air; a guidepole cover at the top of the guidepole; and a well cover positioned at the top of the guidepole well that seals any openings between the well cover and the guidepole (e.g., pole

wiper), any openings between the well cover and any other objects that pass through the well cover, and any other openings in the top of the guidepole well.

(4) Incompatible liquid--A liquid that is a different chemical compound, a different chemical mixture, a different grade of liquid material, or a fuel with different regulatory specifications provided that the chemical compound, chemical mixture, grade of liquid material, or fuel would be unusable for its intended purpose due to contamination from the previously stored liquid.

(5) Internal sleeve emission control system--An emissions control system that includes all of the following: an internal guidepole sleeve that eliminates the hydrocarbon vapor emission pathway from inside the tank through the guidepole slots to the outside air; a guidepole cover at the top of the guidepole; and a well cover positioned at the top of the guidepole well that seals any openings between the well cover and the guidepole (e.g., pole wiper), any openings between the well cover and any other objects that pass through the well cover, and any other openings in the top of the guidepole well.

(6) Pipeline breakout station--A facility along a pipeline containing storage vessels used to relieve surges or receive and store crude oil or condensate from the pipeline for reinjection into the pipeline and continued transportation by pipeline or to other facilities.

(7) Pole float--A float located inside a guidepole that floats on the surface of the stored liquid. The rim of the float has a wiper or seal that extends to the inner surface of the pole.

(8) Pole sleeve--A device that extends from either the cover or the rim of an opening in a floating roof deck to the outer surface of a pole that passes through the opening. The sleeve must extend into the stored liquid.

(9) Pole wiper--A seal that extends from either the cover or the rim of an opening in a floating roof deck to the outer surface of a pole that passes through the opening.

(10) Slotted guidepole--A guidepole or gaugepole that has slots or holes through the wall of the pole. The slots or holes allow the stored liquid to flow into the pole at liquid levels above the lowest operating level.

(11) 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.

(12) 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.

(13) Tank battery--A collection of equipment used to separate, treat, store, and transfer crude oil, condensate, natural gas, and produced water. A tank battery typically receives crude oil, condensate, natural gas, or some combination of these extracted products from several production wells for accumulation and separation prior to transmission to a natural gas plant or petroleum refinery. A collection of storage tanks at a pipeline breakout station, petroleum refinery, or petrochemical plant is not considered to be a tank battery.

(14) Vapor recovery unit--A device that transfers hydrocarbon vapors to a fuel liquid or gas system, a sales liquid or gas system, or a liquid storage tank.

§115.111. Exemptions.

(a) The following exemptions apply in the Beaumont-Port Arthur, Bexar County, Dallas-Fort Worth, El Paso, and Houston-Galveston-Brazoria areas as defined in §115.10 of this title (relating to Definitions), except as noted in paragraphs (2), (4), (6), (7), and (9) - (11) of this subsection.

(1) Except as provided in §115.118 of this title (relating to Recordkeeping Requirements), a storage tank storing volatile organic compounds (VOC) with a true vapor pressure less than 1.5 pounds per square inch absolute (psia) is exempt from the requirements of this division.

(2) A storage tank with storage capacity less than 210,000 gallons storing crude oil or condensate prior to custody transfer in the Beaumont-Port Arthur, Bexar County, or El Paso areas, is exempt from the requirements of this division. This exemption no longer applies in the Dallas-Fort Worth area beginning March 1, 2013.

(3) A storage tank with a storage capacity less than 25,000 gallons located at a motor vehicle fuel dispensing facility is exempt from the requirements of this division.

(4) A welded storage tank in the Beaumont-Port Arthur, Bexar County, El Paso, and Houston-Galveston-Brazoria areas with a mechanical shoe primary seal that 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) An external floating roof storage tank storing waxy, high pour point crude oils is exempt from any secondary seal requirements of §115.112(a), (d), and (e) of this title (relating to Control Requirements).

(6) A welded storage tank in the Beaumont-Port Arthur, Bexar County, El Paso, and Houston-Galveston-Brazoria areas storing VOC with a true vapor pressure less than 4.0 psia is exempt from any external floating roof secondary seal requirement if any of the following types of primary seals were installed before August 22, 1980:

(A) a mechanical shoe seal;

(B) a liquid-mounted foam seal; or

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

(7) A welded storage tank in the Beaumont-Port Arthur, Bexar County, El Paso, and Houston-Galveston-Brazoria areas storing crude oil with a true vapor pressure equal to or greater than 4.0 psia and less than 6.0 psia is exempt from any external floating roof secondary seal requirement if any of the following types of primary seals were installed before December 10, 1982:

(A) a mechanical shoe seal;

(B) a liquid-mounted foam seal; or

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

(8) A storage tank with storage capacity less than or equal to 1,000 gallons is exempt from the requirements of this division.

(9) In the Houston-Galveston-Brazoria area, a storage tank or tank battery storing condensate, as defined in §101.1 of this title (relating to Definitions), prior to custody transfer with a condensate throughput exceeding 1,500 barrels (63,000 gallons) per year on a rolling 12-month basis is exempt from the requirement in §115.112(d)(4) or (e)(4)(A) of this title, to control flashed gases if the owner or operator demonstrates, using the test methods specified in §115.117 of this title (relating to Approved Test Methods), that uncontrolled VOC emissions from the individual storage tank, or from the aggregate of storage tanks in a tank battery, are less than 25 tons per year on a rolling 12-month basis.

(10) In the Dallas-Fort Worth area, except Wise County, a storage tank or tank battery storing condensate prior to custody transfer with a condensate throughput exceeding 3,000 barrels (126,000 gallons) per year on a rolling 12-month basis is exempt from the requirement in §115.112(e)(4)(B) of this title, to control flashed gases if the owner or operator demonstrates, using the test methods specified in §115.117 of this title, that uncontrolled VOC emissions from the individual storage tank, or from the aggregate of storage tanks in a tank battery, are less than 50 tons per year on a rolling 12-month basis. This exemption no longer applies on November 7, 2025.

(11) In the Dallas-Fort Worth area, except in Wise County, on or after November 7, 2025, a storage tank or tank battery storing condensate prior to custody transfer with a condensate throughput exceeding 1,500 barrels (63,000 gallons) per year on a rolling 12-month basis is exempt from the requirement in §115.112(e)(4)(B) of this title, to control flashed gases if the owner or operator demonstrates, using the test methods specified in §115.117 of this

title, that uncontrolled VOC emissions from the individual storage tank, or from the aggregate of storage tanks in a tank battery, are less than 25 tons per year on a rolling 12-month basis.

(12) In Wise County, prior to July 20, 2021, a storage tank or tank battery storing condensate prior to custody transfer with a condensate throughput exceeding 6,000 barrels (252,000 gallons) per year on a rolling 12-month basis is exempt from the requirement in §115.112(e)(4)(C)(i) of this title, to control flashed gases if the owner or operator demonstrates, using the test methods specified in §115.117 of this title, that uncontrolled VOC emissions from the individual storage tank, or from the aggregate of storage tanks in a tank battery, are less than 100 tons per year on a rolling 12-month basis.

(13) In Wise County until November 7, 2025, a storage tank or tank battery storing condensate prior to custody transfer with a condensate throughput exceeding 3,000 barrels (126,000 gallons) per year on a rolling 12-month basis is exempt from the requirement in §115.112(e)(4)(C)(ii) of this title, to control flashed gases if the owner or operator demonstrates, using the test methods specified in §115.117 of this title, that uncontrolled VOC emissions from the individual storage tank, or from the aggregate of storage tanks in a tank battery, are less than 50 tons per year on a rolling 12-month basis.

(14) In Wise County beginning November 7, 2025, a storage tank or tank battery storing condensate prior to custody transfer with a condensate throughput exceeding 1,500 barrels (63,000 gallons) per year on a rolling 12-month basis is exempt from the requirement in

§115.112(e)(4)(D) of this title, to control flashed gases if the owner or operator demonstrates, using the test methods specified in §115.117 of this title, that uncontrolled VOC emissions from the individual storage tank, or from the aggregate of storage tanks in a tank battery, are less than 25 tons per year on a rolling 12-month basis.

(15) In the Bexar County area beginning January 1, 2025 a storage tank or tank battery storing condensate prior to custody transfer with a condensate throughput exceeding 6,000 barrels (252,000 gallons) per year on a rolling 12-month basis is exempt from the requirement in §115.112(e)(4)(E) of this title, to control flashed gases if the owner or operator demonstrates, using the test methods specified in §115.117 of this title, that uncontrolled VOC emissions from the individual storage tank, or from the aggregate of storage tanks in a tank battery, are less than 100 tons per year on a rolling 12-month basis. of this title, to control flashed gases if the owner or operator demonstrates, using the test methods specified in §115.117 of this title, that uncontrolled VOC emissions from the individual storage tank, or from the aggregate of storage tanks in a tank battery, are less than 100 tons per year on a rolling 12-month basis.

(16) In the Bexar County, Dallas-Fort Worth, and Houston-Galveston-Brazoria areas, beginning when compliance is achieved with Division 7 of this subchapter (relating to Oil and Natural Gas Service in Ozone Nonattainment Areas) but no later than its initial §115.183 compliance deadline, a storage tank storing crude oil or condensate that is subject to the compliance requirements of Division 7 of this subchapter is exempt from all requirements in this division.

(b) The following exemptions apply in Gregg, Nueces, and Victoria Counties.

(1) Except as provided in §115.118 of this title, a storage tank storing VOC with a true vapor pressure less than 1.5 psia is exempt from the requirements of this division.

(2) A storage tank with storage capacity less than 210,000 gallons storing crude oil or condensate prior to custody transfer is exempt from the requirements of this division.

(3) A storage tank with storage capacity less than 25,000 gallons located at a motor vehicle fuel dispensing facility is exempt from the requirements of this division.

(4) A welded storage tank with a mechanical shoe primary seal that 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) An external floating roof storage tank storing waxy, high pour point crude oils is exempt from any secondary seal requirements of §115.112(b) of this title.

(6) A welded storage tank storing VOC with a true vapor pressure less than 4.0 psia is exempt from any external secondary seal requirement if any of the following types of primary seals were installed before August 22, 1980:

(A) a mechanical shoe seal;

(B) a liquid-mounted foam seal; or

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

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

(A) a mechanical shoe seal;

(B) a liquid-mounted foam seal; or

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

(8) A storage tank with storage capacity less than or equal to 1,000 gallons is exempt from the requirements of this division.

(c) The following exemptions apply in Aransas, Bexar, Calhoun, Matagorda, San Patricio, and Travis Counties. The exemptions in this subsection no longer apply in Bexar County beginning January 1, 2025.

(1) A storage tank storing VOC with a true vapor pressure less than 1.5 psia is exempt from the requirements of this division.

(2) Slotted guidepoles installed in a floating roof storage tank are exempt from the provisions of §115.112(c) of this title.

(3) A storage tank with storage capacity between 1,000 gallons and 25,000 gallons is exempt from the requirements of §115.112(c)(1) of this title if construction began before May 12, 1973.

(4) A storage tank with storage capacity less than or equal to 420,000 gallons is exempt from the requirements of §115.112(c)(3) of this title.

(5) A storage tank with storage capacity less than or equal to 1,000 gallons is exempt from the requirements of this division.

§115.112. Control Requirements.

(a) The following requirements apply in the Beaumont-Port Arthur, Dallas-Fort Worth, and El Paso areas, as defined in §115.10 of this title (relating to Definitions). The control requirements in this subsection no longer apply in the Dallas-Fort Worth area beginning March 1, 2013.

(1) No person shall place, store, or hold in any storage tank any volatile organic compounds (VOC) unless the storage tank is capable of maintaining working pressure sufficient at all times to prevent any vapor or gas loss to the atmosphere or is in compliance with the control requirements specified in Table I(a) of this paragraph for VOC other than crude oil and condensate or Table II(a) of this paragraph for crude oil and condensate.

Figure: 30 TAC §115.112(a)(1) (No Change)

(2) For an external floating roof or internal floating roof storage tank subject to the provisions of paragraph (1) of this subsection, the following requirements apply.

(A) All openings in an internal floating roof or external floating roof except for automatic bleeder vents (vacuum breaker vents) and rim space vents must provide a projection below the liquid surface or be equipped with a cover, seal, or lid. Any cover, seal, or lid must be in a closed (i.e., no visible gap) position at all times except when the device is in actual use.

(B) Automatic bleeder vents (vacuum breaker vents) must be closed at all times except when the roof is being floated off or landed on the roof leg supports.

(C) Rim vents, if provided, must be set to open only when the roof is being floated off the roof leg supports or at the manufacturer's recommended setting.

(D) Any roof drain that empties into the stored liquid must be equipped with a slotted membrane fabric cover that covers at least 90% of the area of the opening.

(E) There must be no visible holes, tears, or other openings in any seal or seal fabric.

(F) For an external floating roof storage tank, secondary seals must be the rim-mounted type (the seal must be continuous from the floating roof to the tank wall). The accumulated area of gaps that exceed 1/8 inch in width between the secondary seal and storage tank wall may not be greater than 1.0 square inch per foot of tank diameter.

(3) Vapor control systems, as defined in §115.10 of this title, used as a control device on any storage tank must maintain a minimum control efficiency of 90%. If a flare is used, it must be 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 be lit at all times when VOC vapors are routed to the flare.

(b) The following requirements apply in Gregg, Nueces, and Victoria Counties.

(1) No person shall place, store, or hold in any storage tank any VOC, unless the storage tank is capable of maintaining working pressure sufficient at all times to prevent any vapor or gas loss to the atmosphere or is in compliance with the control requirements specified in Table I(a) in subsection (a)(1) of this section for VOC other than crude oil and condensate or Table II(a) in subsection (a)(1) of this section for crude oil and condensate. If a flare is used as a vapor recovery system, as defined in §115.10 of this title, it must be 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 be lit at all times when VOC vapors are routed to the flare.

(2) For an external floating roof or internal floating roof storage tank subject to the provisions of paragraph (1) of this subsection, the following requirements apply.

(A) All openings in an internal floating roof or external floating roof, except for automatic bleeder vents (vacuum breaker vents) and rim space vents, must provide a projection below the liquid surface or be equipped with a cover, seal, or lid. Any cover, seal, or lid must be in a closed (i.e., no visible gap) position at all times, except when the device is in actual use.

(B) Automatic bleeder vents (vacuum breaker vents) must be closed at all times except when the roof is being floated off or landed on the roof leg supports.

(C) Rim vents, if provided, must be set to open only when the roof is being floated off the roof leg supports or at the manufacturer's recommended setting.

(D) Any roof drain that empties into the stored liquid must be equipped with a slotted membrane fabric cover that covers at least 90% of the area of the opening.

(E) There must be no visible holes, tears, or other openings in any seal or seal fabric.

(F) For an external floating roof storage tank, secondary seals must be the rim-mounted type (the seal shall be continuous from the floating roof to the tank wall). The accumulated area of gaps that exceed 1/8 inch in width between the secondary seal and tank wall may not be greater than 1.0 square inch per foot of tank diameter.

(c) The following requirements apply in Aransas, Bexar, Calhoun, Matagorda, San Patricio, and Travis Counties. The control requirements of this subsection no longer apply for sources located in Bexar County beginning January 1, 2025.

(1) No person may place, store, or hold in any storage tank any VOC, other than crude oil or condensate, unless the storage tank is capable of maintaining working pressure sufficient at all times to prevent any vapor or gas loss to the atmosphere or is in compliance with the control requirements specified in Table I(b) of this paragraph for VOC other than crude oil and condensate.

Figure: 30 TAC §115.112(c)(1) (No Change)

(2) For an external floating roof or internal floating roof storage tank subject to the provisions of paragraph (1) of this subsection, the following requirements apply.

(A) There must be no visible holes, tears, or other openings in any seal or seal fabric.

(B) All tank gauging and sampling devices must be vapor-tight except when gauging and sampling is taking place.

(3) No person in Matagorda or San Patricio Counties shall place, store, or hold crude oil or condensate in any storage tank unless the storage tank is a pressure tank capable of maintaining working pressures sufficient at all times to prevent vapor or gas loss to the atmosphere or is equipped with one of the following control devices, properly maintained and operated:

(A) an internal floating roof or external floating roof, as defined in §115.10 of this title. These control devices will not be allowed if the VOC has a true vapor pressure of 11.0 pounds per square inch absolute (psia) or greater. All tank-gauging and tank-sampling devices must be vapor-tight, except when gauging or sampling is taking place; or

(B) a vapor control system as defined in §115.10 of this title.

(d) The following requirements apply in the Houston-Galveston-Brazoria area, as defined in §115.10 of this title. The requirements in this subsection no longer apply beginning March 1, 2013.

(1) No person shall place, store, or hold in any storage tank any VOC unless the storage tank is capable of maintaining working pressure sufficient at all times to prevent any vapor or gas loss to the atmosphere or is in compliance with the control requirements specified in either Table I(a) of subsection (a)(1) of this section for VOC other than crude oil and condensate or Table II(a) of subsection (a)(1) of this section for crude oil and condensate.

(2) For an external floating roof or internal floating roof storage tank subject to the provisions of paragraph (1) of this subsection, the following requirements apply.

(A) All openings in an internal floating roof or external floating roof as defined in §115.10 of this title except for automatic bleeder vents (vacuum breaker vents), and

rim space vents must provide a projection below the liquid surface. All openings in an internal floating roof or external floating roof except for automatic bleeder vents (vacuum breaker vents), rim space vents, leg sleeves, and roof drains must be equipped with a deck cover. The deck cover must be equipped with a gasket in good operating condition between the cover and the deck. The deck cover must be closed (i.e., no gap of more than 1/8 inch) at all times, except when the cover must be open for access.

(B) Automatic bleeder vents (vacuum breaker vents) and rim space vents must be equipped with a gasketed lid, pallet, flapper, or other closure device and must be closed (i.e., no gap of more than 1/8 inch) at all times except when required to be open to relieve excess pressure or vacuum in accordance with the manufacturer's design.

(C) Each opening into the internal floating roof for a fixed roof support column may be equipped with a flexible fabric sleeve seal instead of a deck cover.

(D) Any external floating roof drain that empties into the stored liquid must be equipped with a slotted membrane fabric cover that covers at least 90% of the area of the opening or an equivalent control that must be kept in a closed (i.e., no gap of more than 1/8 inch) position at all times except when the drain is in actual use. Stub drains on an internal floating roof storage tank are not subject to this requirement.

(E) There must be no visible holes, tears, or other openings in any seal or seal fabric.

(F) For an external floating roof storage tank, secondary seals must be the rim-mounted type (the seal must be continuous from the floating roof to the tank wall with the exception of gaps that do not exceed the following specification). The accumulated area of gaps that exceed 1/8 inch in width between the secondary seal and storage tank wall may not be greater than 1.0 square inch per foot of storage tank diameter.

(G) Each opening for a slotted guidepole in an external floating roof storage tank must be equipped with one of the following control device configurations:

(i) a pole wiper and pole float that has a seal or wiper at or above the height of the pole wiper;

(ii) a pole wiper and a pole sleeve;

(iii) an internal sleeve emission control system;

(iv) a retrofit to a solid guidepole system;

(v) a flexible enclosure system; or

(vi) a cover on an external floating roof tank.

(H) The external floating roof or internal floating roof must be floating on the liquid surface at all times except as specified in this subparagraph. The external floating roof or internal floating roof may be supported by the leg supports or other support devices, such as hangers from the fixed roof, during the initial fill or refill after the storage tank has been cleaned or as allowed under the following circumstances:

(i) when necessary for maintenance or inspection;

(ii) when necessary for supporting a change in service to an incompatible liquid;

(iii) when the storage tank has a storage capacity less than 25,000 gallons or the vapor pressure of the material stored is less than 1.5 psia;

(iv) when the vapors are routed to a control device from the time the floating roof is landed until the floating roof is within ten percent by volume of being refloated;

(v) when all VOC emissions from the tank, including emissions from roof landings, have been included in a floating roof storage tank emissions limit or cap approved under Chapter 116 of this title (relating to Control of Air Pollution by Permits for New Construction or Modification); or

(vi) when all VOC emissions from floating roof landings at the regulated entity, as defined in §101.1 of this title (relating to Definitions), are less than 25 tons per year.

(3) Vapor control systems, as defined in §115.10 of this title, used as a control device on any storage tank must maintain a minimum control efficiency of 90%.

(4) For a storage tank storing condensate, as defined in §101.1 of this title, prior to custody transfer, flashed gases must be routed to a vapor control system if the liquid throughput through an individual tank or the aggregate of tanks in a tank battery exceeds 1,500 barrels (63,000 gallons) per year.

(5) For a storage tank storing crude oil or condensate prior to custody transfer or at a pipeline breakout station, flashed gases must be routed to a vapor control system if the uncontrolled VOC emissions from an individual storage tank, or from the aggregate of storage tanks in a tank battery, equal or exceed 25 tons per year on a rolling 12-month basis. Uncontrolled emissions must be estimated by one of the following methods; however, if

emissions determined using direct measurements or other methods approved by the executive director under subparagraph (A) or (D) of this paragraph are higher than emissions estimated using the default factors or charts in subparagraph (B) or (C) of this paragraph, the higher values must be used.

(A) The owner or operator may make direct measurements using the measuring instruments and methods specified in §115.117 of this title (relating to Approved Test Methods).

(B) The owner or operator may use a factor of 33.3 pounds of VOC per barrel (42 gallons) of condensate produced or 1.6 pounds of VOC per barrel (42 gallons) of oil produced.

(C) For crude oil storage only, the owner or operator may use the chart in Exhibit 2 of the United States Environmental Protection Agency publication *Lessons Learned from Natural Gas Star Partners: Installing Vapor Recovery Units on Crude Oil Storage Tanks,* October 2003, and assuming that the hydrocarbon vapors have a molecular weight of 34 pounds per pound mole and are 48% by weight VOC.

(D) Other test methods or computer simulations may be allowed if approved by the executive director.

(e) The control requirements in this subsection apply in the Bexar County, Houston-Galveston-Brazoria, and Dallas-Fort Worth areas, except as specified in §115.119 of this title (relating to Compliance Schedules) and in paragraph (3) of this subsection. Beginning on the applicable compliance date specified in §115.183 of this title (relating to Compliance Schedules), the requirements in this subsection no longer apply to storage tanks storing crude oil or condensate that are subject to Division 7 of this subchapter (relating to Oil and Natural Gas Service in Ozone Nonattainment Areas).

(1) No person shall place, store, or hold VOC in any storage tank unless the storage tank is capable of maintaining working pressure sufficient at all times to prevent any vapor or gas loss to the atmosphere or is in compliance with the control requirements specified in Table 1 of this paragraph for VOC other than crude oil and condensate or Table 2 of this paragraph for crude oil and condensate.

Figure: 30 TAC §115.112(e)(1) (No Change)

(2) For an external floating roof or internal floating roof storage tank subject to the provisions of paragraph (1) of this subsection, the following requirements apply.

(A) All openings in an internal floating roof or external floating roof must provide a projection below the liquid surface. Automatic bleeder vents (vacuum breaker vents) and rim space vents are not subject to this requirement.

(B) All openings in an internal floating roof or external floating roof must be equipped with a deck cover. The deck cover must be equipped with a gasket in good operating condition between the cover and the deck. The deck cover must be closed (i.e., no gap of more than 1/8 inch) at all times, except when the cover must be open for access. Automatic bleeder vents (vacuum breaker vents), rim space vents, leg sleeves, and roof drains are not subject to this requirement.

(C) Automatic bleeder vents (vacuum breaker vents) and rim space vents must be equipped with a gasketed lid, pallet, flapper, or other closure device and must be closed (i.e., no gap of more than 1/8 inch) at all times except when required to be open to relieve excess pressure or vacuum in accordance with the manufacturer's design.

(D) Each opening into the internal floating roof for a fixed roof support column may be equipped with a flexible fabric sleeve seal instead of a deck cover.

(E) Any external floating roof drain that empties into the stored liquid must be equipped with a slotted membrane fabric cover that covers at least 90% of the area of the opening or an equivalent control that must be kept in a closed (i.e., no gap of more than 1/8 inch) position at all times except when the drain is in actual use. Stub drains on an internal floating roof storage tank are not subject to this requirement.

(F) There must be no visible holes, tears, or other openings in any seal or seal fabric.

(G) For an external floating roof storage tank, secondary seals must be the rim-mounted type. The seal must be continuous from the floating roof to the tank wall with the exception of gaps that do not exceed the following specification. The accumulated area of gaps that exceed 1/8 inch in width between the secondary seal and storage tank wall may not be greater than 1.0 square inch per foot of storage tank diameter.

(H) Each opening for a slotted guidepole in an external floating roof storage tank must be equipped with one of the following control device configurations:

(i) a pole wiper and pole float that has a seal or wiper at or above the height of the pole wiper;

(ii) a pole wiper and a pole sleeve;

(iii) an internal sleeve emission control system;

(iv) a retrofit to a solid guidepole system;

(v) a flexible enclosure system; or

(vi) a cover on an external floating roof tank.

(I) The external floating roof or internal floating roof must be floating on the liquid surface at all times except as allowed under the following circumstances:

(i) during the initial fill or refill after the storage tank has been cleaned;

(ii) when necessary for preventive maintenance, roof repair, primary seal inspection, or removal and installation of a secondary seal, if product is not transferred into or out of the storage tank, emissions are minimized, and the repair is completed within seven calendar days;

(iii) when necessary for supporting a change in service to an incompatible liquid;

(iv) when the storage tank has a storage capacity less than 25,000 gallons;

(v) when the vapors are routed to a control device from the time the storage tank has been emptied to the extent practical or the drain pump loses suction until the floating roof is within 10% by volume of being refloated;

(vi) when all VOC emissions from the storage tank, including emissions from floating roof landings, have been included in an emissions limit or cap approved under Chapter 116 of this title prior to March 1, 2013; or

(vii) when all VOC emissions from floating roof landings at the regulated entity are less than 25 tons per year.

(3) A control device used to comply with this subsection must meet one of the following conditions at all times when VOC vapors are routed to the device.

(A) A control device, other than a vapor recovery unit or a flare, must maintain the following minimum control efficiency:

(i) 90% in the Houston-Galveston-Brazoria area until the date specified in clause (ii) of this subparagraph;

(ii) 95% in the Houston-Galveston-Brazoria area beginning July 20, 2018;

(iii) 95% in the Dallas-Fort Worth area; and

(iv) 95% in the Bexar County area.

(B) A vapor recovery unit must be designed to process all vapor generated by the maximum liquid throughput of the storage tank or the aggregate of storage tanks in a tank battery and must transfer recovered vapors to a pipe or container that is vapor-tight, as defined in §115.10 of this title.

(C) A flare must be 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 be lit at all times when VOC vapors are routed to the flare.

(4) For a fixed roof storage tank storing condensate prior to custody transfer, flashed gases must be routed to a vapor control system if the condensate throughput of an individual tank or the aggregate of tanks in a tank battery exceeds;

(A) in the Houston-Galveston-Brazoria area, 1,500 barrels (63,000 gallons) per year on a rolling 12-month basis;

(B) in the Dallas-Fort Worth area, except Wise County, 3,000 barrels (126,000 gallons) per year on a rolling 12-month basis until November 7, 2025, upon which date, the requirements in subparagraph (D) of this paragraph apply;

(C) in Wise County:

(i) 6,000 barrels (252,000 gallons) per year on a rolling 12-month basis, until July 20, 2021; and

(ii) 3,000 barrels (126,000 gallons) per year on a rolling 12-month basis until November 7, 2025, upon which date, the requirements in subparagraph (D) of this paragraph apply;

(D) in the Dallas-Fort Worth area, 1,500 barrels (63,000 gallons) per year on a rolling 12-month basis beginning November 7, 2025, as specified in §115.119(f) of this title; and

(E) in the Bexar County area beginning January 1, 2025, 6,000 barrels (252,000 gallons) per year on a rolling 12-month basis.

(5) For a fixed roof storage tank storing crude oil or condensate prior to custody transfer or at a pipeline breakout station, flashed gases must be routed to a vapor control system if the uncontrolled VOC emissions from an individual storage tank, or from the aggregate of storage tanks in a tank battery, or from the aggregate of storage tanks at a pipeline breakout station, equal or exceed:

(A) in the Houston-Galveston-Brazoria area, 25 tons per year on a rolling 12-month basis;

(B) in the Dallas-Fort Worth area, except Wise County: 50 tons per year on a rolling 12-month basis until November 7, 2025, upon which date, the requirements in subparagraph (D) of this paragraph apply;

(C) in Wise County:

(i) 100 tons per year on a rolling 12-month basis, until July 20, 2021;

(ii) 50 tons per year on a rolling 12-month basis beginning July 20, 2021, as specified in §115.119(f) of this title, until November 7, 2025, upon which date, the requirements in subparagraph (D) of this paragraph apply;

(D) in the Dallas-Fort Worth area, 25 tons per year on a rolling 12-month basis beginning November 7, 2025 as specified in §115.119(f) of this title; and

(E) in the Bexar County area 100 tons per year on a rolling 12-month basis.

(6) Uncontrolled emissions from a fixed roof storage tank or fixed roof storage tank battery storing crude oil or condensate prior to custody transfer or at a pipeline breakout station must be estimated by one of the following methods. However, if emissions determined using direct measurements or other methods approved by the executive director under subparagraph (A) or (B) of this paragraph are higher than emissions estimated using the default factors or charts in subparagraph (C) or (D) of this paragraph, the higher values must be used.

(A) The owner or operator may make direct measurements using the measuring instruments and methods specified in §115.117 of this title.

(B) The owner or operator may use other test methods or computer simulations approved by the executive director.

(C) The owner or operator may use a factor of 33.3 pounds of VOC per barrel (42 gallons) of condensate produced or 1.6 pounds of VOC per barrel (42 gallons) of oil produced.

(D) For crude oil storage only, the owner or operator may use the chart in Exhibit 2 of the United States Environmental Protection Agency publication *Lessons Learned from Natural Gas Star Partners: Installing Vapor Recovery Units on Crude Oil Storage Tanks,* October 2003, and assuming that the hydrocarbon vapors have a molecular weight of 34 pounds per pound mole and are 48% by weight VOC.

(7) Fixed roof storage tanks in the Bexar County area, Dallas-Fort Worth area, and Houston-Galveston-Brazoria area storing crude oil or condensate prior to custody transfer or at a pipeline breakout station for which the owner or operator is required by this subsection to control flashed gases must be maintained in accordance with manufacturer instructions. All openings in the fixed roof storage tank through which vapors are not routed to a vapor recovery unit or other vapor control device must be equipped with a closure device maintained according to the manufacturer's instructions and operated according to this paragraph. If

manufacturer instructions are unavailable, industry standards consistent with good engineering practice can be substituted.

(A) Each closure device must be closed at all times except when normally actuated or required to be open for temporary access or to relieve excess pressure or vacuum in accordance with the manufacturer's design and consistent with good air pollution control practices. Such opening, actuation, or use must be limited to minimize vapor loss.

(B) Each closure device must be properly sealed to minimize vapor loss when closed.

(C) Each closure device must either be latched closed or, if designed to relieve pressure, set to automatically open at a pressure that will ensure all vapors are routed to the vapor recovery unit or other vapor control device under normal operating conditions other than gauging the tank or taking a sample through an open thief hatch.

(D) No closure device may be allowed to have a VOC leak for more than 15 calendar days after the leak is found unless delay of repair is allowed. For the purposes of this subparagraph, a leak is the exuding of process gasses from a closed device based on sight, smell, or sound. If parts are unavailable, repair may be delayed. Parts must be ordered promptly and the repair must be completed within five days of receipt of required parts. Repair may be delayed until the next shutdown if the repair of the component would require a

shutdown that would create more emissions than the repair would eliminate. Repair must be completed by the end of the next shutdown.

§115.114. Inspection and Repair Requirements.

(a) The following inspection requirements apply in the Beaumont-Port Arthur, Bexar County, Dallas-Fort Worth, El Paso, and Houston-Galveston-Brazoria areas, as defined in §115.10 of this title (relating to Definitions).

(1) For an internal floating roof storage tank, the internal floating roof and the primary seal or the secondary seal (if one is in service) must be visually inspected through a fixed roof inspection hatch at least once every 12 months.

(A) If the internal floating roof is not resting on the surface of the volatile organic compounds (VOC) inside the storage tank and is not resting on the leg supports; or liquid has accumulated on the internal floating roof; or the seal is detached; or there are holes or tears in the seal fabric; or there are visible gaps between the seal and the wall of the storage tank, within 60 days of the inspection the owner or operator shall repair the items or shall empty and degas the storage tank in accordance with Subchapter F, Division 3 of this chapter (relating to Degassing of Storage Tanks, Transport Vessels, and Marine Vessels).

(B) If a failure cannot be repaired within 60 days and if the storage tank cannot be emptied within 60 days, the owner or operator may submit written requests for up to two extensions of up to 30 additional days each to the appropriate regional office. The owner or operator shall submit a copy to any local air pollution control program with jurisdiction. Each request for an extension must include a statement that alternate storage capacity is unavailable and a schedule that will assure that the repairs will be completed as soon as possible.

(2) For an external floating roof storage tank, the secondary seal gap must be physically measured at least once every 12 months to insure compliance with §115.112(a)(2)(F), (d)(2)(F), and (e)(2)(G) of this title (relating to Control Requirements).

(A) If the secondary seal gap exceeds the limitations specified by §115.112(a)(2)(F), (d)(2)(F), and (e)(2)(G) of this title, within 60 days of the inspection the owner or operator shall repair the items or shall empty and degas the storage tank in accordance with Subchapter F, Division 3 of this chapter.

(B) If a failure cannot be repaired within 60 days and if the storage tank cannot be emptied within 60 days, the owner or operator may submit written requests for up to two extensions of up to 30 additional days each to the appropriate regional office. The owner or operator shall submit a copy to any local air pollution control program with jurisdiction. Each request for an extension must include a statement that alternate storage capacity is

unavailable and a schedule that will assure that the repairs will be completed as soon as possible.

(3) If the storage tank is equipped with a mechanical shoe or liquid-mounted primary seal, compliance with §115.112(a)(2)(F), (d)(2)(F), and (e)(2)(G) of this title can be determined by visual inspection.

(4) For an external floating roof storage tank, the secondary seal must be visually inspected at least once every six months to ensure compliance with §115.112(a)(2)(E) and (F), (d)(2)(E) and (F), and (e)(2)(F) and (G) of this title.

(A) If the external floating roof is not resting on the surface of the VOC inside the storage tank and is not resting on the leg supports; or liquid has accumulated on the external floating roof; or the seal is detached; or there are holes or tears in the seal fabric; or there are visible gaps between the seal and the wall of the storage tank, within 60 days of the inspection the owner or operator shall repair the items or shall empty and degas the storage tank in accordance with Subchapter F, Division 3 of this chapter.

(B) If a failure cannot be repaired within 60 days and if the storage tank cannot be emptied within 60 days, the owner or operator may submit written requests for up to two extensions of up to 30 additional days each to the appropriate regional office. The owner or operator shall submit a copy to any local air pollution control program with jurisdiction.

Each request for an extension must include a statement that alternate storage capacity is unavailable and a schedule that will assure that the repairs will be completed as soon as possible.

(5) For fixed roof storage tanks in the Bexar County, Dallas-Fort Worth and Houston-Galveston-Brazoria areas, storing crude oil or condensate prior to custody transfer or at a pipeline breakout station for which the owner or operator is required by §115.112(e) of this title to control flashed gases, the owner or operator shall inspect and repair all closure devices not connected to a vapor recovery unit or other vapor control device according to the schedule in this paragraph.

(A) The owner or operator shall conduct an audio, visual, and olfactory inspection of each closure device not connected to a vapor recovery unit or other vapor control device to ensure compliance with §115.112(e)(7)(A) of this title. The inspection must occur when liquids are not being added to or unloaded from the tank. If the owner or operator finds the closure device open for reasons not allowed in §115.112(e)(7)(A) of this title, the owner or operator shall attempt to close the device during the inspection. The inspection must occur before the end of one business day after each opening of a thief or access hatch for sampling or gauging, and before the end of one business day after each unloading event. If multiple events occur on a single day, a single inspection within one business day after the last event is sufficient.

(B) The owner or operator shall conduct an audio, visual, and olfactory inspection of all gaskets and vapor sealing surfaces of each closure device not connected to a vapor recovery unit or other vapor control device once per calendar quarter to ensure compliance with §115.112(e)(7)(B) of this title. If the owner or operator finds an improperly sealed closure device, the owner or operator shall make a first attempt at repair no later than five calendar days after the inspection and repair the device no later than 15 calendar days after the inspection unless delay of repair is allowed. If parts are unavailable, repair may be delayed. Parts must be ordered promptly and the repair must be completed within five days of receipt of required parts. Repair may be delayed until the next shutdown if the repair of the component would require a shutdown that would create more emissions than the repair would eliminate. Repair must be completed by the end of the next shutdown. For the purpose of this subparagraph, a repair is complete if the closure device no longer exudes process gasses based on sight, smell, or sound.

(b) The following inspection requirements apply in Gregg, Nueces, and Victoria Counties.

(1) For an internal floating roof storage tank, the following inspection requirements apply.

(A) If during an inspection of an internal floating roof storage tank, the internal floating roof is not resting on the surface of the VOC inside the storage tank and is not resting on the leg supports; or liquid has accumulated on the internal floating roof; or the seal

is detached; or there are holes or tears in the seal fabric; or there are visible gaps between the seal and the wall of the storage tank, within 60 days of the inspection the owner or operator shall repair the items or shall empty and degas the storage tank.

(B) If a failure cannot be repaired within 60 days and if the storage tank cannot be emptied within 60 days, the owner or operator may submit written requests for up to two extensions of up to 30 additional days each to the appropriate regional office. The owner or operator shall submit a copy to any local air pollution control program with jurisdiction. Each request for an extension must include a statement that alternate storage capacity is unavailable and a schedule that will assure that the repairs will be completed as soon as possible.

(2) For an external floating roof storage tank, the secondary seal gap must be physically measured at least once every 12 months to insure compliance with §115.112(b)(2)(F) of this title.

(A) If the secondary seal gap exceeds the limitations specified by §115.112(b)(2)(F) of this title, within 60 days of the inspection the owner or operator shall repair the items or shall empty and degas the storage tank.

(B) If a failure cannot be repaired within 60 days and if the storage tank cannot be emptied within 60 days, the owner or operator may submit written requests for up to

two extensions of up to 30 additional days each to the appropriate regional office. The owner or operator shall submit a copy to any local air pollution control program with jurisdiction. Each request for an extension must include a statement that alternate storage capacity is unavailable and a schedule that will assure that the repairs will be completed as soon as possible.

(3) If the storage tank is equipped with a mechanical shoe or liquid-mounted primary seal, compliance with §115.112(b)(2)(F) of this title can be determined by visual inspection.

(4) For an external floating roof storage tank, the secondary seal must be visually inspected at least once every 12 months to insure compliance with §115.112(b)(2)(E) - (F) of this title.

(A) If the external floating roof is not resting on the surface of the VOC inside the storage tank and is not resting on the leg supports; or liquid has accumulated on the external floating roof; or the seal is detached; or there are holes or tears in the seal fabric; or there are visible gaps between the seal and the wall of the storage tank, within 60 days of the inspection the owner or operator shall repair the items or shall empty and degas the storage tank.

(B) If a failure cannot be repaired within 60 days and if the storage tank cannot be emptied within 60 days, the owner or operator may submit written requests for up to two extensions of up to 30 additional days each to the appropriate regional office. The owner or operator shall submit a copy to any local air pollution control program with jurisdiction. Each request for an extension must include a statement that alternate storage capacity is unavailable and a schedule that will assure that the repairs will be completed as soon as possible.

(c) The following inspection requirements apply in Aransas, Bexar, Calhoun, Matagorda, San Patricio, and Travis Counties. The inspection and repair requirements of this subsection no longer apply for sources located in Bexar County beginning January 1, 2025.

(1) For an internal floating roof storage tank, the following inspection requirements apply.

(A) If during an inspection of an internal floating roof storage tank, the internal floating roof is not resting on the surface of the VOC inside the storage tank and is not resting on the leg supports; or liquid has accumulated on the internal floating roof; or the seal is detached; or there are holes or tears in the seal fabric; or there are visible gaps between the seal and the wall of the storage tank, within 60 days of the inspection the owner or operator shall repair the items or shall empty and degas the storage tank.

(B) If a failure cannot be repaired within 60 days and if the storage tank cannot be emptied within 60 days, the owner or operator may submit written requests for up to two extensions of up to 30 additional days each to the appropriate regional office. The owner or operator shall submit a copy to any local air pollution control program with jurisdiction. Each request for an extension must include a statement that alternate storage capacity is unavailable and a schedule that will assure that the repairs will be completed as soon as possible.

(2) For an external floating roof storage tank, the following inspection requirements apply.

(A) If during an inspection of an external floating roof storage tank, the external floating roof is not resting on the surface of the VOC inside the storage tank and is not resting on the leg supports; or liquid has accumulated on the external floating roof; or the seal is detached; or there are holes or tears in the seal fabric; or there are visible gaps between the seal and the wall of the storage tank, within 60 days of the inspection the owner or operator shall repair the items or shall empty and degas the storage tank.

(B) If a failure cannot be repaired within 60 days and if the storage tank cannot be emptied within 60 days, the owner or operator may submit written requests for up to two extensions of up to 30 additional days each to the appropriate regional office. The owner or operator shall submit a copy to any local air pollution control program with jurisdiction. Each request for an extension must include a statement that alternate storage capacity is

unavailable and a schedule that will assure that the repairs will be completed as soon as possible.

§115.115. Monitoring Requirements.

(a) The following monitoring requirements apply in the Beaumont-Port Arthur, Bexar County, Dallas-Fort Worth, El Paso, and Houston-Galveston-Brazoria areas, as defined in §115.10 of this title (relating to Definitions). An affected owner or operator shall install and maintain monitors to measure operational parameters of any of the following control devices installed to meet applicable control requirements. Such monitors must be sufficient to demonstrate proper functioning of those devices to design specifications.

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

(2) 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 volatile organic compounds (VOC) vapors routed to the device.

(3) For a carbon adsorption system or carbon adsorber, as defined in §101.1 of this title (relating to Definitions), the owner or operator shall:

(A) continuously monitor the exhaust gas VOC concentration of a carbon adsorption system that regenerates the carbon bed directly to determine breakthrough. For the purpose of this paragraph, breakthrough is defined as a measured VOC concentration exceeding 100 parts per million by volume above background expressed as methane; or

(B) switch the vent gas flow to fresh carbon at a regular predetermined time interval for a carbon adsorber or carbon adsorption system that does not regenerate the carbon directly. The time interval must be less than the carbon replacement interval determined by the maximum design flow rate and the VOC concentration in the gas stream vented to the carbon adsorption system or carbon adsorber.

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

(5) For a vapor recovery unit used to comply with §115.112(e)(3) of this title (relating to Control Requirements), the owner or operator shall continuously monitor at least one of the following operational parameters:

(A) run-time of the compressor or motor in a vapor recovery unit;

(B) total volume of recovered vapors; or

(C) other parameters sufficient to demonstrate proper functioning to design specifications.

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

(b) In Victoria County, the owner or operator shall monitor operational parameters of any of the emission control devices listed in this subsection installed to meet applicable control requirements.

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

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

(3) For a carbon adsorption system or carbon adsorber, the owner or operator shall continuously monitor the exhaust gas VOC concentration to determine if breakthrough has occurred. The owner or operator may conduct this monitoring using Method 21, as

specified in §115.117 of this title, if the monitoring is conducted once every seven calendar days.

§115.116. Testing Requirements.

(a) The testing requirements in this subsection apply in the Beaumont-Port Arthur, Bexar County, Dallas-Fort Worth, Houston-Galveston-Brazoria, and El Paso areas, as defined in §115.10 of this title (relating to Definitions).

(1) For a vapor control system, other than a vapor recovery unit or a flare, used to comply with the control requirements in §115.112(a)(3) and (e)(3)(A) of this title (relating to Control Requirements), an initial control efficiency test must be conducted in accordance with the approved test methods in §115.117 of this title (relating to Approved Test Methods). If the vapor control system is modified in any way that could reasonably be expected to decrease the control efficiency, the device must be retested within 60 days of the modification.

(2) A flare used to comply with the control requirements in §115.112(a)(3) and (e)(3)(C) of this title must meet the design verification test requirements in 40 Code of Federal Regulations §60.18(f) (as amended through December 22, 2008 (73 FR 78209)).

(b) The testing requirements in this subsection apply in Gregg, Nueces, and Victoria Counties.

(1) For a vapor control system, other than a vapor recovery unit or a flare, compliance with the control requirements in §115.112(b) of this title must be demonstrated in accordance with the approved test methods in §115.117 of this title.

(2) A flare must meet the design verification test requirements in 40 Code of Federal Regulations §60.18(f) (as amended through December 22, 2008 (73 FR 78209)).

§115.117. Approved Test Methods.

For the Beaumont-Port Arthur, Bexar County, Dallas-Fort Worth, El Paso, and Houston-Galveston-Brazoria areas, as defined in §115.10 of this title (relating to Definitions) and Gregg, Nueces, and Victoria Counties, compliance with the requirements in this division must be determined by applying the following test methods, as appropriate:

(1) Methods 1 - 4 (40 Code of Federal Regulations (CFR) Part 60, Appendix A) for determining flow rates, as necessary;

(2) Method 18 (40 CFR Part 60, Appendix A) for determining gaseous organic compound emissions by gas chromatography;

(3) Method 21 (40 CFR Part 60, Appendix A-7) for determining volatile organic compounds concentrations for the purposes of determining the presence of leaks and determining breakthrough on a carbon adsorption system or carbon adsorber. If the owner or operator chooses to conduct a test to verify a vapor-tight requirement, Method 21 is acceptable;

(4) Method 22 (40 CFR Part 60, Appendix A) for determination of visible emissions from flares;

(5) Method 25 (40 CFR Part 60, Appendix A) for determining total gaseous nonmethane organic emissions as carbon;

(6) Methods 25A or 25B (40 CFR Part 60, Appendix A) for determining total gaseous organic concentrations using flame ionization or nondispersive infrared analysis;

(7) test method described in 40 CFR §60.113a(a)(1)(ii) (effective April 8, 1987) for measurement of storage tank seal gap;

(8) true vapor pressure must be determined using standard reference texts or ASTM International Test Method D323, D2879, D4953, D5190, D5191, or D6377 for the measurement of Reid vapor pressure, adjusted for actual storage temperature in accordance with American Petroleum Institute Publication 2517. For the purposes of temperature

correction, the owner or operator shall use the actual storage temperature. Actual storage temperature of an unheated storage tank may be determined using the maximum local monthly average ambient temperature as reported by the National Weather Service. Actual storage temperature of a heated storage tank must be determined using either the measured temperature or the temperature set point of the storage tank;

(9) mass flow meter, positive displacement meter, or similar device for measuring the volumetric flow rate of flash, working, breathing, and standing emissions from crude oil and condensate over a 24-hour period representative of normal operation. For crude oil and natural gas production sites, volumetric flow rate measurements must be made while the producing wells are operational;

(10) test methods referenced in paragraphs (2), (5), and (6) of this section or Gas Processors Association Method 2286, Tentative Method of Extended Analysis for Natural Gas and Similar Mixtures by Temperature Programmed Gas Chromatography, to measure the concentration of volatile organic compounds in flashed gases from crude oil and condensate storage;

(11) 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; or

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

§115.118. Recordkeeping Requirements.

(a) The following recordkeeping requirements apply in the Beaumont-Port Arthur, Bexar County, Dallas-Fort Worth, El Paso, and Houston-Galveston-Brazoria areas, as defined in §115.10 of this title (relating to Definitions).

(1) The owner or operator of storage tank claiming an exemption in §115.111 of this title (relating to Exemptions) shall maintain records sufficient to demonstrate continuous compliance with the applicable exemption criteria. Where applicable, true vapor pressure, volatile organic compounds (VOC) content type, or a combination of the two must be recorded initially and at every change of service or when the storage tank is emptied and refilled.

(2) The owner or operator of an external floating roof storage tank that is exempt from the requirement for a secondary seal in accordance with §115.111(a)(1), (6), and (7) of this title and is used to store VOC with a true vapor pressure greater than 1.0 pounds per square inch absolute (psia) shall maintain records of the type of VOC stored and the average monthly true vapor pressure of the stored liquid.

(3) The owner or operator shall maintain records of the results of inspections required by §115.114(a) of this title (relating to Inspection and Repair Requirements). For secondary seal gaps that are required to be physically measured during inspection, these records must include a calculation of emissions for all secondary seal gaps that exceed 1/8 inch where the accumulated area of such gaps is greater than 1.0 square inch per foot of tank diameter. These calculated emissions inventory reportable emissions must be reported in the annual emissions inventory submittal required by §101.10 of this title (relating to Emissions Inventory Requirements). The emissions must be calculated using the following equation.

Figure: 30 TAC §115.118(a)(3) (No Change)

(4) The owner or operator shall maintain records of any operational parameter monitoring required in §115.115(a) of this title (relating to Monitoring Requirements). Such records must be sufficient to demonstrate proper functioning of those devices to design specifications and must include, but are not limited to, the following.

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

(B) For a condensation system, the owner or operator shall continuously record 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.

(C) For a carbon adsorption system or carbon adsorber, the owner or operator shall:

(i) continuously record the exhaust gas VOC concentration of any carbon adsorption system monitored according to §115.115(a)(3)(A) of this title; or

(ii) record the date and time of each switch between carbon containers and the method of determining the carbon replacement interval if the carbon adsorption system or carbon adsorber is switched according to §115.115(a)(3)(B) of this title.

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

(E) For a vapor recovery unit, the owner or operator shall maintain records of the continuous operational parameter monitoring required in §115.115(a)(5) of this title.

(F) For any other control device not listed in this paragraph, the owner or operator shall maintain records of the continuous operational parameter monitoring required in §115.115(a)(6) of this title sufficient to demonstrate proper functioning of the control device to design specifications.

(5) The owner or operator shall maintain the results of any testing conducted in accordance with §115.116 of this title (relating to Testing Requirements) or §115.117 of this title (relating to Approved Test Methods) at an affected site. Results may be maintained at an off-site location if made available for review within 24 hours.

(6) In the Houston-Galveston-Brazoria and Dallas-Fort Worth areas, and in the Bexar County area beginning January 1, 2025, the owner or operator shall maintain the following additional records.

(A) The owner or operator of a fixed roof storage tank that is not required in §115.112(d)(1) or (e)(1) of this title (relating to Control Requirements) to be equipped with an external floating roof, internal floating roof, or vapor control system shall maintain records of the type of VOC stored, the starting and ending dates when the material is stored, and the true vapor pressure at the average monthly storage temperature of the stored liquid. This requirement does not apply to a storage tank with storage capacity of 25,000 gallons or less storing VOC other than crude oil or condensate, or to a storage tank with storage capacity of 40,000 gallons or less storing crude oil or condensate.

(B) The owner or operator of any storage tank that stores crude oil or condensate prior to custody transfer or at a pipeline breakout station and is not equipped with a vapor control system shall maintain records of the estimated uncontrolled emissions from

the storage tank on a rolling 12-month basis. The records must be made available for review within 72 hours upon request by authorized representatives of the executive director, the United States Environmental Protection Agency, or any local air pollution control agency with jurisdiction.

(C) The owner or operator of an external floating roof or internal floating roof storage tank meeting the extended compliance date in §115.119(a)(1)(A) or (b)(1)(A) of this title (relating to Compliance Schedules) shall maintain records of the date of the last time the storage tank was emptied and degassed.

(D) The owner or operator of any storage tank that stores crude oil or condensate prior to custody transfer or at a pipeline breakout station is required by §115.112(e) of this title to control flash emissions shall maintain records of the manufacturer or industry standard instructions used to maintain the storage tanks and tank closure devices in use.

(E) The owner or operator of any storage tank that stores crude oil or condensate prior to custody transfer or at a pipeline breakout station shall maintain records of the results of each inspection and repair required in §115.112(e)(7) or §115.114(a)(5) of this title, including the following items:

(i) the date of the inspection;

(ii) the status of the device during inspection;

(iii) the amount of time a closure device was open since the last inspection for reasons not allowed in §115.112(e)(7)(A) of this title;

(iv) the date repair was attempted and completed; and

(v) the list of closure devices awaiting delayed repair as allowed by §115.112(e)(7)(D) of this title.

(7) All records must be maintained for two years and be made available for review upon request by authorized representatives of the executive director, the United States Environmental Protection Agency, or any local air pollution control agency with jurisdiction. In the Dallas-Fort Worth area, any records created on or after March 1, 2011, must be maintained for at least five years. In the Houston-Galveston-Brazoria area, any records created on or after January 1, 2017 must be maintained for at least five years. In the Bexar County area, beginning January 1, 2025, any records created must be maintained for at least five years.

(b) The following recordkeeping requirements apply in Gregg, Nueces, and Victoria Counties.

(1) The owner or operator of an external floating roof storage tank that is exempt from the requirement for a secondary seal in accordance with §115.111(b)(1), (6), and (7) of this title and used to store VOC with a true vapor pressure greater than 1.0 psia shall maintain records of the type of VOC stored and the average monthly true vapor pressure of the stored liquid.

(2) The owner or operator shall record the results of inspections required by §115.114(b) of this title.

(3) In Victoria County, the owner or operator shall continuously record operational parameters of any of the following emission control devices installed to meet applicable control requirements in §115.112 of this title. Such records must be sufficient to demonstrate proper functioning of those devices to design specifications, including:

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

(B) the inlet and outlet gas temperature of a condensation system or catalytic incinerator; and

(C) the exhaust gas VOC concentration of any carbon adsorption system or carbon adsorber, to determine if breakthrough has occurred.

(4) The owner or operator shall maintain records of the results of any testing conducted in accordance with §115.117 of this title at an affected site.

(5) All records must be maintained for two years and be made available for review upon request by authorized representatives of the executive director, the United States Environmental Protection Agency, or any local air pollution control agency with jurisdiction.

§115.119. Compliance Schedules.

(a) In Brazoria, Chambers, Fort Bend, Galveston, Harris, Liberty, Montgomery, and Waller Counties, the compliance date has passed and the owner or operator of each storage tank in which any volatile organic compounds (VOC) are placed, stored, or held shall continue to comply with this division except as follows.

(1) The affected owner or operator shall comply with the requirements of §§115.112(d); 115.115(a)(1), (2), (3)(A), and (4); 115.117; and 115.118(a) of this title (relating to Control Requirements; Monitoring Requirements; Approved Test Methods; and Recordkeeping Requirements, respectively) no later than January 1, 2009. Section 115.112(d) of this title no longer applies in the Houston-Galveston-Brazoria area beginning March 1, 2013. Prior to March 1, 2013, the owner or operator of a storage tank subject to §115.112(d) of this title shall continue to comply with §115.112(d) of this title until compliance has been demonstrated with

the requirements of §115.112(e)(1) - (6) of this title. Section 115.112(e)(3)(A)(i) of this title no longer applies beginning July 20, 2018.

(A) If compliance with these requirements would require emptying and degassing of the storage tank, compliance is not required until the next time the storage tank is emptied and degassed but no later than January 1, 2017.

(B) The owner or operator of each storage tank with a storage capacity less than 210,000 gallons storing crude oil and condensate prior to custody transfer shall comply with the requirements of this division no later than January 1, 2009, regardless if compliance with these requirements would require emptying and degassing of the storage tank.

(2) The affected owner or operator shall comply with §§115.112(e)(1) - (6), 115.115(a)(3)(B), (5), and (6), and 115.116 of this title (relating to Testing Requirements) no later than March 1, 2013. Section 115.112(e)(3)(A)(i) of this title no longer applies beginning July 20, 2018. Prior to July 20, 2018, the owner or operator of a storage tank subject to §115.112(e)(3)(A)(i) of this title shall continue to comply with §115.112(e)(3)(A)(i) of this title until compliance has been demonstrated with the requirements of §115.112(e)(3)(A)(ii) of this title. After July 20, 2018, the owner or operator of a storage tank is subject to §115.112(e)(3)(A)(ii) of this title.

(A) If compliance with these requirements would require emptying and degassing of the storage tank, compliance is not required until the next time the storage tank is emptied and degassed but no later than January 1, 2017.

(B) The owner or operator of each storage tank with a storage capacity less than 210,000 gallons storing crude oil and condensate prior to custody transfer shall comply with these requirements no later than March 1, 2013, regardless if compliance with these requirements would require emptying and degassing of the storage tank.

(3) The affected owner or operator shall comply with §§115.112(e)(3)(A)(ii), 115.112(e)(7), 115.118(a)(6)(D) and (E), and 115.114(a)(5) of this title (relating to Inspection and Repair Requirements) as soon as practicable, but no later than July 20, 2018.

(b) In Collin, Dallas, Denton, Ellis, Johnson, Kaufman, Parker, Rockwall, and Tarrant Counties, the owner or operator of each storage tank in which any VOC is placed, stored, or held was required to be in compliance with this division on or before March 1, 2009, and shall continue to comply with this division, except as follows.

(1) The affected owner or operator shall comply with §§115.112(e), 115.115(a)(3)(B), (5), and (6), 115.116, and 115.118(a)(6) of this title as soon as practicable, but no later than March 1, 2013.

(A) If compliance with §115.112(e) of this title would require emptying and degassing of the storage tank, compliance is not required until the next time the storage tank is emptied and degassed but no later than December 1, 2021.

(B) The owner or operator of a storage tank with a storage capacity less than 210,000 gallons storing crude oil and condensate prior to custody transfer shall comply with these requirements no later than March 1, 2013, regardless if compliance with these requirements would require emptying and degassing of the storage tank.

(2) The affected owner or operator in Collin, Dallas, Denton, Ellis, Johnson, Kaufman, Parker, Rockwall, and Tarrant Counties shall comply with §§115.112(e)(7), 115.114(a)(5), and 115.118(a)(6)(D) and (E) of this title no later than January 1, 2017.

(c) In Hardin, Jefferson, and Orange Counties, the owner or operator of each storage tank in which any VOC is placed, stored, or held was required to be in compliance with this division by March 7, 1997, and shall continue to comply with this division, except that compliance with §115.115(a)(3)(B), (5), and (6), and §115.116 of this title is required no later than March 1, 2013.

(d) In El Paso County, the owner or operator of each storage tank in which any VOC is placed, stored, or held was required to be in compliance with this division by January 1, 1996,

and shall continue to comply with this division, except that compliance with §115.115(a)(3)(B), (5), and (6), and §115.116 of this title is required no later than March 1, 2013.

(e) Except as specified in subsection (g) of this section, in Aransas, Bexar, Calhoun, Gregg, Matagorda, Nueces, San Patricio, Travis, and Victoria Counties, the owner or operator of each storage tank in which any VOC is placed, stored, or held was required to be in compliance with this division by July 31, 1993, and shall continue to comply with this division, except that compliance with §115.116(b) of this title is required as soon as practicable, but no later than March 1, 2013.

(f) In Wise County, the owner or operator of each storage tank in which any VOC is placed, stored, or held was required to be in compliance with this division by January 1, 2017, and shall continue to comply with this division, except that compliance with §115.112(e)(4)(D) and (5)(D) by no later than November 7, 2025.

(g) The owner or operator of each storage tank in the Bexar County area subject to the requirements of this division shall comply with the requirements of §115.112(c) and §115.114(c) of this title through December 31, 2024 and all other applicable requirements of this division no later than January 1, 2025.

(h) The owner or operator of each storage tank in which any VOC is placed, stored, or held that becomes subject to this division on or after the date specified in subsections (a) - (f)

of this section, shall comply with the requirements in this division no later than 60 days after becoming subject.

(i) In Brazoria, Chambers, Collin, Dallas, Denton, Ellis, Fort Bend, Galveston, Harris, Johnson, Kaufman, Liberty, Montgomery, Parker, Rockwall, Tarrant, Waller, and Wise Counties, the owner or operator of a storage tank storing crude oil or condensate shall continue to comply with the requirements in this division until compliance with the requirements in Division 7 of this subchapter (relating to Oil and Natural Gas Service in Ozone Nonattainment Areas) is achieved or until December 31, 2022, whichever is sooner.

SUBCHAPTER B: GENERAL VOLATILE ORGANIC COMPOUND SOURCES
DIVISION 2: VENT GAS CONTROL
§§115.121 – 115.123, 115.125 – 115.127, 115.129

Statutory Authority

The amendments are adopted under Texas Water Code (TWC), §5.102, concerning general powers; §5.103, concerning Rules; TWC, §5.105, concerning General Policy, which authorize the commission to adopt rules necessary to carry out its powers and duties under the TWC; TWC, §7.002, concerning Enforcement Authority, which authorizes the commission to enforce the provisions of the Water Code and the Health and Safety Code within the commission's jurisdiction; and under Texas Health and Safety Code (THSC), §382.017, concerning Rules, which authorizes the commission to adopt rules consistent with the policy and purpose of the Texas Clean Air Act.

The amendments are also adopted under THSC, §382.002, concerning Policy and Purpose, which establishes the commission's purpose to safeguard the state's air resources, consistent with the protection of public health, general welfare, and physical property; THSC, §382.011, concerning General Powers and Duties, which authorizes the commission to control the quality of the state's air; THSC, §382.012, concerning the State Air Control Plan, which authorizes the commission to prepare and develop a general, comprehensive plan for the proper control of the state's air; THSC, §382.016, concerning Monitoring Requirements; Examination of Records, which authorizes the commission to prescribe reasonable requirements for measuring and monitoring the emissions of air contaminants; and THSC, §382.021, concerning Sampling Methods and Procedures.

The adopted amendments implement TWC, §§5.102, 5.103 and 7.002; and THSC, §§382.002, 382.011, 382.012, 382.016, 382.017, and 382.021.

§115.121. Emissions Specifications.

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

(1) No person may allow a vent gas stream containing volatile organic compounds (VOC) to be emitted from any process vent, unless the vent gas stream is controlled properly in accordance with §115.122(a)(1) of this title (relating to Control Requirements). Vent gas streams include emissions from compressor rod packing that are contained and routed through a vent, except from compressors subject to Division 7 of this subchapter (relating to Oil and Natural Gas in Ozone Nonattainment Areas), and emissions from a glycol dehydrator still vent.

(2) No person may allow a vent gas stream to be emitted from the following processes unless the vent gas stream is controlled properly in accordance with §115.122(a)(2) of this title:

(A) any synthetic organic chemical manufacturing industry reactor process or distillation operation;

(B) any air oxidation synthetic organic chemical manufacturing process;

(C) any liquid phase polypropylene manufacturing process;

(D) any liquid phase slurry high-density polyethylene manufacturing process; or

(E) any continuous polystyrene manufacturing process.

(3) In the Bexar County, Dallas-Fort Worth, El Paso, and Houston-Galveston-Brazoria areas, as defined in §115.10 of this title, VOC emissions from bakery ovens, shall be controlled properly in accordance with §115.122(a)(3) of this title.

(4) Any vent gas stream in the Houston-Galveston-Brazoria area which includes a highly-reactive volatile organic compound, as defined in §115.10 of this title, 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.

(b) In Nueces and Victoria Counties, no person may allow a vent gas stream to be emitted from any process vent containing one or more of the following VOC or classes of VOC, unless the vent gas stream is controlled properly in accordance with §115.122(b) of this title:

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

(2) emissions of the following specific VOC: ethylene, butadiene, isobutylene, styrene, isoprene, propylene, methylstyrene; and

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

(c) For persons in Aransas, Bexar, Calhoun, Matagorda, San Patricio, and Travis Counties, the following emission specifications shall apply. The emission specifications of this subsection no longer apply for sources located in Bexar County beginning January 1, 2025.

(1) No person may allow a vent gas stream to be emitted from any process vent containing one or more of the following VOC or classes of VOC, unless the vent gas stream is controlled properly in accordance with §115.122(c)(1) of this title:

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

(B) emissions of the following specific VOC: ethylene, butadiene, isobutylene, styrene, isoprene, propylene, and methylstyrene; and

(C) emissions of specified classes of VOC, including aldehydes, alcohols, aromatics, ethers, olefins, peroxides, amines, acids, esters, ketones, sulfides, and branched chain hydrocarbons (C_8 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 controlled in accordance with §115.122(c)(2) of this title.

(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 controlled in accordance with §115.122(c)(3) of this title.

(4) Vent gas streams from blast furnaces shall be controlled properly in accordance with §115.122(c)(4) of this title.

§115.122. Control Requirements.

(a) For all persons in the Beaumont-Port Arthur, Bexar County, Dallas-Fort Worth, El Paso, and Houston-Galveston-Brazoria areas, the following control requirements shall apply.

(1) Any vent gas streams affected by §115.121(a)(1) of this title (relating to Emission Specifications) must be controlled properly with a control efficiency of at least 90% or to a volatile organic compound (VOC) concentration of no more than 20 parts per million by volume (ppmv) (on a dry basis corrected to 3.0% oxygen for combustion devices):

(A) in a direct-flame incinerator at a temperature equal to or greater than 1,300 degrees Fahrenheit;

(B) in a smokeless flare that is lit at all times when VOC vapors are routed to the flare; or

(C) by any other vapor control system, as defined in §115.10 of this title (relating to Definitions). A glycol dehydrator reboiler burning the vent stream from the still vent is a vapor control system.

(2) Any vent gas streams affected by §115.121(a)(2) of this title must be controlled properly with a control efficiency of at least 98% or to a VOC concentration of no more than 20 ppmv (on a dry basis corrected to 3.0% oxygen for combustion devices):

(A) in a smokeless flare that is lit at all times when VOC vapors are routed to the flare; or

(B) by any other vapor control system, as defined in §115.10 of this title.

(3) For the Bexar County, Dallas-Fort Worth, El Paso, and Houston-Galveston-Brazoria areas, VOC emissions from each bakery with a bakery oven vent gas stream(s) affected by §115.121(a)(3) of this title shall be reduced as follows.

(A) Each bakery in the Houston-Galveston-Brazoria area with a total weight of VOC emitted from all bakery ovens on the property, when uncontrolled, equal to or greater than 25 tons per calendar year shall ensure that the overall emission reduction from the uncontrolled VOC emission rate of the oven(s) is at least 80%.

(B) Through November 6, 2025, each bakery in the Dallas-Fort Worth area, except in Wise County, with a total weight of VOC emitted from all bakery ovens on the property, when uncontrolled, equal to or greater than 50 tons per calendar year, shall ensure that the overall emission reduction from the uncontrolled VOC emission rate of the oven(s) is at least 80%. Beginning November 7, 2025, each bakery in the Dallas-Fort Worth area, including Wise County, with a total weight of VOC emitted from all bakery ovens on the property, when uncontrolled, equal to or greater than 25 tons per calendar year, shall ensure that the overall emission reduction from the uncontrolled VOC emission rate of the oven(s) is at least 80%.

(C) Each bakery in the Dallas-Fort Worth with a total weight of VOC emitted from all bakery ovens on the property, when uncontrolled, equal to or greater than 25 tons per calendar year, but less than 50 tons per calendar year, shall reduce total VOC emissions by at least 30% from the bakery's 1990 emissions inventory in accordance with the schedule specified in §115.129(d) of this title (relating to Counties and Compliance Schedules). The requirements of this subparagraph no longer apply beginning November 7, 2025.

(D) Each bakery in the El Paso area with a total weight of VOC emitted from all bakery ovens on the property, when uncontrolled, equal to or greater than 25 tons per calendar year shall reduce total VOC emissions by at least 30% from the bakery's 1990 emissions inventory in accordance with the schedule specified in §115.129(e) of this title.

(E) Each bakery in the Bexar County area with a total weight of VOC emitted from all bakery ovens on the property, when uncontrolled, equal to or greater than 100 tons per calendar year, shall ensure that the overall emission reduction from the uncontrolled VOC emission rate of the oven(s) is at least 80%.

(F) Emission reductions in the 30% to 90% range are not creditable under Chapter 101, Subchapter H, Division 1 of this title (relating to Emission Credit Program) for the following bakeries:

(i) each bakery in the Houston-Galveston-Brazoria area with a total weight of VOC emitted from all bakery ovens on the property, when uncontrolled, equal to or greater than 25 tons per calendar year;

(ii) each bakery in the Dallas-Fort Worth area with a total weight of VOC emitted from all bakery ovens on the property, when uncontrolled, equal to or greater than 50 tons per calendar year through November 6, 2025 and 25 tons per calendar year beginning November 7, 2025;

(iii) each bakery in the El Paso area with a total weight of VOC emitted from all bakery ovens on the property, when uncontrolled, equal to or greater than 50 tons per calendar year; and

(iv) each bakery in the Bexar County area with a total weight of VOC emitted from all bakery ovens on the property, when uncontrolled, equal to or greater than 100 tons per calendar year.

(4) Any vent gas stream that becomes subject to the provisions of paragraphs (1), (2), or (3) of this subsection by exceeding provisions of §115.127(a) of this title (relating to Exemptions) shall remain subject to the provisions of this subsection, even if throughput or emissions later fall below the exemption limits unless and until emissions are reduced to no more than the controlled emissions level existing before implementation of the project by

which throughput or emission rate was reduced to less than the applicable exemption limits in §115.127(a) of this title; and:

(A) the project by which throughput or emission rate was reduced is authorized by any permit or permit amendment or standard permit or permit by rule required by Chapter 116 or Chapter 106 of this title (relating to Control of Air Pollution by Permits for New Construction or Modification; and Permits by Rule). If a permit by rule is available for the project, compliance with this subsection must be maintained for 30 days after the filing of documentation of compliance with that permit by rule; or

(B) if authorization by permit, permit amendment, standard permit, or permit by rule is not required for the project, the owner or operator has given the executive director 30 days' notice of the project in writing.

(b) For all persons in Nueces and Victoria Counties, any vent gas streams affected by §115.121(b) of this title must be controlled properly with a control efficiency of at least 90% or to a VOC concentration of no more than 20 ppmv (on a dry basis corrected to 3.0% oxygen for combustion devices):

(1) in a direct-flame incinerator at a temperature equal to or greater than 1,300 degrees Fahrenheit;

(2) in a smokeless flare that is lit at all times when VOC vapors are routed to the flare; or

(3) by any other vapor control system, as defined in §115.10 of this title.

(c) For all persons in Aransas, Bexar, Calhoun, Matagorda, San Patricio, and Travis Counties, the following control requirements shall apply. The control requirements of the subsection no longer apply for sources located in Bexar County beginning January 1, 2025.

(1) Any vent gas streams affected by §115.121(c)(1) of this title must be controlled properly:

(A) in a direct-flame incinerator at a temperature equal to or greater than 1,300 degrees Fahrenheit;

(B) in a smokeless flare that is lit at all times when VOC vapors are routed to the flare; or

(C) by any other vapor control system, as defined in §115.10 of this title, with a control efficiency of at least 90% or to a VOC concentration of no more than 20 ppmv (on a dry basis corrected to 3.0% oxygen for combustion devices).

(2) Any vent gas streams affected by §115.121(c)(2) of this title must be controlled properly:

(A) in a direct-flame incinerator or boiler at a temperature equal to or greater than 1,300 degrees Fahrenheit; or

(B) by any other vapor control system, as defined in §115.10 of this title, with a control efficiency of at least 90% or to a VOC concentration of no more than 20 ppmv (on a dry basis corrected to 3.0% oxygen for combustion devices).

(3) Any vent gas streams affected by §115.121(c)(3) of this title must be controlled properly:

(A) at a temperature equal to or greater than 1,300 degrees Fahrenheit 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; or

(B) by any other vapor control system, as defined in §115.10 of this title, with a control efficiency of at least 90% or to a VOC concentration of no more than 20 ppmv (on a dry basis corrected to 3.0% oxygen for combustion devices).

(4) Any vent gas streams affected by §115.121(c)(4) of this title must be controlled properly:

(A) in a smokeless flare that is lit at all times when VOC vapors are routed to the flare or in a combustion device used in a heating process associated with the operation of a blast furnace; or

(B) by any other vapor control system, as defined in §115.10 of this title, with a control efficiency of at least 90% or to a VOC concentration of no more than 20 ppmv (on a dry basis corrected to 3.0% oxygen for combustion devices).

§115.123. Alternate Control Requirements.

(a) The alternate control requirements for vent gas streams in the Beaumont-Port Arthur, Bexar County, Dallas-Fort Worth, El Paso, and Houston-Galveston-Brazoria areas are as follows.

(1) Alternate methods of demonstrating and documenting continuous compliance with the applicable control requirements or exemption criteria in this division (relating to Vent Gas Control) 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.

(2) The owner or operator of a synthetic organic chemical manufacturing industry (SOCMI) reactor process or distillation operation in which vent gas stream emissions are controlled by a control device with a control efficiency of at least 90% which was installed before December 3, 1993 may request an alternate reasonably available control technology (ARACT) determination. The executive director may approve the ARACT if it is determined to be economically unreasonable to replace the control device with a new control device meeting the requirements of §115.122(a)(2) of this title (relating to Control Requirements). Each ARACT approved by the executive director shall include a requirement that the control device be operated at its maximum efficiency. Each ARACT shall only be valid until the control device undergoes a replacement, a modification as defined in 40 Code of Federal Regulations (CFR) §60.14 (October 17, 2000), or a reconstruction as defined in 40 CFR §60.15 (December 16, 1975), at which time the replacement, modified, or reconstructed control device shall meet the requirements of §115.122(a)(2) of this title. Any request for an ARACT determination shall be submitted to the executive director in writing no later than May 31, 1994. The executive director may direct the holder of an ARACT to reapply for an ARACT if it is more than ten years since the date of installation of the control device and there is good cause to believe that it is now economically reasonable to meet the requirements of §115.122(a)(2) of this title. Within three months of an executive director request, the holder of an ARACT shall reapply for an ARACT. If the reapplication for an ARACT is denied, the holder of the ARACT shall meet the requirements of §115.122(a)(2) of this title as soon as practicable, but no later than two years from the date of the executive director's written notification of denial.

(b) For all persons in Nueces and Victoria Counties, 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 if emission reductions are demonstrated to be substantially equivalent.

(c) For all persons in Aransas, Bexar, Calhoun, Matagorda, San Patricio, and Travis Counties, 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 if emission reductions are demonstrated to be substantially equivalent. The alternate methods of demonstrating continuous compliance available under this subsection no longer apply for sources located in Bexar County beginning January 1, 2025.

§115.125. Testing Requirements.

Compliance with the emission specifications, vapor control system efficiency, and certain control requirements and exemption criteria of §§115.121 - 115.123 and 115.127 of this title (relating to Emission Specifications; Control Requirements; Alternate Control Requirements; and Exemptions) shall be determined by applying one or more of the following test methods and procedures, as appropriate, when specifically required within this division,

when required by the executive director under §101.8 of this title (relating to Sampling), or when the owner or operator elects to conduct testing of one or more vent gas streams.

(1) Flow rate. Test Methods 1-4 (40 Code of Federal Regulations (CFR) Part 60, Appendix A) are used for determining flow rates, as necessary.

(2) Concentration of volatile organic compounds (VOC).

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

(B) Test Method 21 (40 CFR Part 60, Appendix A-7) for determining VOC concentrations for the purpose of determining breakthrough on a carbon adsorption system or carbon adsorber.

(C) Test Method 25 (40 CFR Part 60, Appendix A) is used for determining total gaseous nonmethane organic emissions as carbon.

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

(3) Performance requirements for flares and vapor combustors.

(A) For flares, Test Method 22 (40 CFR Part 60, Appendix A) is used for visual determination of fugitive emissions from material sources and smoke emissions.

(B) For flares, additional test method requirements are described in 40 CFR §60.18(f), unless the United States Environmental Protection Agency (EPA) or the executive director has granted a waiver from such testing requirements.

(C) Flares in the Beaumont-Port Arthur, Bexar County, Dallas-Fort Worth, and Houston-Galveston-Brazoria areas shall comply with the performance test requirements of 40 CFR §60.18(b), unless EPA or the executive director has granted a waiver from such testing requirements.

(D) For vapor combustors, the owner or operator may consider the unit to be a flare. Each vapor combustor in Victoria County and the Beaumont-Port Arthur, Bexar County, Dallas-Fort Worth, El Paso, and Houston-Galveston-Brazoria areas which the owner or operator elected to consider as a flare shall meet the performance test requirements of 40 CFR §60.18(b) in lieu of any testing under paragraphs (1) and (2) of this section.

(E) Compliance with the requirements of 40 CFR §60.18(b) will be considered to demonstrate compliance with the emission specifications and control efficiency requirements of §115.121 and §115.122 of this title.

(4) Minor modifications. Minor modifications to these test methods may be used, if approved by the executive director.

(5) Alternate test methods. Test methods other than those specified in paragraphs (1) - (3) of this section may be used if validated by 40 CFR 63, Appendix A, Test Method 301. For the purposes of this paragraph, substitute "executive director" each place that Test Method 301 references "administrator."

§115.126. Monitoring and Recordkeeping Requirements.

The owner or operator of any facility which emits volatile organic compounds (VOC) through a stationary vent in Aransas, Calhoun, Matagorda, Nueces, San Patricio, Travis, and Victoria Counties or in the Beaumont-Port Arthur, Bexar County, Dallas-Fort Worth, El Paso, and Houston-Galveston-Brazoria areas shall maintain the following information at the facility for at least five years. The owner or operator shall make the information available upon request to representatives of the executive director, the United States Environmental Protection Agency, or any local air pollution control agency having jurisdiction in the area.

(1) Vapor control systems. For vapor control systems used to control emissions in Victoria County and in the Beaumont-Port Arthur, Bexar County, Dallas-Fort Worth, El Paso, and Houston-Galveston-Brazoria areas, from vents subject to the provisions of §115.121 of this title (relating to Emission Specifications), records of appropriate parameters to demonstrate compliance, including:

(A) continuous monitoring and recording of:

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

(ii) the inlet and outlet gas temperatures of a catalytic incinerator or chiller;

(iii) the exhaust gas temperature immediately downstream of a vapor combustor. Alternatively, the owner or operator of a vapor combustor may consider the unit to be a flare and meet the requirements specified in 40 Code of Federal Regulations (CFR) §60.18(b) and Chapter 111 of this title (relating to Control of Air Pollution from Visible Emissions and Particulate Matter) for flares; and

(iv) for a carbon adsorption system or carbon adsorber, as defined in §101.1 of this title (relating to Definitions), the owner or operator shall:

(I) continuously monitor the exhaust gas VOC concentration of a carbon adsorption system that regenerates the carbon bed directly to determine breakthrough. For the purpose of this subclause, breakthrough is defined as a measured VOC concentration exceeding 100 parts per million by volume above background expressed as methane; and

(II) switch the vent gas flow to fresh carbon at a regular predetermined time interval for a carbon adsorber or carbon adsorption system that does not regenerate the carbon directly. The time interval must be less than the carbon replacement interval determined by the maximum design flow rate and the VOC concentration in the gas stream vented to the carbon adsorption system or carbon adsorber.

(B) in the Beaumont-Port Arthur, Bexar County, Dallas-Fort Worth, and Houston-Galveston-Brazoria areas, the requirements specified in 40 CFR §60.18(b) and Chapter 111 of this title for flares; and

(C) for vapor control systems other than those specified in subparagraphs (A) and (B) of this paragraph, records of appropriate operating parameters.

(2) Test results. A record of the results of any testing conducted in accordance with §115.125 of this title (relating to Testing Requirements).

(3) Records for exempted vents. Records for each vent exempted from control requirements in accordance with §115.127 of this title (relating to Exemptions) shall be sufficient to demonstrate compliance with the applicable exemption limit, including the following, as appropriate:

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

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

(C) the concentration of VOC in each vent gas stream on a daily basis;

(D) the maximum design flow rate or VOC concentration of each vent gas stream exempt under §115.127(a)(4)(C) of this title; and

(E) the total design capacity of process units exempt under §115.127(a)(4)(B) of this title.

(4) Alternative records for exempted vents. As an alternative to the requirements of paragraph (3)(B) and (C) of this section, records for each vent exempted from control requirements in accordance with §115.127 of this title and having a VOC emission rate or

concentration less than the applicable exemption limits at maximum actual operating conditions shall be sufficient to demonstrate continuous compliance with the applicable exemption limit. These records shall include complete information from either test results or appropriate calculations which clearly documents that the emission characteristics at maximum actual operating conditions are less than the applicable exemption limit. This documentation shall include the operating parameter levels that occurred during any testing, and the maximum levels feasible (either VOC concentration or mass emission rate) for the process.

(5) Bakeries. For bakeries subject to §115.122(a)(3)(A) - (B) of this title (relating to Control Requirements), the following additional requirements apply.

(A) The owner or operator of each bakery in the Houston-Galveston-Brazoria area with a total weight of VOC emitted from all bakery ovens on the property, when uncontrolled, equal to or greater than 25 tons per calendar year, shall submit a control plan no later than March 31, 2001, to the executive director, the appropriate regional office, and any local air pollution control program with jurisdiction. The plan shall demonstrate that the overall emission reduction from the uncontrolled VOC emission rate of the oven(s) will be at least 80% by December 31, 2001. At a minimum, the control plan shall include the emission point number (EPN) and the facility identification number (FIN) of each bakery oven and any associated control device, a plot plan showing the location, EPN, and FIN of each bakery oven and any associated control device, and the 2000 VOC emission rates (consistent with the

bakery's 2000 emissions inventory). The projected 2002 VOC emission rates shall be calculated in a manner consistent with the 2000 emissions inventory.

(B) All representations in control plans become enforceable conditions. It shall be unlawful for any person to vary from such representations if the variation will cause a change in the identity of the specific emission sources being controlled or the method of control of emissions unless the owner or operator of the bakery submits a revised control plan to the executive director, the appropriate regional office, and any local air pollution control program with jurisdiction within 30 days of the change. All control plans shall include documentation that the overall emission reduction from the uncontrolled VOC emission rate of the bakery's oven(s) continues to be at least the specified percentage reduction. The emission rates shall be calculated in a manner consistent with the most recent emissions inventory.

(6) Bakeries (contingency measures). For bakeries subject to §115.122(a)(3)(C) and (D) of this title, the following additional requirements apply.

(A) No later than six months after the commission publishes notification in the *Texas Register* as specified in §115.129(d) or (e) of this title (relating to Counties and Compliance Schedules), the owner or operator of each bakery shall submit an initial control plan to the executive director, the appropriate regional office, and any local air pollution control program with jurisdiction which demonstrates that the overall reduction of VOC emissions from the bakery's 1990 emissions inventory will be at least 30%. At a minimum, the

control plan shall include the EPN and the FIN of each bakery oven and any associated control device, a plot plan showing the location, EPN, and FIN of each bakery oven and any associated control device, and the 1990 VOC emission rates (consistent with the bakery's 1990 emissions inventory). The projected VOC emission rates shall be calculated in a manner consistent with the 1990 emissions inventory.

(B) In order to document continued compliance with §115.122(a)(3) of this title, the owner or operator of each bakery shall submit an annual report no later than March 31 of each year to the executive director, the appropriate regional office, and any local air pollution control program with jurisdiction which demonstrates that the overall reduction of VOC emissions from the bakery's 1990 emissions inventory during the preceding calendar year is at least 30%. At a minimum, the report shall include the EPN and FIN of each bakery oven and any associated control device, a plot plan showing the location, EPN, and FIN of each bakery oven and any associated control device, and the VOC emission rates. The emission rates for the proceeding calendar year shall be calculated in a manner consistent with the 1990 emissions inventory.

(C) All representations in control plans and annual reports become enforceable conditions. It shall be unlawful for any person to vary from such representations if the variation will cause a change in the identity of the specific emission sources being controlled or the method of control of emissions unless the owner or operator of the bakery submits a revised control plan to the executive director, the appropriate regional office, and

any local air pollution control program with jurisdiction within 30 days of the change. All control plans and reports shall include documentation that the overall reduction of VOC emissions from the bakery's 1990 emissions inventory continues to be at least 30%. The emission rates shall be calculated in a manner consistent with the 1990 emissions inventory.

(7) Additional flare requirements. The owner or operator of a facility that uses a flare to meet the requirements of §115.122(a)(2) of this title shall install, calibrate, maintain, and operate according to the manufacturer's specifications, a heat-sensing device, such as an ultraviolet beam sensor or thermocouple, at the pilot light to indicate continuous presence of a flame.

§115.127. Exemptions.

(a) For all persons in the Beaumont-Port Arthur, Bexar County, Dallas-Fort Worth, El Paso, and Houston-Galveston-Brazoria areas, the following exemptions apply. In cases where vent gas streams emanating from multiple process locations are combined, compliance with the exemptions of this section is determined after the combination of the streams but prior to the combined stream entering a control device, if present.

(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 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:

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

(B) a vent gas stream specified in §115.121(a)(1) of this title with a concentration of VOC less than 612 parts per million by volume (ppmv);

(C) a vent gas stream which is subject to §115.121(a)(2) or (3) of this title; and

(D) a vent gas stream which qualifies for exemption under paragraphs (3), (4)(B), (4)(C), (4)(D), (4)(E), or (5) of this subsection.

(3) The following vent gas streams are exempt from the requirements of §115.121(a)(2)(B) - (E) of this title:

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

(B) a vent gas stream from any air oxidation synthetic organic chemical manufacturing process with a concentration of VOC less than 612 ppmv; and

(C) 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 VOC less than 408 ppmv.

(4) For synthetic organic chemical manufacturing industry (SOCMI) reactor processes and distillation operations, the following exemptions apply.

(A) Any reactor process or distillation operation that is designed and operated in a batch mode is exempt from the requirements of §115.121(a)(2)(A) of this title. For the purposes of this subparagraph, batch mode means any noncontinuous reactor process or distillation operation which is not characterized by steady-state conditions, and in which the addition of reactants does not occur simultaneously with the removal of products.

(B) Any reactor process or distillation operation operating in a process unit with a total design capacity of less than 1,100 tons per year, for all chemicals produced within that unit, is exempt from the requirements of §115.121(a)(2)(A) of this title.

(C) Any reactor process or distillation operation vent gas stream with a flow rate less than 0.388 standard cubic feet per minute or a VOC concentration less than 500 ppmv is exempt from the requirements of §115.121(a)(2)(A) of this title.

(D) Any distillation operation vent gas stream which meets the requirements of 40 Code of Federal Regulations (CFR) §60.660(c)(4) or §60.662(c) (concerning Subpart NNN--Standards of Performance for VOC Emissions From SOCMI Distillation Operations, December 14, 2000) is exempt from the requirements of §115.121(a)(2)(A) of this title.

(E) Any reactor process vent gas stream which meets the requirements of 40 CFR §60.700(c)(2) or §60.702(c) (concerning Subpart RRR--Standards of Performance for VOC Emissions From SOCMI Reactor Processes, December 14, 2000) is exempt from the requirements of §115.121(a)(2)(A) of this title.

(5) Bakeries are exempt from the requirements of §115.121(a)(3) and §115.122(a)(3) of this title (relating to Emission Specifications and Control Requirements) if the total weight of VOC emitted from all bakery ovens on the property, when uncontrolled, is less than 25 tons per calendar year.

(6) A vent gas stream is exempt from this division if all of the VOCs in the vent gas stream originate from a source(s) for which another division within Chapter 115 (for

example, Storage of Volatile Organic Compounds) has established a control requirement(s), emission specification(s), or exemption(s) which applies to that VOC source category in that county.

(7) A combustion unit exhaust stream is exempt from this division provided that the unit is not being used as a control device for any vent gas stream which is subject to this division and which originates from a non-combustion source.

(8) As an alternative to complying with the requirements of this division (or, in the case of bakeries, as an alternative to complying with the requirements of §115.121(a)(1) and §115.122(a)(1) of this title) for a source that is addressed by a Chapter 115 contingency rule (i.e., one in which Chapter 115 requirements are triggered for that source by the commission publishing notification in the *Texas Register* that implementation of the contingency rule is necessary), the owner or operator of that source may instead choose to comply with the requirements of the contingency rule as though the contingency rule already had been implemented for that source. The owner or operator of each source choosing this option shall submit written notification to the executive director and any local air pollution control program with jurisdiction. When the executive director and the local program (if any) receive such notification, the source will then be considered subject to the contingency rule as though the contingency rule already had been implemented for that source.

(b) For all persons in Nueces and Victoria Counties, the following exemptions apply. In cases where vent gas streams emanating from multiple process locations are combined, compliance with the exemptions of this subsection is determined after the combination of the streams, but prior to the combined stream entering a control device, if present.

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

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

(A) a vent gas stream having a combined weight of the VOC or classes of compounds specified in §115.121(b)(2) and (3) of this title equal to or less than 100 pounds in any continuous 24-hour period; and

(B) a vent gas stream with a concentration of the VOC or classes of compounds specified in §115.121(b)(2) and (3) of this title less than 30,000 ppmv.

(3) A vent gas stream is exempt from this division if all of the VOCs in the vent gas stream originate from a source(s) for which another division within Chapter 115 (for

example, Storage of Volatile Organic Compounds) has established a control requirement(s), emission specification(s), or exemption(s) which applies to that VOC source category in that county.

(4) A combustion unit exhaust stream is exempt from this division provided that the unit is not being used as a control device for any vent gas stream which is subject to this division and which originates from a non-combustion source.

(c) For all persons in Aransas, Bexar, Calhoun, Matagorda, San Patricio, and Travis Counties, the following exemptions apply. In cases where vent gas streams emanating from multiple process locations are combined, compliance with the exemptions of this subsection is determined after the combination of the streams, but prior to the combined stream entering a control device, if present. The provisions of this subsection no longer apply for sources located in Bexar County beginning January 1, 2025.

(1) The following vent gas streams are exempt from the requirements of §115.121(c)(1) of this title:

(A) a vent gas stream from a low-density polyethylene plant provided that no more than 1.1 pounds of ethylene per 1,000 pounds of product are emitted from all the vent gas streams associated with the formation, handling, and storage of solidified product;

(B) a vent gas stream having a combined weight of the VOC or classes of compounds specified in §115.121(c)(1)(B) - (C) of this title equal to or less than 100 pounds in any continuous 24-hour period; and

(C) a vent gas stream having a concentration of the VOC specified in §115.121(c)(1)(B) and (C) of this title less than 30,000 ppmv.

(2) A vent gas stream specified in §115.121(c)(2) of this title which emits less than or equal to five tons of total uncontrolled VOC in any one calendar year is exempt from the requirements of §115.121(c)(2) of this title.

(3) A vent gas stream is exempt from this division if all of the VOCs in the vent gas stream originate from a source(s) for which another division within Chapter 115 (for example, Storage of Volatile Organic Compounds) has established a control requirement(s), emission specification(s), or exemption(s) which applies to that VOC source category in that county.

(4) A combustion unit exhaust stream is exempt from this division provided that the unit is not being used as a control device for any vent gas stream which is subject to this division and which originates from a non-combustion source.

§115.129. Counties and Compliance Schedules

(a) Except as specified in subsection (g) of this section, in Aransas, Bexar, Brazoria, Calhoun, Chambers, Collin, Dallas, Denton, El Paso, Fort Bend, Galveston, Hardin, Harris, Jefferson, Liberty, Matagorda, Montgomery, Nueces, Orange, San Patricio, Travis, Victoria, and Waller Counties, the compliance date has passed and the owner or operator of each vent gas stream shall continue to comply with existing provisions in this division.

(b) The owner or operator of each bakery in Collin, Dallas, Denton, and Tarrant Counties subject to §115.122(a)(3)(C) of this title (relating to Control Requirements) shall comply with §§115.121(a)(3), 115.122(a)(3)(C), and 115.126(6) of this title (relating to Emission Specifications; Control Requirements; and Monitoring and Recordkeeping Requirements) 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 (NAAQS) for ozone by the attainment deadline or failure to demonstrate reasonable further progress as set forth in Federal Clean Air Act (FCAA), §172(c)(9).

(c) The owner or operator of each bakery in El Paso County subject to §115.122(a)(3)(D) of this title shall comply with §§115.121(a)(3), 115.122(a)(3)(D), and 115.126(6) of this title 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 NAAQS for ozone by the attainment deadline or failure to demonstrate reasonable further progress as set forth in FCAA, §172(c)(9).

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

(e) The owner or operator of each vent gas stream in Wise County shall comply with this division as soon as practicable, but no later than January 1, 2017.

(f) The owner or operator of a vent gas stream in Bexar, Collin, Dallas, Denton, Ellis, Johnson, Kaufman, Parker, Rockwall, Tarrant, and Wise Counties that becomes subject to a new requirement of this division on or after the applicable compliance date in this section shall comply with the requirements in this division as soon as practicable, but no later than 60 days after becoming subject.

(g) The owner or operator of each vent gas stream in the Bexar County area subject to the requirements of this division shall comply with the requirements of §115.121(c), §115.122(c), §115.123(c), and §115.127(c) through December 31, 2024 and all other applicable requirements of this division by no later than January 1, 2025.

SUBCHAPTER B: GENERAL VOLATILE ORGANIC COMPOUND SOURCES
DIVISION 3: WATER SEPARATION
§§115.131, 115.132, 115.135 – 115.137, 115.139

Statutory Authority

The amendments are adopted under Texas Water Code (TWC), §5.102, concerning general powers; §5.103, concerning Rules; TWC, §5.105, concerning General Policy, which authorize the commission to adopt rules necessary to carry out its powers and duties under the TWC; TWC, §7.002, concerning Enforcement Authority, which authorizes the commission to enforce the provisions of the Water Code and the Health and Safety Code within the commission's jurisdiction; and under Texas Health and Safety Code (THSC), §382.017, concerning Rules, which authorizes the commission to adopt rules consistent with the policy and purpose of the Texas Clean Air Act.

The amendments are also adopted under THSC, §382.002, concerning Policy and Purpose, which establishes the commission's purpose to safeguard the state's air resources, consistent with the protection of public health, general welfare, and physical property; THSC, §382.011, concerning General Powers and Duties, which authorizes the commission to control the quality of the state's air; THSC, §382.012, concerning the State Air Control Plan, which authorizes the commission to prepare and develop a general, comprehensive plan for the proper control of the state's air; THSC, §382.016, concerning Monitoring Requirements; Examination of Records, which authorizes the commission to prescribe reasonable requirements for measuring and monitoring the emissions of air contaminants; and THSC, §382.021, concerning Sampling Methods and Procedures.

The adopted amendments implement TWC, §§5.102, 5.103 and 7.002; and THSC, §§382.002, 382.011, 382.012, 382.016, 382.017, and 382.021.

§115.131. Emission Specification.

(a) For all persons in the Beaumont-Port Arthur, Bexar County, Dallas-Fort Worth, El Paso, and Houston-Galveston-Brazoria areas as defined in §115.10 of this title (relating to Definitions), any volatile organic compound (VOC) water separator equipped with a vapor recovery system in order to comply with §115.132(a) of this title (relating to Control Requirements) shall reduce emissions such that the true partial pressure of the VOC in vent gases to the atmosphere will not exceed a level of 0.5 psia (3.4 kPa).

(b) For all persons in Gregg, Nueces, and Victoria Counties, any VOC water separator equipped with a vapor recovery system in order to comply with §115.132(b) of this title (relating to Control Requirements) shall reduce emissions such that the partial pressure of the VOC in vent gases to the atmosphere will not exceed a level of 1.5 psia (10.3 kPa).

(c) For all persons in Aransas, Bexar, Calhoun, Matagorda, San Patricio, and Travis Counties, any VOC water separator equipped with a vapor recovery system in order to comply with §115.132(c) of this title shall reduce emissions such that the true partial pressure of the VOC in vent gases to the atmosphere will not exceed a level of 1.5 psia (10.3 kPa). The emission

specifications of this subsection no longer apply for sources located in Bexar County beginning January 1, 2025.

§115.132. Control Requirements.

(a) For the Beaumont-Port Arthur, Bexar County, Dallas-Fort Worth, El Paso, and Houston-Galveston-Brazoria areas, no person shall use any single or multiple compartment volatile organic compound (VOC) water separator which separates materials containing VOC obtained from any equipment which is processing, refining, treating, storing, or handling VOC, unless each compartment is controlled in one of the following ways:

(1) the compartment totally encloses the liquid contents and has all openings (such as roof seals and access doors) sealed such that the separator can hold a vacuum or pressure without emissions to the atmosphere, except through a pressure relief valve. All gauging and sampling devices shall be vapor-tight except during gauging or sampling. The pressure relief valve must be designed to open only as necessary to allow proper operation, and must be set at the maximum possible pressure necessary for proper operation, but such that the valve will not vent continuously;

(2) the compartment is equipped with a floating roof or internal floating cover which will rest on the surface of the contents and be equipped with a closure seal or seals to close the space between the roof edge and tank wall. All gauging and sampling devices shall be vapor-tight except during gauging or sampling;

(3) the compartment is equipped with a vapor recovery system which satisfies the provisions of §115.131(a) of this title (relating to Emission Specifications);

(4) any water separator that becomes subject to the provisions of paragraphs (1), (2), or (3) of this subsection by exceeding provisions of §115.137(a) of this title (relating to Exemptions) will remain subject to the provisions of this subsection, even if throughput or emissions later fall below the exemption limits unless and until emissions are reduced to no more than the controlled emissions level existing before implementation of the project by which throughput or emission rate was reduced to less than the applicable exemption limits in §115.137(a) of this title; and

(A) the project by which throughput or emission rate was reduced is authorized by any permit or permit amendment or standard permit or permit by rule required by Chapter 116 or Chapter 106 of this title (relating to Control of Air Pollution by Permits for New Construction or Modification; and Permits by Rule. If a permit by rule is available for the project, compliance with this subsection must be maintained for 30 days after the filing of documentation of compliance with that permit by rule; or

(B) if authorization by permit, permit amendment, standard permit, or permit by rule is not required for the project, the owner/operator has given the executive director 30 days' notice of the project in writing.

(b) For Gregg, Nueces, and Victoria Counties, no person shall use any single or multiple compartment VOC water separator which separates materials containing VOC obtained from any equipment which is processing, refining, treating, storing, or handling VOC, unless each compartment is controlled in one of the following ways:

(1) the compartment totally encloses the liquid contents and has all openings (such as roof seals and access doors) sealed such that the separator can hold a vacuum or pressure without emissions to the atmosphere, except through a pressure relief valve. All gauging and sampling devices shall be vapor-tight except during gauging or sampling. The pressure relief valve must be designed to open only as necessary to allow proper operation, and must be set at the maximum possible pressure necessary for proper operation, but such that the valve will not vent continuously;

(2) the compartment is equipped with a floating roof or internal floating cover which will rest on the surface of the contents and be equipped with a closure seal or seals to close the space between the roof or cover edge and tank wall. All gauging and sampling devices shall be vapor-tight, except during gauging or sampling;

(3) the compartment is equipped with a vapor recovery system which satisfies the provisions of §115.131(b) of this title.

(c) For Aransas, Bexar, Calhoun, Matagorda, San Patricio, and Travis Counties, no person shall use any single or multiple compartment VOC water separator which separates materials containing VOC obtained from any equipment which is processing, refining, treating, storing, or handling VOC, unless each compartment is controlled in one of the following ways. The control requirements of this subsection no longer apply for sources located in Bexar County beginning January 1, 2025.

(1) The compartment totally encloses the liquid contents and has all openings (such as roof seals and access doors) sealed such that the separator can hold a vacuum or pressure without emissions to the atmosphere, except through a pressure relief valve. All gauging and sampling devices shall be vapor-tight except during gauging or sampling. The pressure relief valve must be designed to open only as necessary to allow proper operation, and must be set at the maximum possible pressure necessary for proper operation, but such that the valve will not vent continuously.

(2) The compartment is equipped with a floating roof or internal floating cover which will rest on the surface of the contents and be equipped with a closure seal or seals to close the space between the roof or cover edge and tank wall. All gauging and sampling devices shall be vapor-tight except during gauging or sampling.

(3) The compartment is equipped with a vapor recovery system which satisfies the provisions of §115.131(c) of this title.

§115.135. Testing Requirements.

(a) For the Beaumont-Port Arthur, Bexar County, Dallas-Fort Worth, El Paso, and Houston-Galveston-Brazoria areas, compliance with §115.131(a), §115.132(a), and §115.137 of this title (relating to Emission Specifications; Control Requirements; and Exemptions) shall be determined by applying the following test methods, as appropriate:

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

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

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

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

(5) determination of true vapor pressure at actual storage temperature using American Society for Testing Materials (ASTM) Test Methods D323-89, D2879, D4953, D5190, or D5191; using API Publication 2517, Third Edition, 1989 or standard reference texts to convert from Reid vapor pressure to true vapor pressure, where applicable; or

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

(b) For Gregg, Nueces, and Victoria Counties, compliance with §115.131(b), §115.132(b), and §115.137(b) of this title shall be determined by applying the following test methods, as appropriate:

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

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

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

(4) 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;

(5) determination of true vapor pressure at actual storage temperature using ASTM Test Methods D323-89, D2879, D4953, D5190, or D5191; and using API Publication 2517, Third Edition, 1989 or standard reference texts to convert from Reid vapor pressure to true vapor pressure, where applicable; or

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

§115.136. Monitoring and Recordkeeping Requirements.

(a) For the Beaumont-Port Arthur, Bexar County, Dallas-Fort Worth, El Paso, and Houston-Galveston-Brazoria areas, the following recordkeeping requirements shall apply.

(1) Any person who operates a single or multiple compartment volatile organic compound (VOC) water separator without the controls specified in §115.132(a) of this title (relating to Control Requirements) shall maintain complete and up-to-date records sufficient to demonstrate continuous compliance with the applicable exemption criteria including, but not

limited to, the names and true vapor pressures of all such materials stored, processed, or handled at the affected property, and any other necessary operational information.

(2) Affected persons shall install and maintain monitors to continuously measure and record operational parameters of any emission control device installed to meet applicable control requirements. Such records must be sufficient to demonstrate proper functioning of those devices to design specifications, including:

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

(B) the gas temperature immediately upstream and downstream of any catalytic incinerator or chiller; and

(C) the VOC concentration of any carbon adsorption system exhaust gas to determine if breakthrough has occurred.

(3) Affected persons shall maintain the results of any testing conducted in accordance with the provisions specified in §115.135(a) of this title (relating to Testing Requirements).

(4) All records shall be maintained at the affected facility for at least two years and be made available upon request to representatives of the executive director, EPA, or any local air pollution control agency having jurisdiction in the area.

(b) For Gregg, Nueces, and Victoria Counties, the following recordkeeping requirements shall apply.

(1) Any person who operates a single or multiple compartment VOC water separator without the controls specified in §115.132(b) of this title shall maintain complete and up-to-date records sufficient to demonstrate continuous compliance with the applicable exemption criteria including, but not limited to, the names and true vapor pressures of all such materials stored, processed, or handled at the affected property, and any other necessary operational information.

(2) In Victoria County, affected persons shall install and maintain monitors to continuously measure and record operational parameters of any emission control device installed to meet applicable control requirements. Such records must be sufficient to demonstrate proper functioning of those devices to design specifications, including:

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

(B) the gas temperature immediately upstream and downstream of any catalytic incinerator or chiller; and

(C) the exhaust gas VOC concentration of any carbon adsorption system, as defined in §115.10 of this title (relating to Definitions), to determine if breakthrough has occurred.

(3) Affected persons shall maintain the results of any testing conducted in accordance with the provisions specified in §115.135(b) of this title.

(4) All records shall be maintained at the affected facility for at least two years and be made available upon request to representatives of the executive director, EPA, or any local air pollution control agency having jurisdiction in the area.

§115.137. Exemptions.

(a) For the Beaumont-Port Arthur, Bexar County, Dallas-Fort Worth, El Paso, and Houston-Galveston-Brazoria areas, the following exemptions shall apply.

(1) Any volatile organic compound (VOC) water separator used exclusively in conjunction with the production of crude oil or condensate is exempt from §115.132(a) of this title (relating to Control Requirements) if the emissions from the separator have a combined

weight of VOC equal to or less than 100 pounds (45.4 kg) in any continuous 24-hour period. When emissions from multiple sources (including, but not limited to, VOC water separators, treaters, storage tanks, and saltwater disposal tanks) are routed through a common vent, the calculation of VOC emissions for purposes of this exemption shall be based upon the total of all emission sources which are routed to the common vent. It is unacceptable to disconnect any of the multiple sources routed through a common vent for purposes of complying with this exemption.

(2) Any single or multiple compartment VOC water separator which separates materials having a true vapor pressure of VOC less than 0.5 pounds per square inch absolute (psia) (3.4 kPa) obtained from any equipment is exempt from §115.132(a) of this title.

(3) Any single or multiple compartment VOC water separator which is designed solely to capture stormwater, spills, or exterior surface cleanup waters is exempt from this division (relating to Water Separation), provided that the separator is fully covered. These separators are not required to be equipped with pressure/vacuum vents or vapor control systems.

(b) For Gregg, Nueces, and Victoria Counties, the following exemptions shall apply.

(1) VOC water separators used exclusively in conjunction with the production of crude oil or condensate are exempt from §115.132(b) of this title.

(2) Any single or multiple compartment VOC water separator which separates less than 200 gallons (757 liters) a day of materials containing VOC obtained from any equipment is exempt from §115.132(b) of this title.

(3) Any single or multiple compartment VOC water separator which separates materials having a true vapor pressure of VOC less than 1.5 psia (10.3 kPa) obtained from any equipment is exempt from §115.132(b) of this title.

(4) In Gregg County, any single or multiple compartment VOC water separator which separates materials obtained from any equipment in a facility other than a petroleum refinery is exempt from §115.132(b) of this title.

(5) Any single or multiple compartment VOC water separator which is designed solely to capture stormwater, spills, or exterior surface cleanup waters is exempt from this division, provided that the separator is fully covered. These separators are not required to be equipped with pressure/vacuum vents or vapor control systems.

(c) For Aransas, Bexar, Calhoun, Matagorda, San Patricio, and Travis Counties, the following exemptions shall apply. The exemptions provided in this subsection no longer apply for sources located in Bexar County beginning January 1, 2025.

(1) VOC water separators used exclusively in conjunction with the production of crude oil or condensate are exempt from §115.132(c) of this title.

(2) Any single or multiple compartment VOC water separator which separates less than 200 gallons (757 liters) a day of materials containing VOC obtained from any equipment is exempt from §115.132(c) of this title.

(3) Any single or multiple compartment VOC water separator which separates materials having a true vapor pressure of VOC less than 1.5 psia (10.3 kPa) obtained from any equipment is exempt from §115.132(c) of this title.

(4) Any single or multiple compartment VOC water separator which is designed solely to capture stormwater, spills, or exterior surface cleanup waters is exempt from this division, provided that the separator is fully covered. These separators are not required to be equipped with pressure/vacuum vents or vapor control systems.

§115.139. Counties and Compliance Schedules.

(a) Except as specified in subsection (e) of this section, in Aransas, Bexar, Brazoria, Calhoun, Chambers, Collin, Dallas, Denton, El Paso, Fort Bend, Galveston, Gregg, Hardin, Harris,

Jefferson, Liberty, Matagorda, Montgomery, Nueces, Orange, San Patricio, Tarrant, Travis, Victoria, and Waller Counties, the compliance date has passed and the owner or operator of each volatile organic compound (VOC) water separator shall continue to comply with this division.

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

(c) The owner or operator of each VOC water separator in Wise County shall comply with this division as soon as practicable, but no later than January 1, 2017.

(d) The owner or operator of a water separator in Bexar, Collin, Dallas, Denton, Ellis, Johnson, Kaufman, Parker, Rockwall, Tarrant, and Wise Counties that becomes subject to this division on or after the applicable compliance date in subsection (a), (b) or (c) of this section, shall be in compliance with the requirements in this division as soon as practicable, but no later than 60 days after becoming subject.

(e) The owner or operator of each VOC water separator in the Bexar County area subject to the requirements of this division shall comply with the requirements of §115.131(c), §115.132(c), and §115.137(c) through December 31, 2024 and all other applicable requirements of this division by no later than January 1, 2025.

SUBCHAPTER B: GENERAL VOLATILE ORGANIC COMPOUND SOURCES
DIVISION 4: INDUSTRIAL WASTEWATER
§§115.142, 115.144, 115.146, 115.147, 115.149

Statutory Authority

The amendments are adopted under Texas Water Code (TWC), §5.102, concerning general powers; §5.103, concerning Rules; TWC, §5.105, concerning General Policy, which authorize the commission to adopt rules necessary to carry out its powers and duties under the TWC; TWC, §7.002, concerning Enforcement Authority, which authorizes the commission to enforce the provisions of the Water Code and the Health and Safety Code within the commission's jurisdiction; and under Texas Health and Safety Code (THSC), §382.017, concerning Rules, which authorizes the commission to adopt rules consistent with the policy and purpose of the Texas Clean Air Act.

The amendments are also adopted under THSC, §382.002, concerning Policy and Purpose, which establishes the commission's purpose to safeguard the state's air resources, consistent with the protection of public health, general welfare, and physical property; THSC, §382.011, concerning General Powers and Duties, which authorizes the commission to control the quality of the state's air; THSC, §382.012, concerning the State Air Control Plan, which authorizes the commission to prepare and develop a general, comprehensive plan for the proper control of the state's air; THSC, §382.016, concerning Monitoring Requirements; Examination of Records, which authorizes the commission to prescribe reasonable requirements for measuring and monitoring the emissions of air contaminants; and THSC, §382.021, concerning Sampling Methods and Procedures.

The adopted amendments implement TWC, §§5.102, 5.103 and 7.002; and THSC, §§382.002, 382.011, 382.012, 382.016, 382.017, and 382.021.

§115.142. Control Requirements.

The owner or operator of an affected source category within a plant in the Beaumont-Port Arthur, Bexar County, Dallas-Fort Worth, El Paso, and Houston-Galveston-Brazoria areas, as defined in §115.10 of this title (relating to Definitions), shall comply with the following control requirements. Any component of a wastewater storage, handling, transfer, or treatment facility, if the component contains an affected volatile organic compounds (VOC) wastewater stream, shall be controlled in accordance with either paragraph (1) or (2) of this section, except for properly operated biotreatment units which shall meet the requirements of paragraph (3) of this section. In the Dallas-Fort Worth and El Paso areas, and until December 31, 2002 in the Houston-Galveston-Brazoria area, the control requirements apply from the point of generation of an affected VOC wastewater stream until the affected VOC wastewater stream is either returned to a process unit or is treated to remove VOC so that the wastewater stream no longer meets the definition of an affected VOC wastewater stream. In the Beaumont-Port Arthur and the Bexar County areas, and after December 31, 2002 in the Houston-Galveston-Brazoria, the control requirements apply from the point of generation of an affected VOC wastewater stream until the affected VOC wastewater stream is either returned to a process unit, or is treated to reduce the VOC content of the wastewater stream by 90% by weight and also reduce the VOC content of the same VOC wastewater stream to less than 1,000 parts per million by weight. For wastewater streams which are combined and then treated to remove VOC, the amount of VOC to be removed from the combined wastewater stream shall be at least the total amount of VOC

that would be removed to treat each individual affected VOC wastewater stream so that they no longer meet the definition of affected VOC wastewater stream, except for properly operated biotreatment units which shall meet the requirements of paragraph (3) of this section. For this division, a component of a wastewater storage, handling, transfer, or treatment facility shall include, but is not limited to, wastewater storage tanks, surface impoundments, wastewater drains, junction boxes, lift stations, weirs, and oil-water separators.

(1) The wastewater component shall meet the following requirements.

(A) All components shall be fully covered or be equipped with water seal controls. For any component equipped with water seal controls, the only acceptable alternative to water as the sealing liquid in a water seal is the use of ethylene glycol, propylene glycol, or other low vapor pressure antifreeze, which may be used only during the period of November through February. For any process drain not equipped with water seal controls, the process drain shall be equipped with a gasketed seal, or a tightly-fitting cap or plug.

(B) All openings shall be closed and sealed, except when the opening is in actual use for its intended purpose or the component is maintained at a pressure less than atmospheric pressure.

(C) All liquid contents shall be totally enclosed.

(D) For junction boxes and vented covers, the following requirements apply.

(i) In the Dallas-Fort Worth and El Paso areas, and until December 31, 2002 in the Houston-Galveston-Brazoria area, if any cover, other than a junction box cover, is equipped with a vent, the vent shall be equipped with either a vapor control system which maintains a minimum control efficiency of 90% or a closed system which prevents the flow of VOC vapors from the vent during normal operation. Any junction box vent shall be equipped with a vent pipe at least 90 centimeters (cm) (36 inches (in.)) in length and no more than 10.2 cm (4.0 in.) in diameter.

(ii) In the Beaumont-Port Arthur and Bexar County areas, and after December 31, 2002 in the Houston-Galveston-Brazoria area, the following requirements apply.

(I) If any cover or junction box cover, except for junction boxes described in subclause (II) of this clause, is equipped with a vent, the vent shall be equipped with either a vapor control system which maintains a minimum control efficiency of 90% or a closed system which prevents the flow of VOC vapors from the vent during normal operation.

(II) Any junction box that is filled and emptied by gravity flow (i.e., there is no pump) or is operated with no more than slight fluctuations in the liquid level may be vented to the atmosphere, provided it is equipped with:

(-a-) a vent pipe at least 90 cm (36 in.) in length and no more than 10.2 cm (4.0 in.) in diameter; and

(-b-) water seal controls which are installed and maintained at the wastewater entrance(s) to or exit from the junction box restricting ventilation in the individual drain system and between components in the individual drain system.

(E) All gauging and sampling devices shall be vapor-tight except during gauging or sampling.

(F) Any loading or unloading to or from a portable container by pumping shall be performed with a submerged fill pipe.

(G) All seals and cover connections shall be maintained in proper condition. For purposes of this paragraph, "proper condition" means that covers shall have a tight seal around the edge and shall be kept in place except as allowed by this division, that seals shall not be broken or have gaps, and that sewer lines shall have no visible gaps or cracks in joints, seals, or other emission interfaces.

(H) If any seal or cover connection is found to not be in proper condition, a first attempt at repair shall be made no later than five calendar days after the leak or improper condition is found. The repair or correction shall be completed as soon as possible but no later than 15 calendar days after detection, unless the repair or correction is technically infeasible without requiring a process unit shutdown, in which case the repair or correction shall be made at the next process unit shutdown. Test Method 21 must be used to confirm that a leak or improper condition is repaired, and the following records shall be maintained:

(i) the date on which a leak or improper condition is discovered;

(ii) the date on which a first attempt at repair was made to correct the leak or improper condition;

(iii) the date on which a leak or improper condition is repaired; and

(iv) the date and instrument reading of the recheck procedure after a leak or improper condition is repaired.

(2) If a wastewater component is equipped with an internal or external floating roof, it shall meet the following requirements.

(A) All openings in an internal or external floating roof except for automatic bleeder vents (vacuum breaker vents) and rim space vents shall provide a projection below the liquid surface or be equipped with a cover, seal, or lid. Any cover, seal, or lid shall be in a closed (i.e., no visible gap) position at all times except when the opening is in actual use for its intended purpose.

(B) Automatic bleeder vents (vacuum breaker vents) shall be closed at all times except when the roof is being floated off or landed on the roof leg supports.

(C) Rim vents, if provided, shall be set to open only when the roof is being floated off the roof leg supports or at the manufacturer's recommended setting.

(D) Any roof drain that empties into the stored liquid shall be provided with a slotted membrane fabric cover that covers at least 90% of the area of the opening.

(E) There shall be no visible holes, tears, or other openings in any seal or seal fabric.

(F) For external floating roof storage tanks, the secondary seals shall be the rim-mounted type (i.e., the seal shall be continuous from the floating roof to the tank wall). The accumulated area of gaps that exceed 1/8 in. (0.32 cm) in width between the secondary seal and tank wall shall be no greater than 1.0 $in.^2$ per foot (21 cm^2/meter) of tank diameter.

(3) In the Beaumont-Port Arthur and Bexar County areas, and after December 31, 2002 in the Houston-Galveston-Brazoria area, each properly operated biotreatment unit shall meet the following requirements.

(A) The VOC content of the wastewater shall be reduced by 90% by weight; and

(B) The average concentration of suspended biomass maintained in the aeration basin of the biotreatment unit shall equal or exceed 1.0 kilogram per cubic meter (kg/m^3), measured as total suspended solids.

(4) Any wastewater component that becomes subject to this division by exceeding the provisions of §115.147 of this title (relating to Exemptions) or an affected VOC wastewater stream as defined in §115.140 of this title (relating to Industrial Wastewater Definitions) will remain subject to the requirements of this division, even if the component later falls below those provisions, unless and until emissions are reduced to no more than the controlled emissions level existing prior to the implementation of the project by which throughput or emission rate was reduced to less than the applicable exemption levels in §115.147 of this title; and

(A) the project by which throughput or emission rate was reduced is authorized by any permit or permit amendment or standard permit or permit by rule required by Chapter 116 or Chapter 106 of this title (relating to Control of Air Pollution by Permits for New Construction or Modification; and Permits by Rule). If a permit by rule is available for the project, compliance with this division must be maintained for 30 days after the filing of documentation of compliance with that permit by rule; or

(B) if authorization by permit, permit amendment, standard permit, or permit by rule is not required for the project, the owner or operator has given the executive director 30 days' notice of the project in writing.

§115.144. Inspection and Monitoring Requirements.

The owner or operator of an affected source category within a plant in the Beaumont-Port Arthur, Bexar County, Dallas-Fort Worth, El Paso, and Houston-Galveston-Brazoria areas shall comply with the following inspection and monitoring requirements.

(1) All seals and covers used to comply with §115.142(1) of this title (relating to Control Requirements) shall be inspected according to the following schedules to ensure compliance with §115.142(1)(G) and (H) of this title:

(A) initially and semiannually thereafter to ensure compliance with §115.142(1)(G) of this title; and

(B) upon completion of repair to ensure compliance with §115.142(1)(G) and (H) of this title.

(2) Floating roofs and internal floating covers used to comply with §115.142(2) of this title shall be subject to the following requirements. All secondary seals shall be inspected according to the following schedules to ensure compliance with §115.142(2)(E) and (F) of this title.

(A) If the primary seal is vapor-mounted, the secondary seal gap area shall be physically measured annually to ensure compliance with §115.142(2)(F) of this title.

(B) If the tank is equipped with a mechanical shoe or liquid-mounted primary seal, compliance with §115.142(2)(F) of this title may be determined by visual inspection.

(C) All secondary seals shall be visually inspected semiannually to ensure compliance with §115.142(2)(E) and (F) of this title.

(3) Monitors shall be installed and maintained as required by this section to measure operational parameters of any emission control device or other device installed to comply with §115.142 of this title. Such monitoring and parameters shall be sufficient to demonstrate proper functioning of those devices to design specifications, and include the monitoring and parameters listed in subparagraphs (A) - (H) of this paragraph, as applicable. In lieu of the monitoring and parameters listed in subparagraphs (A) - (H) of this paragraph, other monitoring and parameters may be approved or required by the executive director:

(A) for an enclosed non-catalytic combustion device (including, but not limited to, a thermal incinerator, boiler, or process heater), continuously monitor and record the temperature of the gas stream either in the combustion chamber or immediately downstream before any substantial heat exchange;

(B) for a catalytic incinerator, continuously monitor and record the temperature of the gas stream immediately before and after the catalyst bed;

(C) for a condenser (chiller), continuously monitor and record the temperature of the gas stream at the condenser exit;

(D) for a carbon adsorber, continuously monitor and record the VOC concentration of exhaust gas stream to determine if breakthrough has occurred. If the carbon adsorber does not regenerate the carbon bed directly in the control device (e.g., a carbon

canister), the exhaust gas stream shall be monitored daily or at intervals no greater than 20% of the design replacement interval, whichever is greater, or as an alternative to conducting monitoring, the carbon may be replaced with fresh carbon at a regular predetermined time interval that is less than the carbon replacement interval that is determined by the maximum design flow rate and the VOC concentration in the gas stream vented to the carbon adsorber;

(E) for a flare, meet the requirements specified in 40 Code of Federal Regulations §60.18(b) and Chapter 111 of this title (relating to Control of Air Pollution from Visible Emissions and Particulate Matter);

(F) for a steam stripper, continuously monitor and record the steam flow rate, the wastewater feed mass flow rate, the wastewater feed temperature, and condenser vapor outlet temperature;

(G) for a vapor combustor, continuously monitor and record the exhaust gas temperature either in the combustion chamber or immediately downstream before any substantial heat exchange. Alternatively, the owner or operator of a vapor combustor may consider the unit to be a flare and meet the requirements of subparagraph (E) of this paragraph; and

(H) for vapor control systems other than those specified in subparagraphs (A) - (G) of this paragraph, continuously monitor and record the appropriate operating parameters.

(4) In the Beaumont-Port Arthur, Bexar County, and Houston-Galveston-Brazoria areas, units used to comply with §115.142(3) of this title shall:

(A) initially demonstrate a 90% reduction in VOCs by using the methods in §115.145 of this title (relating to Approved Test Methods); and

(B) measure on a weekly basis the total suspended solids in the aeration basin of the biotreatment unit.

(5) All water seal controls shall be inspected weekly to ensure that the water seal controls are effective in preventing ventilation, except that daily inspections are required for those seals that have failed three or more inspections in any 12-month period. Upon request by the executive director, EPA, or any local program with jurisdiction, the owner or operator shall demonstrate (e.g., by visual inspection or smoke test) that the water seal controls are properly designed and restrict ventilation.

(6) All process drains not equipped with water seal controls shall be inspected monthly to ensure that all gaskets, caps, and/or plugs are in place and that there are no gaps, cracks, or other holes in the gaskets, caps, and/or plugs. In addition, all caps and plugs shall be inspected monthly to ensure that they are tightly-fitting.

§115.146. Recordkeeping Requirements.

The owner or operator of an affected source category within a plant in the Beaumont-Port Arthur, Bexar County, Dallas-Fort Worth, El Paso, and Houston-Galveston-Brazoria areas shall comply with the following recordkeeping requirements.

(1) Complete and up-to-date records shall be maintained as needed to demonstrate compliance with §115.142 and §115.143 of this title (relating to Control Requirements; and Alternate Control Requirements) which are sufficient to demonstrate the characteristics of wastewater streams and the qualification for any exemptions claimed under §115.147 of this title (relating to Exemptions).

(2) Records shall be maintained of the results of any inspection or monitoring conducted in accordance with §115.144 of this title (relating to Inspection and Monitoring Requirements). Records shall be sufficient to demonstrate proper functioning of applicable control equipment to design specifications to ensure compliance with §115.142 and §115.143 of this title.

(3) Records shall be maintained of the results of any testing conducted in accordance with §115.145 of this title (relating to Approved Test Methods).

(4) All records shall be maintained at the plant for at least two years and be made available upon request to representatives of the executive director, EPA, or any local air pollution control agency having jurisdiction in the area.

115.147. Exemptions.

The following exemptions apply in the Beaumont-Port Arthur, Bexar County, Dallas-Fort Worth, El Paso, and Houston-Galveston-Brazoria areas.

(1) Any plant with an annual volatile organic compounds (VOC) loading in wastewater, as determined in accordance with §115.148 of this title (relating to Determination of Wastewater Characteristics), less than or equal to ten megagrams (Mg) (11.03 tons) is exempt from the control requirements of §115.142 of this title (relating to Control Requirements).

(2) At any plant with an annual VOC loading in wastewater, as determined in accordance with §115.148 of this title greater than ten Mg (11.03 tons), any person who is the owner or operator of the plant may exempt from the control requirements of §115.142 of this title one or more affected VOC wastewater streams for which the sum of the annual VOC loading in wastewater for all of the exempted streams is less than or equal to ten Mg (11.03 tons).

(3) Unless specifically required by this division (relating to Industrial Wastewater), any piece of equipment of a wastewater storage, handling, transfer, or treatment facility to which the control requirements of §115.142 of this title apply is exempt from the requirements of any other division of this chapter. This paragraph does not apply to pieces of equipment or components which are subject to the requirements of Subchapter D, Division 3, and/or Subchapter H of this chapter (relating to Fugitive Emission Control in Petroleum Refining, Natural Gas/Gasoline Processing, and Petrochemical Processes in Ozone Nonattainment Areas; and Highly-Reactive Volatile Organic Compounds).

(4) If compliance with the control requirements of §115.142 of this title would create a safety hazard in a component of a wastewater storage, handling, transfer, or treatment facility, the owner or operator may request the executive director to exempt that component from the control requirements of §115.142 of this title. The executive director shall approve the request if justified by the likelihood and magnitude of the potential injury and if the executive director determines that reducing or eliminating the hazard is technologically or economically unreasonable based on the emissions reductions that would be achieved.

(5) Wet weather retention basins are exempt from the requirements of this division.

(6) Petroleum refineries in the Beaumont-Port Arthur area are exempt from the requirements of this division.

(7) The following exemptions apply to petroleum refineries in the Houston-Galveston-Brazoria area.

(A) Petroleum refineries are exempt from the requirement in §115.142 of this title that after December 31, 2002, the control requirements apply from the point of generation of an affected VOC wastewater stream until the affected VOC wastewater stream is either returned to a process unit, or is treated to reduce the VOC content of the wastewater stream by 90% by weight and also reduce the VOC content of the same VOC wastewater stream to less than 1,000 parts per million by weight, provided that petroleum refineries continue to apply the requirement in §115.142 of this title that the control requirements apply from the point of generation of an affected VOC wastewater stream until the affected VOC wastewater stream is either returned to a process unit, or is treated to remove VOC so that the wastewater stream no longer meets the definition of an affected VOC wastewater stream.

(B) Junction boxes are exempt from the requirements of §115.142(1)(D)(ii) of this title, provided that after December 31, 2002 they continue to comply with the requirements of §115.142(1)(D)(i) of this title.

(C) Properly operated biotreatment units are exempt from the requirements of §§115.142(3), 115.144(4), and 115.145(7) and (8) of this title (relating to Control Requirements; Inspection and Monitoring Requirements; and Approved Test Methods).

§115.149. Counties and Compliance Schedules.

(a) The owner or operator of each affected source category within a plant in Brazoria, Chambers, Collin, Dallas, Denton, El Paso, Fort Bend, Galveston, Hardin, Harris, Jefferson, Liberty, Montgomery, Orange, Tarrant, and Waller Counties shall continue to comply with this division (relating to Industrial Wastewater) as required by §115.930 of this title (relating to Compliance Dates).

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

(c) The owner or operator of each affected source category in the Bexar County area subject to the requirements of this division shall comply with the requirements of this division by no later than January 1, 2025.

SUBCHAPTER B: GENERAL VOLATILE ORGANIC COMPOUND SOURCES
DIVISION 6: BATCH PROCESSES
§§115.161, 115.162, 115.164 – 115.167, 115.169

Statutory Authority

The amendments are adopted under Texas Water Code (TWC), §5.102, concerning general powers; §5.103, concerning Rules; TWC, §5.105, concerning General Policy, which authorize the commission to adopt rules necessary to carry out its powers and duties under the TWC; TWC, §7.002, concerning Enforcement Authority, which authorizes the commission to enforce the provisions of the Water Code and the Health and Safety Code within the commission's jurisdiction; and under Texas Health and Safety Code (THSC), §382.017, concerning Rules, which authorizes the commission to adopt rules consistent with the policy and purpose of the Texas Clean Air Act.

The amendments are also adopted under THSC, §382.002, concerning Policy and Purpose, which establishes the commission's purpose to safeguard the state's air resources, consistent with the protection of public health, general welfare, and physical property; THSC, §382.011, concerning General Powers and Duties, which authorizes the commission to control the quality of the state's air; THSC, §382.012, concerning the State Air Control Plan, which authorizes the commission to prepare and develop a general, comprehensive plan for the proper control of the state's air; THSC, §382.016, concerning Monitoring Requirements; Examination of Records, which authorizes the commission to prescribe reasonable requirements for measuring and monitoring the emissions of air contaminants; and THSC, §382.021, concerning Sampling Methods and Procedures.

The adopted amendments implement TWC, §§5.102, 5.103 and 7.002; and THSC, §§382.002, 382.011, 382.012, 382.016, 382.017, and 382.021.

§115.161. Applicability.

(a) The provisions of §§115.162 - 115.167 of this title (relating to Control Requirements; Alternate Control Requirements; Determination of Emissions and Flow Rates; Approved Test Methods and Testing Requirements; Monitoring and Recordkeeping Requirements; and Exemptions) apply to vent gas streams at batch process operations in the Beaumont-Port Arthur, Bexar County, and Houston-Galveston-Brazoria areas, as defined in §115.10 of this title (relating to Definitions), under the following Standard Industrial Classification (SIC) codes:

(1) 2821 (plastic resins and materials);

(2) 2833 (medicinals and botanicals);

(3) 2834 (pharmaceutical preparations);

(4) 2861 (gum and wood chemicals);

(5) 2865 (cyclic crudes and intermediates);

(6) 2869 (industrial organic chemicals, not elsewhere classified); and

(7) 2879 (agricultural chemicals, not elsewhere classified).

(b) Any batch process operation that is exempt under §115.167(1) or (2)(A) of this title is subject to the requirements of Division 2 of this subchapter (relating to Vent Gas Control).

(c) Any batch process 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 either this division (relating to Batch Processes) or Division 2 of this subchapter, whichever of these two divisions applies.

§115.162. Control Requirements.

The owner or operator of each batch process operation in the Beaumont-Port Arthur, Bexar County, and Houston-Galveston-Brazoria areas, shall comply with the following control requirements.

(1) Reasonable available control technology (RACT) equations. The volatile organic compounds (VOC) mass emission rate from individual process vents or for process vent streams in aggregate within a batch process shall be reduced by 90% if the actual average flow

rate value (in standard cubic feet per minute (scfm)) is below the flow rate (FR) value calculated using the applicable RACT equation for the volatility range (low, moderate, or high) of the material being emitted when the annual mass emission total (AE, in pounds per year) are input. The RACT equations, specific to volatility, are as follows:

(A) Low volatility: FR = 0.07(AE) - 1821;

(B) Moderate volatility: FR = 0.031(AE) - 494;

(C) High volatility: FR = 0.013(AE) - 301.

(2) Successive ranking scheme. For aggregate streams within a process, the control requirements must be evaluated with the following successive ranking scheme until control of a segment of unit operations is required or until all unit operations have been eliminated from the process pool.

(A) If, for the process vent streams in aggregate, the value of FR calculated using the applicable RACT equation in paragraph (1) of this section is negative (i.e., less than zero), then the process is exempt from the 90% control requirements, and the successive ranking scheme of subparagraph (F) of this paragraph does not apply. This would occur if the mass annual emission rates are below the lower limits specified in §115.167(2)(A) of this title (relating to Exemptions).

(B) If, for the process vent streams in aggregate, the actual average flow rate value (in scfm) is below the value of FR calculated using the applicable RACT equation in paragraph (1) of this section, then the overall emissions from the batch process must be reduced by 90%, and the successive ranking scheme of subparagraph (F) of this paragraph does not apply. The owner or operator has the option of selecting which unit operations are to be controlled and to what levels, provided that the overall control meets the specified level of 90%. Single units that qualify for exemption under §115.167(2)(B) of this title do not have to be controlled even if all units should qualify for this exemption.

(C) If, for the process vent streams in aggregate, the actual average flow rate value (in scfm) is greater than the value of FR calculated using the applicable RACT equation in paragraph (1) of this section (and the calculated value of FR is a positive number), then the control requirements must be evaluated with the successive ranking scheme of subparagraph (F) of this paragraph until control of a segment of unit operations is required or until all unit operations have been eliminated from the process pool. Single units that qualify for exemption under §115.167(2)(B) of this title do not have to be included in the rankings and do not have to be controlled.

(D) Sources that are required to be controlled to the level specified by RACT (i.e., 90%) will have an average flow rate that is below the flow rate specified by the applicable RACT equation in paragraph (1) of this section (when the source's annual emission

total is input). The applicability criterion is implemented on a two-tier basis. First, single pieces of batch equipment corresponding to distinct unit operations shall be evaluated over the course of an entire year, regardless of what materials are handled or what products are manufactured in them. Second, equipment shall be evaluated as an aggregate if it can be linked together based on the definition of a process.

(E) To determine applicability of a RACT option in the aggregation scenario, all the VOC emissions from a single process shall be summed to obtain the annual mass emission total, and the weighted average flow rate from each process vent in the aggregation shall be used as the average flow rate.

(F) All unit operations in the batch process, as defined for the purpose of determining RACT applicability, shall be ranked in ascending order according to their ratio of annual emissions (pounds per year) divided by average flow rate (in scfm). Sources with the smallest ratios shall be listed first. This list of sources constitutes the "pool" of sources within a batch process. The annual emission total and average flow rate of the pool of sources shall then be compared against the RACT equations in paragraph (1) of this section to determine whether control of the pool is required.

(i) If control is not required after the initial ranking, unit operations having the lowest annual emissions/average flow rate ratio shall then be eliminated one by one, and the characteristics of annual emission and average flow rate for the remaining

pool of equipment must be evaluated with each successive elimination of a source from the pool.

(ii) Control of the unit operations remaining in the pool to the specified level (i.e., 90%) shall be required once the aggregated characteristics of annual emissions and average flow rate have met the specified cutoffs. The owner or operator has the option of selecting which unit operations are to be controlled and to what levels, provided that the overall control meets the specified level of 90%.

(3) Once-in, always-in. Any batch process operation that becomes subject to the provisions of this division by exceeding provisions of §115.167 of this title will remain subject to the provision of this division, even if throughput or emissions later fall below exemption limits, unless and until emissions are reduced to no more than the controlled emissions level existing before implementation of the project by which throughput or emission rate was reduced to less than the applicable exemption limits in §115.167 of this title; and

(A) the project by which throughput or emission rate was reduced is authorized by any permit or permit amendment or standard permit or permit by rule required by Chapter 116 or Chapter 106 of this title (relating to Control of Air Pollution by Permits for New Construction or Modification; and Permits by Rule). If a permit by rule is available for the project, compliance with this division must be maintained for 30 days after the filing of documentation of compliance with that permit by rule; or

(B) if authorization by permit, permit amendment, standard permit, or permit by rule is not required for the project, the owner/operator has given the executive director 30 days' notice of the project in writing.

§115.164. Determination of Emissions and Flow Rates.

The owner or operator of each batch process operation in the Beaumont-Port Arthur, Bexar County, and Houston-Galveston-Brazoria areas shall determine the mass emissions and flow rates as follows.

(1) Determination of Uncontrolled Annual Emission Total. The owner or operator shall determine the annual mass emissions total by using engineering estimates of the uncontrolled emissions from a process vent or group of process vents within a batch process train and multiplying by the potential or permitted number of batch cycles per year. Engineering estimates must follow the guidance contained in EPA's *Control of Volatile Organic Compound Emissions from Batch Processes - Alternative Control Techniques Information Document* (EPA-453/R-93-020, February 1994). Alternatively, if an emissions measurement is used to measure vent emissions, the measurement must conform with the requirements of measuring incoming mass flow rate of volatile organic compounds as specified in §115.165 of this title (relating to Approved Test Methods and Testing Requirements).

(2) Determination of Average Flow Rate. To obtain a value for average flow rate, the owner or operator may choose to measure the flow rates or to estimate the flow rates using the estimation methods contained in EPA's *Control of Volatile Organic Compound Emissions from Batch Processes - Alternative Control Techniques Information Document* (EPA-453/R-93-020, February 1994). For existing manifolds, the average flow rate may be the flow rate that was assumed in the design.

§115.165. Approved Test Methods and Testing Requirements.

The owner or operator of each batch process operation in the Beaumont-Port Arthur, Bexar County, and Houston-Galveston-Brazoria areas, shall comply with the following.

(1) Performance testing conditions. For the purpose of determining compliance with the control requirements of this division (relating to Batch Processes), the process unit shall be run at a scenario that represents maximum batch rates (e.g., three batches per day, 1,000 lbs per batch, etc.) during any performance test.

(2) Test methods. The owner or operator of each batch process operation shall use the following methods to determine compliance with the percent reduction efficiency requirement of §115.162 of this title (relating to Control Requirements).

(A) Flow rate.

(i) Test Methods 1 or 1A (40 Code of Federal Regulations (CFR) 60, Appendix A) as appropriate, shall be used for selection of the sampling sites if the flow rate measuring device is a rotameter. No traverse is necessary when the flow measuring device is an ultrasonic probe. The control device inlet sampling sites for determination of vent stream volatile organic compounds (VOC) composition reduction efficiency shall be before the control device and after the control device.

(ii) Test Methods 2, 2A, 2C, or 2D (40 CFR 60, Appendix A) as appropriate, shall be used for determination of gas stream volumetric flow rate. Flow rate measurements shall be made continuously.

(B) Concentration of VOC. Test Method 18 (40 CFR 60, Appendix A) (gas chromatography) or Test Method 25A (40 CFR 60, Appendix A) (flame ionization) shall be used to determine the concentration of VOC in the control device inlet and outlet.

(i) The sampling time for each run shall be the entire length of the batch cycle, during which readings shall be taken:

(I) continuously if Method 25A is used; or

(II) as often as is possible using Method 18, with a maximum of one-minute intervals between measurements throughout the batch cycle.

(ii) The emission rate of the process vent or inlet to the control device shall be determined by combining continuous concentration and flow rate measurements at simultaneous points throughout the batch cycle.

(iii) The mass flow rate of the control device outlet shall be determined by combining continuous concentration and flow rate measurements at simultaneous points throughout the batch cycle.

(iv) The efficiency of the control device shall be determined by integrating the mass flow rates obtained in clauses (ii) and (iii) of this subparagraph over the time of the batch cycle, and dividing the difference in inlet and outlet mass flow totals by the inlet mass flow total.

(C) Performance requirements for flares and vapor combustors.

(i) For flares, the performance test requirements of 40 CFR 60.18(b) shall apply.

(ii) For vapor combustors, the owner or operator may consider the unit to be a flare and meet the performance test requirements of 40 CFR 60.18(b).

(iii) Compliance with the requirements of 40 CFR 60.18(b) will be considered to represent 98% control of the VOC in the flare inlet.

(D) Minor modifications. Minor modifications to these test methods may be used, if approved by the executive director.

(E) Alternate test methods. Test methods other than those specified in subparagraphs (B) and (C) of this paragraph may be used if validated by 40 CFR 63, Appendix A, Test Method 301 (effective December 29, 1992). For the purposes of this paragraph, substitute "executive director" each place that Test Method 301 references "administrator."

§115.166. Monitoring and Recordkeeping Requirements.

The owner or operator of each batch process operation in the Beaumont-Port Arthur, Bexar County, and Houston-Galveston-Brazoria areas shall maintain the following information for at least five years at the plant, as defined by its air quality account number, except that the five-year record retention requirement does not apply to records generated before December 31, 2000. The owner or operator shall make the information available upon request to representatives of the executive director, EPA, or any local air pollution control agency having jurisdiction in the area:

(1) Vapor control systems. For vapor control systems used to control emissions from batch process operations, records of appropriate parameters to demonstrate compliance, including:

(A) continuous monitoring and recording of:

(i) for a direct-flame incinerator, the exhaust gas temperature in the firebox or in the ductwork immediately downstream of the firebox before any substantial heat exchange. The temperature monitoring device shall have an accuracy of ±0.5 degrees Celsius, or alternatively, ±1.0%;

(ii) for a catalytic incinerator, the exhaust gas temperature immediately before and after the catalyst bed. The temperature monitoring device shall have an accuracy of ±0.5 degrees Celsius, or alternatively, ±1.0%;

(iii) for an absorber, either:

(I) the scrubbing liquid temperature. The temperature monitoring device shall have an accuracy of ±1.0% of the temperature being monitored in degrees Celsius, or alternatively, ±0.02 specific gravity unit; or

(II) the concentration level of volatile organic compounds (VOC) exiting the recovery device based on a detection principle such as infrared, photoionization, or thermal conductivity;

(iv) for a condenser or refrigeration system, either:

(I) the condenser exit temperature. The temperature monitoring device shall have an accuracy of ±1.0% of the temperature being monitored in degrees Celsius, or alternatively, ±0.5 degrees Celsius; or

(II) the concentration level of VOC exiting the recovery device based on a detection principle such as infrared, photoionization, or thermal conductivity;

(v) for a carbon adsorption system, as defined in §101.1 of this title (relating to Definitions), either:

(I) steam flow (using an integrating steam flow monitoring device) and the carbon bed temperature. The steam flow monitor shall have an accuracy of ±10%. The temperature monitor shall have an accuracy of ±1.0% of the temperature being monitored in degrees Celsius, or ±0.5 degrees Celsius, whichever is greater; or

(II) the concentration level of VOC exiting the recovery device based on a detection principle such as infrared, photoionization, or thermal conductivity;

(vi) for a pressure swing adsorption unit that is the final recovery device, the temperature of the bed near the inlet and near the outlet. The temperature monitoring device shall have an accuracy of ±1.0% of the temperature being monitored in degrees Celsius, or ±0.5 degrees Celsius; and

(vii) for a vapor combustor, the exhaust gas temperature in the firebox or in the ductwork immediately downstream of the firebox before any substantial heat exchange. The temperature monitoring device shall have an accuracy of ±0.5 degrees Celsius, or alternatively, ±1.0%. Alternatively, the owner or operator of a vapor combustor may consider the unit to be a flare and meet the requirements of subparagraph (B) of this paragraph;

(B) for flares, the requirements specified in 40 Code of Federal Regulations §60.18(b) and Chapter 111 of this title (relating to Control of Air Pollution from Visible Emissions and Particulate Matter); and

(C) for vapor control systems other than those specified in subparagraphs (A) and (B) of this paragraph, records of appropriate operating parameters.

(2) Process vents. A record of the following emission stream parameters for each process vent contained in the batch process:

(A) the annual mass emission total and documentation verifying these values. If emission estimate equations are used, the documentation shall be the calculations coupled with the expected or permitted (if available) number of emission events per year; and

(B) the average flow rate in standard cubic feet per minute and documentation verifying these values.

(3) Performance test monitoring parameters. Records of the following parameters required to be measured during a performance test required under §115.165 of this title (relating to Approved Test Methods and Testing Requirements) and required to be monitored under paragraph (1) of this section:

(A) where an owner or operator seeks to demonstrate compliance with §115.162 of this title (relating to Control Requirements) through use of either a direct-flame or catalytic incinerator, the average firebox temperature of the incinerator (or the average temperature upstream and downstream of the catalyst bed for a catalytic incinerator), measured continuously and averaged over the same time period as the performance test;

(B) where an owner or operator seeks to demonstrate compliance with §115.162 of this title through use of a smokeless flare, the flare design (i.e., steam-assisted, air-assisted, or nonassisted), all visible emissions readings, heat content determinations, flow rate measurements, and exit velocity determinations made during the performance test; continuous flare pilot flame monitoring; and all periods of operations during which the pilot flame is absent; and

(C) where an owner or operator seeks to demonstrate compliance with §115.162 of this title:

(i) with an absorber as the final control device, the exit specific gravity (or alternative parameter which is a measure of the degree of absorbing liquid saturation, if approved by the executive director) and average exit temperature of the absorbing liquid measured continuously and averaged over the same time period as the performance test (both measured while the vent stream is routed normally);

(ii) with a condenser as the control device, the average exit (product side) temperature measured continuously and averaged over the same time period as the performance test while the vent stream is routed normally;

(iii) with a carbon adsorption system as the control device, the total steam mass flow measured continuously and averaged over the same time period as the

performance test (full carbon bed cycle), temperature of the carbon bed after regeneration (and within 15 minutes of completion of any cooling cycle(s)), and duration of the carbon bed steaming cycle (all measured while the vent stream is routed normally);

(iv) the concentration level or reading indicated by an organic monitoring device at the outlet of the absorber, condenser, or carbon adsorption system, measured continuously and averaged over the same time period as the performance test while the vent stream is routed normally; and

(v) with a pressure swing adsorption unit as the final recovery device, the temperature of the bed near the inlet and near the outlet. The temperature monitoring device shall have an accuracy of ±1.0% of the temperature being monitored in degrees Celsius, or ±0.5 degrees Celsius.

§115.167. Exemptions.

The following exemptions apply.

(1) Batch process operations at an account that has total volatile organic compound (VOC) emissions (determined before control but after the last recovery device) of less than the following rates from all stationary emission sources included in the account are

exempt from the requirements of this division (relating to Batch Processes), except for §115.161(b) and (c) of this title (relating to Applicability):

(A) 50 tons per year (tpy) in the Beaumont-Port Arthur area;

(B) 25 tpy in the Houston-Galveston-Brazoria area; and

(C) 100 tpy in the Bexar County area.

(2) The following are exempt from the requirements of this division, except for §§115.161(b) and (c), 115.164, and 115.166(2) and (3) of this title (relating to Applicability; Determination of Emissions and Flow Rates; and Monitoring and Recordkeeping Requirements).

(A) Combined vents from a batch process train that have the following annual mass emissions total.

Figure: 30 TAC §115.167(2)(A) (No Change)

(B) Single unit operations that have an annual mass emissions total of 500 pounds per year or less.

§115.169. Counties and Compliance Schedules.

(a) The owner or operator of each batch process operation in Hardin, Jefferson, and Orange Counties at an account that has total volatile organic compound (VOC) emissions (determined before control but after the last recovery device) of 100 tons per year or more shall continue to comply with this division (relating to Batch Processes) as required by §115.930 of this title (relating to Compliance Dates).

(b) The owner or operator of each batch process operation in Brazoria, Chambers, Fort Bend, Galveston, Harris, Liberty, Montgomery, and Waller Counties shall demonstrate compliance with this division as soon as practicable, but no later than December 31, 2002. All batch process operations subject to this division in Brazoria, Chambers, Fort Bend, Galveston, Harris, Liberty, Montgomery, and Waller Counties must continue to comply with the requirements of Division 2 of this subchapter (relating to Vent Gas Control) until these batch process operations are in compliance with the requirements of this division.

(c) The owner or operator of each batch process operation in Hardin, Jefferson, and Orange Counties at an account that has total VOC emissions (determined before control but after the last recovery device) of 50 tons per year or more but less than 100 tons per year shall demonstrate compliance with this division as soon as practicable, but no later than December 31, 2006. All batch process operations subject to this division in Hardin, Jefferson, and Orange Counties must continue to comply with the requirements of Division 2 of this subchapter until these batch process operations are in compliance with the requirements of this division.

(d) The owner or operator of each batch process operation in the Bexar County area at an account that has total VOC emissions (determined before control but after the last recovery device) of 100 tons per year or more shall demonstrate compliance with the requirements of this division no later January 1, 2025.

SUBCHAPTER B: GENERAL VOLATILE ORGANIC COMPOUND SOURCES
DIVISION 7: OIL AND NATURAL GAS SERVICE IN OZONE NONATTAINMENT AREAS
§§115.170 - 115.173, 115.177, 115.183

Statutory Authority

The repealed rule is adopted under Texas Water Code (TWC), §5.102, concerning general powers; §5.103, concerning Rules; TWC, §5.105, concerning General Policy, which authorize the commission to adopt rules necessary to carry out its powers and duties under the TWC; TWC, §7.002, concerning Enforcement Authority, which authorizes the commission to enforce the provisions of the Water Code and the Health and Safety Code within the commission's jurisdiction; and under Texas Health and Safety Code (THSC), §382.017, concerning Rules, which authorizes the commission to adopt rules consistent with the policy and purpose of the Texas Clean Air Act.

The repeal is also adopted under THSC, §382.002, concerning Policy and Purpose, which establishes the commission's purpose to safeguard the state's air resources, consistent with the protection of public health, general welfare, and physical property; THSC, §382.011, concerning General Powers and Duties, which authorizes the commission to control the quality of the state's air; THSC, §382.012, concerning the State Air Control Plan, which authorizes the commission to prepare and develop a general, comprehensive plan for the proper control of the state's air; THSC, §382.016, concerning Monitoring Requirements; Examination of Records, which authorizes the commission to prescribe reasonable requirements for measuring and monitoring the emissions of air contaminants; and THSC, §382.021, concerning Sampling Methods and Procedures.

The adopted repeal implements TWC, §§5.102, 5.103 and 7.002; and THSC, §§382.002, 382.011, 382.012, 382.016, 382.017, and 382.021.

SUBCHAPTER B: GENERAL VOLATILE ORGANIC COMPOUND SOURCES
DIVISION 7: OIL AND NATURAL GAS SERVICE IN OZONE NONATTAINMENT AREAS
§§115.170 – 115.173, 115.177, 115.183

Statutory Authority

The new and amended rules are adopted under Texas Water Code (TWC), §5.102, concerning general powers; §5.103, concerning Rules; TWC, §5.105, concerning General Policy, which authorize the commission to adopt rules necessary to carry out its powers and duties under the TWC; TWC, §7.002, concerning Enforcement Authority, which authorizes the commission to enforce the provisions of the Water Code and the Health and Safety Code within the commission's jurisdiction; and under Texas Health and Safety Code (THSC), §382.017, concerning Rules, which authorizes the commission to adopt rules consistent with the policy and purpose of the Texas Clean Air Act.

The new and amended rules are also adopted under THSC, §382.002, concerning Policy and Purpose, which establishes the commission's purpose to safeguard the state's air resources, consistent with the protection of public health, general welfare, and physical property; THSC, §382.011, concerning General Powers and Duties, which authorizes the commission to control the quality of the state's air; THSC, §382.012, concerning the State Air Control Plan, which authorizes the commission to prepare and develop a general, comprehensive plan for the proper control of the state's air; THSC, §382.016, concerning Monitoring Requirements; Examination of Records, which authorizes the commission to prescribe reasonable requirements for measuring and monitoring the emissions of air contaminants; and THSC, §382.021, concerning Sampling Methods and Procedures.

The new and amended adopted rules implement TWC, §§5.102, 5.103 and 7.002; and THSC, §§382.002, 382.011, 382.012, 382.016, 382.017, and 382.021.

§115.170. Applicability.

The requirements in this division apply to the following equipment in the Bexar County, Dallas-Fort Worth, and Houston-Galveston-Brazoria areas as defined in §115.10 of this title (relating to Definitions):

(1) any centrifugal compressor with wet seals and any reciprocating compressor located between the wellhead, but not including the well site, and point of custody transfer to a natural gas transmission or storage operation;

(2) any pneumatic controller located from the wellhead to a natural gas processing plant, including the natural gas processing plant, or point of custody transfer to a crude oil pipeline;

(3) any pneumatic pump located at a well site or a natural gas processing plant;

(4) any storage tank located from the well site to the point of custody transfer to an oil pipeline or to the point of natural gas distribution; and

(5) any fugitive emission component in volatile organic compounds service located at a crude oil or natural gas production well site, natural gas processing plant, or gathering and boosting station.

§115.171. 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, respectively), the terms in this division have the meanings commonly used in the field of air pollution control. The following meanings apply in this division unless the context clearly indicates otherwise.

(1) Centrifugal compressor--A piece of equipment for raising the pressure of natural gas by drawing in low-pressure natural gas and discharging significantly higher-pressure natural gas by means of mechanical rotating vanes or impellers. Screw, sliding vane, and liquid ring compressors are not centrifugal compressors.

(2) Closure device--A piece of equipment that covers an opening in the roof of a fixed roof storage tank and either can be temporarily opened or has a component that provides a temporary opening. Examples of closure devices include, but are not limited to, thief hatches, pressure relief valves, pressure-vacuum relief valves, and access hatches.

(3) Difficult-to-monitor--Equipment that cannot be inspected without elevating the inspecting personnel more than two meters above a support surface.

(4) Fugitive emission components--Except for vents as defined in §101.1 of this title (relating to Definitions) and sampling systems, equipment as defined in subparagraphs (A) and (B) of this paragraph that has the potential to leak volatile organic compounds (VOC) emissions.

(A) At a natural gas processing plant, equipment considered fugitive components include, but are not limited to, any pump, pressure relief device, open-ended valve or line, valve, flange, or other connector that is in VOC service or wet gas service, and any closed vent system or control device not subject to another section in this division that specifies one or more instrument monitoring requirements for the system or device. A compressor or sampling connection system that is exempt from the fugitive monitoring requirements in §115.352 and §115.354 of this title (relating to Fugitive Emission Control in Petroleum Refining, Natural Gas/Gasoline Processing, and Petrochemical Processes in Ozone Nonattainment Areas) on or before December 31, 2022 is excluded as a fugitive monitoring component under this subparagraph.

(B) At a well site or gathering and boosting station from equipment considered fugitive emissions components include, but are not limited to, valves, compressors, connectors, pressure relief devices, open-ended lines, flanges, instruments, meters, or other

openings that are not on a storage tank subject to §115.175 of this title (relating to Storage Tank Control Requirements), and any closed vent system or control device not subject to another section in this division that specifies one or more instrument monitoring requirements for the system or device. A compressor seal at a gathering and boosting station that is addressed in §115.173 of this title (relating to Compressor Control Requirements) is not included as a fugitive emission component.

(5) Gathering and boosting station--Any permanent combination of one or more compressors that collects natural gas from well sites and moves the natural gas at increased pressure into gathering pipelines to a natural gas processing plant or into the pipeline. The combination of one or more compressors located at a well site, or located at an onshore natural gas processing plant, is not a gathering and boosting station.

(6) Heavy liquid service--Equipment is in heavy liquid service if the heavy liquid process fluid contains 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).

(7) Light liquid service--A piece of equipment contains a liquid that meets the following conditions.

(A) The vapor pressure of one or more of the organic components is greater than 1.2 inches water at 68 degrees Fahrenheit (0.3 kiloPascals at 20 degrees Celsius).

(B) The total concentration of the pure organic components having a vapor pressure greater than 1.2 inches water at 68 degrees Fahrenheit (0.3 kiloPascals at 20 degrees Celsius) is equal to or greater than 20.0% by weight.

(C) The fluid is a liquid at operating conditions.

(D) An equipment is in light liquid service if the weight percent evaporated is greater than 10.0% at 302 degrees Fahrenheit (150 degrees Celsius) as determined by ASTM Method D86-96.

(8) Natural gas processing plant--any processing site engaged in the extraction of natural gas liquids from field gas, fractionation of mixed natural gas liquids to natural gas products, or both. A Joule-Thompson valve, a dew point depression valve, or an isolated or standalone Joule-Thompson skid is not a natural gas processing plant.

(9) Pneumatic controller--An automated instrument that is actuated by a compressed gas and is used to maintain a process condition such as liquid level, pressure, pressure differential and temperature. When actuated by natural gas, pneumatic controllers are characterized primarily by their emission characteristics.

(A) Continuous bleed pneumatic controllers receive a continuous flow of pneumatic natural gas supply and are used to modulate flow, liquid level, or pressure. Gas is vented continuously at a rate that may vary over time. Continuous bleed controllers are further subdivided into two types based on their bleed rate, which for the purposes of this section means the rate at which natural gas is continuously vented from a pneumatic controller and measured in standard cubic feet per hour (scfh):

(i) low bleed controllers have a bleed rate of less than or equal to 6.0 scfh; and

(ii) high bleed controllers have a bleed rate of greater than 6.0 scfh.

(B) Intermittent bleed or snap-acting pneumatic controllers release natural gas intermittently only during control system actuation periods when they open, close, or throttle the gas flow to a control valve for actuation purposes. Intermittent bleed or snap-acting pneumatic controllers, as defined in this section, are not subject to 30 TAC §115.174(b)(2) bleed rate limits measured in scfh.

(C) Zero-bleed pneumatic controllers do not bleed natural gas to the atmosphere. These pneumatic controllers are self-contained devices that release gas to a downstream pipeline instead of to the atmosphere.

(10) Pneumatic pump--A positive displacement pump powered by pressurized natural gas that uses the reciprocating action of flexible diaphragms in conjunction with check valves to pump a fluid.

(11) Reciprocating compressor--A piece of equipment that increases the pressure of a natural gas by positive displacement, employing linear movement of the driveshaft.

(12) Rod packing--A series of flexible rings in machined metal cups that fit around the reciprocating compressor piston rod to create a seal limiting the amount of compressed natural gas that escapes to the atmosphere, or other mechanism that provides the same function.

(13) Route to a process--The emissions are:

(A) conveyed via a closed vent system to any enclosed portion of a process where it is predominantly recycled or consumed in the same manner as a material that fulfills the same function in the process or is transformed by chemical reaction into materials that are not regulated materials or incorporated into a product; or

(B) recovered.

(14) Storage tank--A tank, stationary vessel, or a container that contains an accumulation of crude oil, condensate, intermediate hydrocarbon liquids, or produced water, and that is constructed primarily of non-earthen materials.

(15) Unsafe-to-monitor--Equipment that exposes monitoring personnel to an imminent or potential danger as a consequence of conducting an inspection.

(16) Vapor recovery unit--A device that transfers hydrocarbon vapors to a fuel liquid or gas system, a sales liquid or gas system, or a liquid storage tank.

(17) Wellhead--the piping, casing, tubing and connected valves protruding above the earth's surface for an oil and/or natural gas well. The wellhead ends where the flow line connects to a wellhead valve. The wellhead does not include other equipment at the well site except for any conveyance through which gas is vented to the atmosphere.

(18) Well site--A parcel of land with one or more surface sites, which means sites with any combination of one or more graded pad sites, gravel pad sites, foundations, platforms, or the immediate physical location upon which equipment is physically affixed, that are constructed for the drilling and subsequent operation of one or more oil, natural gas, or injection wells. The meaning of "site" and "sites" in this definition is limited to this division.

(19) Wet gas service--A piece of equipment which contains or contacts the field gas before the extraction step at a gas processing plant process unit.

§115.172. Exemptions.

(a) The following exemptions apply to the equipment specified in §115.170 of this title (relating to Applicability) that is subject to this division. Records to support exemption qualification must be kept in accordance with the requirements in §115.180 of this title (relating to Recordkeeping Requirements). Additional requirements apply where specified.

(1) Boilers and process heaters are exempt from the testing requirements of §115.179 of this title (relating to Approved Test Methods and Testing Requirements) and the monitoring requirements of §115.178 of this title (relating to Monitoring and Inspection Requirements) if:

(A) a vent gas stream from equipment subject to this division is introduced with the primary fuel or is used as the primary fuel; or

(B) the boiler or process heater has a design heat input capacity equal to or greater than 44 megawatts or 149.6 million British thermal units per hour.

(2) Any pneumatic pump at a well site that operates fewer than 90 days per calendar year is exempt from the requirements of this division.

(3) Except for the control requirements in §115.175(b) or (c) of this title (relating to Storage Tank Control Requirements), any storage tank that meets one of the following conditions is exempt from the requirements in this division:

(A) a storage tank with the potential to emit of less than 6.0 tons per year of volatile organic compounds (VOC) emissions, which must be calculated in accordance with §115.175(c)(2) of this title;

(B) a storage tank with uncontrolled actual VOC emissions of less than 4.0 tons per year, which must be calculated in accordance with §115.175(c)(1) of this title;

(C) a process vessel such as a surge control vessel, bottom receiver, or knockout vessel;

(D) a pressure vessel designed to operate in excess of 29.7 pounds per square inch absolute and designed to operate without emissions to the atmosphere; and

(E) a vessel that is skid-mounted or permanently attached to something that is mobile (such as trucks, railcars, barges, or ships) and is intended to be located at a site for less than 180 consecutive days.

(4) Fugitive emission components at a natural gas processing plant that contact a process fluid that contains less than 1.0% VOC by weight are exempt from the requirements of this division.

(5) All pumps and compressors, other than those specified in §115.173 and §115.174 of this title (relating to Compressor Control Requirements and Pneumatic Controller and Pump Controller Requirements, respectively), that are equipped with a shaft sealing system that prevents or detects emissions of VOC from the seal are exempt from the fugitive monitoring requirements of §115.177 of this title (relating to Fugitive Emission Component Requirements). 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.

(6) At a natural gas processing plant, components that are insulated, making them inaccessible to monitoring with a hydrocarbon gas analyzer, are exempt from the hydrocarbon gas analyzer monitoring requirements of §115.177 and §115.178 of this title.

Inspections using audio, visual, and olfactory means must still be conducted in accordance with the appropriate requirements of §115.177 and §115.178 of this title.

(7) At a natural gas processing plant, sampling connection systems, as defined in 40 Code of Federal Regulations (CFR) §63.161 (as amended January 17, 1997 (62 FR 2788)), that meet the requirements of 40 CFR §63.166(a) and (b) (as amended June 20, 1996 (61 FR 31439)) are exempt from the requirements of this division, except from the recordkeeping requirement in §115.180(2) of this title.

(8) Fugitive emission components located at a well site with one or more wells that produce on average 15-barrel equivalents or less per day are exempt from the requirements of this division, except from the recordkeeping requirement in §115.180(2) of this title.

(9) Natural gas processing plant pump, valve and connector fugitive components that contact a heavy liquid process fluid containing 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 §115.177(b) of this title (relating to Monitoring and Inspection Requirements) if the components are inspected by visual, audio, and/or olfactory means according to the minimum inspection schedules specified in §115.177(b) of this title and the following procedures are followed when the inspection indicates that a leak may be present.

(A) The owner or operator shall monitor the heavy liquid service component within five days by the method specified in 115.177(b) and shall comply with the requirements of subparagraphs (B) through (D) of this paragraph.

(B) The owner or operator shall eliminate the visual, audible, olfactory, or other indication of a potential leak within five calendar days of detection.

(C) If an instrument reading of 10,000 ppm or greater is measured, a leak is detected.

(i) When a leak is detected, it shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected, except as provided in 115.177(b).

(ii) The first attempt at repair shall be made no later than 5 calendar days after each leak is detected.

(D) First attempts at repair include, but are not limited to, the best operating practices described under 40 CFR §60.482-2a(c)(2) and §60.482-7a(e).

(10) Natural gas processing plant pressure relief devices routed through a closed vent system to a control device, process or fuel gas system are exempt from the instrument monitoring (with a hydrocarbon gas analyzer) requirements of §115.177(b) of this title (relating to Monitoring and Inspection Requirements) if the owner or operator inspects components by visual, audio, and/or olfactory means according to the minimum inspection schedules specified in §115.177(b) of this title and complies with procedures specified in either §115.172(a)(10)(A), (C) and (D) or §115.172(a)(10)(B).

(A) The owner or operator shall monitor the light liquid service component within five days by the method specified in 115.177(b) and shall comply with the requirements of paragraphs (C) through (D) of this subsection.

(B) The owner or operator shall eliminate the visual, audible, olfactory, or other indication of a potential leak within five calendar days of detection.

(C) If an instrument reading of 10,000 ppm or greater is measured, a leak is detected.

(i) When a leak is detected, it shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected, except as provided in 115.177(b).

(ii) The first attempt at repair shall be made no later than 5 calendar days after each leak is detected.

(D) First attempts at repair include, but are not limited to, the best operating practices described under 40 CFR §60.482-2a(c)(2) and §60.482-7a(e).

(b) Equipment used only for materials outside the product stream from a crude oil or natural gas production well or after the point of custody transfer to a crude oil or natural gas distribution or storage segment is exempt from the requirements of this division.

(c) After the appropriate compliance date in §115.183 of this title (relating to Compliance Schedules) and upon the date that the wet seals on a centrifugal compressor subject to subsection (a) of this section are retrofitted with a dual mechanical or other equivalent dry seal control system, the compressor no longer meets the applicability of this division.

(d) After the appropriate compliance date in §115.183 of this title, if changes are made to a pneumatic pump or controller are such that the pump or controller does not meet the appropriate definitions in this division, the requirements of §115.174(a) or (b) of this title no longer apply. The change in applicability status must be documented in accordance with the recordkeeping requirements in §115.180 of this title. For example, a pneumatic controller converted to a solar-powered controller no longer meets the applicability of a pneumatic controller regulated by this division.

(e) Well sites that only contain one or more wellheads and do not contain additional equipment are exempt from the monitoring requirements of §115.177(b).

(f) Pressure relief valves vented to a process, fuel gas system, or equipped with a closed vent system routed to a control device that meet the requirements of §115.175(a)(2) and (4) are exempt from the monitoring requirements of §115.177(b), provided the closed vent system is monitored in accordance with §115.177.

§115.173. Compressor Control Requirements.

(a) Owners or operators of centrifugal compressors with wet seal fluid degassing systems must comply with the following requirements.

(1) Vapors must be routed from the wet seal fluid degassing system through a closed vent system that is designed and operated under normal operations to route all gases, vapors, and/or fumes from the wet seal fluid degassing system to a control device that meets the requirements of subsection (c) of this section. The closed vent system must operate under negative pressure at the inlet for vapors.

(2) The compressor must be equipped with a seal cover that forms a continuous impermeable barrier over the entire liquid surface area, and the cover must remain in a sealed

position (e.g., covered by a gasketed lid or cap) except during periods necessary to inspect, maintain, repair, or replace equipment.

(b) Owners or operators of reciprocating compressors must comply with paragraph (1), (2) or (3) of this subsection.

(1) Replace the compressor rod packing on or before the compressor has operated for 26,000 hours from the most recent rod packing replacement. The number of hours the compressor operates must be continuously recorded beginning on the appropriate compliance date in §115.183 of this title (relating to Compliance Schedule).

(2) Replace the compressor rod packing within 36 months from the most recent rod packing replacement beginning from the appropriate compliance date in §115.183 of this title.

(3) Operate a closed vent system under negative inlet pressure that captures and routes rod packing vapor to a control device that meets the requirements of subsection (c) of this section.

(c) A control device, other than a device specified in paragraphs (3) or (4) of this subsection, may be used and must maintain a VOC control efficiency of at least 95% or a VOC concentration of equal to or less than 275 parts per million by volume (ppmv), as propane, on a wet basis corrected to 3% oxygen. The 95% VOC control efficiency and 275 ppmv VOC

concentration are calculated from the gas stream at the control device outlet.

(1) The control device must be operated at all times when gases, vapors, or fumes are vented from the closed vent system to the control device. For a boiler or process heater used as the control device, the vent gas stream must be introduced into the flame zone of the boiler or process heater. Multiple vents may be routed to the same control device. Control devices and closed vent systems must comply with §115.178 of this title (relating to Monitoring and Inspection Requirements) and §115.179 of this title (relating to Approved Test Methods and Testing Requirements).

(2) Control devices must operate with no visible emissions, as determined through a visible emissions test conducted according to United States Environmental Protection Agency (EPA) Method 22, 40 Code of Federal Regulations (CFR) Part 60, Appendix A-7, Section 11, except for periods not to exceed a total of one minute during any 15-minute observation period.

(3) A flare may be used and must be designed and operated in accordance with 40 CFR §60.18(b) - (f) (as amended through December 22, 2008 (73 *Federal Register* (FR) 78209)). The flare must be lit at all times when VOC vapors are routed to the flare. Multiple vents may be routed to the same control device.

(4) VOC emissions may be routed to a process if the emissions are compatible with the process and would be retained within the process. Routing to a process is considered equivalent to a 95% control efficiency.

(5) A bypass installed on a closed vent system able to divert any portion of the flow from entering a control device or routing to a process must be in compliance with subparagraphs (A) or (B) of this paragraph.

(A) A flow indicator must be installed, calibrated, and maintained at the inlet of each bypass. The flow indicator must take a reading at least once every 15 minutes and initiate an alarm notifying operators to take prompt remedial action when bypass flows are present.

(B) Each bypass valve must be secured in the non-diverting position using a car-seal or a lock-and-key type configuration.

§115.177. Fugitive Emission Component Requirements.

(a) The owner or operator of equipment with fugitive emission components shall create a written plan and maintain such plan in accordance with §115.180 of this title (relating to Recordkeeping Requirements) that details information about the site subject to this section including, but not limited to, the following:

(1) the identification of each fugitive emission component grouping required to be monitored;

(2) the fugitive emission component designated as unsafe-to-monitor or difficult-to-monitor;

(3) the exemptions or exceptions that apply to any fugitive emission component;

(4) the method of monitoring; and

(5) the monitoring survey schedules of the fugitive emission components in paragraph (1) or (2) of this subsection.

(b) The owner or operator shall monitor each affected fugitive emission component and calibrate the hydrocarbon gas analyzer instrumentation in accordance with procedures specified by the United States Environmental Protection Agency (EPA) Method 21 in 40 Code of Federal Regulations (CFR) Part 60, Appendix A-7. The owner or operator may elect to use the alternative work practice in §115.358 of this title (relating to Alternative Work Practice) for any fugitive emission component, as specified in paragraph (11) of this subsection.

(1) Except as provided in paragraph (5)(C) of this subsection, no component at a natural gas processing plant is allowed to have a volatile organic compounds (VOC) leak for more than five calendar days without a first attempt at repair after the leak is detected and must be repaired no later than 15 calendar days after the leak is found that meets the following:

(A) for pump seals in light-liquid service, a leak definition of 5,000 parts per million by volume (ppmv) for a pump used for any polymerizing monomer and 2,000 ppmv for all other pumps;

(B) for valves, flanges, connectors, pressure relief devices, pumps in heavy-liquid service, sampling connections, and process drains, a leak definition of 500 ppmv; and

(C) for compressors, a leak definition of 10,000 ppmv or exuding of process fluid based on sight, smell, or sound.

(2) Except as provided in paragraph (5)(C) of this subsection, no fugitive emission component at a well site or gathering and boosting station is allowed to have a VOC leak of equal to or greater than 500 ppmv for more than five calendar days without a first attempt at repair after the leak is detected and must be repaired no later than 15 calendar days after the leak is found.

(3) Except as specified in subsection (c) of this section, the owner or operator shall conduct monitoring according to the following schedules.

(A) The owner or operator of a natural gas processing plant shall monitor annually to detect leaks of VOC emissions from all connectors.

(B) Except as provided in subparagraph (E) of this paragraph, the owner or operator shall monitor to detect leaks of VOC emissions from all:

(i) fugitive emission components at gathering and boosting stations quarterly; and

(ii) fugitive emission components at well sites semiannually.

(C) The owner or operator shall monitor quarterly to detect VOC emissions leaks from all:

(i) pump seals at a natural gas processing plant that are not in light-liquid service; and

(ii) fugitive emission components at a natural gas processing plant not specified elsewhere in this paragraph.

(D) The owner or operator shall monitor monthly to detect leaks of VOC emissions at a natural gas processing plant from all:

(i) pressure relief valves in gaseous service;

(ii) pump seals in light-liquid service; and

(iii) accessible fugitive emission components in gas/vapor and light-liquid service, except for connectors.

(E) In addition to monitoring in subparagraphs (B)(i), (B)(ii), and (D)(i) of this paragraph, the owner or operator shall monitor pressure relief valves within 24 hours of a release.

(F) At a natural gas processing plant, the owner or operator shall visually inspect for indications of dripping liquid each pump in light liquid service weekly. If evidence of a leak is found, the owner or operator shall monitor each leaking pump in accordance with Method 21 in 40 CFR Part 60, Appendix A-7 or the alternative work practice in §115.358 of this title within five calendar days after the leak is detected.

(4) Upon the detection of a leaking fugitive emission component, the owner or operator shall 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, or be replaced if damaged, 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.

(5) When a leak or defect is detected from a fugitive emission component, the owner or operator shall repair the leak or defect as soon as practicable.

(A) A first attempt at repair must be made no later than five calendar days after the leak is detected.

(B) A repair must be completed no later than 15 calendar days after the leak is detected.

(C) If an owner or operator determines and documents that a repair is technically infeasible without a shutdown, vent blowdown at a well site or gathering and boosting station, well shut-in, would be unsafe to repair during operation of the unit, or that emissions resulting from immediate repair would be greater than the total fugitive emissions

likely to result from a delay of repair, then the repair is not required to be completed until the end of the next shutdown, vent blowdown at a well site or gathering and boosting station, well shut-in, or unplanned blowdown. Any repair under this subparagraph at a well site or gathering and boosting station must be made within two years after the leak is detected.

(D) For the owner or operator using the alternative work practice in §115.358 of this title to monitor fugitive emission components, repair is complete once a monitoring survey using EPA Method 21 in 40 CFR Part 60, Appendix A-7 or the alternative work practice in §115.358 of this title shows no leaking. For the owner or operator using Method 21 in 40 CFR Part 60, Appendix A-7 or audio, visual, or olfactory means to monitor fugitive emission components, repair is complete once the monitoring required under this section shows no leaking. At a well site or gathering and boosting station, this monitoring survey to check that the leak is fixed must be done within 30 days of the repair attempt. At a natural gas processing plant, if a shutdown is needed as specified in subparagraph (C) of this paragraph, the monitoring survey to check that the leak is fixed must be done within 15 days of startup of the process unit.

(6) If the executive director determines that the number of leaks in a process area is excessive, the monitoring schedule in this subsection may be modified to require an increase in the frequency of monitoring in a given process area.

(7) Any fugitive component that is monitored monthly in accordance with EPA Method 21 to comply with §115.177(b)(3)(D) and not found leaking for two successive monthly monitoring periods may be monitored quarterly, beginning with the first month of the next quarter until a leak is detected. Any component found to be leaking must be returned to its original monthly monitoring schedule until it does not show evidence of a leak for two successive months. After completion of the required valve monitoring in this subsection for a period of at least two years, the owner or operator of a natural gas processing plant may request in writing to the appropriate regional office that the valve monitoring schedule be revised based on the percent of valves leaking. Valid historical monitoring data may be used to satisfy the initial 2-year data collection period requirement. 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 by the total number of valves subject to monitoring requirements. The revised monitoring schedule is not effective until a response is received from the executive director. 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% using EPA Method 21, 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% using EPA Method 21, 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) 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 subsection.

(9) 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, a default pegged value of 100,000 ppmv must be recorded. This requirement does not apply to monitoring using an optical gas imaging instrument, which makes emissions visible that may otherwise be invisible to the naked eye, in accordance with §115.358 of this title.

(10) The owner or operator shall check all new connectors for leaks within 30 days of being placed in VOC 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.

(11) For any fugitive emission component for which the owner or operator elects to use the alternative work practice in §115.358 of this title, the following provisions apply.

(A) At a natural gas processing plant, the frequency for monitoring components listed in this section must be the frequency determined according to §115.358 of this title. At a well site or gathering and boosting station, the frequency for monitoring components using optical gas imaging is the frequency in paragraph (3) of this subsection.

(B) The alternative monitoring schedules allowed under paragraph (7) of this subsection are not allowed.

(C) At a well site or gathering and boosting station, the requirements in §115.358 of this title, except for the requirements in §115.358(e) and (f) of this title, apply in addition to the appropriate requirements in this section. At a natural gas processing plant, the requirements in §115.358 of this title apply in addition to the applicable requirements in this section.

(D) The owner or operator may still classify a component as unsafe-to-monitor as allowed under subsection (c) of this section if the component cannot safely be monitored using either a hydrocarbon gas analyzer or the alternative work practice. The owner or operator may use either EPA Method 21 in 40 CFR Part 60, Appendix A-7 or the alternative work practice at the monitoring frequency specified in paragraph (3) of this subsection. Any component classified as unsafe-to-monitor under the alternative work practice must be identified as such in the list required in §115.180(7) of this title.

(E) If the executive director determines that there is an excessive number of leaks in any given process area for which 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.

(c) An owner or operator is not required to comply with monitoring frequencies in subsection (b) of this section for any fugitive emission component designated as unsafe-to-monitor or difficult-to-monitor.

(1) Any component, except closed vent systems, designated difficult-to-monitor must be monitored at least once per calendar year. Difficult-to-monitor closed vent system components must be monitored at least once every five years.

(2) Any component designated unsafe-to-monitor must be monitored as frequently as practicable during a time when it is safe-to-monitor, not to exceed the monitoring frequency in subsection (b) of this section.

(3) The number of components designated as difficult-to-monitor may not exceed 3% of total affected components in the same classification (e.g., pumps, valves, flanges, connectors etc.) at the site.

(4) The owner or operator shall inspect all flanges weekly by audio, visual, and olfactory means, excluding flanges that are monitored at least once each calendar year using EPA Method 21 in 40 CFR Part 60, Appendix A-7 and flanges that are difficult-to-monitor and unsafe-to-monitor. Flanges that are difficult-to-monitor and unsafe-to-monitor must be identified in a list made available upon request. If a difficult-to-monitor or an unsafe-to-monitor 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.

(5) Relief valves that are designated as unsafe-to-monitor must be monitored as soon as possible during times that are safe to monitor after any release event. Relief valves that are designated as difficult-to-monitor must be monitored within 15 days after a release.

§115.183. Compliance Schedules.

(a) In the Dallas-Fort Worth and Houston-Galveston-Brazoria areas, the owner or operator of a piece of equipment that meets the applicability in §115.170 of this title (relating to Applicability) and is subject to a requirement of this division shall be in compliance as soon as practicable, but no later than January 1, 2023.

(b) For an owner or operator in the Dallas-Fort Worth and Houston-Galveston-Brazoria areas subject to this division as of January 1, 2023, the recordkeeping required by §115.180(8) of this title (relating to Recordkeeping Requirements) must be completed no later than March 31, 2023.

(c) An owner or operator who becomes subject to the requirements of this division on or after the date specified in the applicable subsection of this section shall comply with the requirements in this division no later than 60 days after becoming subject. Recordkeeping required under §115.180(8) of this title must be complied with no later than 30 days after compliance with the division is achieved.

(d) The owner or operator of a storage tank in the Dallas-Fort Worth and Houston-Galveston-Brazoria areas subject to the requirements in Division 1 of this subchapter (relating to the Storage of Volatile Organic Compounds) shall remain subject to that division until compliance with the requirements in this division are achieved, but not later than January 1, 2023.

(e) The owner or operator of a fugitive emission component at a natural gas processing plant in the Dallas-Fort Worth and Houston-Galveston-Brazoria areas as defined in §115.10 of this title (relating to Definitions), subject to the requirements of Subchapter D, Division 3 of this chapter (relating to Fugitive Emission Control in Petroleum Refining, Natural Gas/Gasoline Processing, and Petrochemical Processes in Ozone Nonattainment Areas) shall remain subject to that division until compliance with the requirements in this division are achieved, but not later than January 1, 2023.

(f) Upon the date the owner or operator can no longer claim the exceptions in §115.174(e) of this title (relating to Pneumatic Controller and Pump Control Requirements), the owner or operator shall comply with the appropriate control requirement within 60 days.

(g) The owner or operator of a piece of equipment in the Bexar County area subject to the requirements of this division shall comply with the requirements of this division no later than January 1, 2025.

SUBCHAPTER C: VOLATILE ORGANIC COMPOUND TRANSFER OPERATIONS
DIVISION 1: LOADING AND UNLOADING OF VOLATILE ORGANIC COMPOUNDS
§§115.211 – 115.214, 115.216, 115.217, 115.219

Statutory Authority

The amendments are adopted under Texas Water Code (TWC), §5.102, concerning general powers; §5.103, concerning Rules; TWC, §5.105, concerning General Policy, which authorize the commission to adopt rules necessary to carry out its powers and duties under the TWC; TWC, §7.002, concerning Enforcement Authority, which authorizes the commission to enforce the provisions of the Water Code and the Health and Safety Code within the commission's jurisdiction; and under Texas Health and Safety Code (THSC), §382.017, concerning Rules, which authorizes the commission to adopt rules consistent with the policy and purpose of the Texas Clean Air Act.

The amendments are also adopted under THSC, §382.002, concerning Policy and Purpose, which establishes the commission's purpose to safeguard the state's air resources, consistent with the protection of public health, general welfare, and physical property; THSC, §382.011, concerning General Powers and Duties, which authorizes the commission to control the quality of the state's air; THSC, §382.012, concerning the State Air Control Plan, which authorizes the commission to prepare and develop a general, comprehensive plan for the proper control of the state's air; THSC, §382.016, concerning Monitoring Requirements; Examination of Records, which authorizes the commission to prescribe reasonable requirements for measuring and monitoring the emissions of air contaminants; and THSC, §382.021, concerning Sampling Methods and Procedures.

The adopted amendments implement TWC, §§5.102, 5.103 and 7.002; and THSC, §§382.002, 382.011, 382.012, 382.016, 382.017, and 382.021.

§115.211. Emission Specifications.

The owner or operator of each gasoline terminal in the covered attainment counties and in the Beaumont-Port Arthur, Bexar County, Dallas-Fort Worth, El Paso, and Houston-Galveston-Brazoria areas, as defined in §115.10 of this title (relating to Definitions), shall ensure that volatile organic compound (VOC) emissions from the vapor control system vent at gasoline terminals do not exceed the following rates:

(1) in the Beaumont-Port Arthur, Bexar County, Dallas-Fort Worth, El Paso, and Houston-Galveston-Brazoria areas, 0.09 pound per 1,000 gallons (10.8 mg/liter) of gasoline loaded into transport vessels.

(2) in the covered attainment counties, as defined in §115.10 of this title (relating to Definitions), 0.17 pound per 1,000 gallons (20 mg/liter) of gasoline loaded into transport vessels.

§115.212. Control Requirements.

(a) The owner or operator of each volatile organic compound (VOC) transfer operation, transport vessel, and marine vessel in the Beaumont-Port Arthur, Bexar County, Dallas-Fort Worth, El Paso, and Houston-Galveston-Brazoria areas, shall comply with the following control requirements.

(1) General VOC loading. At VOC loading operations other than gasoline terminals, gasoline bulk plants, and marine terminals, vapors from the transport vessel caused by the loading of VOC with a true vapor pressure greater than or equal to 0.5 psia under actual storage conditions must be controlled by:

(A) a vapor control system which maintains a control efficiency of at least 90%; or

(B) a vapor balance system, as defined in §115.10 of this title (relating to Definitions); or

(C) pressurized loading.

(2) Disposal of transported vapors. After unloading, transport vessels must be kept vapor-tight until the vapors in the transport vessel are returned to a loading, cleaning, or degassing operation and discharged in accordance with the control requirements of that operation.

(3) Leak-free requirements. All land-based VOC transfer to or from transport vessels shall be conducted such that:

(A) All liquid and vapor lines are:

(i) equipped with fittings which make vapor-tight connections that close automatically when disconnected; or

(ii) equipped to permit residual VOC after transfer is complete to discharge into a recovery or disposal system which routes all VOC emissions to a vapor control system or a vapor balance system. After VOC transfer, if necessary to empty a liquid line, the contents may be placed in a portable container, which is then closed vapor-tight and disposed of properly.

(B) There are no VOC leaks, as defined in §101.1 of this title (relating to Definitions), when measured with a hydrocarbon gas analyzer, and no liquid or vapor leaks, as detected by sight, sound, or smell, from any potential leak source in the transport vessel and transfer system (including, but not limited to, liquid lines, vapor lines, hatch covers, pumps, and valves, including pressure relief valves).

(C) All gauging and sampling devices are vapor-tight except for necessary gauging and sampling. Any nonvapor-tight gauging and/or sampling shall:

(i) be limited in duration to the time necessary to practicably gauge and/or sample; and

(ii) not occur while VOC is being transferred.

(D) Any openings in a transport vessel during unloading are limited to minimum openings which are sufficient to prevent collapse of the transport vessel.

(E) If VOC is loaded through the hatches of a transport vessel, then pneumatic, hydraulic, or other mechanical means shall force a vapor-tight seal between the loading arm's vapor collection adapter and the hatch. A means shall be provided which prevents liquid drainage from the loading device when it is removed from the hatch of any transport vessel, or which routes all VOC emissions to a vapor control system. After VOC transfer, if necessary to empty a liquid line, the contents may be placed in a portable container, which is then closed vapor-tight and disposed of properly.

(4) Gasoline terminals. The following additional control requirements apply to the transfer of gasoline at gasoline terminals.

(A) A vapor control system must be used to control the vapors from loading each transport vessel.

(B) Vapor control systems and loading equipment at gasoline terminals shall be designed and operated such that gauge pressure does not exceed 18 inches of water and vacuum does not exceed six inches of water in the gasoline tank-truck.

(C) Each gasoline terminal shall be equipped with sensors and other equipment designed and connected to monitor the status of the control device. If the control device malfunctions or is not operational, the system shall automatically stop gasoline transfer to the transport vessel(s) immediately.

(D) As an alternative to subparagraph (C) of this paragraph, the following requirements apply to gasoline terminals which have a variable vapor space holding tank design that can process the vapors independent of transport vessel loading. Such gasoline terminals shall be equipped with sensors and other equipment designed and connected to monitor the status of the control device. If the variable vapor space holding tank serving the loading rack(s) does not have the capacity to store additional vapors for processing by the control device at a later time and the control device malfunctions or is not operational, the system shall automatically stop gasoline transfer to the transport vessel(s) immediately.

(5) Gasoline bulk plants. The following additional control requirements apply to transfer of gasoline at gasoline bulk plants.

(A) A vapor balance system must be used between the storage tank and transport vessel. Alternatively, a vapor control system which maintains a control efficiency of at least 90% may be used to control the vapors.

(B) While filling a transport vessel from a storage tank:

(i) the transport vessel, if equipped for top loading, must use a submerged fill pipe; and

(ii) gauge pressure must not exceed 18 inches of water and vacuum must not exceed six inches of water in the gasoline tank-truck tank.

(6) Marine terminals. The following control requirements apply to marine terminals in the Houston-Galveston-Brazoria area.

(A) VOC emissions shall not exceed 0.09 pound from the vapor control system vent per 1,000 gallons (10.8 mg/liter) of VOC loaded into the marine vessel, or the vapor control system shall maintain a control efficiency of at least 90%. Alternatively, a vapor balance system or pressurized loading may be used to control the vapors.

(B) Only leak-free marine vessels, as defined in §115.10 of this title, shall be used for loading operations.

(C) All gauging and sampling devices shall be vapor-tight except for necessary gauging and sampling. Any nonvapor-tight gauging and/or sampling shall:

(i) be limited in duration to the time necessary to practicably gauge and/or sample; and

(ii) not occur while VOC is being transferred.

(D) When non-dedicated loading lines are used to load VOC with a true vapor pressure less than 0.5 psia (or a flash point of 150 degrees Fahrenheit or greater) and the preceding transfer through these lines was VOC with a true vapor pressure equal to or greater than 0.5 psia, the residual VOC vapors from this preceding transfer must be controlled by the vapor control system, vapor balance system, or pressurized loading as specified in subparagraph (A) of this paragraph.

(7) Once-in-always-in. Any loading or unloading operation that becomes subject to the provisions of this subsection by exceeding provisions of §115.217(a) of this title (relating to Exemptions) will remain subject to the provision of this subsection, even if throughput or

emissions later fall below exemption limits unless and until emissions are reduced to no more than the controlled emissions level existing before implementation of the project by which throughput or emission rate was reduced to less than the applicable exemption limits in §115.217(a) of this title; and

(A) the project by which throughput or emission rate was reduced is authorized by any permit or permit amendment or standard permit or permit by rule required by Chapter 116 or Chapter 106 of this title (relating to Control of Air Pollution by Permits for New Construction or Modification; and Permits by Rule). If a permit by rule is available for the project, compliance with this subsection must be maintained for 30 days after the filing of documentation of compliance with that permit by rule; or

(B) if authorization by permit, permit amendment, standard permit, or permit by rule is not required for the project, the owner/operator has given the executive director 30 days' notice of the project in writing.

(b) The owner or operator of each land-based VOC transfer operation and transport vessel in the covered attainment counties as defined by §115.10 of this title (relating to Definitions) shall comply with the following control requirements.

(1) General VOC loading in Aransas, Bexar, Calhoun, Gregg, Matagorda, Nueces, San Patricio, Travis, and Victoria Counties. The requirements of this paragraph no longer apply

in Bexar County beginning January 1, 2025. At VOC loading operations other than gasoline terminals and gasoline bulk plants, vapors from the transport vessel caused by the loading of VOC with a true vapor pressure greater than or equal to 1.5 psia under actual storage conditions must be controlled by:

(A) a vapor control system which maintains a control efficiency of at least 90%;

(B) a vapor balance system, as defined in §115.10 of this title; or

(C) pressurized loading.

(2) Disposal of transported vapors. After unloading, transport vessels must be kept vapor-tight until the vapors in the transport vessel are returned to a loading, cleaning, or degassing operation and discharged in accordance with the control requirements of that operation.

(3) Leak-free requirements. All land-based VOC transfer to or from transport vessels shall be conducted such that:

(A) all liquid and vapor lines are:

(i) equipped with fittings which make vapor-tight connections and that close automatically when disconnected; or

(ii) equipped to permit residual VOC after transfer is complete to discharge into a recovery or disposal system which routes all VOC emissions to a vapor control system or a vapor balance system. After VOC transfer, if necessary to empty a liquid line, the contents may be placed in a portable container, which is then closed vapor-tight and disposed of properly.

(B) there are no VOC leaks, as defined in §101.1 of this title, when measured with a hydrocarbon gas analyzer, and no liquid or vapor leaks, as detected by sight, sound, or smell, from any potential leak source in the transport vessel and transfer system (including, but not limited to, liquid lines, vapor lines, hatch covers, pumps, and valves, including pressure relief valves);

(C) all gauging and sampling devices are vapor-tight except for necessary gauging and sampling. Any nonvapor-tight gauging and/or sampling shall:

(i) be limited in duration to the time necessary to practicably gauge and/or sample; and

(ii) not occur while VOC is being transferred;

(D) any openings in a transport vessel during unloading are limited to minimum openings which are sufficient to prevent collapse of the transport vessel;

(E) if VOC is loaded through the hatches of a transport vessel, then pneumatic, hydraulic, or other mechanical means shall force a vapor-tight seal between the loading arm's vapor collection adapter and the hatch. A means shall be provided which prevents liquid drainage from the loading device when it is removed from the hatch of any transport vessel, or which routes all VOC emissions to a vapor control system. After VOC transfer, if necessary to empty a liquid line, the contents may be placed in a portable container, which is then closed vapor-tight and disposed of properly.

(4) Gasoline terminals. The following additional control requirements apply to gasoline transfer at gasoline terminals.

(A) A vapor control system must be used to control the vapors from loading the transport vessel.

(B) Vapor control systems and loading equipment at gasoline terminals shall be designed and operated such that gauge pressure does not exceed 18 inches of water and vacuum does not exceed six inches of water in the gasoline tank-truck.

(C) Each gasoline terminal shall be equipped with sensors and other equipment designed and connected to monitor the status of the control device. If the control device malfunctions or is not operational, the system shall automatically stop gasoline transfer to the transport vessel(s) immediately.

(D) As an alternative to subparagraph (C) of this paragraph, the following requirements apply to gasoline terminals which have a variable vapor space holding tank design that can process the vapors independent of transport vessel loading. Such gasoline terminals shall be equipped with sensors and other equipment designed and connected to monitor the status of the control device. If the variable vapor space holding tank serving the loading rack(s) does not have the capacity to store additional vapors for processing by the control device at a later time and the control device malfunctions or is not operational, the system shall automatically stop gasoline transfer to the transport vessel(s) immediately.

(5) Gasoline bulk plants. The following additional control requirements apply to gasoline transfer at gasoline bulk plants.

(A) A vapor balance system must be used between the storage tank and transport vessel. Alternatively, a vapor control system which maintains a control efficiency of at least 90% may be used to control the vapors.

(B) While filling a transport vessel from a storage tank:

(i) the transport vessel, if equipped for top loading, must use a submerged fill pipe; and

(ii) gauge pressure must not exceed 18 inches of water and vacuum must not exceed six inches of water in the gasoline tank-truck tank.

§115.213. Alternate Control Requirements.

(a) Alternate means of control. Alternate methods of demonstrating and documenting continuous compliance with the applicable control requirements or exemption criteria in this division (relating to Loading and Unloading of Volatile Organic Compounds) 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) General volatile organic compound (VOC) loading--90% overall control option in the Beaumont-Port Arthur, Bexar County, Dallas-Fort Worth, El Paso, and Houston-Galveston-Brazoria areas. As an alternative to §115.212(a)(1) of this title (relating to Control Requirements), VOC loading operations other than gasoline terminals, gasoline bulk plants, and marine terminals may elect to achieve a 90% overall control of emissions at the account from

the loading of VOC (excluding loading into marine vessels and loading at gasoline terminals and gasoline bulk plants) with a true vapor pressure equal to or greater than 0.5 psia, but less than 11 psia, under actual storage conditions, provided that the following requirements are met.

(1) To qualify for the control option available under this subsection after December 31, 1996, the owner or operator of a VOC loading operation for which a control plan was not previously submitted shall submit a control plan to the executive director, the appropriate regional office, and any local air pollution control program with jurisdiction which demonstrates that the overall control of emissions at the account from the loading of VOC with a true vapor pressure greater than or equal to 0.5 psia, but less than 11 psia, under actual storage conditions will be at least 90%. Any control plan submitted after December 31, 1996, must be approved by the executive director before the owner or operator may use the control option available under this subsection for compliance. For each loading rack and any associated control device at the account, the control plan shall include the emission point number (EPN), the facility identification number (FIN), the throughput of VOC with a true vapor pressure greater than or equal to 0.5 psia, but less than 11 psia, under actual storage conditions for the preceding calendar year, a plot plan showing the location, EPN, and FIN of each loading rack and any associated control device, the controlled and uncontrolled emission rates for the preceding calendar year, and an explanation of the recordkeeping procedure and calculations which will be used to demonstrate compliance.

(2) The owner or operator of the VOC loading operation shall submit an annual report no later than March 31 of each year to the executive director, the appropriate regional

office, and any local air pollution control program with jurisdiction which demonstrates that the overall control of emissions at the account from the loading of VOC with a true vapor pressure greater than or equal to 0.5 psia, but less than 11 psia, under actual storage conditions during the preceding calendar year is at least 90%. For each loading rack and any associated control device at the account, the report shall include the EPN, the FIN, the throughput of VOC with a true vapor pressure greater than or equal to 0.5 psia, but less than 11 psia, under actual storage conditions for the preceding calendar year, a plot plan showing the location, EPN, and FIN of each loading rack and any associated control device, and the controlled and uncontrolled emission rates for the preceding calendar year.

(3) The owner or operator of the VOC loading operation shall submit an updated report no later than 30 days after the installation of an additional loading rack(s) or any change in service of a loading rack(s) from loading VOC with a true vapor pressure less than 0.5 psia to loading VOC with a true vapor pressure greater than or equal to 0.5 psia, or vice versa. The report shall be submitted to the executive director, the appropriate regional office, and any local air pollution control program with jurisdiction and shall demonstrate that the overall control of emissions at the account from the loading of VOC with a true vapor pressure greater than or equal to 0.5 psia, but less than 11 psia, under actual storage conditions continues to be at least 90%.

(4) All representations in control plans and annual reports become enforceable conditions. It shall be unlawful for any person to vary from such representations if the

variation will cause a change in the identity of the specific emission sources being controlled or the method of control of emissions unless the owner or operator of the VOC loading operation submits a revised control plan to the executive director, the appropriate regional office, and any local air pollution control program with jurisdiction no later than 30 days after the change. All control plans and reports shall demonstrate that the overall control of emissions at the account from the loading of VOC with a true vapor pressure greater than or equal to 0.5 psia, but less than 11 psia, under actual storage conditions continues to be at least 90%. The emission rates shall be calculated in a manner consistent with the most recent emissions inventory.

(5) The loading of VOC with a true vapor pressure greater than or equal to 11 psia under actual storage conditions must be controlled by:

(A) pressurized loading;

(B) a vapor control system which maintains a control efficiency of at least 90%; or

(C) a vapor balance system, as defined in §115.10 of this title (relating to Definitions).

(6) A VOC loading operation which, under the 90% control option of this subsection, is not required to control vapors caused by loading VOC into a transport vessel is likewise not required to comply with:

(A) §115.212(a)(3)(A) and (C) of this title; or

(B) §115.214(a)(1)(A)(ii) and (iii) and (C) of this title (relating to Inspection Requirements).

(c) General VOC loading--90% overall control option in Aransas, Bexar, Calhoun, Gregg, Matagorda, Nueces, San Patricio, Travis, and Victoria counties. This control option is no longer available in Bexar County beginning January 1, 2025. As an alternative to §115.212(b)(1) of this title, VOC loading operations other than gasoline terminals, gasoline bulk plants, and marine terminals may elect to achieve a 90% overall control of emissions at the account from the loading of VOC (excluding loading into marine vessels and loading at gasoline terminals and gasoline bulk plants) with a true vapor pressure greater than or equal to 1.5 psia, but less than 11 psia, under actual storage conditions.

(1) Each VOC loading operation using this control option shall meet the requirements of subsection (b)(1)-(5) of this section, except that 1.5 psia shall be substituted for 0.5 psia in these paragraphs.

(2) A VOC loading operation which, under the 90% control option of this subsection, is not required to control vapors caused by loading VOC into a transport vessel is likewise not required to comply with:

(A) §115.212(b)(3)(A) and (C) of this title; or

(B) §115.214(b)(1)(A)(ii) and (iii) and (C) of this title.

(d) Marine vessel loading--90% control option. As an alternative to §115.212(a)(6)(A) of this title, marine terminals may elect to achieve a 90% overall control of emissions at the marine terminal from the loading of VOC with a true vapor pressure greater than or equal to 0.5 psia, but less than 11 psia, under actual storage conditions into marine vessels, provided that the following requirements are met.

(1) To qualify for the control option available under this subsection after December 31, 1996, the owner or operator of a marine terminal for which a control plan was not previously submitted shall submit a control plan to the executive director, the appropriate regional office, and any local air pollution control program with jurisdiction which demonstrates that the overall control of emissions at the marine terminal from the loading of VOC with a true vapor pressure greater than or equal to 0.5 psia, but less than 11 psia, under actual storage conditions into marine vessels will be at least 90%. Any control plan submitted after December 31, 1996 must be approved by the executive director before the owner or

operator may use the control option available under this subsection for compliance. For each marine loading facility and any associated control device at the marine terminal, the control plan shall include the EPN, the FIN, the throughput of VOC with a true vapor pressure greater than or equal to 0.5 psia, but less than 11 psia, under actual storage conditions for the preceding calendar year, a plot plan showing the location, EPN, and FIN of each marine loading facility and any associated control device, the controlled and uncontrolled emission rates for the preceding calendar year, and an explanation of the recordkeeping procedure and calculations which will be used to demonstrate compliance.

(2) The owner or operator of the marine terminal shall submit an annual report no later than March 31 of each year to the executive director, the appropriate regional office, and any local air pollution control program with jurisdiction which demonstrates that the overall control of emissions at the marine terminal from the loading of VOC with a true vapor pressure greater than or equal to 0.5 psia, but less than 11 psia, under actual storage conditions into marine vessels during the preceding calendar year is at least 90%. For each marine loading facility and any associated control device at the account, the report shall include the EPN, the FIN, the throughput of VOC with a true vapor pressure greater than or equal to 0.5 psia, but less than 11 psia, under actual storage conditions for the preceding calendar year, a plot plan showing the location, EPN, and FIN of each marine loading facility and any associated control device, and the controlled and uncontrolled emission rates for the preceding calendar year.

(3) All representations in control plans and annual reports become enforceable conditions. It shall be unlawful for any person to vary from such representations if the variation will cause a change in the identity of the specific emission sources being controlled or the method of control of emissions unless the owner or operator of the marine terminal submits a revised control plan to the executive director, the appropriate regional office, and any local air pollution control program with jurisdiction no later than 30 days after the change. All control plans and reports shall demonstrate that the overall control of emissions at the marine terminal from the loading into marine vessels of VOC with a true vapor pressure greater than or equal to 0.5 psia, but less than 11 psia, under actual storage conditions continues to be at least 90%. The emission rates shall be calculated in a manner consistent with the most recent emissions inventory.

(4) The loading of VOC with a true vapor pressure greater than 11 psia under actual storage conditions must be controlled by:

(A) pressurized loading;

(B) a vapor control system which maintains a control efficiency of at least 90%; or

(C) a vapor balance system, as defined in §115.10 of this title.

(5) A marine loading operation which, under the 90% control option of this subsection, is not required to control vapors caused by loading VOC into a marine vessel is likewise not required to comply with:

(A) §115.212(a)(6)(B)-(D) of this title; or

(B) §115.214(a)(3)(A), (B)(ii) and (iii), and (D) of this title.

§115.214. Inspection Requirements.

(a) The owner or operator of each volatile organic compound (VOC) transfer operation in the Beaumont-Port Arthur, Bexar County, Dallas-Fort Worth, El Paso, Houston-Galveston-Brazoria areas, shall comply with the following inspection requirements.

(1) Land-based VOC transfer to or from transport vessels.

(A) During each VOC transfer, the owner or operator of the transfer operation or of the transport vessel shall inspect for:

(i) visible liquid leaks;

(ii) visible fumes; and

(iii) significant odors.

(B) VOC loading or unloading through the affected transfer lines shall be discontinued immediately when a leak is observed and shall not be resumed until the observed leak is repaired.

(C) All tank-truck tanks being filled with or emptied of gasoline, or being filled with non-gasoline VOC having a true vapor pressure greater than or equal to 0.5 pounds per square inch absolute under actual storage conditions, shall have been leak tested within one year in accordance with the requirements of §§115.234 - 115.237 of this title (relating to Control of Volatile Organic Compound Leaks From Transport Vessels) as evidenced by prominently displayed certification affixed near the United States Department of Transportation certification plate.

(D) Subparagraphs (A) and (B) of this paragraph do not apply to fumes from hatches or vents if the fumes result from:

(i) a VOC transfer which is exempt from §115.211 or §115.212(a)(1) of this title (relating to Emission Specifications; and Control Requirements) under §115.217(a) of this title (relating to Exemptions); or

(ii) a VOC loading operation which, under the 90% control option in §115.213(b) of this title (relating to Alternate Control Requirements), is not required to control vapors caused by loading VOC.

(2) Gasoline terminals-additional inspection. The owner or operator of each gasoline terminal shall perform a monthly leak inspection of all equipment in gasoline service. Each piece of equipment shall be inspected during the loading of gasoline tank-trucks. For this inspection, detection methods incorporating sight, sound, and smell are acceptable. Alternatively, a hydrocarbon gas analyzer may be used for the detection of leaks, by meeting the requirements of §§115.352 - 115.357 of this title (relating to Fugitive Emission Control in Petroleum Refining, Natural Gas/Gasoline Processing, and Petrochemical Processes in Ozone Nonattainment Areas). Every reasonable effort shall be made to repair or replace a leaking component within 15 days after a leak is found. If the repair or replacement of a leaking component would require a unit shutdown, the repair may be delayed until the next scheduled shutdown.

(3) Marine terminals. For marine terminals in the Houston-Galveston-Brazoria area, the following inspection requirements apply.

(A) Before loading a marine vessel with a VOC which has a vapor pressure equal to or greater than 0.5 pounds per square inch absolute under actual storage conditions, the owner or operator of the marine terminal shall verify that the marine vessel has passed an annual vapor tightness test as specified in §115.215(7) of this title (relating to Approved Test

Methods). If no documentation of the annual vapor tightness test is available, one of the following methods may be substituted.

(i) VOC shall be loaded into the marine vessel with the vessel product tank at negative gauge pressure.

(ii) Leak testing shall be performed during loading using Test Method 21. The testing shall be conducted during the final 20% of loading of each product tank of the marine vessel and shall be applied to any potential sources of vapor leaks on the vessel.

(iii) Documentation of leak testing conducted during the preceding 12 months as described in clause (ii) of this subparagraph shall be provided.

(B) During each VOC transfer, the owner or operator of the marine terminal or of the marine vessel shall inspect for:

(i) visible liquid leaks;

(ii) visible fumes; and

(iii) significant odors.

(C) If a liquid leak is detected during VOC transfer and cannot be repaired immediately (for example, by tightening a bolt or packing gland), then the transfer operation shall cease until the leak is repaired.

(D) If a vapor leak is detected by sight, sound, smell, or hydrocarbon gas analyzer during the VOC loading operation, then a "first attempt" shall be made to repair the leak. VOC loading operations need not be ceased if the first attempt to repair the leak, as defined in §101.1 of this title (relating to Definitions), to less than 10,000 parts per million by volume (ppmv) or 20% of the lower explosive limit, is not successful provided that the first attempt effort is documented by the owner or operator of the marine vessel as soon as practicable and a copy of the repair log made available to a representative of the marine terminal. No additional loadings shall be made into the cargo tank until a successful repair has been completed and an inspection conducted under 40 Code of Federal Regulations 61.304(f) or 63.565(c).

(E) The intentional bypassing of a vapor control device during marine loading operations is prohibited.

(F) All shore-based equipment is subject to the fugitive emissions monitoring requirements of §§115.352 - 115.357 of this title. For the purposes of this paragraph, shore-based equipment includes, but is not limited to, all equipment such as loading arms, pumps, meters, shutoff valves, relief valves, and other piping and valves between the

marine loading facility and the vapor control system and between the marine loading facility and the associated land-based storage tanks, excluding working emissions from the storage tanks.

(G) Subparagraphs (B) and (D) of this paragraph do not apply to fumes from hatches or vents if the fumes result from:

(i) a VOC transfer which is exempt from §115.212(a)(6)(A) of this title under §115.217(a)(5) of this title; or

(ii) a VOC loading operation which, under the 90% control option in §115.213(d) of this title, is not required to control vapors caused by loading VOC.

(b) The owner or operator of each VOC transfer operation in the covered attainment counties as defined in §115.10 of this title (relating to Definitions) shall comply with the following inspection requirements.

(1) Land-based VOC transfer to or from transport vessels. The requirements of this paragraph apply at VOC transfer operations in Aransas, Bexar, Calhoun, Gregg, Matagorda, Nueces, San Patricio, Travis, and Victoria Counties, and at gasoline terminals and gasoline bulk plants in the covered attainment counties. These requirements no longer apply in Bexar County beginning January 1, 2025.

(A) During each VOC transfer, the owner or operator of the transfer operation or of the transport vessel shall inspect for:

(i) visible liquid leaks;

(ii) visible fumes; and

(iii) significant odors.

(B) VOC loading or unloading through the affected transfer lines shall be discontinued immediately when a leak is observed and shall not be resumed until the observed leak is repaired.

(C) All tank-truck tanks being filled with or emptied of gasoline shall have been leak tested within one year in accordance with the requirements of §§115.234 - 115.237 of this title as evidenced by prominently displayed certification affixed near the United States Department of Transportation certification plate.

(D) Subparagraphs (A) and (B) of this paragraph do not apply to fumes from hatches or vents if the fumes result from:

(i) a VOC transfer which is exempt from §115.211 or §115.212(b)(1) of this title under §115.217(b) of this title; or

(ii) a VOC loading operation which, under the 90% control option in §115.213(c) of this title, is not required to control vapors caused by loading VOC.

(2) Gasoline terminals-additional inspection. The owner or operator of each gasoline terminal shall perform a monthly leak inspection of all equipment in gasoline service. Each piece of equipment shall be inspected during the loading of gasoline tank-trucks. For this inspection, detection methods incorporating sight, sound, and smell are acceptable. Alternatively, a hydrocarbon gas analyzer may be used for the detection of leaks, by meeting the requirements of §§115.352 - 115.357 of this title. Every reasonable effort shall be made to repair or replace a leaking component within 15 days after a leak is found. If the repair or replacement of a leaking component would require a unit shutdown, the repair may be delayed until the next scheduled shutdown.

§115.216. Monitoring and Recordkeeping Requirements.

The owner or operator of each volatile organic compound (VOC) loading or unloading operation in the covered attainment counties or in the Beaumont-Port Arthur, Bexar County, Dallas-Fort Worth, El Paso, and Houston-Galveston-Brazoria areas, shall maintain the following information for at least two years at the plant, as defined by its air quality account number. The

owner or operator shall make the information available upon request to representatives of the executive director, EPA, or any local air pollution control agency having jurisdiction in the area.

(1) Vapor control systems. For vapor control systems used to control emissions from VOC transfer operations, records of appropriate parameters to demonstrate compliance, including:

(A) continuous monitoring and recording of:

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

(ii) the inlet and outlet gas temperature of a chiller or catalytic incinerator;

(iii) the exhaust gas VOC concentration of a carbon adsorption system, as defined in §101.1 of this title (relating to Definitions); and

(iv) the exhaust gas temperature immediately downstream of a vapor combustor. Alternatively, the owner or operator of a vapor combustor may consider the unit to be a flare and meet the requirements of subparagraph (B) of this paragraph;

(B) the requirements specified in 40 Code of Federal Regulations §60.18(b) and Chapter 111 of this title (relating to Control of Air Pollution from Visible Emissions and Particulate Matter) for flares; and

(C) for vapor control systems other than those specified in subparagraphs (A) and (B) of this paragraph, records of appropriate operating parameters.

(2) Test results. A record of the results of any testing conducted in accordance with §115.215 of this title (relating to Approved Test Methods).

(3) Land-based VOC transfer to or from transport vessels.

(A) A daily record of:

(i) the identification number of each tank-truck tank for which annual leak testing is required under §115.214(a)(1)(C) or (b)(1)(C) of this title (relating to Inspection Requirements);

(ii) the quantity of VOC loaded into each transport vessel; and

(iii) the date of the last leak testing of each tank-truck tank as required by §115.214(a)(1)(C) or (b)(1)(C) of this title.

(B) A record of the type and vapor pressure of each VOC transferred (excluding gasoline). Vapor pressure records are not required if the total volume of VOC loaded into transport vessels is less than 20,000 gallons per day (averaged over each consecutive 30-day period).

(C) The owner or operator of any plant, as defined by its air quality account number, at which all VOC transferred has a true vapor pressure at actual storage conditions less than 0.5 pounds per square inch, absolute (psia) as specified in §115.217(a)(1) of this title (relating to Exemptions) or 1.5 psia as specified in §115.217(b)(1) of this title, is not required to keep the records specified in subparagraph (A) of this paragraph.

(D) The owner or operator of any plant, as defined by its air quality account number, that is exempt under §115.217(a)(2)(A) or (B), or §115.217(b)(3)(A) or (B) of this title based upon gallons per day transferred shall maintain a daily record of the total throughput of gasoline or of VOC equal to or greater than 0.5 or 1.5 psia vapor pressure, as appropriate, loaded into transport vessels at the plant.

(E) For gasoline terminals, records of the results of the fugitive monitoring and maintenance program required by §115.214(a)(2) and (b)(2) of this title:

(i) a description of the types, identification numbers, and locations of all equipment in gasoline service;

(ii) the date of each monthly inspection;

(iii) the results of each inspection;

(iv) the location, nature, severity, and method of detection for each leak;

(v) the date each leak is repaired and explanation if repair is delayed beyond 15 days;

(vi) a list identifying those leaking components which cannot be repaired or replaced until a scheduled unit shutdown; and

(vii) the inspector's name and signature.

(4) Marine terminals. For marine terminals in the Houston-Galveston-Brazoria area:

(A) a daily record of all marine vessels loaded at the affected terminal, including:

(i) the name, registry of the marine vessel, and the legal owner or operator of the marine vessel;

(ii) the chemical name and amount of VOC cargo loaded; and

(iii) the conditions of the tanks prior to being loaded (i.e., cleaned, crude oil washed, gas freed, etc.) and the prior cargo carried by the marine vessel;

(B) a copy of each marine vessel's vapor tightness test documentation or records documenting compliance with the alternate methods specified in §115.214(a)(3)(A) of this title;

(C) a copy of each marine vessel's first attempt repair log required by §115.214(a)(3)(D) of this title;

(D) records of the results of the fugitive monitoring and maintenance program required by §115.214(a)(3)(F) of this title, including appropriate dates, test methods, instrument readings, repair results, and corrective action taken. Records of flange inspections are not required unless a leak is detected.

§115.217. Exemptions.

(a) The following exemptions apply in the Beaumont-Port Arthur, Bexar County, Dallas-Fort Worth, El Paso, and Houston-Galveston-Brazoria areas.

(1) Vapor pressure (at land-based operations). All land-based loading and unloading (to or from transport vessels) of volatile organic compounds (VOC) with a true vapor pressure less than 0.5 pounds per square inch, absolute (psia) under actual storage conditions is exempt from the requirements of this division (relating to Loading and Unloading of Volatile Organic Compounds), except for:

(A) §115.212(a)(2) of this title (relating to Control Requirements);

(B) §115.214(a)(1)(A)(i) and (B) of this title (relating to Inspection Requirements);

(C) §115.215(4) of this title (relating to Approved Test Methods); and

(D) §115.216(2) and (3)(B) of this title (relating to Monitoring and Recordkeeping Requirements).

(2) Throughput.

(A) Loading operations at any plant, as defined by its air quality account number, excluding gasoline bulk plants, which loads less than 20,000 gallons of VOC into transport vessels per day (averaged over each consecutive 30-day period) with a true vapor pressure greater than or equal to 0.5 psia under actual storage conditions are exempt from the requirements of this division, except for:

(i) §115.212(a)(2) of this title;

(ii) §115.214(a)(1)(A)(i) and (B) of this title;

(iii) §115.215(4) of this title; and

(iv) §115.216(2), (3)(B), and (3)(D) of this title.

(B) Gasoline bulk plants which load less than 4,000 gallons of gasoline into transport vessels per day (averaged over each consecutive 30-day period) are exempt from the requirements of this division, except for:

(i) §115.212(a)(2) of this title;

(ii) §115.214(a)(1)(A)(i) and (B) of this title; and

(iii) §115.216(3)(D) of this title.

(3) Liquefied petroleum gas. All loading and unloading of liquefied petroleum gas is exempt from the requirements of this division, except for:

(A) §115.212(a)(2) of this title;

(B) §115.214(a)(1)(A)(i) and (B) of this title; and

(C) §115.216(3) of this title.

(4) Motor vehicle fuel dispensing facilities. Motor vehicle fuel dispensing facilities, as defined in §101.1 of this title (relating to Definitions), are exempt from the requirements of this division.

(5) Marine vessels. The following marine vessel transfer exemptions apply.

(A) The following marine vessel transfer operations are exempt from this division:

(i) all loading and unloading of marine vessels in ozone nonattainment areas other than the Houston-Galveston-Brazoria area; and

(ii) transfer of VOC from one marine vessel to another marine vessel ("lightering"), provided that the VOC transfer does not use loading arm(s), pump(s), meter(s), valve(s), or piping that are part of a marine terminal.

(B) The following marine vessel transfer operations are exempt from the requirements of §§115.212(a), 115.214(a), and 115.216 of this title, except as noted:

(i) all unloading of marine vessels, except for §115.214(a)(3)(B)(i) and (C) and §115.216(2) of this title;

(ii) marine terminals with uncontrolled marine loading VOC emissions less than 100 tons per year, except for §115.214(a)(3)(B)(i) and (C) and §115.216(2) of this title. Emissions from marine vessel loading operations which were routed to a control device that was installed as of November 15, 1993, are excluded from this calculation. Compliance with this exemption shall be demonstrated through the recordkeeping and reporting requirements of the annual emissions inventory submitted by the owner or operator of the marine terminal;

(iii) all throughput of VOC with a vapor pressure less than 0.5 psia loaded into marine vessels, except for §§115.212(a)(6)(D), 115.214(a)(3)(B)(i) and (C), and 115.216(2) of this title; and

(iv) all throughput of VOC with a flash point of 150 degrees Fahrenheit or greater loaded into marine vessels, except for §§115.212(a)(6)(D), 115.214(a)(3)(B)(i) and (C), and 115.216(2) of this title.

(b) The following exemptions apply in the covered attainment counties as defined in 115.10 of this title (relating to Definitions).

(1) General VOCs (non-gasoline). Except in Aransas, Bexar, Calhoun, Gregg, Matagorda, Nueces, San Patricio, Travis, and Victoria Counties, all loading and unloading of VOC other than gasoline (to or from transport vessels) is exempt from the requirements of this division. This exception no longer applies in Bexar County after December 31, 2024.

(2) Vapor pressure (at land-based operations). All land-based loading and unloading of VOC with a true vapor pressure less than 1.5 psia under actual storage conditions is exempt from the requirements of this division, except for:

(A) §115.212(b)(2) of this title;

(B) §115.214(b)(1)(A)(i) and (B) of this title;

(C) §115.215(4) of this title; and

(D) §115.216(2) and (3)(B) of this title.

(3) Throughput.

(A) Loading operations at any plant, as defined by its air quality account number, excluding gasoline bulk plants, which loads less than 20,000 gallons of VOC into transport vessels per day (averaged over each consecutive 30-day period) with a true vapor pressure greater than or equal to 1.5 psia under actual storage conditions are exempt from the requirements of this division, except for:

(i) §115.212(b)(2) of this title;

(ii) §115.214(b)(1)(A)(i) and (B) of this title;

(iii) §115.215(4) of this title; and

(iv) §115.216(2), (3)(B), and (3)(D) of this title.

(B) Gasoline bulk plants which load less than 4,000 gallons of gasoline into transport vessels per day (averaged over each consecutive 30-day period) are exempt from the requirements of this division, except for:

(i) §115.212(b)(2) of this title;

(ii) §115.214(b)(1)(A)(i) and (B) of this title; and

(iii) §115.216(3)(D) of this title.

(4) Crude oil, condensate, and liquefied petroleum gas. All loading and unloading of crude oil, condensate, and liquefied petroleum gas is exempt from the requirements of this division, except for:

(A) §115.212(b)(2) of this title;

(B) §115.214(b)(1)(A)(i) and (B) of this title; and

(C) §115.216(3) of this title.

(5) Motor vehicle fuel dispensing facilities. Motor vehicle fuel dispensing facilities, as defined in §101.1 of this title, are exempt from the requirements of this division.

(6) Marine vessels. All loading and unloading of marine vessels is exempt from this division.

§115.219. Counties and Compliance Schedules.

(a) In Aransas, Bexar, Brazoria, Calhoun, Chambers, Collin, Dallas, Denton, El Paso, Fort Bend, Galveston, Gregg, Hardin, Harris, Jefferson, Liberty, Matagorda, Montgomery, Nueces, Orange, San Patricio, Tarrant, Travis, Victoria, and Waller Counties, the compliance date has passed and the owner or operator of each volatile organic compound (VOC) transfer operation shall continue to comply with this division. Bexar County is only subject to this division's covered attainment requirements in accordance with this compliance schedule until January 1, 2025, when the area must comply with nonattainment area requirements in accordance with subsection (f) of this section and is no longer required to meet the covered attainment requirements.

(b) In the covered attainment counties, as defined in §115.10 of this title (relating to Definitions), the compliance date has passed and the owner or operator of each gasoline bulk plant shall continue to comply with this division.

(c) In the covered attainment counties, as defined in §115.10 of this title, the compliance date has passed and the owner or operator of each gasoline terminal shall continue to comply with this division.

(d) The owner or operator of each gasoline terminal, gasoline bulk plant, or VOC transfer operation in Ellis, Johnson, Kaufman, Parker, and Rockwall Counties shall comply with this division as soon as practicable, but no later than March 1, 2009.

(e) The owner or operator of each gasoline terminal, gasoline bulk plant, or VOC transfer operation in Wise County shall comply with this division as soon as practicable, but no later than January 1, 2017. The owner or operator of each gasoline terminal or gasoline bulk plant in Wise County shall continue to comply with the applicable requirements in §§115.211(2), 115.212(b), and 115.214(b) of this title (relating to Emission Specifications; Control Requirements; and Inspection Requirements) until the facility achieves compliance with the applicable requirements in §§115.211(1), 115.212(a), and 115.214(a) of this title.

(f) The owner or operator of each VOC transfer operation, transport vessel, and marine vessel in the Bexar County area shall be in compliance with the nonattainment area requirements in this division no later than January 1, 2025.

(g) The owner or operator of an affected source that becomes subject to the requirements of this division on or after the applicable compliance date in this section, shall be in compliance with the requirements in this division as soon as practicable, but no later than 60 days after becoming subject.

SUBCHAPTER C: VOLATILE ORGANIC COMPOUND TRANSFER OPERATIONS
DIVISION 2: FILLING OF GASOLINE STORAGE VESSELS (STAGE I) FOR MOTOR VEHICLE FUEL DISPENSING FACILITIES
§§115.221, 115.222, 115.224, 115.226, 115.227, 115.229

Statutory Authority

The amendments are adopted under Texas Water Code (TWC), §5.102, concerning general powers; §5.103, concerning Rules; TWC, §5.105, concerning General Policy, which authorize the commission to adopt rules necessary to carry out its powers and duties under the TWC; TWC, §7.002, concerning Enforcement Authority, which authorizes the commission to enforce the provisions of the Water Code and the Health and Safety Code within the commission's jurisdiction; and under Texas Health and Safety Code (THSC), §382.017, concerning Rules, which authorizes the commission to adopt rules consistent with the policy and purpose of the Texas Clean Air Act.

The amendments are also adopted under THSC, §382.002, concerning Policy and Purpose, which establishes the commission's purpose to safeguard the state's air resources, consistent with the protection of public health, general welfare, and physical property; THSC, §382.011, concerning General Powers and Duties, which authorizes the commission to control the quality of the state's air; THSC, §382.012, concerning the State Air Control Plan, which authorizes the commission to prepare and develop a general, comprehensive plan for the proper control of the state's air; THSC, §382.016, concerning Monitoring Requirements; Examination of Records, which authorizes the commission to prescribe reasonable requirements for measuring and monitoring the emissions of air contaminants; and THSC, §382.021, concerning Sampling Methods and Procedures.

The adopted amendments implement TWC, §§5.102, 5.103 and 7.002; and THSC, §§382.002, 382.011, 382.012, 382.016, 382.017, and 382.021.

§115.221. Emission Specifications.

No person in the Beaumont-Port Arthur, Bexar County, Dallas-Fort Worth, El Paso, and Houston-Galveston-Brazoria areas, or in the covered attainment counties, as defined in §115.10 of this title (relating to Definitions), shall transfer, or allow the transfer of, gasoline from any tank-truck tank into a stationary storage container which is located at a gasoline dispensing facility, unless the displaced vapors from the gasoline storage container are controlled by one of the following:

(1) a vapor control system which reduces the emissions of VOC to the atmosphere to not more than 0.8 pound per 1,000 gallons (93 mg/liter) of gasoline transferred; or

(2) a vapor balance system which is operated and maintained in accordance with the provisions of §115.222 of this title (relating to Control Requirements).

§115.222. Control Requirements.

A vapor balance system will be assumed to comply with the specified emission limitation of §115.221 of this title (relating to Emission Specifications) if all of the following conditions are met.

(1) The container is equipped with a submerged fill pipe as defined in §101.1 of this title (relating to Definitions). The path through the submerged fill pipe to the bottom of the tank must not be obstructed by a screen, grate, or similar device whose presence would preclude the determination of the submerged fill pipe's proximity to the tank bottom while the submerged fill tube is properly installed.

(2) A vapor-tight return line is connected before gasoline can be transferred into the storage container.

(3) No avoidable gasoline leaks, as detected by sight, sound, or smell, exist anywhere in the liquid transfer or vapor balance systems.

(4) The vapor return line's cross-sectional area is at least one-half of the product drop line's cross-sectional area.

(5) In the Beaumont-Port Arthur, Bexar County, Dallas-Fort Worth, El Paso, and Houston-Galveston-Brazoria areas and in the covered attainment counties, as defined in §115.10 of this title (relating to Definitions), the only atmospheric emission during gasoline

transfer into the storage container is through a storage container vent line equipped with a pressure-vacuum relief valve set to open at a pressure of no more than eight ounces per square inch (3.4 kiloPascals (kPa)).

(6) After unloading, the tank-truck tank is kept vapor-tight until the vapors in the tank-truck tank are returned to a loading, cleaning, or degassing operation and discharged in accordance with the control requirements of that operation.

(7) The gauge pressure in the tank-truck tank does not exceed 18 inches of water (4.5 kPa) or vacuum exceed six inches of water (1.5 kPa).

(8) No leak, as defined in §101.1 of this title, exists from potential leak sources when measured with a hydrocarbon gas analyzer.

(9) In the Beaumont-Port Arthur, Bexar County, Dallas-Fort Worth, El Paso, and Houston-Galveston-Brazoria areas, any storage tank installed after November 15, 1993, which is required to install Stage I control equipment must be equipped with a dual-point vapor balance system, as defined in §115.10 of this title. In addition, any modification to a storage tank existing prior to November 15, 1993, requiring excavation of the top of the storage tank must be equipped with a dual-point vapor balance system, even if the original installation utilized coaxial Stage I connections.

(10) In the covered attainment counties, any storage tank installed after December 22, 1998, which is required to install Stage I control equipment must be equipped with a dual-point vapor balance system, as defined in §115.10 of this title. In addition, any modification to a storage tank existing prior to December 22, 1998, requiring excavation of the top of the storage tank must be equipped with a dual-point vapor balance system, even if the original installation utilized coaxial Stage I connections. The control requirements in this paragraph no longer apply to affected storage tanks located in the Bexar County area beginning January 1, 2025.

(11) Any gasoline dispensing facility that no longer meets an exemption in §115.227 of this title (relating to Exemptions) because of an increase in throughput shall have 120 days to come into compliance with the provisions of this section and will remain subject to the provisions of this section, even if its gasoline throughput later falls below exemption limits. However, if gasoline throughput exceeds the exemption limit due to a natural disaster or emergency condition for a period not to exceed one month, upon written request, the executive director may grant a facility continued exempt status.

§115.224. Inspection Requirements.

In the Beaumont-Port Arthur, Bexar County, Dallas-Fort Worth, El Paso, and Houston-Galveston-Brazoria areas, and in the covered attainment counties, as defined in §115.10 of this title (relating to Definitions), the following inspection requirements shall apply.

(1) Inspections for liquid leaks, visible vapors, or significant odors resulting from gasoline transfer shall be conducted at gasoline dispensing facilities. Gasoline transfer shall be discontinued immediately when any liquid leaks, visible vapors, or significant odors are observed and shall not be resumed until the observed issue is repaired.

(2) The gasoline tank-truck tank must have been inspected for leaks within one year in accordance with the requirements of §§115.234 - 115.237 of this title (relating to Inspection Requirements; Approved Test Methods; Recordkeeping Requirements; and Exemptions, respectively), as evidenced by a prominently displayed certification affixed near the United States Department of Transportation certification plate.

§115.226. Recordkeeping Requirements.

The owner or operator of each gasoline dispensing facility in the Beaumont-Port Arthur, Bexar County, Dallas-Fort Worth, El Paso, and Houston-Galveston-Brazoria areas, and in the covered attainment counties, as defined in §115.10 of this title (relating to Definitions) shall maintain the following records and during an inspection make the records available at the site upon request to representatives of the executive director, the United States Environmental Protection Agency, or any local air pollution control program with jurisdiction. The owner or operator shall:

(1) maintain a record at the facility site of the dates on which gasoline was delivered to the dispensing facility and the identification number and date of the last leak testing, required by §115.224(2) of this title (relating to Inspection Requirements), of each tank-truck tank from which gasoline was transferred to the facility. The records shall be kept for a period of two years; and

(2) maintain for a period of two years:

(A) a record of the results of any testing conducted at the gasoline dispensing facility in accordance with the provisions specified in §115.225 of this title (relating to Testing Requirements); and

(B) a record of the gasoline throughput for a 24-month rolling calendar period beginning January 1, 1991. The records must contain the calendar month and year, and the total facility gasoline throughput for each calendar month.

§115.227. Exemptions.

The following exemptions apply:

(1) In the Beaumont-Port Arthur, Bexar County, Dallas-Fort Worth, El Paso, and Houston-Galveston-Brazoria areas, transfers to stationary storage tanks located at a gasoline dispensing facility which has dispensed no more than 10,000 gallons of gasoline in any calendar month after January 1, 1991, and for which construction began prior to November 15, 1992, are exempt from the requirements of this division, except for:

(A) §115.222(3) of this title (relating to Control Requirements) as it applies to liquid gasoline leaks, visible vapors, or significant odors;

(B) §115.222(6) of this title;

(C) §115.224(1) of this title (relating to Inspection Requirements) as it applies to liquid gasoline leaks, visible vapors, or significant odors; and

(D) §115.226(2)(B) of this title (relating to Recordkeeping Requirements).

(2) In the covered attainment counties, as defined in §115.10 of this title (relating to Definitions), stationary gasoline storage containers with a nominal capacity less than or equal to 1,000 gallons at gasoline dispensing facilities are exempt from the requirements of this division, except for:

(A) §115.222(3) of this title as it applies to liquid gasoline leaks, visible vapors, or significant odors;

(B) §115.222(6) of this title; and

(C) §115.224(1) of this title as it applies to liquid gasoline leaks, visible vapors, or significant odors.

(3) Except as specified in paragraph (6) of this section, in the covered attainment counties other than Bexar, Comal, Guadalupe, Wilson, Bastrop, Caldwell, Hays, Travis, and Williamson, transfers to stationary storage tanks located at a gasoline dispensing facility which has dispensed less than 100,000 gallons of gasoline in any calendar month after October 31, 2014 are exempt from the requirements of this division, except for:

(A) §115.222(3) of this title as it applies to liquid gasoline leaks, visible vapors, or significant odors;

(B) §115.222(6) of this title;

(C) §115.224(1) of this title as it applies to liquid gasoline leaks, visible vapors, or significant odors; and

(D) §115.226(2)(B) of this title.

(4) In Bexar County until January 1, 2025, and in Comal, Guadalupe, Wilson, Bastrop, Caldwell, Hays, Travis, and Williamson Counties, transfers to stationary storage tanks located at a gasoline dispensing facility which has dispensed no more than 25,000 gallons of gasoline in any calendar month after December 31, 2004 are exempt from the requirements of this division, except for:

(A) §115.222(3) of this title as it applies to liquid gasoline leaks, visible vapors, or significant odors;

(B) §115.222(6) of this title;

(C) §115.224(1) of this title as it applies to liquid gasoline leaks, visible vapors, or significant odors; and

(D) §115.226(2)(B) of this title.

(5) Transfers to the following stationary receiving containers are exempt from the requirements of this division:

(A) containers used exclusively for the fueling of implements of agriculture; and

(B) storage tanks equipped with external floating roofs, internal floating roofs, or their equivalent.

(6) Bexar County is no longer a covered attainment county, as defined in §115.10 of this title (relating to Definitions), after December 31, 2024.

§115.229. Counties and Compliance Schedules.

(a) The owner or operator of each gasoline dispensing facility in the Beaumont-Port Arthur, El Paso, and Houston-Galveston-Brazoria areas and in Collin, Dallas, Denton, and Tarrant Counties shall continue to comply with this division as required by §115.930 of this title (relating to Compliance Dates).

(b) The owner or operator of each gasoline dispensing facility in the covered attainment counties, as defined in §115.10 of this title (relating to Definitions), shall continue to comply with this division as required by §115.930 of this title.

(c) The owner or operator of each gasoline dispensing facility in Bexar, Comal, Guadalupe, Wilson, Bastrop, Caldwell, Hays, Travis, and Williamson Counties that has dispensed

at least 25,000 gallons of gasoline but less than 125,000 gallons of gasoline in any calendar month after December 31, 2004 shall comply with this division as soon as practicable, but no later than December 31, 2005. Affected sources in Bexar County are no longer subject to this subsection beginning January 1, 2025.

(d) The owner or operator of each gasoline dispensing facility in Ellis, Johnson, Kaufman, Parker, and Rockwall Counties that has dispensed at least 10,000 gallons of gasoline but less than 125,000 gallons of gasoline in any calendar month after April 30, 2005, shall comply with this division as soon as practicable, but no later than June 15, 2007.

(e) The owner or operator of each gasoline dispensing facility in Wise County shall continue to comply with the requirements applicable to covered attainment counties, as defined in §115.10 of this title, until the facility achieves compliance with the requirements applicable to the Dallas-Fort Worth area, as defined in §115.10 of this title. The owner or operator shall comply with the requirements applicable to the Dallas-Fort Worth area as soon as practicable, but no later than January 1, 2017.

(f) The owner or operator of each affected source in the Bexar County area shall comply with all other applicable requirements of this division as soon as practicable, but no later than January 1, 2025.

SUBCHAPTER C: VOLATILE ORGANIC COMPOUND TRANSFER OPERATIONS
DIVISION 3: CONTROL OF VOLATILE ORGANIC COMPOUND LEAKS FROM TRANSPORT VESSELS
§§115.234, 115.235, 115.237, 115.239

Statutory Authority

The amendments are adopted under Texas Water Code (TWC), §5.102, concerning general powers; §5.103, concerning Rules; TWC, §5.105, concerning General Policy, which authorize the commission to adopt rules necessary to carry out its powers and duties under the TWC; TWC, §7.002, concerning Enforcement Authority, which authorizes the commission to enforce the provisions of the Water Code and the Health and Safety Code within the commission's jurisdiction; and under Texas Health and Safety Code (THSC), §382.017, concerning Rules, which authorizes the commission to adopt rules consistent with the policy and purpose of the Texas Clean Air Act.

The amendments are also adopted under THSC, §382.002, concerning Policy and Purpose, which establishes the commission's purpose to safeguard the state's air resources, consistent with the protection of public health, general welfare, and physical property; THSC, §382.011, concerning General Powers and Duties, which authorizes the commission to control the quality of the state's air; THSC, §382.012, concerning the State Air Control Plan, which authorizes the commission to prepare and develop a general, comprehensive plan for the proper control of the state's air; THSC, §382.016, concerning Monitoring Requirements; Examination of Records, which authorizes the commission to prescribe reasonable requirements for measuring and monitoring the emissions of air contaminants; and THSC, §382.021, concerning Sampling Methods and Procedures.

The adopted amendments implement Texas Water Code, §§5.102, 5.103 and 7.002; and Texas Health and Safety Code, §§382.002, 382.011, 382.012, 382.016, 382.017, and 382.021.

§115.234. Inspection Requirements.

(a) No person in the Beaumont-Port Arthur, Bexar County, Dallas-Fort Worth, El Paso, and Houston-Galveston-Brazoria areas, as defined in §115.10 of this title (relating to Definitions), shall allow a tank-truck tank to be filled with or emptied of gasoline at any facility subject to §115.214(a)(1)(C) or §115.224(2) of this title (relating to Inspection Requirements), or filled with non-gasoline volatile organic compounds (VOC) having a true vapor pressure greater than or equal to 0.5 pounds per square inch absolute under actual storage conditions at any facility subject to §115.214(a)(1)(C) of this title, unless the tank-truck tank has passed a leak-tight test within the past year as evidenced by a prominently displayed certification affixed near the United States Department of Transportation certification plate which:

(1) shows the date the tank-truck tank last passed the leak-tight test required by §115.235 of this title (relating to Approved Test Methods); and

(2) shows the identification number of the tank-truck tank.

(b) No person in the covered attainment counties, as defined in §115.10 of this title, shall allow a gasoline tank-truck tank to be filled or emptied at any facility subject to §115.214(b)(1)(C) or §115.224(2) of this title unless the tank-truck tank has passed a leak-tight test within the past year as evidenced by a prominently displayed certification affixed near the United States Department of Transportation certification plate which:

(1) shows the date the gasoline tank-truck tank last passed the leak-tight test required by §115.235 of this title; and

(2) shows the identification number of the tank-truck tank.

§115.235. Approved Test Methods.

(a) In the Beaumont-Port Arthur, Bexar County, Dallas-Fort Worth, El Paso, and Houston-Galveston-Brazoria areas, the following testing requirements apply.

(1) The owner or operator of any tank-truck which is filled with or emptied of gasoline at any facility subject to §115.214(a)(1)(C) or §115.224(2) of this title (relating to Inspection Requirements), or which is filled with non-gasoline volatile organic compounds (VOC) at any facility subject to §115.214(a)(1)(C) of this title shall cause each such tank to be tested annually to ensure that the tank is vapor-tight.

(2) Any tank failing to meet the testing criteria of paragraph (1) of this subsection shall be repaired and retested within 15 days.

(3) Testing required in paragraph (1) of this subsection shall be conducted in accordance with the following test methods, as appropriate:

(A) Test Method 27 (40 Code of Federal Regulations (CFR) 60, Appendix A) for determining vapor-tightness of gasoline delivery tank using pressure-vacuum test such that the pressure in the tank must change no more than three inches of water (0.75 kPa) in five minutes when pressurized to a gauge pressure of 18 inches of water (4.5 kPa) and when evacuated to a vacuum of six inches of water (1.5 kPa); or

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

(4) For tank-truck tanks which are filled with non-gasoline VOC at a facility subject to §115.214(a)(1)(C) of this title, annual testing using the leakage test method described in 49 CFR 180.407(h) for specification cargo tanks is an acceptable alternative to Test Method 27 (40 CFR 60, Appendix A).

(b) In the covered attainment counties, the following testing requirements shall apply.

(1) The owner or operator of any tank-truck which is filled or emptied at any facility subject to §115.214(b)(1)(C) or §115.224(2) of this title shall cause each such tank to be tested annually to ensure that the tank is vapor-tight.

(2) Any tank failing to meet the testing criteria of paragraph (1) of this subsection shall be repaired and retested within 15 days.

(3) Testing required in paragraph (1) of this subsection shall be conducted in accordance with the following test methods, as appropriate:

(A) Test Method 27 (40 CFR 60, Appendix A) for determining vapor tightness of gasoline delivery tank using pressure-vacuum test such that the pressure in the tank must change no more than three inches of water (0.75 kPa) in five minutes when pressurized to a gauge pressure of 18 inches of water (4.5 kPa) and when evacuated to a vacuum of six inches of water (1.5 kPa); or

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

§115.237. Exemptions.

(a) The following exemptions apply in the Beaumont-Port Arthur, Bexar County, Dallas-Fort Worth, El Paso, and Houston-Galveston-Brazoria areas.

(1) Any tank-truck tank which is used exclusively to transport volatile organic compounds (VOC) with a true vapor pressure less than 0.5 pounds per square inch absolute under actual storage conditions is exempt from the requirements of this division (relating to Control of Volatile Organic Compound Leaks From Transport Vessels).

(2) Transport vessels other than tank-trucks are exempt from the requirements of this division (relating to Control of Volatile Organic Compound Leaks From Transport Vessels).

(3) Any tank-truck tank that is a portable tank, as defined in 49 Code of Federal Regulations 171.8, is exempt from the requirements of this division (relating to Control of Volatile Organic Compound Leaks from Transport Vessels).

(b) In the covered attainment counties, transport vessels other than tank-trucks are exempt from the requirements of this division (relating to Control of Volatile Organic Compound Leaks From Transport Vessels).

§115.239. Counties and Compliance Schedules.

(a) In Brazoria, Chambers, Collin, Dallas, Denton, El Paso, Fort Bend, Galveston, Hardin, Harris, Jefferson, Liberty, Montgomery, Orange, Tarrant, and Waller Counties, the compliance date has passed and the owner or operator of each tank-truck tank shall continue to comply with this division.

(b) In the covered attainment counties, as defined in §115.10 of this title (relating to Definitions), the compliance date has passed and the owner or operator of each gasoline tank-truck tank shall continue to comply with this division.

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

(d) The owner or operator of each tank-truck tank in Wise County shall comply with this division as soon as practicable, but no later than January 1, 2017. The owner or operator of each gasoline tank-truck tank in Wise County shall continue to comply with the applicable requirements in §115.234(b) and §115.235(b) of this title (relating to Inspection Requirements and Approved Test Methods) until the facility achieves compliance with the newly applicable requirements in §115.234(a) and §115.235(a) of this title.

(e) The owner or operator of each tank-truck in the Bexar County area shall comply with

the applicable requirements of this division as soon as practicable, but no later than January 1, 2025.

SUBCHAPTER D: PETROLEUM REFINING, NATURAL GAS PROCESSING, AND PETROCHEMICAL PROCESSES
DIVISION 1: PROCESS UNIT TURNAROUND AND VACUUM-PRODUCING SYSTEMS IN PETROLEUM REFINERIES
§§115.311, 115.312, 115.315, 115.316, 115.319

Statutory Authority

The amendments are adopted under Texas Water Code (TWC), §5.102, concerning general powers; §5.103, concerning Rules; TWC, §5.105, concerning General Policy, which authorize the commission to adopt rules necessary to carry out its powers and duties under the TWC; TWC, §7.002, concerning Enforcement Authority, which authorizes the commission to enforce the provisions of the Water Code and the Health and Safety Code within the commission's jurisdiction; and under Texas Health and Safety Code (THSC), §382.017, concerning Rules, which authorizes the commission to adopt rules consistent with the policy and purpose of the Texas Clean Air Act.

The amendments are also adopted under THSC, §382.002, concerning Policy and Purpose, which establishes the commission's purpose to safeguard the state's air resources, consistent with the protection of public health, general welfare, and physical property; THSC, §382.011, concerning General Powers and Duties, which authorizes the commission to control the quality of the state's air; THSC, §382.012, concerning the State Air Control Plan, which authorizes the commission to prepare and develop a general, comprehensive plan for the proper control of the state's air; THSC, §382.016, concerning Monitoring Requirements; Examination of Records, which authorizes the commission to prescribe reasonable requirements for measuring and monitoring the emissions of air contaminants; and THSC, §382.021, concerning Sampling

Methods and Procedures.

The adopted amendments implement TWC, §§5.102, 5.103 and 7.002; and THSC, §§382.002, 382.011, 382.012, 382.016, 382.017, and 382.021.

§115.311. Emission Specifications.

(a) For all affected persons in the Beaumont-Port Arthur, Bexar County, Dallas-Fort Worth, El Paso, and Houston-Galveston-Brazoria areas, as defined in §115.10 of this title (relating to Definitions), the following emission specifications on vacuum-producing systems shall apply.

(1) No person may be allowed to emit any volatile organic compound (VOC) from a steam ejector or mechanical vacuum pump in a petroleum refinery unless the vent stream is controlled properly in accordance with §115.312(a)(2) of this title (relating to Control Requirements).

(2) No person may be allowed to emit any VOC from a hotwell with a contact condenser unless the hotwell is covered and the vapors from the hotwell are controlled properly in accordance with §115.312(a)(2) of this title.

(b) For all affected persons in Gregg, Nueces, and Victoria Counties, the following emission specifications on vacuum-producing systems shall apply.

(1) No person may be allowed to emit any VOC from a steam ejector or mechanical vacuum pump in a petroleum refinery, unless the vent stream is controlled properly in accordance with §115.312(b)(2) of this title.

(2) No person may be allowed to emit any VOC from a hotwell with a contact condenser, unless the hotwell is covered and the vapors from the hotwell are controlled properly in accordance with §115.312(b)(2) of this title.

§115.312. Control Requirements.

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

(1) Volatile organic compound (VOC) emissions from petroleum refineries shall be controlled during process unit shutdown or turnaround with the following procedure:

(A) recover and store all pumpable or drainable liquid; and

(B) reduce vessel gas pressure to 5.0 pounds per square inch gauge (psig) (34.5 kPa gauge) or less by recovery or combustion before venting to the atmosphere.

(2) Vent gas streams affected by §115.311(a) of this title (relating to Emission Specifications) must be controlled properly with a control efficiency of at least 90% or to a VOC concentration of no more than 20 parts per million by volume (ppmv) (on a dry basis corrected to 3.0% oxygen for combustion devices):

(A) in a direct-flame incinerator at a temperature equal to or greater than 1,300 degrees Fahrenheit (704 degrees Celsius);

(B) in a smokeless flare; or

(C) by any other vapor control system, as defined in §115.10 of this title (relating to Definitions).

(3) In the Houston-Galveston-Brazoria area, the following are 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 (relating to Process Unit Turnaround and Vacuum-Producing Systems in Petroleum Refineries):

(A) any vent gas stream which is subject to §115.311(a) of this title and which includes a HRVOC, as defined in §115.10 of this title; and

(B) any process unit shutdown or turnaround of a unit in which a HRVOC is a raw material, intermediate, final product, or in a waste stream.

(b) For all affected persons in Gregg, Nueces, and Victoria Counties, the following control requirements shall apply.

(1) VOC emissions from petroleum refineries shall be controlled during process unit shutdown or turnaround with the following procedure:

(A) recover and store all pumpable or drainable liquid; and

(B) reduce vessel gas pressure to five psig (34.5 kPa gauge) or less by recovery or combustion before venting to the atmosphere.

(2) Vent gas streams affected by §115.311(b) of this title must be controlled properly with a control efficiency of at least 90% or to a VOC concentration of no more than 20 ppmv (on a dry basis corrected to 3.0% oxygen for combustion devices):

(A) in a direct-flame incinerator at a temperature equal to or greater than 1,300 degrees Fahrenheit (704 degrees Celsius);

(B) in a smokeless flare; or

(C) by any other vapor control system, as defined in §115.10 of this title.

§115.315. Testing Requirements.

(a) For all affected persons in the Beaumont-Port Arthur, Bexar County, Dallas-Fort Worth, El Paso, and Houston-Galveston-Brazoria areas, compliance with §115.311(a) of this title (relating to Emission Specifications) and §115.312(a) of this title (relating to Control Requirements) 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 control device 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 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) minor modifications to these test methods approved by the executive director.

(b) For all affected persons in Gregg, Nueces, and Victoria Counties, compliance with §115.311(b) of this title (relating to Emission Specifications) and §115.312(b) of this title (relating to Control Requirements) 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 control device 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) minor modifications to these test methods approved by the executive director.

§115.316. Monitoring and Recordkeeping Requirements.

(a) For all affected persons in the Beaumont-Port Arthur, Bexar County, Dallas-Fort Worth, El Paso, and Houston-Galveston-Brazoria areas, as defined in §115.10 of this title, the following recordkeeping requirements shall apply.

(1) Any person who operates a vacuum-producing system affected by §115.311(a) of this title (relating to Emission Specifications) shall keep the following records:

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

(B) continuous monitoring of temperatures upstream and downstream of a catalytic incinerator or chiller; and

(C) continuous monitoring of the exhaust gas volatile organic compound (VOC) concentration of any carbon adsorption system, as defined in §115.10 of this title (relating to Definitions), to determine breakthrough.

(2) Any person who conducts a process unit turnaround affected by §115.312(a) of this title (relating to Control Requirements) shall keep the following records:

(A) the date of process unit shutdown and subsequent start-up following turnaround;

(B) the type of process unit involved in the turnaround; and

(C) an estimation of the concentration and total emissions of VOC emissions released to the atmosphere during the process turnaround.

(3) The results of any testing conducted in accordance with the provisions specified in §115.315(a) of this title (relating to Testing Requirements) shall be maintained at the affected facility.

(4) All records shall be maintained for two years and be made available for review upon request by authorized representatives of the executive director, EPA, or local air pollution control agencies.

(b) For all affected persons in Victoria County, the following recordkeeping requirements shall apply.

(1) Any person who operates a vacuum-producing system affected by §115.311(b) of this title shall keep the following records:

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

(B) continuous monitoring of temperatures upstream and downstream of a catalytic incinerator or chiller; and

(C) continuous monitoring of the exhaust gas VOC concentration of any carbon adsorption system, as defined in §115.10 of this title, to determine breakthrough.

(2) Any person who conducts a process unit turnaround affected by §115.312(b) of this title shall keep the following records:

(A) the date of process unit shutdown and subsequent start-up following turnaround;

(B) the type of process unit involved in the turnaround; and

(C) an estimation of the concentration and total emissions of VOC emissions released to the atmosphere during the process turnaround.

(3) The results of any testing conducted in accordance with the provisions specified in §115.315(b) of this title shall be maintained at the affected facility.

(4) All records shall be maintained for two years and be made available for review upon request by authorized representatives of the executive director, EPA, or local air pollution control agencies.

§115.319. Counties and Compliance Schedules.

(a) All affected persons in Brazoria, Chambers, Collin, Dallas, Denton, El Paso, Fort Bend, Galveston, Gregg, Hardin, Harris, Jefferson, Liberty, Montgomery, Nueces, Orange, Tarrant, Victoria, and Waller Counties shall continue to comply with this division (relating to Process Unit Turnaround and Vacuum-Producing Systems in Petroleum Refineries) as required by §115.930 of this title (relating to Compliance Dates).

(b) All affected persons in Ellis, Johnson, Kaufman, Parker, and Rockwall Counties shall comply with this division as soon as practicable, but no later than March 1, 2009.

(c) All affected persons in the Bexar County area subject to the requirements of this division shall comply with the requirements of this division no later than January 1, 2025.

SUBCHAPTER D: PETROLEUM REFINING, NATURAL GAS PROCESSING, AND PETROCHEMICAL PROCESSES
DIVISION 3: FUGITIVE EMISSION CONTROL IN PETROLEUM REFINING, NATURAL GAS/GASOLINE PROCESSING, AND PETROCHEMICAL PROCESSES IN OZONE NONATTAINMENT AREAS
§§115.352 – 115.357, 115.359

Statutory Authority

The amendments are adopted under Texas Water Code (TWC), §5.102, concerning general powers; §5.103, concerning Rules; TWC, §5.105, concerning General Policy, which authorize the commission to adopt rules necessary to carry out its powers and duties under the TWC; TWC, §7.002, concerning Enforcement Authority, which authorizes the commission to enforce the provisions of the Water Code and the Health and Safety Code within the commission's jurisdiction; and under Texas Health and Safety Code (THSC), §382.017, concerning Rules, which authorizes the commission to adopt rules consistent with the policy and purpose of the Texas Clean Air Act.

The amendments are also adopted under THSC, §382.002, concerning Policy and Purpose, which establishes the commission's purpose to safeguard the state's air resources, consistent with the protection of public health, general welfare, and physical property; THSC, §382.011, concerning General Powers and Duties, which authorizes the commission to control the quality of the state's air; THSC, §382.012, concerning the State Air Control Plan, which authorizes the commission to prepare and develop a general, comprehensive plan for the proper control of the state's air; THSC, §382.016, concerning Monitoring Requirements; Examination of Records, which authorizes the commission to prescribe reasonable requirements for measuring and monitoring the emissions of air contaminants; and THSC, §382.021, concerning Sampling

Methods and Procedures.

The adopted amendments implement TWC, §§5.102, 5.103 and 7.002; and THSC, §§382.002, 382.011, 382.012, 382.016, 382.017, and 382.021.

§115.352. Control Requirements.

For the Beaumont-Port Arthur, Bexar County, 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, Bexar County, 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, Bexar County, 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, Bexar County, 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, Bexar County, 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, Bexar County, 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, 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.

(15) Beginning on the compliance date in §115.183, any natural gas/gasoline processing operation that is subject to and complies with the compliance requirements of Subchapter B, Division 7 of this chapter (relating to Oil and Natural Gas in Ozone Nonattainment Areas) in the Bexar County, Dallas-Fort Worth, or Houston-Galveston-Brazoria areas is exempt from all requirements in this division.

§115.359. Counties and Compliance Schedules.

(a) In Brazoria, Chambers, Collin, El Paso, Dallas, Denton, Fort Bend, Galveston, Hardin, Harris, Jefferson, Liberty, Montgomery, Orange, Tarrant, and Waller Counties, the compliance date has passed and the owner or operator shall continue to comply with this division.

(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.

(c) The owner or operator of each affected source in Wise County shall comply with this division as soon as practicable, but no later than January 1, 2017.

(d) The owner or operator of an affected source in Bexar, Collin, Dallas, Denton, Ellis, Johnson, Kaufman, Parker, Parker, Rockwall, Tarrant, and Wise Counties that becomes subject to this division on or after the applicable date specified in subsections (a) - (c) and (e) of this section shall comply with the requirements in this division no later than 60 days after becoming subject.

(e) The owner or operator of an affected source in the Bexar County area subject to the requirements of this division shall comply with the requirements of this division as soon as practicable, but no later than January 1, 2025.

SUBCHAPTER E: SOLVENT-USING PROCESSES
DIVISION 1: DEGREASING PROCESSES
§§115.410 – 115.413, 115.415, 114.416, 115.419

Statutory Authority

The amendments are adopted under Texas Water Code (TWC), §5.102, concerning general powers; §5.103, concerning Rules; TWC, §5.105, concerning General Policy, which authorize the commission to adopt rules necessary to carry out its powers and duties under the TWC; TWC, §7.002, concerning Enforcement Authority, which authorizes the commission to enforce the provisions of the Water Code and the Health and Safety Code within the commission's jurisdiction; and under Texas Health and Safety Code (THSC), §382.017, concerning Rules, which authorizes the commission to adopt rules consistent with the policy and purpose of the Texas Clean Air Act.

The amendments are also adopted under THSC, §382.002, concerning Policy and Purpose, which establishes the commission's purpose to safeguard the state's air resources, consistent with the protection of public health, general welfare, and physical property; THSC, §382.011, concerning General Powers and Duties, which authorizes the commission to control the quality of the state's air; THSC, §382.012, concerning the State Air Control Plan, which authorizes the commission to prepare and develop a general, comprehensive plan for the proper control of the state's air; THSC, §382.016, concerning Monitoring Requirements; Examination of Records, which authorizes the commission to prescribe reasonable requirements for measuring and monitoring the emissions of air contaminants; and THSC, §382.021, concerning Sampling Methods and Procedures.

The adopted amendments implement TWC, §§5.102, 5.103 and 7.002; and THSC, §§382.002, 382.011, 382.012, 382.016, 382.017, and 382.021.

§115.410. Applicability and Definitions.

(a) Applicability. The provisions of this division apply in the Beaumont-Port Arthur, Bexar County, Dallas-Fort Worth, El Paso, and Houston-Galveston-Brazoria areas as defined in §115.10 of this title (relating to Definitions) and in Bastrop, Caldwell, Comal, Gregg, Guadalupe, Hays, Nueces, Travis, Victoria, Williamson, and Wilson Counties to all persons using volatile organic compound-containing solvent for cold solvent degreasing processes, open-top vapor degreasing processes, and conveyorized degreasing processes. The provisions in §115.412(b) of this title (relating to Control Requirements) do not apply in the Dallas-Fort Worth area until the commission publishes notice in the *Texas Register,* as provided in §115.419(f) of this title (relating to Compliance Schedules), and the provisions of §115.412(c) of this title do not apply in the Houston-Galveston-Brazoria area until the commission publishes notice in the *Texas Register,* as provided in §115.419(g) of this title.

(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.

§115.411. Exemptions.

(a) The following exemptions apply in the Beaumont-Port Arthur, Bexar County, Dallas-Fort Worth, El Paso, and Houston-Galveston-Brazoria areas and in Bastrop, Caldwell, Comal, Gregg, Guadalupe, Hays, Nueces, Travis, Victoria, Williamson, and Wilson Counties. The exemptions in this subsection are no longer available for an operation subject to §115.412(b) of this title (relating to Control Requirements) in the Dallas-Fort Worth area or §115.412(c) of this title in the Houston-Galveston-Brazoria area as of the compliance date specified in §115.419(f) or §115.419(g), respectively.

(1) Any cold solvent cleaning system is exempt from the provisions of §115.412(a)(1)(B) of this title and may use an external drainage facility in place of an internal type drainage system, if the true vapor pressure of the solvent is less than or equal to 0.6 pounds per square inch absolute (psia) (4.1 kilo Pascals (kPa)) as measured at 100 degrees Fahrenheit (38 degrees Celsius) or if a cleaned part cannot fit into an internal drainage facility.

(2) The following are exempt from the requirements of §115.412(a)(1)(E) of this title:

(A) a cold solvent cleaning system for which the true vapor pressure of the solvent is less than or equal to 0.6 psia (4.1 kPa) as measured at 100 degrees Fahrenheit (38 degrees Celsius), provided that the solvent is not heated above 120 degrees Fahrenheit (49 degrees Celsius); and

(B) remote reservoir cold solvent cleaners.

(3) Any conveyorized degreaser with less than 20 square feet (ft^2) (2 square meters (m^2)) of air/vapor interface is exempt from the requirement of §115.412(a)(3)(A) of this title.

(4) An owner or operator who operates a remote reservoir cold solvent cleaner that uses solvent with a true vapor pressure equal to or less than 0.6 psia (4.1 kPa) measured at 100 degrees Fahrenheit (38 degrees Celsius) and that has a drain area less than 16 square inches (in^2) (100 square centimeters (cm^2)) and who properly disposes of waste solvent in enclosed containers is exempt from §115.412(a)(1) of this title.

(5) In Gregg, Nueces, and Victoria Counties, degreasing operations located on any property that can emit, when uncontrolled, a combined weight of volatile organic compounds (VOC) less than 550 pounds in any consecutive 24-hour period are exempt from the provisions of §115.412 of this title.

(b) If the commission publishes notice in the *Texas Register*, as provided in §115.419(f) of this title for the Dallas-Fort Worth area and/or §115.419(g) of this title for the Houston-Galveston-Brazoria area, to require compliance with the contingency measure control requirements of §115.412(b) of this title for the Dallas-Fort-Worth area and/or §115.412(c) of this title for the Houston-Galveston-Brazoria area, then the following exemptions apply in the applicable area as of the compliance date specified in §115.419(f) or (g) of this title.

(1) Any cold solvent cleaning system is exempt from the provisions of §115.412(a)(1)(B) of this title and may use an external drainage facility in place of an internal type drainage system if the VOC content of the solvent is less than or equal to 25 grams per liter (g/l) or if a cleaned part cannot fit into an internal drainage facility.

(2) The following are exempt from the requirements of §115.412(a)(1)(E) of this title:

(A) a cold solvent cleaning system for which the VOC content of the solvent is less than or equal to 25 g/l; and

(B) remote reservoir cold solvent cleaners.

(3) An owner or operator who operates a remote reservoir cold solvent cleaner that uses solvent with a VOC content that is less than or equal to 25 g/l and that has a drain area less than 16 (in^2) (100 (cm^2)) and who properly disposes of waste solvent in enclosed containers is exempt from §115.412(a)(1) of this title.

§115.412. Control Requirements.

(a) In the Beaumont-Port Arthur, Bexar County, Dallas-Fort Worth, El Paso, and Houston-Galveston-Brazoria areas as defined in §115.10 of this title (relating to Definitions) and in

Gregg, Nueces, Victoria, Comal, Guadalupe, Wilson, Bastrop, Caldwell, Hays, Travis, and Williamson Counties, the following control requirements shall apply.

(1) Cold solvent cleaning. No person shall own or operate a system utilizing a volatile organic compound (VOC) for the cold solvent cleaning of objects without the following controls.

(A) A cover shall be provided for each cleaner which shall be kept closed whenever parts are not being handled in the cleaner. The cover shall be designed for easy one-handed operation if any of the following exists:

(i) the true vapor pressure of the solvent is greater than 0.3 psia (2 kPa) as measured at 100 degrees Fahrenheit (38 degrees Celsius);

(ii) the solvent is agitated; or

(iii) the solvent is heated.

(B) An internal cleaned-parts drainage facility, for enclosed draining under a cover, shall be provided for all cold solvent cleaners.

(C) A permanent label summarizing the operating requirements in subparagraph (F) of this paragraph shall be attached to the cleaner in a conspicuous location near the operator.

(D) If a solvent spray is used, it must be a solid fluid stream (not a fine, atomized, or shower-type spray) and at an operating pressure of ten psig or less as necessary to prevent splashing above the acceptable freeboard.

(E) The system shall be equipped with a freeboard that provides a ratio equal to or greater than 0.7, or a water cover (solvent must be insoluble in and heavier than water). To determine the freeboard ratio, the freeboard height measurement is taken from the top of the degreaser to the top of the air/solvent level. This number is then divided by the smallest width measurement. The width measurement is taken at the smallest interior dimension. This dimension could be located at any point, from the top or opening of the unit to the air/solvent level.

(F) The operating procedures shall be as follows.

(i) Waste solvent shall not be disposed of or transferred to another party such that the waste solvent can evaporate into the atmosphere. Waste solvents shall be stored only in covered containers.

(ii) The degreaser cover shall be kept closed whenever parts are not being handled in the cleaner.

(iii) Parts shall be drained for at least 15 seconds or until dripping ceases.

(iv) Porous or absorbent materials, such as cloth, leather, wood, or rope, shall not be degreased.

(2) Open-top vapor degreasing. No person shall own or operate a system utilizing a VOC for the open-top vapor degreasing of objects without the following controls:

(A) a cover that can be opened and closed easily without disturbing the vapor zone;

(B) the following devices which will automatically shut off the sump heat:

(i) a condenser coolant flow sensor and thermostat which will detect if the condenser coolant is not circulating or if the condenser coolant temperature exceeds the solvent manufacturer's recommendations;

(ii) a solvent level sensor which will detect if the solvent level drops below acceptable design limits; and

(iii) a vapor level sensor which will detect if the vapor level rises above acceptable design limits;

(C) a spray safety switch which will shut off the spray pump to prevent spraying above the vapor level;

(D) one of the following controls:

(i) a freeboard that provides a ratio equal to or greater than 0.75 and, if the degreaser opening is greater than 10 ft^2 (1m^2), a powered cover. To determine the freeboard ratio, the freeboard height measurement is taken from the top of the degreaser to the top of the air/vapor level. This number is then divided by the smallest width measurement. The width measurement is taken at the smallest interior dimension. This dimension could be located at any point, from the top or opening of the unit to the air/vapor level;

(ii) a properly sized refrigerated chiller capable of achieving 85% or greater control of VOC emissions;

(iii) an enclosed design where the cover or door opens only when the dry part is actually entering or exiting the degreaser; or

(iv) a carbon adsorption system with ventilation equal to or greater than 50 cfm/ft2 (15m 3 /min per m^2) of air/vapor area (with the cover open) and exhausting less than 25 ppm of solvent by volume averaged over one complete adsorption cycle;

(E) a permanent, conspicuous, label summarizing the operating procedures listed in subparagraph (F) of this paragraph; and

(F) the following operating procedures:

(i) the cover shall be closed at all times except when processing work loads through the degreaser;

(ii) parts shall be positioned so that complete drainage is obtained;

(iii) parts shall be moved in and out of the degreaser at less than 11 ft/min (3.3 m/min);

(iv) the work load shall be retained in the vapor zone at least 30 seconds or until condensation ceases;

(v) any pools of solvent on the cleaned parts shall be removed by tipping the part before withdrawing it from the vapor zone;

(vi) parts shall be allowed to dry within the degreaser freeboard area for at least 15 seconds or until visually dry;

(vii) porous or absorbent materials, such as cloth, leather, wood, or rope, shall not be degreased;

(viii) work loads shall not occupy more than half of the degreaser open top surface area;

(ix) solvent shall not be sprayed above the vapor level;

(x) solvent leaks shall be repaired immediately, or the degreaser shall be shut down until repairs are made;

(xi) waste solvent shall not be disposed of or transferred to another party such that the waste solvent will evaporate into the atmosphere. Waste solvent shall be stored only in covered containers;

(xii) exhaust ventilation for systems other than those which vent to a major control device shall not exceed 65 cfm per ft 2 (20 m^3 /min per m^2) of degreaser

open area, unless necessary to meet Occupational Safety and Health Administration (OSHA) requirements or unless a carbon adsorption system is installed as a major control device. Ventilation fans or other sources of air agitation shall not be used near the degreaser opening; and

(xiii) water shall not be visibly detectable in the solvent exiting the water separator.

(3) Conveyorized degreasing. No person shall own or operate a system utilizing a VOC for the conveyorized cleaning of objects without the following controls:

(A) one of the following major control devices:

(i) a properly sized refrigerated chiller capable of achieving 85% or greater control of VOC emissions; or

(ii) a carbon adsorption system with ventilation equal to or greater than 50 cfm/ft2 (15 m 3 /min/m^2) of air/vapor area (when downtime covers are open) and exhausting less than 25 ppm of solvent by volume averaged over one complete adsorption cycle;

(B) a drying tunnel or other means, such as rotating (tumbling) basket if space is available, to prevent solvent liquid or vapor carry-out;

(C) a condenser flow switch and thermostat which will shut off sump heat if the condenser coolant is not circulating or if the condenser coolant discharge temperature exceeds the solvent manufacturer's recommendation;

(D) a spray safety switch which will shut off the spray pump if the vapor level drops more than four inches (ten cm);

(E) a vapor level control thermostat which will shut off the sump heat when the vapor level rises above the designed operating level;

(F) entrances and exits which silhouette work loads so that the average clearance (between parts and edge of the degreaser opening) is either less than four inches (ten cm) or less than 10% of the width of the opening;

(G) downtime covers which close off the entrance and exit during nonoperating hours;

(H) a permanent, conspicuous label near the operator summarizing the operating requirements in subparagraph (I) of this paragraph; and

(I) the following operating procedures:

(i) exhaust ventilation for systems other than those which vent to a major control device shall not exceed 65 cfm/ft^2 (20 m^3 /min/m^2) of degreaser opening, unless necessary to meet OSHA requirements or unless a carbon adsorption system is installed as a major control device. Ventilation fans shall not be used near the degreaser opening;

(ii) parts shall be positioned so that complete drainage is obtained;

(iii) vertical conveyor speed shall be maintained at less than 11 ft/min (3.3 m/min);

(iv) waste solvent shall not be disposed of, or transferred to another party, such that the waste solvent can evaporate into the atmosphere. Waste solvent shall be stored only in covered containers;

(v) leaks shall be repaired immediately or the degreaser shall be shut down until repairs are made;

(vi) water shall not be visibly detectable in the solvent exiting the water separator;

(vii) downtime covers shall be placed over entrances and exits of conveyorized degreasers immediately after the conveyor and exhaust are shut down and removed just before they are started up; and

(viii) porous or absorbent materials, such as cloth, leather, wood, or rope, shall not be degreased.

(b) In accordance with the compliance schedule for contingency requirements in §115.419(f) of this title (relating to Counties and Compliance Schedules), and in addition to the requirements of subsection (a) of this section, no person in the Dallas-Fort Worth area shall own or operate a system for the cold solvent cleaning, open-top vapor degreasing, or conveyorized degreasing of objects using a solvent with a VOC content greater than 25 grams per liter (g/l).

(c) In accordance with the compliance schedule for contingency requirements in §115.419(g) of this title, and in addition to the requirements of subsection (a) of this section, no person in the Houston-Galveston-Brazoria area shall own or operate a system for the cold solvent cleaning, open-top vapor degreasing, or conveyorized degreasing of objects using a solvent with a VOC content greater than 25 g/l.

§115.413. Alternate Control Requirements.

Except as specified in paragraph (4) of this section, the alternate control requirements for degreasing processes in the Beaumont-Port Arthur, Bexar County, Dallas-Fort Worth, El Paso, and Houston-Galveston-Brazoria areas and in Gregg, Nueces, Victoria, Comal, Guadalupe, Wilson, Bastrop, Caldwell, Hays, Travis, and Williamson Counties are as follows.

(1) 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.

(2) An alternative capture and control system for cold solvent cleaners with a demonstrated overall volatile organic compound (VOC) emission reduction efficiency of 65% or greater may be used in lieu of the requirements of §115.412(a)(1) of this title (relating to Control Requirements), if approved by the executive director.

(3) An alternate capture and control system for open-top vapor or conveyorized degreasers with a demonstrated overall VOC emission reduction efficiency of 85% or greater may be used in lieu of the requirements of §115.412(a)(2)(D) or (a)(3)(A) of this title, if approved by the executive director.

(4) The owner or operator of a cold cleaning solvent, open-top vapor degreasing, or conveyorized degreasing system that becomes subject to §115.412(b) or (c) of this title may use an airless/air-tight batch cleaning system or an alternative cleaning system approved by the United States Environmental Protection Agency (EPA) that achieves equivalent emission reductions, provided that all of the following applicable requirements are met:

(A) the equipment is operated in accordance with the manufacturer's specifications and operated with a door or other pressure sealing apparatus that is in place during all cleaning and drying cycles;

(B) all waste solvents are stored in properly identified and sealed containers, and no associated pressure relief devices allow liquid solvents to drain out;

(C) spills that occur during solvent transfer must be wiped up immediately, and the used wipe rags must be stored in closed containers that are handled in accordance with clause (ii) of this subparagraph;

(D) the equipment is maintained in a vapor-tight, leak-free condition and any leak is a violation; and

(E) the requirements of this paragraph are subject to approval of the executive director.

§115.415. Testing Requirements.

The testing requirements for degreasing processes in the Beaumont-Port Arthur, Bexar County, Dallas-Fort Worth, El Paso, and Houston-Galveston-Brazoria areas and in Bastrop, Caldwell, Comal, Gregg, Guadalupe, Hays, Nueces, Travis, Victoria, Williamson, and Wilson Counties are as follows.

(1) Compliance with §115.412(a)(1) of this title (relating to Control Requirements) must be determined by applying the following test methods, as applicable:

(A) determination of true vapor pressure using ASTM International Test Method D323-89, ASTM Test Method D2879, ASTM Test Method D4953, ASTM Test Method D5190, or ASTM Test Method D5191 for the measurement of Reid vapor pressure, adjusted for actual storage temperature in accordance with American Petroleum Institute Publication 2517, Third Edition, 1989;

(B) minor modifications to the test methods and procedures listed in subparagraph (A) of this paragraph that are approved by the executive director;

(C) using standard reference materials for the true vapor pressure of each volatile organic compound component; or

(D) using analytical data from the solvent supplier or manufacturer's material safety data sheet.

(2) Compliance with §115.412(a)(2)(D)(iv) and (a)(3)(A)(ii) of this title and §115.413(3) of this title (relating to Alternate Control Requirements) must be determined by applying the following test methods, as appropriate:

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

(B) Test Method 18 (40 CFR Part 60, Appendix A) for determining gaseous organic compound emissions by gas chromatography;

(C) Test Method 25 (40 CFR Part 60, Appendix A) for determining total gaseous nonmethane organic emissions as carbon;

(D) Test Methods 25A or 25B (40 CFR Part 60, Appendix A) for determining total gaseous organic concentrations using flame ionization or nondispersive infrared analysis; or

(E) minor modifications to these test methods and procedures approved by the executive director.

(3) Compliance with §115.412(b) and (c) of this title must be determined by applying the following test methods, as applicable:

(A) Method 24 (40 CFR Part 60, Appendix A); or

(B) additional test procedures described in 40 CFR §60.446 (as amended through October 17, 2000 (65 *Federal Register* 61761)).

(4) Test methods other than those specified in paragraphs (1) - (3) of this section may be used if validated by 40 CFR Part 63, Appendix A, Test Method 301. For the purposes of this paragraph, substitute "executive director" each place that Test Method 301 references "administrator."

§115.416. Recordkeeping Requirements.

The owner or operator of each degreasing process in Beaumont-Port Arthur, Bexar County, Dallas-Fort Worth, El Paso, and Houston-Galveston-Brazoria areas and in Bastrop, Caldwell, Comal, Gregg, Guadalupe, Hays, Nueces, Travis, Victoria, Williamson, and Wilson Counties shall maintain the following records at the facility for at least two years and shall make such records available upon request to representatives of the executive director, the United States Environmental Protection Agency, or the local air pollution control agency having jurisdiction in the area:

(1) a record of control equipment maintenance, such as replacement of the carbon in a carbon adsorption unit;

(2) the results of all tests conducted at the facility in accordance with the requirements described in §115.415(2) and (3) of this title (relating to Testing Requirements);

(3) for each degreasing process in Gregg, Nueces, and Victoria Counties which is exempt under §115.411(a)(5) of this title (relating to Exemptions), records of solvent usage in sufficient detail to document continuous compliance with this exemption;

(4) for each degreasing process in the Dallas-Fort Worth area, records sufficient to demonstrate continuous compliance with:

(A) the vapor pressure testing described in §115.415(1)(A) - (D) of this title; and

(B) the applicable exemptions in §115.411 of this title.

§115.419. Counties and Compliance Schedules.

(a) In Bexar, Brazoria, Chambers, Collin, Dallas, Denton, El Paso, Fort Bend, Galveston, Gregg, Hardin, Harris, Jefferson, Liberty, Montgomery, Nueces, Orange, Tarrant, Victoria, and

Waller, Counties, the compliance date has passed and all affected persons shall continue to comply with this division.

(b) All affected persons in Bastrop, Caldwell, Comal, Guadalupe, Hays, Travis, Williamson, and Wilson Counties shall comply with this division as soon as practicable, but no later than December 31, 2005.

(c) All affected persons in Ellis, Johnson, Kaufman, Parker, and Rockwall Counties shall comply with this division as soon as practicable, but no later than March 1, 2009.

(d) All affected persons of a degreasing process in Wise County shall comply with this division as soon as practicable, but no later than January 1, 2017.

(e) All affected persons of a degreasing process in Collin, Dallas, Denton, Ellis, Johnson, Kaufman, Parker, Rockwall, Tarrant, and Wise Counties that becomes subject to this division on or after the applicable compliance date in subsection (a), (c), or (d) of this section shall comply with the requirements in this division as soon as practicable, but no later than 60 days after becoming subject.

(f) All affected owners or operators of a degreasing process in Collin, Dallas, Denton, Ellis, Johnson, Kaufman, Parker, Rockwall, Tarrant, and Wise Counties shall be in compliance with §115.412(b) of this title (relating to Control Requirements) by no later than 270 days after the commission publishes notification in the *Texas Register* of its determination that this

contingency rule is necessary as a result of EPA publication of a notice in the *Federal Register* that the specified area failed to attain the applicable National Ambient Air Quality Standard for ozone by the attainment deadline or failed to demonstrate reasonable further progress as set forth in the 1990 Amendments to the Federal Clean Air Act, §172(c)(9).

(g) All affected owners or operators of a degreasing process in Brazoria, Chambers, Fort Bend, Galveston, Harris, Liberty, Montgomery, and Waller Counties shall be in compliance with §115.412(c) of this title by no later than 270 days after the commission publishes notification in the *Texas Register* of its determination that this contingency rule is necessary as a result of EPA publication of a notice in the *Federal Register* that the specified area failed to attain the applicable National Ambient Air Quality Standard for ozone by the attainment deadline or failed to demonstrate reasonable further progress as set forth in the 1990 Amendments to the Federal Clean Air Act, §172(c)(9).

(h) The owner or operator of a degreasing process or operation in the Bexar County area subject to the requirements of this division shall comply with the requirements of this division by no later than January 1, 2025. All affected persons of a degreasing process or operation in the Bexar County area that becomes subject to this division on or after the applicable compliance date in this subsection shall comply with the requirements of this division by but no later than 60 days after becoming subject.

SUBCHAPTER E: SOLVENT-USING PROCESSES
DIVISION 2: SURFACE COATING PROCESSES
§§115.420, 115.422, 115.423, 115.425 – 115.427, 115.429

Statutory Authority

The amendments are adopted under Texas Water Code (TWC), §5.102, concerning general powers; §5.103, concerning Rules; TWC, §5.105, concerning General Policy, which authorize the commission to adopt rules necessary to carry out its powers and duties under the TWC; TWC, §7.002, concerning Enforcement Authority, which authorizes the commission to enforce the provisions of the Water Code and the Health and Safety Code within the commission's jurisdiction; and under Texas Health and Safety Code (THSC), §382.017, concerning Rules, which authorizes the commission to adopt rules consistent with the policy and purpose of the Texas Clean Air Act.

The amendments are also adopted under THSC, §382.002, concerning Policy and Purpose, which establishes the commission's purpose to safeguard the state's air resources, consistent with the protection of public health, general welfare, and physical property; THSC, §382.011, concerning General Powers and Duties, which authorizes the commission to control the quality of the state's air; THSC, §382.012, concerning the State Air Control Plan, which authorizes the commission to prepare and develop a general, comprehensive plan for the proper control of the state's air; THSC, §382.016, concerning Monitoring Requirements; Examination of Records, which authorizes the commission to prescribe reasonable requirements for measuring and monitoring the emissions of air contaminants; and THSC, §382.021, concerning Sampling Methods and Procedures.

The adopted amendments implement TWC, §§5.102, 5.103 and 7.002; and THSC, §§382.002, 382.011, 382.012, 382.016, 382.017, and 382.021.

§115.420. Applicability and Definitions.

(a) The owner or operator of a surface coating process in the Beaumont-Port Arthur, Bexar County, Dallas-Fort Worth, El Paso, and Houston-Galveston-Brazoria areas, as defined in §115.10 of this title (relating to Definitions), and in Gregg, Nueces, and Victoria Counties, as specified in each paragraph below, is subject to this division. All owners and operators shall be in compliance with this division in accordance with the compliance schedules listed in §115.429 of this title (relating to Counties and Compliance Schedules).

(1) Large appliance coating. The requirements in this division apply in the Beaumont-Port Arthur and El Paso areas and in Gregg, Nueces, and Victoria Counties.

(2) Metal furniture coating. The requirements in this division apply in the Beaumont-Port Arthur and El Paso areas and in Gregg, Nueces, and Victoria Counties.

(3) Coil coating. The requirements in this division apply in the Beaumont-Port Arthur, Bexar County, Dallas-Fort Worth, El Paso, and Houston-Galveston-Brazoria areas and in Gregg, Nueces, and Victoria Counties.

(4) Paper coating. The requirements in this division apply in the Beaumont-Port Arthur, Dallas-Fort Worth, El Paso, and Houston-Galveston-Brazoria areas and in Gregg, Nueces, and Victoria Counties. In the Dallas-Fort Worth and Houston-Galveston-Brazoria areas, applicability is determined by the volatile organic compound (VOC) emissions from each individual paper coating line.

(A) Each paper coating line in the Dallas-Fort Worth and Houston-Galveston-Brazoria areas that has the potential to emit less than 25 tons per year (tpy) of VOC is subject to this division.

(B) Each paper coating line in the Dallas-Fort Worth and Houston-Galveston-Brazoria areas that has the potential to emit equal to or greater than 25 tpy of VOC is subject to the requirements in Division 5 of this Subchapter (relating to Control Requirements for Surface Coating Processes).

(5) Fabric coating. The requirements in this division apply in the Beaumont-Port Arthur, Bexar County, Dallas-Fort Worth, El Paso, and Houston-Galveston-Brazoria areas and in Gregg, Nueces, and Victoria Counties.

(6) Vinyl coating. The requirements in this division apply in the Beaumont-Port Arthur, Bexar County, Dallas-Fort Worth, El Paso, and Houston-Galveston-Brazoria areas, and in Gregg, Nueces, and Victoria Counties.

(7) Can coating. The requirements in this division apply in the Beaumont-Port Arthur, Bexar County, Dallas-Fort Worth, El Paso, and Houston-Galveston-Brazoria areas, and in Gregg, Nueces, and Victoria Counties.

(8) Automobile and light-duty truck coating. The requirements in this division apply in the Beaumont-Port Arthur, El Paso, and Houston-Galveston-Brazoria areas.

(9) Vehicle refinishing coating (body shops). The requirements in this division apply in the Bexar County, Dallas-Fort Worth, El Paso, and Houston-Galveston-Brazoria areas.

(10) Miscellaneous metal parts and products coating. The requirements in this division apply in the Beaumont-Port Arthur and El Paso areas and in Gregg, Nueces, and Victoria Counties. In the Dallas-Fort Worth and Houston-Galveston-Brazoria areas, the requirements in this division apply only to designated on-site maintenance shops as specified in §115.427(8) of this title (relating to Exemptions).

(11) Factory surface coating of flat wood paneling. The requirements in this division apply in the Beaumont-Port Arthur, Bexar County, Dallas-Fort Worth, El Paso, and Houston-Galveston-Brazoria areas and in Gregg, Nueces, and Victoria Counties.

(12) Aerospace coating. The requirements in this division apply in the Beaumont-Port Arthur, Bexar County, Dallas-Fort Worth, El Paso, and Houston-Galveston-Brazoria areas and in Gregg, Nueces, and Victoria Counties.

(13) Mirror backing coating. The requirements in this division apply in the Beaumont-Port Arthur, Bexar County, Dallas-Fort Worth El Paso, and Houston-Galveston-Brazoria areas.

(14) Wood parts and products coating. The requirements in this division apply in the Bexar County, Dallas-Fort Worth El Paso, and Houston-Galveston-Brazoria areas.

(15) Wood furniture manufacturing coatings. The requirements in this division apply in the Beaumont-Port Arthur, Bexar County, Dallas-Fort Worth, El Paso, and Houston-Galveston-Brazoria areas.

(16) Marine coatings. The requirements in this division apply in the Beaumont-Port Arthur and Houston-Galveston-Brazoria areas.

(b) General surface coating definitions. The following terms, when used in this division have the following meanings, unless the context clearly indicates otherwise. Additional definitions for terms used in this division are found in §§3.2, 101.1, and 115.10 of this title (relating to Definitions).

(1) Aerosol coating (spray paint)--A hand-held, pressurized, nonrefillable container that expels an adhesive or a coating in a finely divided spray when a valve on the container is depressed.

(2) Coating--A material applied onto or impregnated into a substrate for protective, decorative, or functional purposes. Such materials include, but are not limited to, paints, varnishes, sealants, adhesives, thinners, diluents, inks, maskants, and temporary protective coatings.

(3) Coating application system--Devices or equipment designed for the purpose of applying a coating material to a surface. The devices may include, but are not be limited to, brushes, sprayers, flow coaters, dip tanks, rollers, knife coaters, and extrusion coaters.

(4) Coating line--An operation consisting of a series of one or more coating application systems and including associated flashoff area(s), drying area(s), and oven(s) wherein a surface coating is applied, dried, or cured.

(5) Coating solids (or solids)--The part of a coating that remains after the coating is dried or cured.

(6) Daily weighted average--The total weight of volatile organic compound (VOC) emissions from all coatings subject to the same emission standard in §115.421 of this title (relating to Emission Specifications), divided by the total volume of those coatings (minus water and exempt solvent) delivered to the application system each day. Coatings subject to different emission standards in §115.421 of this title must not be combined for purposes of calculating the daily weighted average. In addition, determination of compliance is based on each individual coating line.

(7) High-volume low-pressure spray guns--Equipment used to apply coatings by means of a spray gun which operates between 0.1 and 10.0 pounds per square inch gauge air pressure at the air cap.

(8) Normally closed container--A container that is closed unless an operator is actively engaged in activities such as adding or removing material.

(9) Pounds of VOC per gallon of coating (minus water and exempt solvents)--Basis for emission limits for surface coating processes. Can be calculated by the following equation:

Figure: 30 TAC §115.420(b)(9) (No Change)

(10) Pounds of VOC per gallon of solids--Basis for emission limits for surface coating process. Can be calculated by the following equation:

Figure: 30 TAC §115.420(b)(10) (No Change)

(11) Spray gun--A device that atomizes a coating or other material and projects the particulates or other material onto a substrate.

(12) Surface coating processes--Operations which utilize a coating application system.

(13) Transfer efficiency--The amount of coating solids deposited onto the surface of a part or product divided by the total amount of coating solids delivered to the coating application system.

(c) Specific surface coating definitions. The following terms, when used in this division, shall have the following meanings, unless the context clearly indicates otherwise.

(1) Aerospace coating.

(A) Ablative coating--A coating that chars when exposed to open flame or extreme temperatures, as would occur during the failure of an engine casing or during aerodynamic heating. The ablative char surface serves as an insulative barrier, protecting adjacent components from the heat or open flame.

(B) Adhesion promoter--A very thin coating applied to a substrate to promote wetting and form a chemical bond with the subsequently applied material.

(C) Adhesive bonding primer--A primer applied in a thin film to aerospace components for the purpose of corrosion inhibition and increased adhesive bond strength by attachment. There are two categories of adhesive bonding primers: primers with a design cure at 250 degrees Fahrenheit or below and primers with a design cure above 250 degrees Fahrenheit.

(D) Aerospace vehicle or component--Any fabricated part, processed part, assembly of parts, or completed unit, with the exception of electronic components, of any aircraft including but not limited to airplanes, helicopters, missiles, rockets, and space vehicles.

(E) Aircraft fluid systems--Those systems that handle hydraulic fluids, fuel, cooling fluids, or oils.

(F) Aircraft transparency--The aircraft windshield, canopy, passenger windows, lenses, and other components which are constructed of transparent materials.

(G) Antichafe coating--A coating applied to areas of moving aerospace components that may rub during normal operations or installation.

(H) Antique aerospace vehicle or component--An aerospace vehicle or component thereof that was built at least 30 years ago. An antique aerospace vehicle would not routinely be in commercial or military service in the capacity for which it was designed.

(I) Aqueous cleaning solvent--A solvent in which water is at least 80% by volume of the solvent as applied.

(J) Bearing coating--A coating applied to an antifriction bearing, a bearing housing, or the area adjacent to such a bearing in order to facilitate bearing function or to protect base material from excessive wear. A material shall not be classified as a bearing coating if it can also be classified as a dry lubricative material or a solid film lubricant.

(K) Bonding maskant--A temporary coating used to protect selected areas of aerospace parts from strong acid or alkaline solutions during processing for bonding.

(L) Caulking and smoothing compounds--Semi-solid materials which are applied by hand application methods and are used to aerodynamically smooth exterior vehicle surfaces or fill cavities such as bolt hole accesses. A material shall not be classified as a caulking and smoothing compound if it can also be classified as a sealant.

(M) Chemical agent-resistant coating--An exterior topcoat designed to withstand exposure to chemical warfare agents or the decontaminants used on these agents.

(N) Chemical milling maskant--A coating that is applied directly to aluminum components to protect surface areas when chemically milling the component with a Type I or II etchant. Type I chemical milling maskants are used with a Type I etchant and Type II chemical milling maskants are used with a Type II etchant. This definition does not include bonding maskants, critical use and line sealer maskants, and seal coat maskants. Additionally, maskants that must be used with a combination of Type I or II etchants and any of the above types of maskants (i.e., bonding, critical use and line sealer, and seal coat) are not included. Maskants that are defined as specialty coatings are not included under this definition.

(O) Cleaning operation--Spray-gun, hand-wipe, and flush cleaning operations.

(P) Cleaning solvent--A liquid material used for hand-wipe, spray gun, or flush cleaning. This definition does not include solutions that contain no VOC.

(Q) Clear coating--A transparent coating usually applied over a colored opaque coating, metallic substrate, or placard to give improved gloss and protection to the color coat.

(R) Closed-cycle depainting system--A dust free, automated process that removes permanent coating in small sections at a time, and maintains a continuous vacuum around the area(s) being depainted to capture emissions.

(S) Coating operation--Using a spray booth, tank, or other enclosure or any area (such as a hangar) for applying a single type of coating (e.g., primer); using the same spray booth for applying another type of coating (e.g., topcoat) constitutes a separate coating operation for which compliance determinations are performed separately.

(T) Coating unit--A series of one or more coating applicators and any associated drying area and/or oven wherein a coating is applied, dried, and/or cured. A coating unit ends at the point where the coating is dried or cured, or prior to any subsequent application of a different coating.

(U) Commercial exterior aerodynamic structure primer--A primer used on aerodynamic components and structures that protrude from the fuselage, such as wings and attached components, control surfaces, horizontal stabilizers, vertical fins, wing-to-body fairings, antennae, and landing gear and doors, for the purpose of extended corrosion protection and enhanced adhesion.

(V) Commercial interior adhesive--Materials used in the bonding of passenger cabin interior components. These components must meet the Federal Aviation Administration (FAA) fireworthiness requirements.

(W) Compatible substrate primer--Either compatible epoxy primer or adhesive primer. Compatible epoxy primer is primer that is compatible with the filled elastomeric coating and is epoxy based. The compatible substrate primer is an epoxy-polyamide primer used to promote adhesion of elastomeric coatings such as impact-resistant coatings. Adhesive primer is a coating that:

(i) inhibits corrosion and serves as a primer applied to bare metal surfaces or prior to adhesive application; or

(ii) is applied to surfaces that can be expected to contain fuel. Fuel tank coatings are excluded from this category.

(X) Confined space--A space that:

(i) is large enough and so configured that a person can bodily enter and perform assigned work;

(ii) has limited or restricted means for entry or exit (for example, fuel tanks, fuel vessels, and other spaces that have limited means of entry); and

(iii) is not suitable for continuous occupancy.

(Y) Corrosion prevention compound--A coating system or compound that provides corrosion protection by displacing water and penetrating mating surfaces, forming a protective barrier between the metal surface and moisture. Coatings containing oils or waxes are excluded from this category.

(Z) Critical use and line sealer maskant--A temporary coating, not covered under other maskant categories, used to protect selected areas of aerospace parts from strong acid or alkaline solutions such as those used in anodizing, plating, chemical milling and processing of magnesium, titanium, or high-strength steel, high-precision aluminum chemical milling of deep cuts, and aluminum chemical milling of complex shapes. Materials used for repairs or to bridge gaps left by scribing operations (i.e., line sealer) are also included in this category.

(AA) Cryogenic flexible primer--A primer designed to provide corrosion resistance, flexibility, and adhesion of subsequent coating systems when exposed to loads up to and surpassing the yield point of the substrate at cryogenic temperatures (-275 degrees Fahrenheit and below).

(BB) Cryoprotective coating--A coating that insulates cryogenic or subcooled surfaces to limit propellant boil-off, maintain structural integrity of metallic structures during ascent or re-entry, and prevent ice formation.

(CC) Cyanoacrylate adhesive--A fast-setting, single component adhesive that cures at room temperature. Also known as "super glue."

(DD) Dry lubricative material--A coating consisting of lauric acid, cetyl alcohol, waxes, or other noncross linked or resin-bound materials that act as a dry lubricant.

(EE) Electric or radiation-effect coating--A coating or coating system engineered to interact, through absorption or reflection, with specific regions of the electromagnetic energy spectrum, such as the ultraviolet, visible, infrared, or microwave regions. Uses include, but are not limited to, lightning strike protection, electromagnetic pulse (EMP) protection, and radar avoidance. Coatings that have been designated as "classified" by the Department of Defense are excluded.

(FF) Electrostatic discharge and electromagnetic interference coating--A coating applied to space vehicles, missiles, aircraft radomes, and helicopter blades to disperse static energy or reduce electromagnetic interference.

(GG) Elevated-temperature Skydrol-resistant commercial primer--A primer applied primarily to commercial aircraft (or commercial aircraft adapted for military use) that must withstand immersion in phosphate-ester hydraulic fluid (Skydrol 500b or equivalent) at the elevated temperature of 150 degrees Fahrenheit for 1,000 hours.

(HH) Epoxy polyamide topcoat--A coating used where harder films are required or in some areas where engraving is accomplished in camouflage colors.

(II) Fire-resistant (interior) coating--For civilian aircraft, fire-resistant interior coatings are used on passenger cabin interior parts that are subject to the FAA fireworthiness requirements. For military aircraft, fire-resistant interior coatings are used on parts that are subject to the flammability requirements of MIL-STD-1630A and MIL-A-87721. For space applications, these coatings are used on parts that are subject to the flammability requirements of SE-R-0006 and SSP 30233.

(JJ) Flexible primer--A primer that meets flexibility requirements such as those needed for adhesive bond primed fastener heads or on surfaces expected to contain fuel. The flexible coating is required because it provides a compatible, flexible substrate over bonded sheet rubber and rubber-type coatings as well as a flexible bridge between the fasteners, skin, and skin-to-skin joints on outer aircraft skins. This flexible bridge allows more topcoat flexibility around fasteners and decreases the chance of the topcoat cracking around the fasteners. The result is better corrosion resistance.

(KK) Flight test coating--A coating applied to aircraft other than missiles or single-use aircraft prior to flight testing to protect the aircraft from corrosion and to provide required marking during flight test evaluation.

(LL) Flush cleaning--Removal of contaminants such as dirt, grease, oil, and coatings from an aerospace vehicle or component or coating equipment by passing solvent over, into, or through the item being cleaned. The solvent may simply be poured into the item

being cleaned and then drained, or assisted by air or hydraulic pressure, or by pumping. Hand-wipe cleaning operations where wiping, scrubbing, mopping, or other hand action are used are not included.

(MM) Fuel tank adhesive--An adhesive used to bond components exposed to fuel and must be compatible with fuel tank coatings.

(NN) Fuel tank coating--A coating applied to fuel tank components for the purpose of corrosion and/or bacterial growth inhibition and to assure sealant adhesion in extreme environmental conditions.

(OO) Grams of VOC per liter of coating (less water and less exempt solvent)--The weight of VOC per combined volume of total volatiles and coating solids, less water and exempt compounds. Can be calculated by the following equation:

Figure: 30 TAC §115.420(c)(1)(OO) (No Change)

(PP) Hand-wipe cleaning operation--Removing contaminants such as dirt, grease, oil, and coatings from an aerospace vehicle or component by physically rubbing it with a material such as a rag, paper, or cotton swab that has been moistened with a cleaning solvent.

(QQ) High temperature coating--A coating designed to withstand temperatures of more than 350 degrees Fahrenheit.

(RR) Hydrocarbon-based cleaning solvent--A solvent which is composed of VOC (photochemically reactive hydrocarbons) and/or oxygenated hydrocarbons, has a maximum vapor pressure of seven millimeters of mercury (mm Hg) at 20 degrees Celsius (68 degrees Fahrenheit), and contains no hazardous air pollutant (HAP) identified in the 1990 Amendments to the Federal Clean Air Act (FCAA), §112(b).

(SS) Insulation covering--Material that is applied to foam insulation to protect the insulation from mechanical or environmental damage.

(TT) Intermediate release coating--A thin coating applied beneath topcoats to assist in removing the topcoat in depainting operations and generally to allow the use of less hazardous depainting methods.

(UU) Lacquer--A clear or pigmented coating formulated with a nitrocellulose or synthetic resin to dry by evaporation without a chemical reaction. Lacquers are resoluble in their original solvent.

(VV) Limited access space--Internal surfaces or passages of an aerospace vehicle or component that cannot be reached without the aid of an airbrush or a spray gun extension for the application of coatings.

(WW) Metalized epoxy coating--A coating that contains relatively large quantities of metallic pigmentation for appearance and/or added protection.

(XX) Mold release--A coating applied to a mold surface to prevent the molded piece from sticking to the mold as it is removed.

(YY) Monthly weighted average--The total weight of VOC emission from all coatings divided by the total volume of those coatings (minus water and exempt solvents) delivered to the application system each calendar month. Coatings shall not be combined for purposes of calculating the monthly weighted average. In addition, determination of compliance is based on each individual coating operation.

(ZZ) Nonstructural adhesive--An adhesive that bonds nonload bearing aerospace components in noncritical applications and is not covered in any other specialty adhesive categories.

(AAA) Operating parameter value--A minimum or maximum value established for a control equipment or process parameter that, if achieved by itself or in

combination with one or more other operating parameter values, determines that an owner or operator has continued to comply with an applicable emission limitation.

(BBB) Optical antireflection coating--A coating with a low reflectance in the infrared and visible wavelength ranges that is used for antireflection on or near optical and laser hardware.

(CCC) Part marking coating--Coatings or inks used to make identifying markings on materials, components, and/or assemblies of aerospace vehicles. These markings may be either permanent or temporary.

(DDD) Pretreatment coating--An organic coating that contains at least 0.5% acids by weight and is applied directly to metal or composite surfaces to provide surface etching, corrosion resistance, adhesion, and ease of stripping.

(EEE) Primer--The first layer and any subsequent layers of identically formulated coating applied to the surface of an aerospace vehicle or component. Primers are typically used for corrosion prevention, protection from the environment, functional fluid resistance, and adhesion of subsequent coatings. Primers that are defined as specialty coatings are not included under this definition.

(FFF) Radome--The nonmetallic protective housing for electromagnetic transmitters and receivers (e.g., radar, electronic countermeasures, etc.).

(GGG) Rain erosion-resistant coating--A coating or coating system used to protect the leading edges of parts such as flaps, stabilizers, radomes, engine inlet nacelles, etc. against erosion caused by rain impact during flight.

(HHH) Research and development--An operation whose primary purpose is for research and development of new processes and products and that is conducted under the close supervision of technically trained personnel and is not involved in the manufacture of final or intermediate products for commercial purposes, except in a de minimis manner.

(III) Rocket motor bonding adhesive--An adhesive used in rocket motor bonding applications.

(JJJ) Rocket motor nozzle coating--A catalyzed epoxy coating system used in elevated temperature applications on rocket motor nozzles.

(KKK) Rubber-based adhesive--A quick setting contact cement that provides a strong, yet flexible bond between two mating surfaces that may be of dissimilar materials.

(LLL) Scale inhibitor--A coating that is applied to the surface of a part prior to thermal processing to inhibit the formation of scale.

(MMM) Screen print ink--An ink used in screen printing processes during fabrication of decorative laminates and decals.

(NNN) Sealant--A material used to prevent the intrusion of water, fuel, air, or other liquids or solids from certain areas of aerospace vehicles or components. There are two categories of sealants: extrudable/rollable/brushable sealants and sprayable sealants.

(OOO) Seal coat maskant--An overcoat applied over a maskant to improve abrasion and chemical resistance during production operations.

(PPP) Self-priming topcoat--A topcoat that is applied directly to an uncoated aerospace vehicle or component for purposes of corrosion prevention, environmental protection, and functional fluid resistance. More than one layer of identical coating formulation may be applied to the vehicle or component.

(QQQ) Semiaqueous cleaning solvent--A solution in which water is a primary ingredient. More than 60% by volume of the solvent solution as applied must be water.

(RRR) Silicone insulation material--An insulating material applied to exterior metal surfaces for protection from high temperatures caused by atmospheric friction or engine exhaust. These materials differ from ablative coatings in that they are not "sacrificial."

(SSS) Solid film lubricant--A very thin coating consisting of a binder system containing as its chief pigment material one or more of the following: molybdenum, graphite, polytetrafluoroethylene, or other solids that act as a dry lubricant between faying (i.e., closely or tightly fitting) surfaces.

(TTT) Space vehicle--A man-made device, either manned or unmanned, designed for operation beyond earth's atmosphere. This definition includes integral equipment such as models, mock-ups, prototypes, molds, jigs, tooling, hardware jackets, and test coupons. Also included is auxiliary equipment associated with test, transport, and storage, that through contamination can compromise the space vehicle performance.

(UUU) Specialty coating--A coating that, even though it meets the definition of a primer, topcoat, or self-priming topcoat, has additional performance criteria beyond those of primers, topcoats, and self-priming topcoats for specific applications. These performance criteria may include, but are not limited to, temperature or fire resistance, substrate compatibility, antireflection, temporary protection or marking, sealing, adhesively joining substrates, or enhanced corrosion protection.

(VVV) Specialized function coating--A coating that fulfills extremely specific engineering requirements that are limited in application and are characterized by low volume usage. This category excludes coatings covered in other specialty coating categories.

(WWW) Structural autoclavable adhesive--An adhesive used to bond load-carrying aerospace components that is cured by heat and pressure in an autoclave.

(XXX) Structural nonautoclavable adhesive--An adhesive cured under ambient conditions that is used to bond load-carrying aerospace components or other critical functions, such as nonstructural bonding in the proximity of engines.

(YYY) Surface preparation--The removal of contaminants from the surface of an aerospace vehicle or component or the activation or reactivation of the surface in preparation for the application of a coating.

(ZZZ) Temporary protective coating--A coating applied to provide scratch or corrosion protection during manufacturing, storage, or transportation. Two types include peelable protective coatings and alkaline removable coatings. These materials are not intended to protect against strong acid or alkaline solutions. Coatings that provide this type of protection from chemical processing are not included in this category.

(AAAA) Thermal control coating--A coating formulated with specific thermal conductive or radiative properties to permit temperature control of the substrate.

(BBBB) Topcoat--A coating that is applied over a primer on an aerospace vehicle or component for appearance, identification, camouflage, or protection. Topcoats that are defined as specialty coatings are not included under this definition.

(CCCC) Touch-up and repair coating--A coating used to cover minor coating imperfections appearing after the main coating operation.

(DDDD) Touch-up and repair operation--That portion of the coating operation that is the incidental application of coating used to cover minor imperfections in the coating finish or to achieve complete coverage. This definition includes out-of-sequence or out-of-cycle coating.

(EEEE) Volatile organic compound (VOC) composite vapor pressure--The sum of the partial pressures of the compounds defined as VOCs, determined by the following calculation:

Figure: 30 TAC §115.420(c)(1)(EEEE) (No Change)

(FFFF) Waterborne (water-reducible) coating--A coating which contains more than 5.0% water by weight as applied in its volatile fraction.

(GGGG) Wet fastener installation coating--A primer or sealant applied by dipping, brushing, or daubing to fasteners that are installed before the coating is cured.

(HHHH) Wing coating--A corrosion-resistant topcoat that is resilient enough to withstand the flexing of the wings.

(2) Can coating--The coating of cans for beverages (including beer), edible products (including meats, fruit, vegetables, and others), tennis balls, motor oil, paints, and other mass-produced cans.

(3) Coil coating--The coating of any flat metal sheet or strip supplied in rolls or coils.

(4) Fabric coating--The application of coatings to fabric, which includes rubber application (rainwear, tents, and industrial products such as gaskets and diaphragms).

(5) Factory surface coating of flat wood paneling--Coating of flat wood paneling products, including hardboard, hardwood plywood, particle board, printed interior paneling, and tile board.

(6) Large appliance coating--The coating of doors, cases, lids, panels, and interior support parts of residential and commercial washers, dryers, ranges, refrigerators, freezers, water heaters, dishwashers, trash compactors, air conditioners, and other large appliances.

(7) Metal furniture coating--The coating of metal furniture (tables, chairs, wastebaskets, beds, desks, lockers, benches, shelves, file cabinets, lamps, and other metal furniture products) or the coating of any metal part which will be a part of a nonmetal furniture product.

(8) Mirror backing coating--The application of coatings to the silvered surface of a mirror.

(9) Miscellaneous metal parts and products coating.

(A) Clear coat--A coating which lacks opacity or which is transparent and which may or may not have an undercoat that is used as a reflectant base or undertone color.

(B) Drum (metal)--Any cylindrical metal shipping container with a nominal capacity equal to or greater than 12 gallons (45.4 liters) but equal to or less than 110 gallons (416 liters).

(C) Extreme performance coating--A coating intended for exposure to extreme environmental conditions, such as continuous outdoor exposure; temperatures frequently above 95 degrees Celsius (203 degrees Fahrenheit); detergents; abrasive and scouring agents; solvents; and corrosive solutions, chemicals, or atmospheres.

(D) High-bake coatings--Coatings designed to cure at temperatures above 194 degrees Fahrenheit.

(E) Low-bake coatings--Coatings designed to cure at temperatures of 194 degrees Fahrenheit or less.

(F) Miscellaneous metal parts and products (MMPP) coating--The coating of MMPP in the following categories at original equipment manufacturing operations; designated on-site maintenance shops which recoat used parts and products; and off-site job shops which coat new parts and products or which recoat used parts and products:

(i) large farm machinery (harvesting, fertilizing, and planting machines, tractors, combines, etc.);

(ii) small farm machinery (lawn and garden tractors, lawn mowers, rototillers, etc.);

(iii) small appliances (fans, mixers, blenders, crock pots, dehumidifiers, vacuum cleaners, etc.);

(iv) commercial machinery (computers and auxiliary equipment, typewriters, calculators, vending machines, etc.);

(v) industrial machinery (pumps, compressors, conveyor components, fans, blowers, transformers, etc.);

(vi) fabricated metal products (metal-covered doors, frames, etc.); and

(vii) any other category of coated metal products, including, but not limited to, those which are included in the Standard Industrial Classification Code major group 33 (primary metal industries), major group 34 (fabricated metal products), major group 35 (nonelectrical machinery), major group 36 (electrical machinery), major group 37 (transportation equipment), major group 38 (miscellaneous instruments), and major group 39 (miscellaneous manufacturing industries). Excluded are those surface coating processes specified in paragraphs (1) - (8) and (10) - (14) of this subsection.

(G) Pail (metal)--Any cylindrical metal shipping container with a nominal capacity equal to or greater than 1 gallon (3.8 liters) but less than 12 gallons (45.4 liters) and constructed of 29 gauge or heavier material.

(10) Paper coating--The coating of paper and pressure-sensitive tapes (regardless of substrate and including paper, fabric, and plastic film) and related web coating processes on plastic film (including typewriter ribbons, photographic film, and magnetic tape) and metal foil (including decorative, gift wrap, and packaging).

(11) Marine coatings.

(A) Air flask specialty coating--Any special composition coating applied to interior surfaces of high pressure breathing air flasks to provide corrosion resistance and that is certified safe for use with breathing air supplies.

(B) Antenna specialty coating--Any coating applied to equipment through which electromagnetic signals must pass for reception or transmission.

(C) Antifoulant specialty coating--Any coating that is applied to the underwater portion of a vessel to prevent or reduce the attachment of biological organisms and that is registered with the EPA as a pesticide under the Federal Insecticide, Fungicide, and Rodenticide Act.

(D) Batch--The product of an individual production run of a coating manufacturer's process. (A batch may vary in composition from other batches of the same product.)

(E) Bitumens--Black or brown materials that are soluble in carbon disulfide, which consist mainly of hydrocarbons.

(F) Bituminous resin coating--Any coating that incorporates bitumens as a principal component and is formulated primarily to be applied to a substrate or surface to resist ultraviolet radiation and/or water.

(G) Epoxy--Any thermoset coating formed by reaction of an epoxy resin (i.e., a resin containing a reactive epoxide with a curing agent).

(H) General use coating--Any coating that is not a specialty coating.

(I) Heat resistant specialty coating--Any coating that during normal use must withstand a temperature of at least 204 degrees Celsius (400 degrees Fahrenheit).

(J) High-gloss specialty coating--Any coating that achieves at least 85% reflectance on a 60 degree meter when tested by the American Society for Testing and Materials (ASTM) Method D-523.

(K) High-temperature specialty coating--Any coating that during normal use must withstand a temperature of at least 426 degrees Celsius (800 degrees Fahrenheit).

(L) Inorganic zinc (high-build) specialty coating--A coating that contains 960 grams per liter (eight pounds per gallon) or more elemental zinc incorporated into an inorganic silicate binder that is applied to steel to provide galvanic corrosion resistance. (These coatings are typically applied at more than two mil dry film thickness.)

(M) Maximum allowable thinning ratio--The maximum volume of thinner that can be added per volume of coating without exceeding the applicable VOC limit of §115.421(15) of this title.

(N) Military exterior specialty coating--Any exterior topcoat applied to military or United States Coast Guard vessels that are subject to specific chemical, biological, and radiological washdown requirements.

(O) Mist specialty coating--Any low viscosity, thin film, epoxy coating applied to an inorganic zinc primer that penetrates the porous zinc primer and allows the occluded air to escape through the paint film prior to curing.

(P) Navigational aids specialty coating--Any coating applied to Coast Guard buoys or other Coast Guard waterway markers when they are recoated aboard ship at their usage site and immediately returned to the water.

(Q) Nonskid specialty coating--Any coating applied to the horizontal surfaces of a marine vessel for the specific purpose of providing slip resistance for personnel, vehicles, or aircraft.

(R) Nonvolatiles (or volume solids)--Substances that do not evaporate readily. This term refers to the film-forming material of a coating.

(S) Nuclear specialty coating--Any protective coating used to seal porous surfaces such as steel (or concrete) that otherwise would be subject to intrusion by radioactive materials. These coatings must be resistant to long-term (service life) cumulative radiation exposure (ASTM D4082-83), relatively easy to decontaminate (ASTM D4256-83), and resistant to various chemicals to which the coatings are likely to be exposed (ASTM 3912-80). (For nuclear coatings, see the general protective requirements outlined by the U.S. Atomic Energy Commission in a report entitled "U.S. Atomic Energy Commission Regulatory Guide 1.54" dated

June 1973, available through the Government Printing Office at (202) 512-2249 as document number A74062-00001.)

(T) Organic zinc specialty coating--Any coating derived from zinc dust incorporated into an organic binder that contains more than 960 grams of elemental zinc per liter (eight pounds per gallon) of coating, as applied, and that is used for the expressed purpose of corrosion protection.

(U) Pleasure craft--Any marine or fresh-water vessel used by individuals for noncommercial, nonmilitary, and recreational purposes that is less than 20 meters (65.6 feet) in length. A vessel rented exclusively to, or chartered for, individuals for such purposes shall be considered a pleasure craft.

(V) Pretreatment wash primer specialty coating--Any coating that contains a minimum of 0.5% acid by weight that is applied only to bare metal surfaces to etch the metal surface for corrosion resistance and adhesion of subsequent coatings.

(W) Repair and maintenance of thermoplastic coating of commercial vessels (specialty coating)--Any vinyl, chlorinated rubber, or bituminous resin coating that is applied over the same type of existing coating to perform the partial recoating of any in-use commercial vessel. (This definition does not include coal tar epoxy coatings, which are considered "general use" coatings.)

(X) Rubber camouflage specialty coating--Any specially formulated epoxy coating used as a camouflage topcoat for exterior submarine hulls and sonar domes.

(Y) Sealant for thermal spray aluminum--Any epoxy coating applied to thermal spray aluminum surfaces at a maximum thickness of one dry mil.

(Z) Ship--Any marine or fresh-water vessel, including self-propelled vessels, those propelled by other craft (barges), and navigational aids (buoys). This definition includes, but is not limited to, all military and Coast Guard vessels, commercial cargo and passenger (cruise) ships, ferries, barges, tankers, container ships, patrol and pilot boats, and dredges. Pleasure craft and offshore oil or gas drilling platforms are not considered ships.

(AA) Shipbuilding and ship repair operations--Any building, repair, repainting, converting, or alteration of ships or offshore oil or gas drilling platforms.

(BB) Special marking specialty coating--Any coating that is used for safety or identification applications, such as ship numbers and markings on flight decks.

(CC) Specialty interior coating--Any coating used on interior surfaces aboard United States military vessels pursuant to a coating specification that requires the

coating to meet specified fire retardant and low toxicity requirements, in addition to the other applicable military physical and performance requirements.

(DD) Tack coat specialty coating--Any thin film epoxy coating applied at a maximum thickness of two dry mils to prepare an epoxy coating that has dried beyond the time limit specified by the manufacturer for the application of the next coat.

(EE) Undersea weapons systems specialty coating--Any coating applied to any component of a weapons system intended to be launched or fired from under the sea.

(FF) Weld-through preconstruction primer (specialty coating)--A coating that provides corrosion protection for steel during inventory, is typically applied at less than one mil dry film thickness, does not require removal prior to welding, is temperature resistant (burn back from a weld is less than 1.25 centimeters (0.5 inches)), and does not normally require removal before applying film-building coatings, including inorganic zinc high-build coatings. When constructing new vessels, there may be a need to remove areas of weld-through preconstruction primer due to surface damage or contamination prior to application of film-building coatings.

(12) Automobile and light-duty truck manufacturing.

(A) Automobile coating--The assembly-line coating of passenger cars, or passenger car derivatives, capable of seating 12 or fewer passengers.

(B) Light-duty truck coating--The assembly-line coating of motor vehicles rated at 8,500 pounds (3,855.5 kg) gross vehicle weight or less and designed primarily for the transportation of property, or derivatives such as pickups, vans, and window vans.

(13) Vehicle refinishing (body shops).

(A) Basecoat/clearcoat system--A topcoat system composed of a pigmented basecoat portion and a transparent clearcoat portion. The VOC content of a basecoat (BCCA-AG)/clearcoat (cc) system shall be calculated according to the following formula.

Figure: 30 TAC §115.420(c)(13)(A) (No Change)

(B) Precoat--Any coating that is applied to bare metal to deactivate the metal surface for corrosion resistance to a subsequent water-based primer. This coating is applied to bare metal solely for the prevention of flash rusting.

(C) Pretreatment--Any coating which contains a minimum of 0.5% acid by weight that is applied directly to bare metal surfaces to etch the metal surface for corrosion resistance and adhesion of subsequent coatings.

(D) Primer or primer surfacers--Any base coat, sealer, or intermediate coat which is applied prior to colorant or aesthetic coats.

(E) Sealers--Coatings that are formulated with resins which, when dried, are not readily soluble in typical solvents. These coatings act as a shield for surfaces over which they are sprayed by resisting the penetration of solvents which are in the final topcoat.

(F) Specialty coatings--Coatings or additives which are necessary due to unusual job performance requirements. These coatings or additives prevent the occurrence of surface defects and impart or improve desirable coating properties. These products include, but are not limited to, uniform finish blenders, elastomeric materials for coating of flexible plastic parts, coatings for non-metallic parts, jambing clear coatings, gloss flatteners, and anti-glare/safety coatings.

(G) Three-stage system--A topcoat system composed of a pigmented basecoat portion, a semitransparent midcoat portion, and a transparent clearcoat portion. The VOC content of a three-stage system shall be calculated according to the following formula:

Figure: 30 TAC §115.420(c)(13)(G) (No Change)

(H) Vehicle refinishing (body shops)--The coating of motor vehicles, as defined in §114.620 of this title (relating to Definitions), including, but not limited to, motorcycles, passenger cars, vans, light-duty trucks, medium-duty trucks, heavy-duty trucks, buses, and other vehicle body parts, bodies, and cabs by an operation other than the original manufacturer. The coating of non-road vehicles and non-road equipment, as these terms are defined in §114.3 and §114.6 of this title (relating to Low Emission Vehicle Fleet Definitions; and Low Emission Fuel Definitions), and trailers is not included.

(I) Wipe-down solutions--Any solution used for cleaning and surface preparation.

(14) Vinyl coating--The use of printing or any decorative or protective topcoat applied over vinyl sheets or vinyl-coated fabric.

(15) Wood parts and products. The following terms apply to wood parts and products coating facilities subject to §115.421(14) of this title.

(A) Clear coat--A coating which lacks opacity or which is transparent and uses the undercoat as a reflectant base or undertone color.

(B) Clear sealers--Liquids applied over stains, toners, and other coatings to protect these coatings from marring during handling and to limit absorption of succeeding coatings.

(C) Final repair coat--Liquids applied to correct imperfections or damage to the topcoat.

(D) Opaque ground coats and enamels--Colored, opaque liquids applied to wood or wood composition substrates which completely hide the color of the substrate in a single coat.

(E) Semitransparent spray stains and toners--Colored liquids applied to wood to change or enhance the surface without concealing the surface, including but not limited to, toners and nongrain-raising stains.

(F) Semitransparent wiping and glazing stains--Colored liquids applied to wood that require multiple wiping steps to enhance the grain character and to partially fill the porous surface of the wood.

(G) Shellacs--Coatings formulated solely with the resinous secretions of the lac beetle (laccifer lacca), thinned with alcohol, and formulated to dry by evaporation without a chemical reaction.

(H) Topcoat--A coating which provides the final protective and aesthetic properties to wood finishes.

(I) Varnishes--Clear wood finishes formulated with various resins to dry by chemical reaction on exposure to air.

(J) Wash coat--A low-solids clear liquid applied over semitransparent stains and toners to protect the color coats and to set the fibers for subsequent sanding or to separate spray stains from wiping stains to enhance color depth.

(K) Wood parts and products coating--The coating of wood parts and products, excluding factory surface coating of flat wood paneling.

(16) Wood furniture manufacturing facilities. The following terms apply to wood furniture manufacturing facilities subject to §115.421(15) of this title.

(A) Adhesive--Any chemical substance that is applied for the purpose of bonding two surfaces together other than by mechanical means. Adhesives are not considered to be coatings or finishing materials for wood furniture manufacturing facilities subject to §115.421(15) of this title.

(B) Basecoat--A coat of colored material, usually opaque, that is applied before graining inks, glazing coats, or other opaque finishing materials and is usually topcoated for protection.

(C) Cleaning operations--Operations in which organic solvent is used to remove coating materials from equipment used in wood furniture manufacturing operations.

(D) Continuous coater--A finishing system that continuously applies finishing materials onto furniture parts moving along a conveyor system. Finishing materials that are not transferred to the part are recycled to the finishing material reservoir. Several types of application methods can be used with a continuous coater, including spraying, curtain coating, roll coating, dip coating, and flow coating.

(E) Conventional air spray--A spray coating method in which the coating is atomized by mixing it with compressed air at an air pressure greater than 10 pounds per square inch gauge (psig) at the point of atomization. Airless and air-assisted airless spray technologies are not conventional air spray because the coating is not atomized by mixing it with compressed air. Electrostatic spray technology is also not conventional air spray because an electrostatic charge is employed to attract the coating to the workpiece. In addition, high-volume low-pressure (HVLP) spray technology is not conventional air spray because its pressure is less than 10 psig.

(F) Finishing application station--The part of a finishing operation where the finishing material is applied (for example, a spray booth).

(G) Finishing material--A coating used in the wood furniture industry. For the wood furniture manufacturing industry, such materials include, but are not limited to, basecoats, stains, washcoats, sealers, and topcoats.

(H) Finishing operation--Those activities in which a finishing material is applied to a substrate and is subsequently air-dried, cured in an oven, or cured by radiation.

(I) Organic solvent--A liquid containing VOCs that is used for dissolving or dispersing constituents in a coating; adjusting the viscosity of a coating; cleaning; or washoff. When used in a coating, the organic solvent evaporates during drying and does not become a part of the dried film.

(J) Sealer--A finishing material used to seal the pores of a wood substrate before additional coats of finishing material are applied. Washcoats, which are used in some finishing systems to optimize aesthetics, are not sealers.

(K) Stain--Any color coat having a solids content of no more than 8.0% by weight that is applied in single or multiple coats directly to the substrate. Includes, but is not

limited to, nongrain raising stains, equalizer stains, sap stains, body stains, no-wipe stains, penetrating stains, and toners.

(L) Strippable booth coating--A coating that is applied to a booth wall to provide a protective film to receive overspray during finishing operations; is subsequently peeled off and disposed; and reduces or eliminates the need to use organic solvents to clean booth walls.

(M) Topcoat--The last film-building finishing material applied in a finishing system. A material such as a wax, polish, nonoxidizing oil, or similar substance that must be periodically reapplied to a surface over its lifetime to maintain or restore the reapplied material's intended effect is not considered to be a topcoat.

(N) Touch-up and repair--The application of finishing materials to cover minor finishing imperfections.

(O) Washcoat--A transparent special purpose coating having a solids content of 12% by weight or less. Washcoats are applied over initial stains to protect and control color and to stiffen the wood fibers in order to aid sanding.

(P) Washoff operations--Those operations in which organic solvent is used to remove coating from a substrate.

(Q) Wood furniture--Any product made of wood, a wood product such as rattan or wicker, or an engineered wood product such as particleboard that is manufactured under any of the following standard industrial classification codes: 2434 (wood kitchen cabinets), 2511 (wood household furniture, except upholstered), 2512 (wood household furniture, upholstered), 2517 (wood television, radios, phonograph and sewing machine cabinets), 2519 (household furniture not elsewhere classified), 2521 (wood office furniture), 2531 (public building and related furniture), 2541 (wood office and store fixtures, partitions, shelving and lockers), 2599 (furniture and fixtures not elsewhere classified), or 5712 (custom kitchen cabinets).

(R) Wood furniture component--Any part that is used in the manufacture of wood furniture. Examples include, but are not limited to, drawer sides, cabinet doors, seat cushions, and laminated tops. However, foam seat cushions manufactured and fabricated at a facility that does not engage in any other wood furniture or wood furniture component manufacturing operation are excluded from this definition.

(S) Wood furniture manufacturing operations--The finishing, cleaning, and washoff operations associated with the production of wood furniture or wood furniture components.

§115.422. Control Requirements.

In the Beaumont-Port Arthur, Bexar County, Dallas-Fort Worth, El Paso, and Houston-Galveston-Brazoria areas, as defined in §115.10 of this title (relating to Applicability and Definitions), the following control requirements apply. In Gregg, Nueces, and Victoria Counties, the control requirements in paragraph (5) of this section apply.

(1) The owner or operator of each vehicle refinishing (body shop) operation shall minimize volatile organic compounds (VOC) emissions during equipment cleanup by using the following procedures:

(A) install and operate a system that totally encloses spray guns, cups, nozzles, bowls, and other parts during washing, rinsing, and draining procedures. Non-enclosed cleaners may be used if the vapor pressure of the cleaning solvent is less than 100 millimeters of mercury (mm Hg) at 20 degrees Celsius (68 degrees Fahrenheit) and the solvent is directed towards a drain that leads directly to an enclosed remote reservoir;

(B) keep all wash solvents in an enclosed reservoir that is covered at all times, except when being refilled with fresh solvents; and

(C) keep all waste solvents and other cleaning materials in closed containers.

(2) Each vehicle refinishing (body shop) operation must use coating application equipment with a transfer efficiency of at least 65%, unless otherwise specified in an alternate means of control approved by the executive director in accordance with §115.910 of this title (relating to Availability of Alternate Means of Control). High-volume, low-pressure (HVLP) spray guns are assumed to comply with the 65% transfer efficiency requirement.

(3) The following requirements apply to each wood furniture manufacturing facility subject to §115.421(15) of this title (relating to Emission Specifications).

(A) No compounds containing more than 8.0% by weight of VOC may be used for cleaning spray booth components other than conveyors, continuous coaters and their enclosures, and/or metal filters, unless the spray booth is being refurbished. If the spray booth is being refurbished, that is, the spray booth coating or other material used to cover the booth is being replaced, no more than 1.0 gallon of organic solvent may be used to prepare the booth prior to applying the booth coating.

(B) Normally closed containers must be used for storage of finishing, cleaning, and washoff materials.

(C) Conventional air spray guns may not be used for applying finishing materials except under one or more of the following circumstances:

(i) to apply finishing materials that have a VOC content no greater than 1.0 kilogram of VOC per kilogram of solids (1.0 pound of VOC per pound of solids), as delivered to the application system;

(ii) for touch-up and repair under the following circumstances:

(I) the finishing materials are applied after completion of the finishing operation; or

(II) the finishing materials are applied after the stain and before any other type of finishing material is applied, and the finishing materials are applied from a container that has a volume of no more than 2.0 gallons.

(iii) if spray is automated, that is, the spray gun is aimed and triggered automatically, not manually;

(iv) if emissions from the finishing application station are directed to a vapor control system;

(v) the conventional air gun is used to apply finishing materials and the cumulative total usage of that finishing material is no more than 5.0% of the total gallons of finishing material used during that semiannual period; or

(vi) the conventional air gun is used to apply stain on a part that:

(I) the production speed is too high or the part shape is too complex for one operator to coat the part and the application station is not large enough to accommodate an additional operator; or

(II) the excessively large vertical spray area of the part makes it difficult to avoid sagging or runs in the stain.

(D) All organic solvent used for line cleaning or to clean spray guns must be pumped or drained into a normally closed container.

(E) Emissions from washoff operations must be minimized by:

(i) using normally closed tanks for washoff; and

(ii) minimizing dripping by tilting or rotating the part to drain as much organic solvent as possible.

(4) The following requirements apply to each shipbuilding and ship repair surface coating facility subject to §115.421(16) of this title.

(A) All handling and transfer of VOC-containing materials to and from containers, tanks, vats, drums, and piping systems must be conducted in a manner that minimizes spills.

(B) All containers, tanks, vats, drums, and piping systems must be free of cracks, holes, and other defects and remain closed unless materials are being added to or removed from them.

(C) All organic solvent used for line cleaning or to clean spray guns must be pumped or drained into a normally closed container.

(5) The following requirements apply to each aerospace vehicle or component coating process subject to §115.421(10) of this title.

(A) One or more of the following application techniques must be used to apply any primer or topcoat to aerospace vehicles or components: flow/curtain coating; dip coating; roll coating; brush coating; cotton-tipped swab application; electrodeposition coating; HVLP spraying; electrostatic spraying; or other coating application methods that achieve emission reductions equivalent to HVLP or electrostatic spray application methods, unless one of the following situations apply:

(i) any situation that normally requires the use of an airbrush or an extension on the spray gun to properly reach limited access spaces;

(ii) the application of specialty coatings;

(iii) the application of coatings that contain fillers that adversely affect atomization with HVLP spray guns and that the executive director has determined cannot be applied by any of the specified application methods;

(iv) the application of coatings that normally have a dried film thickness of less than 0.0013 centimeter (0.0005 in.) and that the executive director has determined cannot be applied by any of the specified application methods in this subparagraph;

(v) the use of airbrush application methods for stenciling, lettering, and other identification markings;

(vi) the use of aerosol coating (spray paint) application methods; and

(vii) touch-up and repair operations.

(B) Cleaning solvents used in hand-wipe cleaning operations must meet the definition of aqueous cleaning solvent in §115.420(c)(1)(I) of this title (relating to Surface Coating Definitions) or have a VOC composite vapor pressure less than or equal to 45 mm Hg at 20 degrees Celsius, unless one of the following situations apply:

(i) cleaning during the manufacture, assembly, installation, maintenance, or testing of components of breathing oxygen systems that are exposed to the breathing oxygen;

(ii) cleaning during the manufacture, assembly, installation, maintenance, or testing of parts, subassemblies, or assemblies that are exposed to strong oxidizers or reducers (e.g., nitrogen tetroxide, liquid oxygen, hydrazine);

(iii) cleaning and surface activation prior to adhesive bonding;

(iv) cleaning of electronics parts and assemblies containing electronics parts;

(v) cleaning of aircraft and ground support equipment fluid systems that are exposed to the fluid, including air-to-air heat exchangers and hydraulic fluid systems;

(vi) cleaning of fuel cells, fuel tanks, and confined spaces;

(vii) surface cleaning of solar cells, coated optics, and thermal control surfaces;

(viii) cleaning during fabrication, assembly, installation, and maintenance of upholstery, curtains, carpet, and other textile materials used on the interior of the aircraft;

(ix) cleaning of metallic and nonmetallic materials used in honeycomb cores during the manufacture or maintenance of these cores, and cleaning of the completed cores used in the manufacture of aerospace vehicles or components;

(x) cleaning of aircraft transparencies, polycarbonate, or glass substrates;

(xi) cleaning and solvent usage associated with research and development, quality control, or laboratory testing;

(xii) cleaning operations, using nonflammable liquids, conducted within five feet of energized electrical systems. Energized electrical systems means any alternating current or direct current electrical circuit on an assembled aircraft once electrical

power is connected, including interior passenger and cargo areas, wheel wells and tail sections; and

(xiii) cleaning operations identified as essential uses under the Montreal Protocol that the United States Environmental Protection Agency (EPA) has allocated essential use allowances or exemptions in 40 Code of Federal Regulations §82.4 (as amended through May 10, 1995 (60 FR 24986)), including any future amendments promulgated by the EPA.

(C) For cleaning solvents used in the flush cleaning of parts, assemblies, and coating unit components, the used cleaning solvent must be emptied into an enclosed container or collection system that is kept closed when not in use or captured with wipers provided they comply with the housekeeping requirements of subparagraph (E) of this paragraph. Aqueous and semiaqueous cleaning solvents are exempt from this subparagraph.

(D) All spray guns must be cleaned by one or more of the following methods:

(i) enclosed spray gun cleaning system provided that it is kept closed when not in use and leaks are repaired within 14 days from when the leak is first discovered. If the leak is not repaired by the 15th day after detection, the solvent must be

removed and the enclosed cleaner must be shut down until the leak is repaired or its use is permanently discontinued;

(ii) unatomized discharge of solvent into a waste container that is kept closed when not in use;

(iii) disassembly of the spray gun and cleaning in a vat that is kept closed when not in use; or

(iv) atomized spray into a waste container that is fitted with a device designed to capture atomized solvent emissions.

(E) All fresh and used cleaning solvents used in solvent cleaning operations must be stored in containers that are kept closed at all times except when filling or emptying. Cloth and paper, or other absorbent applicators, moistened with cleaning solvents must be stored in closed containers. Cotton-tipped swabs used for very small cleaning operations are exempt from this subparagraph. In addition, the owner or operator shall implement handling and transfer procedures to minimize spills during filling and transferring the cleaning solvent to or from enclosed systems, vats, waste containers, and other cleaning operation equipment that hold or store fresh or used cleaning solvents. The requirements of this subparagraph are known collectively as housekeeping measures. Aqueous, semiaqueous,

and hydrocarbon-based cleaning solvents, as defined in §115.420(c)(1) of this title, are exempt from this subparagraph.

(6) Any surface coating operation in the Beaumont-Port Arthur, Bexar County, Dallas-Fort Worth, El Paso, and Houston-Galveston-Brazoria areas that becomes subject to §115.421 of this title by exceeding the exemption limits in §115.427 of this title (relating to Exemptions) is subject to the provisions in §115.421 of this title, even if throughput or emissions later fall below exemption limits unless emissions are maintained at or below the controlled emissions level achieved while complying with §115.421 of this title and one of the following conditions is met.

(A) The project that caused the throughput or emission rate to fall below the exemption limits in §115.427 of this title must be authorized by a permit, permit amendment, standard permit, or permit by rule required by Chapter 116 or Chapter 106 of this title (relating to Control of Air Pollution by Permits for New Construction or Modification; and Permits by Rule). If a permit by rule is available for the project, the owner or operator shall continue to comply with §115.421 of this title for 30 days after the filing of documentation of compliance with that permit by rule.

(B) If authorization by permit, permit amendment, standard permit, or permit by rule is not required for the project, the owner or operator shall provide the executive director 30 days notice of the project in writing.

(7) In the Bexar County, Dallas-Fort Worth, and Houston-Galveston-Brazoria areas, the owner or operator of a paper surface coating line subject to this division shall implement the following work practices to limit VOC emissions from storage, mixing, and handling of cleaning and cleaning-related waste materials.

(A) All VOC-containing cleaning materials must be stored in closed containers.

(B) Mixing and storage containers used for VOC-containing materials must be kept closed at all times except when depositing or removing these materials.

(C) Spills of VOC-containing cleaning materials must be minimized.

(D) VOC-containing cleaning materials must be conveyed from one location to another in closed containers or pipes.

(E) VOC emissions from the cleaning of storage, mixing, and conveying equipment must be minimized.

§115.423. Alternate Control Requirements.

The alternate control requirements for surface coating processes in the Beaumont-Port Arthur, Bexar County, Dallas-Fort Worth, El Paso, and Houston-Galveston-Brazoria areas and in Gregg, Nueces, and Victoria Counties are as follows.

(1) Emission calculations for surface coating operations performed to satisfy the conditions of §101.23 of this title (relating to Alternate Emission Reduction ("Bubble") Policy), §115.910 of this title (relating to Availability of Alternate Means of Control), or other demonstrations of equivalency with the specified emission limits in this division must be based on the pounds of volatile organic compounds (VOC) per gallon of solids for all affected coatings. The owner or operator shall use the following equation to convert emission limits from pounds of VOC per gallon of coating to pounds of VOC per gallon of solids:

Figure: 30 TAC §115.423(1) (No Change)

(2) Any alternate methods of demonstrating and documenting continuous compliance with the applicable control requirements or exemption criteria in this division, such as use of improved transfer efficiency, may be approved by the executive director in accordance with §115.910 of this title if emission reductions are demonstrated to be substantially equivalent.

(3) If a vapor control system is used to control emissions from coating operations:

(A) the capture and abatement system must be capable of achieving and maintaining emission reductions equivalent to the emission limitations of §115.421 of this title (relating to Emission Specifications) and an overall control efficiency of at least 80% of the VOC emissions from those coatings. The owner or operator shall use the following equation to determine the minimum overall control efficiency necessary to demonstrate equivalency with the emission limitations of §115.421 of this title:

Figure: 30 TAC §115.423(3)(A) (No Change)

(B) the owner or operator shall submit design data for each capture system and emission control device that is proposed for use to the executive director for approval. In the Beaumont-Port Arthur, Bexar County, Dallas-Fort Worth, El Paso, and Houston-Galveston-Brazoria areas, capture efficiency testing must be performed in accordance with §115.425(4) of this title (relating to Testing Requirements).

(4) For any surface coating process or processes at a specific property, the executive director may approve requirements different from those in §115.421(8) of this title based upon his determination that such requirements will result in the lowest emission rate that is technologically and economically reasonable. When such a determination is made, the executive director shall specify the date or dates by which such different requirements must be met and shall specify any requirements to be met in the interim. If the emissions resulting from such different requirements equal or exceed 25 tons a year for a property, the determinations

for that property must be reviewed every five years. Executive director approval does not necessarily constitute satisfaction of all federal requirements nor eliminate the need for approval by the United States Environmental Protection Agency in cases where specified criteria for determining equivalency have not been clearly identified in applicable sections of this chapter.

§115.425. Testing Requirements.

The testing requirements for surface coating processes in the Beaumont-Port Arthur, Bexar County, Dallas-Fort Worth, El Paso, and Houston-Galveston-Brazoria areas and in Gregg, Nueces, and Victoria Counties are as follows.

(1) The owner or operator shall determine compliance with §115.421 of this title (relating to Emission Specifications) by applying the following test methods, as appropriate, except as specified in paragraph (5) of this section. Where a test method also inadvertently measures compounds that are exempt solvent, an owner or operator may exclude these exempt solvents when determining compliance with an emission standard:

(A) Test Method 24 (40 Code of Federal Regulations (CFR) Part 60, Appendix A) with a one-hour bake;

(B) ASTM International Test Methods D 1186-06.01, D 1200-06.01, D 3794-06.01, D 2832-69, D 1644-75, and D 3960-81;

(C) The United States Environmental Protection Agency (EPA) guidelines series document "Procedures for Certifying Quantity of Volatile Organic Compounds (VOC) Emitted by Paint, Ink, and Other Coatings (EPA-450/3-84-019)," as in effect December, 1984;

(D) additional test procedures described in 40 Code of Federal Regulations (CFR) §60.446; or

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

(2) Compliance with §115.423(3) of this title (relating to Alternate Control Requirements) must be determined by applying the following test methods, as appropriate:

(A) Test Methods 1-4 (40 CFR Part 60, Appendix A) for determining flow rates, as necessary;

(B) Test Method 25 (40 CFR Part 60, Appendix A) for determining total gaseous nonmethane organic emissions as carbon;

(C) Test Method 25A or 25B (40 CFR Part 60, Appendix A) for determining total gaseous organic concentrations using flame ionization or nondispersive infrared analysis;

(D) additional performance test procedures described in 40 CFR §60.044; or

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

(3) Compliance with the alternative emission limits in §115.421(11) of this title must be determined by applying the following test methods, as appropriate:

(A) Protocol for Determining the Daily VOC Emission Rate of Automobile and Light-Duty Truck Topcoat Operations (EPA 450/3-88-018); or

(B) The procedure contained in this paragraph for determining daily compliance with the alternative emission limitation in §115.421(11) of this title for final repair. Calculation of occurrence weighted average for each combination of repair coatings (primer, specific basecoat, clearcoat) must be determined by the following procedure.

(i) The characteristics identified below, which are represented in the following equations by the variables shown, are established for each repair material as sprayed:

Figure: 30 TAC §115.425(3)(B)(i) (No Change)

(ii) The relative occurrence weighted usage is calculated as follows:

Figure: 30 TAC §115.425(3)(B)(ii) (No Change)

(iii) The occurrence weighted average (Q) in pounds of VOC per gallon of coating (minus water and exempt solvents) as applied for each potential combination of repair coatings is calculated according to paragraph (4) of this section.

Figure: 30 TAC §115.425(3)(B)(iii) (No Change)

(4) In the Beaumont-Port Arthur, Bexar County, Dallas-Fort Worth, El Paso, and Houston-Galveston-Brazoria areas, the owner or operator of surface coating processes subject to §115.423(3) of this title shall measure the capture efficiency using applicable procedures

outlined in 40 CFR §52.741, Subpart O, Appendix B. These procedures are: Procedure T-Criteria for and Verification of a Permanent or Temporary Total Enclosure; Procedure L-VOC Input; Procedure G.2-Captured VOC Emissions (Dilution Technique); Procedure F.1-Fugitive VOC Emissions from Temporary Enclosures; and Procedure F.2-Fugitive VOC Emissions from Building Enclosures.

(A) Exemptions to capture efficiency testing requirements:

(i) If a source installs a permanent total enclosure (PTE) that meets the specifications of Procedure T and directs all VOC to a control device, then the capture efficiency is assumed to be 100%, and the source is exempted from capture efficiency testing requirements. This does not exempt the source from performance of any control device efficiency testing that may be required. In addition, a source must demonstrate all criteria for a PTE are met during testing for control efficiency.

(ii) If a source uses a control device designed to collect and recover VOC (e.g., carbon adsorption system), an explicit measurement of capture efficiency is not necessary if the following conditions are met. The overall control of the system can be determined by directly comparing the input liquid VOC to the recovered liquid VOC. The general procedure for use in this situation is given in 40 CFR §60.433, with the following additional restrictions.

(I) The source must be able to equate solvent usage with solvent recovery on a 24-hour (daily) basis, rather than a 30-day weighted average. This must be done within 72 hours following each 24-hour period of the 30-day period.

(II) The solvent recovery system (i.e., capture and control system) must be dedicated to a single process line (e.g., one process line venting to a carbon adsorber system); or if the solvent recovery system controls multiple process lines, the source must be able to demonstrate that the overall control (i.e., the total recovered solvent VOC divided by the sum of liquid VOC input to all process lines venting to the control system) meets or exceeds the most stringent standard applicable for any process line venting to the control system.

(B) The capture efficiency must be calculated using one of the following four protocols referenced. Any affected source must use one of these protocols, unless a suitable alternative protocol is approved by the executive director and the EPA.

(i) Gas/gas method using Temporary Total Enclosure (TTE). The EPA specifications to determine whether a temporary enclosure is considered a TTE are given in Procedure T. The capture efficiency equation to be used for this protocol is:

Figure: 30 TAC §115.425(4)(B)(i) (No Change)

(ii) Liquid/gas method using TTE. The EPA specifications to determine whether a temporary enclosure is considered a TTE are given in Procedure T. The capture efficiency equation to be used for this protocol is:

Figure: 30 TAC §115.425(4)(B)(ii) (No Change)

(iii) Gas/gas method using the building or room in which the affected source is located as the enclosure (BE) and in which G and F are measured while operating only the affected facility. All fans and blowers in the BE must be operating as they would under normal production. The capture efficiency equation to be used for this protocol is:

Figure: 30 TAC §115.425(4)(B)(iii) (No Change)

(iv) Liquid/gas method using a BE in which L and F are measured while operating only the affected facility. All fans and blowers in the building or room must be operated as they would under normal production. The capture efficiency equation to be used for this protocol is:

Figure: 30 TAC §115.425(4)(B)(iv) (No Change)

(C) The following conditions must be met in measuring capture efficiency:

(i) Any error margin associated with a test protocol may not be incorporated into the results of a capture efficiency test.

(ii) All affected facilities must accomplish the initial capture efficiency testing by July 31, 1992 in Brazoria, Dallas, El Paso, Galveston, Harris, Jefferson, Orange, and Tarrant Counties, and by July 31, 1993 in Chambers, Collin, Denton, Fort Bend, Hardin, Liberty, Montgomery, and Waller Counties, except that all mirror backing coating facilities must accomplish the initial capture efficiency testing by July 31, 1994. Affected sources in the Bexar County area must conduct initial capture efficiency testing by no later than July 1, 2024.

(iii) During an initial pretest meeting, the executive director and the source owner or operator shall identify those operating parameters that must be monitored to ensure that capture efficiency does not change significantly over time. These parameters must be monitored and recorded initially during the capture efficiency testing and thereafter during facility operation. The executive director may require a new capture efficiency test if the operating parameter values change significantly from those recorded during the initial capture efficiency test.

(5) The following additional testing requirements apply to each aerospace vehicle or component coating facility subject to §115.421(10) of this title.

(A) For coatings which are not waterborne (water-reducible), determine the VOC content of each formulation (less water and less exempt solvents) as applied using manufacturer's supplied data or Method 24 of 40 CFR Part 60, Appendix A. If there is a discrepancy between the manufacturer's formulation data and the results of the Method 24 analysis, compliance must be based on the results from the Method 24 analysis. For water-borne (water-reducible) coatings, manufacturer's supplied data alone can be used to determine the VOC content of each formulation.

(B) For aqueous and semiaqueous cleaning solvents, manufacturers' supplied data must be used to determine the water content.

(C) For hand-wipe cleaning solvents, manufacturers' supplied data or standard engineering reference texts or other equivalent methods shall be used to determine the vapor pressure or VOC composite vapor pressure for blended cleaning solvents.

(D) Except for specialty coatings, compliance with the test method requirements of 40 CFR §63.750, (National Emission Standards for Aerospace Manufacturing

and Rework Facilities), is considered to represent compliance with the requirements of this section.

(6) Test methods other than those specified in paragraphs (1) - (5) of this section may be used if validated by 40 CFR Part 63, Appendix A, Test Method 301. For the purposes of this paragraph, substitute "executive director" each place that Test Method 301 references "administrator."

§115.426. Monitoring and Recordkeeping Requirements.

The following recordkeeping requirements apply to the owner or operator of each surface coating process in the Beaumont-Port Arthur, Bexar County, Dallas-Fort Worth, El Paso, and Houston-Galveston-Brazoria areas, and in Gregg, Nueces, and Victoria Counties. Records of non-exempt solvent washings are not required to be kept if the non-exempt solvent is directed into containers that prevent evaporation into the atmosphere.

(1) The owner or operator shall satisfy the following recordkeeping requirements.

(A) A material data sheet must be maintained that documents the volatile organic compound (VOC) content, composition, solids content, solvent density, and other relevant information regarding each coating and solvent available for use in the affected

surface coating processes sufficient to determine continuous compliance with applicable control limits.

(B) Records must be maintained of the quantity and type of each coating and solvent consumed during the specified averaging period if any of the coatings, as delivered to the coating application system, exceed the applicable control limits. Such records must be sufficient to calculate the applicable weighted average of VOC for all coatings.

(i) As an alternative to the recordkeeping requirements of this subparagraph, the owner or operator of any vehicle refinishing (body shop) operation subject to §115.421(11) of this title may substitute the recordkeeping requirements specified in §106.436 of this title (relating to Auto Body Refinishing Facility (Previously Standard Exemption 124)) provided that all coatings and solvents meet the emission limits of §115.421(11) of this title. If the owner or operator of a vehicle refinishing (body shop) operation that uses any coating or solvent which exceeds the limits of §115.421(11) of this title, then the owner or operator shall maintain daily records of the quantity and type of each coating and solvent consumed in sufficient detail to calculate the daily weighted average of VOC for all coatings and solvents.

(ii) As an alternative to the recordkeeping requirements of this subparagraph, the owner or operator of any wood parts and products coating operation subject to §115.421(14) of this title may substitute the recordkeeping requirements specified in §106.231 of this title (relating to Manufacturing, Refinishing, and Restoring Wood Products)

provided that all coatings and solvents meet the emission limits of §115.421(14) of this title. If the owner or operator of a wood parts and products coating operation uses any coating or solvent which exceeds the limits of §115.421(14) of this title, then the owner or operator shall maintain daily records of the quantity and type of each coating and solvent consumed in sufficient detail to calculate the daily weighted average of VOC for all coatings and solvents.

(iii) As an alternative to the recordkeeping requirements of this subparagraph, the owner or operator of any surface coating operation that qualifies for exemption under §115.427(3)(C) of this title (relating to Exemptions) shall maintain records of total gallons of coating and solvent used in each month, and total gallons of coating and solvent used in the previous 12 months.

(C) Records shall be maintained of any testing conducted at an affected facility in accordance with the provisions specified in §115.425 of this title (relating to Testing Requirements).

(D) Records required by subparagraphs (A) - (C) of this paragraph must be maintained for at least two years and must be made available upon request by representatives of the executive director, the United States Environmental Protection Agency (EPA), or any local air pollution control agency with jurisdiction.

(2) The owner or operator of any surface coating facility that utilizes a vapor control system approved by the executive director in accordance with §115.423(3) of this title (relating to Alternate Control Requirements) shall:

(A) install and maintain monitors to accurately measure and record operational parameters of all required control devices, as necessary, to ensure the proper functioning of those devices in accordance with design specifications, including:

(i) continuous monitoring of the exhaust gas temperature immediately downstream of direct-flame incinerators and/or the gas temperature immediately upstream and downstream of any catalyst bed;

(ii) the total amount of VOC recovered by carbon adsorption or other solvent recovery systems during a calendar month;

(iii) continuous monitoring of carbon adsorption bed exhaust; and

(iv) appropriate operating parameters for vapor control systems other than those specified in clauses (i) - (iii) of this subparagraph;

(B) maintain records of any testing conducted in accordance with the provisions specified in §115.425(2) of this title; and

(C) maintain all records at the affected facility for at least two years and make such records available to representatives of the executive director, EPA, or any local air pollution control agency with jurisdiction, upon request.

(3) The owner or operator shall maintain, on file, the capture efficiency protocol submitted under §115.425(4) of this title. The owner or operator shall submit all results of the test methods and capture efficiency protocols to the executive director within 60 days of the actual test date. The owner or operator shall maintain records of the capture efficiency operating parameter values on site for a minimum of one year. If any changes are made to capture or control equipment, the owner or operator is required to notify the executive director in writing within 30 days of these changes and a new capture efficiency and/or control device destruction or removal efficiency test may be required.

(4) The owner or operator shall maintain records sufficient to document the applicability of the conditions for exemptions referenced in §115.427 of this title.

(5) The following additional requirements apply to each aerospace vehicle or component coating process subject to §115.421(10) of this title. The owner or operator shall:

(A) for coatings:

(i) maintain a current list of coatings in use with category and VOC content as applied; and

(ii) record coating usage on an annual basis;

(B) for aqueous and semiaqueous hand-wipe cleaning solvents, maintain a list of materials used with corresponding water contents;

(C) for vapor pressure compliant hand-wipe cleaning solvents:

(i) maintain a current list of cleaning solvents in use with their respective vapor pressures or, for blended solvents, VOC composite vapor pressures; and

(ii) maintain a record cleaning solvent usage on an annual basis; and

(D) for cleaning solvents with a vapor pressure greater than 45 millimeters of mercury at 20 degrees Celsius used in exempt hand-wipe cleaning operations:

(i) maintain a list of exempt hand-wipe cleaning processes; and

(ii) maintain a record cleaning solvent usage on an annual basis.

(6) Except for specialty coatings, compliance with the recordkeeping requirements of 40 Code of Federal Regulations §63.752, (National Emission Standards for Aerospace Manufacturing and Rework Facilities), is considered to represent compliance with the requirements of this section.

§115.427. Exemptions.

In the Beaumont-Port Arthur, Bexar County, Dallas-Fort Worth, El Paso, and Houston-Galveston-Brazoria areas, as defined in §115.10 of this title (relating to Definitions) and in Gregg, Nueces, and Victoria Counties the following exemptions apply.

(1) The following coating operations are exempt from the miscellaneous metal parts and products surface coating emission specifications in §115.421(8) of this title (relating to Emission Specifications):

(A) aerospace vehicles and components;

(B) in the Bexar County, Dallas-Fort Worth, El Paso, and Houston-Galveston-Brazoria areas, vehicle refinishing (body shops); and

(C) in the Beaumont-Port Arthur and Houston-Galveston-Brazoria areas, ships and offshore oil or gas drilling platforms.

(2) The following coating operations are exempt from the factory surface coating of flat wood paneling emission specifications in §115.421(9) of this title:

(A) the manufacture of exterior siding;

(B) tile board; or

(C) particle board used as a furniture component.

(3) In the Beaumont-Port Arthur, Bexar County, Dallas-Fort Worth, El Paso, and Houston-Galveston-Brazoria areas, the following exemptions apply to surface coating processes, except for vehicle refinishing (body shops) controlled by §115.421(12) of this title. Excluded from the volatile organic compounds (VOC) emission calculations are coatings and solvents used in surface coating activities that are not addressed by the surface coating categories of §115.421(1) - (16) or §115.453 of this title (relating to Control Requirements). For example, architectural coatings (i.e., coatings that are applied in the field to stationary structures and their appurtenances, to portable buildings, to pavements, or to curbs) at a property would not be included in the calculations.

(A) Surface coating operations on a property that, when uncontrolled, will emit a combined weight of VOC of less than 3.0 pounds per hour and 15 pounds in any consecutive 24-hour period are exempt from §115.421 of this title and §115.423 of this title (relating to Alternate Control Requirements).

(B) Surface coating operations on a property that, when uncontrolled, will emit a combined weight of VOC of less than 100 pounds in any consecutive 24-hour period are exempt from §115.421 and §115.423 of this title if documentation is provided to and approved by both the executive director and the United States Environmental Protection Agency to demonstrate that necessary coating performance criteria cannot be achieved with coatings that satisfy applicable emission specifications and that control equipment is not technically or economically feasible.

(C) Surface coating operations on a property for which total coating and solvent usage does not exceed 150 gallons in any consecutive 12-month period are exempt from §115.421 and §115.423 of this title.

(D) Mirror backing coating operations located on a property that, when uncontrolled, emit a combined weight of VOC less than 25 tons in one year (based on historical coating and solvent usage) are exempt from this division.

(E) Wood furniture manufacturing facilities that are subject to and are complying with §115.421(15) of this title and §115.422(3) of this title (relating to Control Requirements) are exempt from §115.421(14) of this title. These wood furniture manufacturing facilities must continue to comply with §115.421(14) of this title until these facilities are in compliance with §115.421(15) and §115.422(3) of this title.

(F) Wood furniture manufacturing facilities that, when uncontrolled, emit a combined weight of VOC from wood furniture manufacturing operations less than 25 tons per year (tpy) are exempt from §115.421(15) and §115.422(3) of this title.

(G) In Hardin, Jefferson, and Orange Counties, wood parts and products coating facilities are exempt from §115.421(14) of this title.

(H) In Hardin, Jefferson, and Orange Counties, shipbuilding and ship repair operations that, when uncontrolled, emit a combined weight of VOC from ship and offshore oil or gas drilling platform surface coating operations less than 50 tpy are exempt from §115.421(16) and §115.422(4) of this title.

(I) In Brazoria, Chambers, Fort Bend, Galveston, Harris, Liberty, Montgomery, and Waller Counties, shipbuilding and ship repair operations that, when uncontrolled, emit a combined weight of VOC from ship and offshore oil or gas drilling

platform surface coating operations less than 25 tpy are exempt from §115.421(16) and §115.422(4) of this title.

(J) The following activities where cleaning and coating of aerospace vehicles or components may take place are exempt from this division: research and development, quality control, laboratory testing, and electronic parts and assemblies, except for cleaning and coating of completed assemblies.

(4) Vehicle refinishing (body shops) in Hardin, Jefferson, and Orange Counties are exempt from §115.421(12) and §115.422(1) and (2) of this title.

(5) The coating of vehicles at in-house (fleet) vehicle refinishing operations and the coating of vehicles by private individuals are exempt from §115.421(11)(B) and §115.422(1) and (2) of this title. This exemption is not applicable if the coating of a vehicle by a private individual occurs at a commercial operation.

(6) Aerosol coatings (spray paint) are exempt from this division.

(7) In Gregg, Nueces, and Victoria Counties, surface coating operations located at any property that, when uncontrolled, will emit a combined weight of VOC less than 550 pounds (249.5 kilograms) in any continuous 24-hour period are exempt from §115.421 of this title. Excluded from this calculation are coatings and solvents used in surface coating activities

that are not addressed by the surface coating categories of §115.421(1) - (10) of this title. For example, architectural coatings (i.e., coatings that are applied in the field to stationary structures and their appurtenances, to portable buildings, to pavements, or to curbs) at a property would not be included in the calculation.

(8) In the Dallas-Fort Worth and Houston-Galveston-Brazoria areas, the following surface coating categories that are subject to the requirements of Chapter 115, Subchapter E, Division 5 of this title (relating to Control Requirements for Surface Coating Processes) are exempt from the requirements in this division:

(A) large appliance coating;

(B) metal furniture coating;

(C) miscellaneous metal parts and products coating;

(D) each paper coating line with the potential to emit equal to or greater than 25 tpy of VOC from all coatings applied; and

(E) automobile and light-duty truck manufacturing coating.

(9) In the Dallas-Fort Worth and the Houston-Galveston-Brazoria areas, the re-coating of used miscellaneous metal parts and products at a designated on-site maintenance shop that was exempt from §115.421(8) of this title prior to January 1, 2012, or that begins operation on or after January 1, 2012, is exempt from all requirements in this division. The re-coating of used miscellaneous metal parts and products at a designated on-site maintenance shop that was subject to §115.421(8) of this title prior to January 1, 2012, remains subject to this division. For purposes of this exemption, a designated on-site maintenance shop is an area at a site where used miscellaneous metal parts or products are re-coated on a routine basis. Miscellaneous metal parts and products coating processes in Wise County are not subject to this division.

§115.429. Counties and Compliance Schedules.

(a) In Brazoria, Chambers, Collin, Dallas, Denton, Ellis, El Paso, Fort Bend, Galveston, Gregg, Hardin, Harris, Jefferson, Johnson, Kaufman, Liberty, Montgomery, Nueces, Orange, Parker, Rockwall, Tarrant, Victoria, and Waller Counties, the compliance date has passed and the owner or operator of a surface coating process shall continue to comply with this division.

(b) In Hardin, Jefferson, and Orange Counties the compliance date has passed and the owner or operator of each shipbuilding and ship repair operation that, when uncontrolled, emits a combined weight of volatile organic compounds from ship and offshore oil or gas

drilling platform surface coating operations equal to or greater than 50 tons per year and less than 100 tons per year shall continue to comply with this division.

(c) The owner or operator of a paper surface coating process located in the Dallas-Fort Worth area, except Wise County, and Houston-Galveston-Brazoria area, as defined in §115.10 of this title (relating to Definitions), shall comply with the requirements in §115.422(7) of this title (relating to Control Requirements), no later than March 1, 2013.

(d) The owner or operator of a surface coating process in Wise County shall comply with the requirements in this division as soon as practicable, but no later than January 1, 2017.

(e) The owner or operator of a surface coating process in Collin, Dallas, Denton, Ellis, Johnson, Kaufman, Parker, Rockwall, Tarrant, and Wise Counties that becomes subject to this division on or after the applicable compliance date in this section shall comply with the requirements in this division as soon as practicable, but no later than 60 days after becoming subject.

(f) The owner or operator of a surface coating process in the Bexar County area subject to the requirements of this division shall comply with the requirements of this division no later than January 1, 2025. All affected persons of a surface coating process in the Bexar County area that becomes subject to this division on or after the applicable compliance date in this subsection shall comply with the requirements of this division as soon as practicable, but no

later than 60 days after becoming subject.

SUBCHAPTER E: SOLVENT-USING PROCESSES
DIVISION 3: FLEXOGRAPHIC AND ROTOGRAVURE PRINTING
§§115.430 – 115.432, 115.435, 115.436, 115.439

Statutory Authority

The amendments are adopted under Texas Water Code (TWC), §5.102, concerning general powers; §5.103, concerning Rules; TWC, §5.105, concerning General Policy, which authorize the commission to adopt rules necessary to carry out its powers and duties under the TWC; TWC, §7.002, concerning Enforcement Authority, which authorizes the commission to enforce the provisions of the Water Code and the Health and Safety Code within the commission's jurisdiction; and under Texas Health and Safety Code (THSC), §382.017, concerning Rules, which authorizes the commission to adopt rules consistent with the policy and purpose of the Texas Clean Air Act.

The amendments are also adopted under THSC, §382.002, concerning Policy and Purpose, which establishes the commission's purpose to safeguard the state's air resources, consistent with the protection of public health, general welfare, and physical property; THSC, §382.011, concerning General Powers and Duties, which authorizes the commission to control the quality of the state's air; THSC, §382.012, concerning the State Air Control Plan, which authorizes the commission to prepare and develop a general, comprehensive plan for the proper control of the state's air; THSC, §382.016, concerning Monitoring Requirements; Examination of Records, which authorizes the commission to prescribe reasonable requirements for measuring and monitoring the emissions of air contaminants; and THSC, §382.021, concerning Sampling Methods and Procedures.

The adopted amendments implement TWC, §§5.102, 5.103 and 7.002; and THSC, §§382.002, 382.011, 382.012, 382.016, 382.017, and 382.021.

§115.430. Applicability and Definitions.

(a) Applicability. The requirements in this division apply to the following flexographic and rotogravure printing processes in the Beaumont-Port Arthur, Bexar County, Dallas-Fort Worth, El Paso, and Houston-Galveston-Brazoria areas, as defined in §115.10 of this title (relating to Definitions), and in Gregg, Nueces, and Victoria Counties:

(1) packaging rotogravure printing lines;

(2) publication rotogravure printing lines;

(3) flexographic printing lines; and

(4) flexible package printing lines.

(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 operation--The cleaning of a press, press parts, or removing dried ink from areas around a press. A cleaning operation does not include cleaning electronic components of a press; cleaning in pre-press (e.g., platemaking) or post-press (e.g., binding) operations; the use of janitorial supplies (e.g., detergents or floor cleaners) to clean areas around a press; and parts washers or cold cleaners.

(2) Daily weighted average--The total weight of volatile organic compounds (VOC) emissions from all materials subject to the same VOC content limit in §115.432 of this title (relating to Control Requirements) divided by the total volume or weight of those materials (minus water and exempt solvent), where applicable, or divided by the total volume or weight of solids applied to each printing line per day.

(3) Flexible package printing--Flexographic or rotogravure printing on any package or part of a package the shape of which can be readily changed including, but not limited to, bags, pouches, liners, and wraps using paper, plastic, film, aluminum foil, metallized or coated paper or film, or any combination of these materials.

(4) Flexographic printing--A method of printing in which the image areas are raised above the non-image areas, and the image carrier is made of an elastomeric material.

(5) Packaging rotogravure printing--Any rotogravure printing on paper, paper board, metal foil, plastic film, or any other substrate that is, in subsequent operations, formed into packaging products or labels.

(6) Publication rotogravure printing--Any rotogravure printing on paper that is subsequently formed into books, magazines, catalogues, brochures, directories, newspaper supplements, or other types of printed materials.

(7) Rotogravure printing--The application of words, designs, or pictures to any substrate by means of a roll printing technique that involves a recessed image area. The recessed area is loaded with ink and pressed directly to the substrate for image transfer.

§115.431. Exemptions.

(a) In the Beaumont-Port Arthur, Bexar County, 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) In the Beaumont-Port Arthur, Dallas-Fort Worth, and El Paso areas, all rotogravure and flexographic printing lines on a property that, when uncontrolled, have a maximum potential to emit a combined weight of volatile organic compounds (VOC) less than

50 tons per year (based on historical ink and VOC solvent usage, and at maximum production capacity) are exempt from the requirements in §115.432(a) of this title (relating to Control Requirements).

(2) In the Dallas-Fort Worth and Houston-Galveston-Brazoria areas, all rotogravure and flexographic printing lines on a property that, when uncontrolled, have a maximum potential to emit a combined weight of VOC less than 25 tons per year (based on historical ink and VOC solvent usage, and at maximum production capacity) are exempt from the requirements in §115.432(a) of this title.

(3) Beginning March 1, 2013, in the Dallas-Fort Worth and Houston-Galveston-Brazoria areas, and beginning January 1, 2025 in the Bexar County area, all flexible package printing lines located on a property that have a combined weight of total actual VOC emissions less than 3.0 tons per year from all coatings, as defined in §101.1 of this title (relating to Definitions), and all associated cleaning operations are exempt from the requirements in §115.432(c) and (d) of this title.

(4) Beginning March 1, 2013, in the Dallas-Fort Worth and Houston-Galveston-Brazoria areas, and beginning January 1, 2025 in the Bexar County area, each flexible package printing line that, when uncontrolled, has a maximum potential to emit total VOC emissions less than 25 tons per year from all coatings is exempt from the requirements in §115.432(c) of this title.

(b) In Gregg, Nueces, and Victoria Counties, all rotogravure and flexographic printing lines on a property that, when uncontrolled, emit a combined weight of VOC less than 100 tons per year (based on historical ink and VOC solvent usage) are exempt from the requirements in §115.432(b) of this title.

§115.432. Control Requirements.

(a) In the Beaumont-Port Arthur, Bexar County, Dallas-Fort Worth, El Paso, and Houston-Galveston-Brazoria areas, as defined in §115.10 of this title (relating to Definitions), the control requirements of this subsection apply. Beginning March 1, 2013, this subsection no longer applies to flexible package printing lines in the Dallas-Fort Worth and Houston-Galveston-Brazoria areas that are required to comply with the requirements in subsection (c) of this section. In the Bexar County area, the control requirements of this subsection apply to flexographic printing lines, packaging rotogravure printing lines, and publication rotogravure printing lines, but not flexible packaging lines, which are required to comply with the requirements in subsection (c) of this section.

(1) The owner or operator shall limit the volatile organic compounds (VOC) emissions from solvent-containing ink used on each packaging rotogravure, publication rotogravure, flexible package, and flexographic printing line by using one of the following options.

(A) The owner or operator shall apply low solvent ink with a volatile fraction containing 25% by volume or less of VOC solvent and 75% by volume or more of water and exempt solvent.

(B) The owner or operator shall apply high solids solvent-borne ink containing 60% by volume or more of nonvolatile material (minus water and exempt solvent).

(C) The owner or operator shall operate a vapor control system to reduce the VOC emissions from an effective capture system by at least 90% by weight. The design and operation of the capture system for each printing line must be consistent with good engineering practice and must achieve, as demonstrated to the satisfaction of the executive director, upon request, of at least the following weight percentages:

(i) 75% for a publication rotogravure process;

(ii) 65% for a packaging rotogravure process;

(iii) 60% for a flexographic printing process; or

(iv) for a flexible package printing process, the overall control efficiency in clause (ii) or (iii) of this subparagraph, depending on the type of press used.

(2) A flexographic and rotogravure printing line that becomes subject to paragraph (1) of this subsection by exceeding the exemption limits in §115.431(a) of this title (relating to Exemptions) is subject to the provisions of this subsection even if throughput or emissions later fall below exemption limits unless emissions are maintained at or below the controlled emissions level achieved while complying with paragraph (1) of this subsection and one of the following conditions is met.

(A) The project that caused the throughput or emission rate to fall below the exemption limits in §115.431(a) of this title must be authorized by a permit, permit amendment, standard permit, or permit by rule required by Chapter 116 of this title (relating to Control of Air Pollution by Permit for New Construction or Modification) or Chapter 106 of this title (relating to Permits by Rule). If a permit by rule is available for the project, the owner or operator shall continue to comply with paragraph (1) of this subsection for 30 days after the filing of documentation of compliance with that permit by rule.

(B) If authorization by permit, permit amendment, standard permit, or permit by rule is not required for the project, the owner or operator shall provide the executive director 30 days notice of the project in writing.

(3) Any capture efficiency testing of the capture system must be conducted in accordance with §115.435(a) of this title (relating to Testing Requirements).

(b) In Gregg, Nueces, and Victoria Counties, the owner or operator shall limit the VOC emissions from solvent-containing ink used on each packaging rotogravure, publication rotogravure, flexible package, and flexographic printing line by using one of the following options.

(1) The owner or operator shall apply low solvent ink with a volatile fraction containing 25% by volume or less of VOC solvent and 75% by volume or more of water and exempt solvent.

(2) The owner or operator shall apply high solids solvent-borne ink containing 60% by volume or more of nonvolatile material (minus water and exempt solvent).

(3) The owner or operator shall operate a vapor control system to reduce the VOC emissions from an effective capture system by at least 90% by weight. The design and operation of the capture system for each printing line must be consistent with good engineering practice and must achieve an overall control efficiency, as demonstrated to the satisfaction of the executive director, upon request, of at least the following weight percentages:

(A) 75% for a publication rotogravure process;

(B) 65% for a packaging rotogravure process;

(C) 60% for a flexographic printing process; or

(D) for a flexible package printing process, the overall control efficiency in subparagraph (B) or (C) of this paragraph, depending on the type of press used.

(c) Beginning March 1, 2013, in the Dallas-Fort Worth and Houston-Galveston-Brazoria areas, and beginning January 1, 2025, in the Bexar County area, the following control requirements apply to each flexible package printing line.

(1) The owner or operator shall limit the VOC emissions from coatings, as defined in §101.1 of this title (relating to Definitions), applied on each flexible package printing line by using one of the following options. These limits are based on the daily weighted average, as defined in §115.430(b) of this title (relating to Applicability and Definitions).

(A) The owner or operator shall limit the VOC emissions from the coatings to 0.80 pound of VOC per pound of solids applied. The VOC emission limit can be met through the use of low-VOC coatings or a combination of coatings and the operation of a vapor control system.

(B) The owner or operator shall limit the VOC emissions from the coatings to 0.16 pound of VOC per pound of coating applied. The VOC emission limit can be

met through the use of low-VOC coatings or a combination of coatings and the operation of a vapor control system.

(C) The owner or operator shall operate a vapor control system that achieves an overall control efficiency of at least 80% by weight.

(2) A flexographic and rotogravure printing line that becomes subject to paragraph (1) of this subsection by exceeding the exemption limits in §115.431(a) of this title is subject to paragraph (1) of this subsection even if throughput or emissions later fall below exemption limits unless emissions are maintained at or below the controlled emissions level achieved while complying with paragraph (1) of this subsection and one of the following conditions is met.

(A) The project that caused the throughput or emission rate to fall below the exemption limits in §115.431(a) of this title must be authorized by a permit, permit amendment, standard permit, or permit by rule required by Chapter 116 of this title or Chapter 106 of this title. If a permit by rule is available for the project, the owner or operator shall continue to comply with paragraph (1) of this subsection for 30 days after the filing of documentation of compliance with that permit by rule.

(B) If authorization by permit, permit amendment, standard permit, or permit by rule is not required for the project, the owner or operator shall provide the executive director 30 days notice of the project in writing.

(3) An owner or operator applying coatings in combination with a vapor control system to meet the VOC emission limits in paragraph (1)(A) or (B) of this subsection shall use the following equation to determine the minimum overall control efficiency necessary to demonstrate equivalency. Control device and capture efficiency testing must be performed in accordance with the testing requirements in §115.435(a) of this title.

Figure: 30 TAC §115.432(c)(3) (No Change)

(d) The owner or operator of a flexible package printing process shall implement the following work practices for cleaning materials:

(1) keep all cleaning solvents and used shop towels in closed containers; and

(2) convey cleaning solvents from one location to another in closed containers or pipes.

§115.435. Testing Requirements.

(a) In the Beaumont-Port Arthur, Bexar County, Dallas-Fort Worth, El Paso, and Houston-Galveston-Brazoria areas, as defined in §115.10 of this title (relating to Definitions), compliance with the control requirements in §115.432 of this title (relating to Control Requirements) must be determined by applying the following test methods, as appropriate:

(1) Methods 1 - 4 (40 Code of Federal Regulations (CFR) Part 60, Appendix A) for determining flow rates, as necessary;

(2) Method 24 (40 CFR Part 60, Appendix A) for determining the volatile organic compounds (VOC) content and density of printing inks and related coatings;

(3) Method 25 (40 CFR Part 60, Appendix A) for determining total gaseous nonmethane organic emissions as carbon;

(4) Methods 25A or 25B (40 CFR Part 60, Appendix A) for determining total gaseous organic concentrations using flame ionization or nondispersive infrared analysis;

(5) the United States Environmental Protection Agency (EPA) guidelines series document "Procedures for Certifying Quantity of Volatile Organic Compounds Emitted by Paint, Ink, and Other Coatings," EPA-450/3-84-019, as in effect December 1984;

(6) additional performance test procedures described in 40 CFR §60.444 (as amended through October 18, 1983 (48 FR 48375));

(7) minor modifications to these methods and procedures approved by the executive director; and

(8) for the capture efficiency, the applicable procedures outlined in 40 CFR §52.741, Subpart O, Appendix B (as amended through October 21, 1996 (61 FR 54559)). These procedures are: Procedure T - Criteria for and Verification of a Permanent or Temporary Total Enclosure; Procedure L - VOC Input; Procedure G.2 - Captured VOC Emissions (Dilution Technique); Procedure F.1 - Fugitive VOC Emissions from Temporary Enclosures; Procedure F.2 - Fugitive VOC Emissions from Building Enclosures.

(A) The following exemptions apply to capture efficiency testing requirements.

(i) If a source installs a permanent total enclosure that meets the specifications of Procedure T and that directs all VOC to a control device, then the capture efficiency is assumed to be 100%, and the source is exempt from capture efficiency testing requirements. This does not exempt the source from performance of any control device efficiency testing that may be required. In addition, a source must demonstrate all criteria for a permanent total enclosure are met during testing for control efficiency.

(ii) If a source uses a control device designed to collect and recover VOC (e.g., carbon adsorption system), an explicit measurement of capture efficiency is not necessary if the following conditions are met. The overall control of the system can be determined by directly comparing the input liquid VOC to the recovered liquid VOC. The general procedure for use in this situation is given in 40 CFR §60.433 (as amended through October 17, 2000 (65 FR 61761)) with the following additional restrictions.

(I) The source must be able to equate solvent usage with solvent recovery on a 24-hour (daily) basis, rather than a 30-day weighted average. This verification must be done within 72 hours following each 24-hour period of the 30-day period specified in 40 CFR §60.433 (as amended through October 17, 2000 (65 FR 61761)).

(II) The solvent recovery system (i.e., capture and control system) must be dedicated to a single process line (e.g., one process line venting to a carbon adsorption system); or if the solvent recovery system controls multiple process lines, the source must be able to demonstrate that the overall control (i.e., the total recovered solvent VOC divided by the sum of liquid VOC input to all process lines venting to the control system) meets or exceeds the most stringent standard applicable for any process line venting to the control system.

(B) The capture efficiency must be calculated using one of the following four protocols referenced. The owner or operator of any affected source shall use one of these protocols, unless a suitable alternative protocol is approved by the executive director and the EPA.

(i) Gas/gas method using temporary total enclosure (TTE). The EPA specifications to determine whether a temporary enclosure is considered a TTE are given in Procedure T. The following equation must be used to determine the capture efficiency for this protocol.

Figure: 30 TAC §115.435(a)(8)(B)(i) (No Change)

(ii) Liquid/gas method using TTE. The EPA specifications to determine whether a temporary enclosure is considered a TTE are given in Procedure T. The following equation must be used to determine the capture efficiency for this protocol.

Figure: 30 TAC §115.435(a)(8)(B)(ii) (No Change)

(iii) Gas/gas method using the building or room enclosure (BE) in which the affected source is located and in which the mass of VOC captured and delivered to a control device and the mass of fugitive VOC that escapes from building enclosure are measured while operating only the affected facility. All fans and blowers in the BE must be operating as

they would under normal production. The following equation must be used to determine the capture efficiency for this protocol.

Figure: 30 TAC §115.435(a)(8)(B)(iii) (No Change)

(iv) Liquid/gas method using a BE in which the mass of liquid VOC input to process and the mass of fugitive VOC that escapes from BE are measured while operating only the affected facility. All fans and blowers in the BE must be operated as they would under normal production. The following equation must be used to determine the capture efficiency for this protocol.

Figure: 30 TAC §115.435(a)(8)(B)(iv) (No Change)

(C) The operating parameters selected for monitoring of the capture system for compliance with the requirements in §115.436(a) of this title (relating to Monitoring and Recordkeeping Requirements) must be monitored and recorded during the initial capture efficiency testing and thereafter during facility operation. The executive director may require a new capture efficiency test if the operating parameter values change significantly from those recorded during the initial capture efficiency test.

(b) In Gregg, Nueces, and Victoria Counties, compliance with the requirements in this division must be determined by applying the following test methods, as appropriate:

(1) Methods 1 - 4 (40 CFR Part 60, Appendix A) for determining flow rates, as necessary;

(2) Method 24 (40 CFR Part 60, Appendix A) for determining the VOC content and density of printing inks and related coatings;

(3) Method 25 (40 CFR Part 60, Appendix A) for determining total gaseous nonmethane organic emissions as carbon;

(4) Methods 25A or 25B (40 CFR Part 60, Appendix A) for determining total gaseous organic concentrations using flame ionization or nondispersive infrared analysis;

(5) the EPA guidelines series document "Procedures for Certifying Quantity of Volatile Organic Compounds Emitted by Paint, Ink, and Other Coatings," EPA-450/3-84-019, as in effect December 1984;

(6) additional performance test procedures described in 40 CFR §60.444 (as amended through October 18, 1983 (48 FR 48375)); or

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

(c) Methods other than those specified in subsections (a)(1) - (6) and (b)(1) - (6) of this section may be used if approved by the executive director and validated using Method 301 (40 CFR Part 63, Appendix A). For the purposes of this subsection, substitute "executive director" each place that Method 301 references "administrator."

§115.436. Monitoring and Recordkeeping Requirements.

(a) In the Beaumont-Port Arthur, Bexar County, Dallas-Fort Worth, El Paso, and Houston-Galveston-Brazoria areas, as defined in §115.10 of this title (relating to Definitions), the owner or operator of a rotogravure or flexographic printing line subject to this division shall:

(1) maintain records of the volatile organic compounds (VOC) content of all inks as applied to the substrate. Additionally, records of the quantity of each ink and solvent used must be maintained. The composition of inks may be determined by the methods referenced in §115.435(a) of this title (relating to Testing Requirements) or by examining the manufacturer's formulation data and the amount of dilution solvent added to adjust the viscosity of inks prior to application to the substrate;

(2) maintain daily records of the quantity of each ink and solvent used at a facility subject to the requirements of an alternate means of control approved by the executive director in accordance with §115.433 of this title (relating to Alternate Control Requirements)

that allows the application of inks exceeding the applicable control limits. Such records must be sufficient to demonstrate compliance with the applicable emission limitation on a daily weighted average;

(3) install and maintain monitors to continuously measure and record operational parameters of any control device installed to meet applicable control requirements. Such records must be sufficient to demonstrate proper functioning of those devices to design specifications, including:

(A) the exhaust gas temperature of direct-flame incinerators or gas temperature immediately upstream and downstream of any catalyst bed;

(B) the total amount of VOC recovered by a carbon adsorption or other solvent recovery system during a calendar month;

(C) the exhaust gas VOC concentration of any carbon adsorption system, as defined in §115.10 of this title, to determine if breakthrough has occurred; and

(D) the dates and reasons for any maintenance and repair of the required control devices and the estimated quantity and duration of VOC emissions during such activities;

(4) maintain the results of any testing conducted at an affected facility in accordance with the provisions specified in §115.435(a) of this title;

(5) maintain all records at the affected facility for at least two years and make such records available upon request to authorized representatives of the executive director, the United States Environmental Protection Agency (EPA), or any local air pollution agency with jurisdiction; and

(6) maintain on file the capture efficiency protocol submitted under §115.435(a)(8) of this title. The owner or operator shall submit all results of the test methods and capture efficiency protocols to the executive director within 60 days of the actual test date. The source owner or operator shall maintain records of the capture efficiency operating parameter values on-site for a minimum of one year. If any changes are made to capture or control equipment, the owner or operator is required to notify the executive director in writing within 30 days of these changes, and a new capture efficiency or control device destruction or removal efficiency test may be required.

(b) In Gregg, Nueces, and Victoria Counties, the owner or operator of any rotogravure or flexographic printing line shall:

(1) maintain records of the VOC content of all inks as applied to the substrate. Additionally, records of the quantity of each ink and solvent used must be maintained. The

composition of inks may be determined by the methods referenced in §115.435(b) of this title or by examining the manufacturer's formulation data and the amount of dilution solvent added to adjust the viscosity of inks prior to application to the substrate;

(2) maintain daily records of the quantity of each ink and solvent used at a facility subject to the requirements of an alternate means of control approved by the executive director in accordance with §115.433 of this title that allows the application of inks exceeding the applicable control limits. Such records must be sufficient to demonstrate compliance with the applicable emission limitation on a daily weighted average;

(3) install and maintain monitors to continuously measure and record operational parameters of any control device installed to meet applicable control requirements. Such records must be sufficient to demonstrate proper functioning of those devices to design specifications, including:

(A) the exhaust gas temperature of direct-flame incinerators or the gas temperature immediately upstream and downstream of any catalyst bed;

(B) the total amount of VOC recovered by a carbon adsorption or other solvent recovery system during a calendar month;

(C) in Victoria County, the exhaust gas VOC concentration of any carbon adsorption system, as defined in §115.10 of this title, to determine if breakthrough has occurred; and

(D) the dates and reasons for any maintenance and repair of the required control devices and the estimated quantity and duration of VOC emissions during such activities;

(4) maintain the results of any testing conducted at an affected facility in accordance with the provisions specified in §115.435(b) of this title; and

(5) maintain all records at the affected facility for at least two years and make such records available upon request to authorized representatives of the executive director, the EPA, or any local air pollution agency with jurisdiction.

(c) Beginning March 1, 2013, in the Dallas-Fort Worth and Houston-Galveston-Brazoria areas, and beginning January 1, 2025, in the Bexar County area, the owner or operator of a flexible package printing line subject to this division shall comply with the following monitoring and recordkeeping requirements.

(1) The owner or operator shall maintain records of the VOC content of all coatings, as defined in §101.1 of this title (relating to Definitions), as applied to the substrate.

The composition of coatings may be determined by the methods referenced in §115.435(a) of this title or by examining the manufacturer's formulation data and the amount of dilution solvent added to adjust the viscosity of coatings prior to application to the substrate. Additionally, records of the quantity of each coating used must be maintained.

(2) For flexible package printing lines subject to the control requirements in §115.432(c) of this title (relating to Control Requirements), the owner or operator shall maintain records of the quantity and type of each coating and solvent consumed if any of the coatings, as applied, exceed the applicable VOC content or emission limits in §115.432(c) of this title. Records must be sufficient to demonstrate compliance with the applicable VOC content or emission limit on a daily weighted average.

(3) For flexible package printing lines subject to the control requirements in §115.432(a) of this title, the owner or operator shall maintain daily records of the quantity of each ink and solvent used at a facility subject to the requirements of an alternate means of control approved by the executive director in accordance with §115.433 of this title that allows the application of inks exceeding the applicable control limits. Such records must be sufficient to demonstrate compliance with the applicable emission limitation in §115.432(a) of this title on a daily weighted average.

(4) The owner or operator shall install and maintain monitors to continuously measure and record operational parameters of any control device installed to meet applicable

control requirements in §115.432(a) or (c) of this title. Such records must be sufficient to demonstrate proper functioning of those devices to design specifications, including:

(A) the exhaust gas temperature of direct-flame incinerators or gas temperature immediately upstream and downstream of any catalyst bed;

(B) the total amount of VOC recovered by a carbon adsorption or other solvent recovery system during a calendar month;

(C) the exhaust gas VOC concentration of any carbon adsorption system, as defined in §115.10 of this title, to determine if breakthrough has occurred; and

(D) the dates and reasons for any maintenance and repair of the required control devices and the estimated quantity and duration of VOC emissions during such activities.

(5) The owner or operator shall maintain the results of any testing conducted at an affected facility in accordance with the provisions specified in §115.435(a) of this title.

(6) The owner or operator shall maintain all records at the affected facility for at least two years and make such records available upon request to authorized representatives of the executive director, the EPA, or any local air pollution agency with jurisdiction.

(7) The owner or operator shall maintain on file the capture efficiency protocol submitted under §115.435(a)(8) of this title. The owner or operator shall submit all results of the test methods and capture efficiency protocols to the executive director within 60 days of the actual test date. The source owner or operator shall maintain records of the capture efficiency operating parameter values on-site for a minimum of one year. If any changes are made to capture or control equipment, the owner or operator is required to notify the executive director in writing within 30 days of these changes, and a new capture efficiency or control device destruction or removal efficiency test may be required.

§115.439. Counties and Compliance Schedules.

(a) Except as specified in subsection (c) and (d) of this section, for the owner or operator of a flexographic or rotogravure printing line subject to this division in Brazoria, Chambers, Collin, Dallas, Denton, El Paso, Fort Bend, Galveston, Gregg, Hardin, Harris, Jefferson, Liberty, Montgomery, Nueces, Orange, Tarrant, Victoria, and Waller Counties the compliance date has already passed and the owner or operator shall continue to comply with applicable sections of this division.

(b) Except as specified in subsection (c) and (d) of this section, in Ellis, Johnson, Kaufman, Parker, and Rockwall Counties the compliance date has already passed and the owner

or operator of a flexographic or rotogravure printing line subject to this division shall continue to comply with this division.

(c) The owner or operator of a flexible package printing line in the Dallas-Fort Worth and Houston-Galveston-Brazoria areas, as defined in §115.10 of this title (relating to Definitions), shall comply with the requirements in §115.432(c) and (d) and §115.436(c) of this title (relating to Control Requirements; and Monitoring and Recordkeeping Requirements) no later than March 1, 2013. Testing required by §115.435 of this title (relating to Testing Requirements) to demonstrate compliance with the requirements of §115.432(c) of this title must be completed, and the results submitted to the executive director no later than March 1, 2013.

(d) The owner or operator of a flexible package printing line in the Bexar County, Dallas-Fort Worth, and Houston-Galveston-Brazoria areas that becomes subject to the requirements of this division on or after the applicable compliance date in this section shall comply with the requirements in this division as soon as practicable, but no later than 60 days after becoming subject.

(e) The owner or operator of a flexographic or rotogravure printing process in the Bexar County area subject to the requirements of this division shall comply with the requirements of this division no later than January 1, 2025.

SUBCHAPTER E: SOLVENT-USING PROCESSES
DIVISION 4: OFFSET LITHOGRAPHIC PRINTING
§§115.440 – 115.443, 115.445, 115.446, 115.449

Statutory Authority

The amendments are adopted under Texas Water Code (TWC), §5.102, concerning general powers; §5.103, concerning Rules; TWC, §5.105, concerning General Policy, which authorize the commission to adopt rules necessary to carry out its powers and duties under the TWC; TWC, §7.002, concerning Enforcement Authority, which authorizes the commission to enforce the provisions of the Water Code and the Health and Safety Code within the commission's jurisdiction; and under Texas Health and Safety Code (THSC), §382.017, concerning Rules, which authorizes the commission to adopt rules consistent with the policy and purpose of the Texas Clean Air Act.

The amendments are also adopted under THSC, §382.002, concerning Policy and Purpose, which establishes the commission's purpose to safeguard the state's air resources, consistent with the protection of public health, general welfare, and physical property; THSC, §382.011, concerning General Powers and Duties, which authorizes the commission to control the quality of the state's air; THSC, §382.012, concerning the State Air Control Plan, which authorizes the commission to prepare and develop a general, comprehensive plan for the proper control of the state's air; THSC, §382.016, concerning Monitoring Requirements; Examination of Records, which authorizes the commission to prescribe reasonable requirements for measuring and monitoring the emissions of air contaminants; and THSC, §382.021, concerning Sampling Methods and Procedures.

The adopted amendments implement TWC, §§5.102, 5.103 and 7.002; and THSC, §§382.002, 382.011, 382.012, 382.016, 382.017, and 382.021.

§115.440. Applicability and Definitions.

(a) Applicability. The provisions in this division apply to offset lithographic printing lines located in the Bexar County, Dallas-Fort Worth, El Paso, and Houston-Galveston-Brazoria areas, as defined in §115.10 of this title (relating to Definitions).

(b) Definitions. Unless specifically defined in the Texas Clean Air Act (Texas Health and Safety Code, Chapter 382) or in §§3.2, 101.1, and 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 unless the context clearly indicates otherwise.

(1) Alcohol--Any of the hydroxyl-containing organic compounds with a molecular weight equal to or less than 74.12, which includes methanol, ethanol, propanol, and butanol.

(2) Alcohol substitutes--Nonalcohol additives that contain volatile organic compounds and are used in the fountain solution to reduce the surface tension of water or prevent ink piling.

(3) Batch--A supply of fountain solution or cleaning solution that is prepared and used without alteration until completely used or removed from the printing process.

(4) Cleaning solution--Liquids used to remove ink and debris from the operating surfaces of the printing press and its parts.

(5) Fountain solution--A mixture of water, nonvolatile printing chemicals, and a liquid additive that reduces the surface tension of the water so that it spreads easily across the printing plate surface. The fountain solution wets the non-image areas so that the ink is maintained within the image areas.

(6) Heatset--Any operation where heat is required to evaporate ink oil from the printing ink.

(7) Lithography--A plane-o-graphic printing process where the image and non-image areas are on the same plane of the printing plate. The image and non-image areas are chemically differentiated so the image area is oil receptive and the non-image area is water receptive.

(8) Major printing source--All offset lithographic printing lines located on a property with combined uncontrolled emissions of volatile organic compounds (VOC) greater than or equal to:

(A) 50 tons of VOC per calendar year before and 25 tons of VOC per calendar year on and after November 7, 2025 in the Dallas-Fort Worth area as defined in §115.10 of this title (relating to Definitions), except Wise County;

(B) 25 tons of VOC per calendar year in the Houston-Galveston-Brazoria area, as defined in §115.10 of this title;

(C) 100 tons of VOC per calendar year before and 25 tons of VOC per calendar year on and after November 7, 2025 in Wise County; or

(D) 100 tons of VOC per calendar year on and after January 1, 2025 in the Bexar County area.

(9) Minor printing source--All offset lithographic printing lines located on a property with combined uncontrolled emissions of volatile organic compounds (VOC) less than:

(A) 50 tons of VOC per calendar year before and 25 tons of VOC per calendar year on and after November 7, 2025 in the Dallas-Fort Worth area, defined in §115.10 of this title (relating to Definitions), except Wise County;

(B) 25 tons of VOC per calendar year in the Houston-Galveston-Brazoria area, as defined in §115.10 of this title;

(C) 100 tons of VOC per calendar year before and 25 tons of VOC per calendar year on and after November 7, 2025 in Wise County; or

(D) 100 tons of VOC per calendar year on and after January 1, 2025 in the Bexar County area.

(10) Non-heatset--Any operation where the printing inks are set without the use of heat. For the purposes of this division, ultraviolet-cured and electron beam-cured inks are considered non-heatset.

(11) Offset lithography--A printing process that transfers the ink film from the lithographic plate to an intermediary surface (blanket) that, in turn, transfers the ink film to the substrate.

(12) Volatile organic compound (VOC) composite partial pressure--The sum of the partial pressures of the compounds that meet the definition of VOC in §101.1 of this title (relating to Definitions). The VOC composite partial pressure is calculated as follows.

Figure: 30 TAC §115.440(b)(12) (No Change)

§115.441. Exemptions.

(a) In the Bexar County, Dallas-Fort Worth, and Houston-Galveston-Brazoria areas, as defined in §115.10 of this title (relating to Definitions), the owner or operator of all offset lithographic printing lines located on a property with combined emissions of volatile organic compounds less than 3.0 tons per calendar year when uncontrolled, is exempt from the requirements in this division except as specified in §115.446 of this title (relating to Monitoring and Recordkeeping Requirements).

(b) In the Bexar County, Dallas-Fort Worth and Houston-Galveston-Brazoria areas, the owner or operator of a minor printing source, as defined in §115.440 of this title (relating to Applicability and Definitions) and in Wise County, the owner or operator of a minor printing source or a major printing source, as defined in §115.440 of this title:

(1) may exempt up to 110 gallons of cleaning solution per calendar year from the content limits in §115.442(c)(1) of this title (relating to Control Requirements);

(2) may exempt any press with a total fountain solution reservoir less than 1.0 gallons from the fountain solution content limits in §115.442(c)(2) - (4) of this title; and

(3) may exempt any sheet-fed press with a maximum sheet size of 11.0 inches by 17.0 inches or less from the fountain solution content limits in §115.442(c)(2) of this title.

§115.442. Control Requirements.

(a) In the El Paso area as defined in §115.10 of this title (relating to Definitions), the following control requirements apply.

(1) The owner or operator of an offset lithographic printing line that uses solvent-containing ink shall limit emissions of volatile organic compounds (VOC) as follows.

(A) The owner or operator of a heatset web offset lithographic printing press that uses alcohol in the fountain solution shall maintain total fountain solution alcohol to 5.0% or less (by volume). Alternatively, a standard of 10.0% or less (by volume) alcohol may be used if the fountain solution containing alcohol is refrigerated to less than 60 degrees Fahrenheit (15.5 degrees Celsius).

(B) The owner or operator of a non-heatset web offset lithographic printing press that prints newspaper and that uses alcohol in the fountain solution shall eliminate the use of alcohol in the fountain solution. Nonalcohol additives or alcohol substitutes can be used to accomplish the total elimination of alcohol use.

(C) The owner or operator of a non-heatset web offset lithographic printing press that does not print newspaper and that uses alcohol in the fountain solution shall maintain the use of alcohol at 5.0% or less (by volume). Alternatively, a standard of 10.0% or less (by volume) alcohol may be used if the fountain solution is refrigerated to less than 60 degrees Fahrenheit (15.5 degrees Celsius).

(D) The owner or operator of a sheet-fed offset lithographic printing press shall maintain the use of alcohol at 10.0% or less (by volume). Alternatively, a standard of 12.0% or less (by volume) alcohol may be used if the fountain solution is refrigerated to less than 60 degrees Fahrenheit (15.5 degrees Celsius).

(E) The owner or operator of any type of offset lithographic printing press shall be considered in compliance with the fountain solution limitations of this paragraph if the only VOC in the fountain solution are nonalcohol additives or alcohol substitutes, so that the concentration of VOC in the fountain solution is 3.0% or less (by weight). The fountain solution must not contain any isopropyl alcohol.

(F) The owner or operator of an offset lithographic printing press shall reduce VOC emissions from cleaning solutions by one of the following methods:

(i) using cleaning solutions with a VOC content of 50% or less (by volume, as used);

(ii) using cleaning solutions with a VOC content of 70% or less (by volume, as used) and incorporating a towel handling program that ensures that all waste ink, solvents, and cleanup rags are stored in closed containers until removed from the site by a licensed disposal/cleaning service; or

(iii) using cleaning solutions with a VOC composite partial vapor pressure less than or equal to 10.0 millimeters of mercury at 68 degrees Fahrenheit (20 degrees Celsius).

(2) The owner or operator of a heatset offset lithographic printing press shall operate a control device to reduce VOC emissions from the press dryer exhaust vent by 90% by weight or maintain a maximum dryer exhaust outlet VOC concentration of 20 parts per million by volume (ppmv), whichever is less stringent when the press is in operation. The dryer air pressure must be lower than the pressroom air pressure at all times when the press is operating to ensure the dryer has a capture efficiency of 100%.

(b) In the Bexar County, Dallas-Fort Worth and Houston-Galveston-Brazoria areas, the following control requirements apply to the owner or operator of a major printing source, as defined in §115.440 of this title (relating to Applicability and Definitions), in accordance with the appropriate compliance date specified in §115.449 of this title (relating to Compliance Schedules).

(1) The owner or operator of an offset lithographic printing press shall limit the VOC content of the cleaning solution, as applied, to:

(A) 50.0% VOC or less by volume;

(B) 70.0% VOC or less by volume if the facility has a towel handling program in place that ensures all waste ink, solvents, and cleanup rags are stored in closed containers until removed from the site by a licensed disposal or cleaning service; or

(C) a VOC composite partial vapor pressure less than or equal to 10.0 millimeters of mercury at 68 degrees Fahrenheit (20 degrees Celsius) if the facility has a towel handling program in place that ensures all waste ink, solvents, and cleanup rags are stored in closed containers until removed from the site by a licensed disposal or cleaning service.

(2) The owner or operator of a sheet-fed offset lithographic printing press shall limit the VOC content of the fountain solution, as applied, to:

(A) 5.0% alcohol or less by weight;

(B) 8.5% alcohol or less by weight if the fountain solution is refrigerated below 60 degrees Fahrenheit (15.5 degrees Celsius); or

(C) 3.0% alcohol substitutes or less by weight and no alcohol in the fountain solution.

(3) The owner or operator of a non-heatset web offset lithographic printing press shall limit the VOC content of the fountain solution, as applied, to 3.0% alcohol substitutes or less by weight and no alcohol in the fountain solution.

(4) The owner or operator of a heatset web offset lithographic printing press shall limit the VOC content of the fountain solution, as applied, to:

(A) 1.6% alcohol or less by weight;

(B) 3.0% alcohol or less by weight if the fountain solution is refrigerated below 60 degrees Fahrenheit (15.5 degrees Celsius); or

(C) 3.0% alcohol substitutes or less by weight and no alcohol in the fountain solution.

(5) The owner or operator of a heatset offset lithographic printing press shall operate a control device to reduce VOC emissions from the press dryer exhaust vent by at least 90% by weight or maintain a maximum dryer exhaust outlet VOC concentration of 20 ppmv or less, whichever is less stringent when the press is in operation. The dryer air pressure must be lower than the pressroom air pressure at all times when the press is operating to ensure the dryer has a capture efficiency of 100%.

(c) In the Bexar County, Dallas-Fort Worth and Houston-Galveston-Brazoria areas, the following control requirements apply to the owner or operator of a minor printing source, as defined in §115.440 of this title, in accordance with the appropriate compliance date specified in §115.449.

(1) The owner or operator of an offset lithographic printing press shall limit the VOC content of the cleaning solution, as applied, to:

(A) 50.0% VOC or less by volume;

(B) 70.0% VOC or less by volume if the facility has a towel handling program in place that ensures all waste ink, solvents, and cleanup rags are stored in closed containers until removed from the site by a licensed disposal or cleaning service; or

(C) a VOC composite partial vapor pressure less than or equal to 10.0 millimeters of mercury at 68 degrees Fahrenheit (20 degrees Celsius) if the facility has a towel handling program in place that ensures all waste ink, solvents, and cleanup rags are stored in closed containers until removed from the site by a licensed disposal or cleaning service.

(2) The owner or operator of a sheet-fed offset lithographic printing press shall limit the VOC content of the fountain solution, as applied, to:

(A) 5.0% alcohol or less by weight;

(B) 8.5% alcohol or less by weight if the fountain solution is refrigerated below 60 degrees Fahrenheit (15.5 degrees Celsius); or

(C) 5.0% alcohol substitutes or less by weight and no alcohol in the fountain solution.

(3) The owner or operator of a non-heatset web offset lithographic printing press shall limit the VOC content of the fountain solution, as applied, to 5.0% alcohol substitutes or less by weight and no alcohol in the fountain solution.

(4) The owner or operator of a heatset web offset lithographic printing press shall limit the VOC content of the fountain solution, as applied, to:

(A) 1.6% alcohol or less by weight;

(B) 3.0% alcohol or less by weight if the fountain solution is refrigerated below 60 degrees Fahrenheit (15.5 degrees Celsius); or

(C) 5.0% alcohol substitutes or less by weight and no alcohol in the fountain solution.

§115.443. Alternate Control Requirements.

In the Bexar County, Dallas-Fort Worth, El Paso, and Houston-Galveston-Brazoria areas, as defined in §115.10 of this title (relating to Definitions), alternate methods of demonstrating and documenting continuous compliance with the applicable control requirements or exemption criteria in this division (relating to Offset Lithographic Printing) 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.

§115.445. Approved Test Methods.

In the Bexar County, Dallas-Fort Worth, El Paso, and Houston-Galveston-Brazoria areas, as defined in §115.10 of this title (relating to Definitions) compliance with the requirements in this division (relating to Offset Lithographic Printing) must be determined by applying the following test methods, as appropriate:

(1) Test Methods 1-4 (40 Code of Federal Regulations (CFR) Part 60, Appendix A) for determining flow rates;

(2) Test Method 24 (40 CFR Part 60, Appendix A) for determining the volatile organic compound content and density of printing inks and related coatings;

(3) Test Method 25 (40 CFR Part 60, Appendix A) for determining total gaseous nonmethane organic emissions as carbon with the modification that the probe and filter should be heated to the gas stream temperature, typically closer to 350 degrees Fahrenheit (177 degrees Celsius) to prevent condensation;

(4) Test Methods 25A or 25B (40 CFR Part 60, Appendix A) for determining total gaseous organic concentrations using flame ionization or nondispersive infrared analysis;

(5) the United States Environmental Protection Agency guidelines series document "Procedures for Certifying Quantity of Volatile Organic Compounds Emitted by Paint, Ink, and Other Coatings" (EPA-450/3-84-019, effective December 1984);

(6) additional performance test procedures described in 40 CFR §60.444 (effective October 18, 1983);

(7) minor modifications to these test methods if approved by the executive director; and

(8) test methods other than those specified in this section if validated by 40 CFR Part 63, Appendix A, Test Method 301 (effective December 29, 1992) and approved by the executive director.

§115.446. Monitoring and Recordkeeping Requirements.

(a) In the El Paso area as defined in §115.10 of this title (relating to Definitions), the following monitoring and recordkeeping requirements apply.

(1) The owner or operator of a heatset offset lithographic printing press shall install, calibrate, maintain, and operate a temperature monitoring device, according to the manufacturer's instructions, at the outlet of the control device. The temperature monitoring device must be equipped with a continuous recorder and must have an accuracy of ±0.5 degrees Fahrenheit, or alternatively ±1.0% of the temperature being monitored.

(2) The owner or operator of any offset lithographic printing press shall install and maintain monitors to continuously measure and record operational parameters of any emission control device installed to meet applicable control requirements on a regular basis. Such records must be sufficient to demonstrate proper functioning of those devices to design specifications, including:

(A) the exhaust gas temperature of direct-flame incinerators or the gas temperature immediately upstream and downstream of any catalyst bed;

(B) the total amount of volatile organic compounds (VOC) recovered by a carbon adsorption or other solvent recovery system during a calendar month; and

(C) the exhaust gas VOC concentration of any carbon adsorption system, as defined in §115.10 of this title, to determine if breakthrough has occurred.

(3) The dryer pressure must be maintained lower than the press room air pressure such that air flows into the dryer at all times when the offset lithographic printing press is operating. A 100% emissions capture efficiency for the dryer must be demonstrated using an air flow direction measuring device.

(4) The owner or operator of any offset lithographic printing press shall monitor fountain solution alcohol concentration with a refractometer or a hydrometer that is corrected for temperature at least once per eight-hour shift or once per batch, whichever is longer. The refractometer or hydrometer must have a visual, analog, or digital readout with an accuracy of 0.5% VOC. A standard solution must be used to calibrate the refractometer for the type of alcohol used in the fountain. The VOC content of the fountain solution may be monitored with a conductivity meter if it is determined that a refractometer or hydrometer cannot be used for the type of VOC in the fountain solution. The conductivity meter reading for the fountain solution must be referenced to the conductivity of the incoming water.

(5) The owner or operator of any offset lithographic printing press using refrigeration equipment on the fountain solution in order to comply with §115.442(a)(1)(A), (C), or (D) of this title (relating to Control Requirements) shall monitor the temperature of the fountain solution reservoir at least once per hour. Alternatively, the owner or operator of any offset lithographic printing press using refrigeration equipment on the fountain solution shall install, maintain, and continuously operate a temperature monitor of the fountain solution

reservoir. The temperature monitor must be attached to a continuous recording device such as a strip chart, recorder, or computer.

(6) For any offset lithographic printing press with automatic cleaning equipment, flow meters are required to monitor water and cleaning solution flow rates. The flow meters must be calibrated so that the VOC content of the mixed solution complies with the requirements of §115.442(a)(1) of this title.

(7) The owner or operator of any offset lithographic printing press shall maintain the results of any testing conducted at an affected facility in accordance with the provisions specified in §115.445 of this title (relating to Approved Test Methods).

(8) The owner or operator of any offset lithographic printing press shall maintain all records at the affected facility for at least two years and make such records available upon request to authorized representatives of the executive director, the United States Environmental Protection Agency, or any local air pollution agency with jurisdiction.

(b) In the Bexar County, Dallas-Fort Worth and Houston-Galveston-Brazoria areas, the following monitoring and recordkeeping requirements apply in accordance with the appropriate compliance date specified in §115.449 of this title (relating to Compliance Schedules).

(1) The owner or operator of an offset lithographic printing press claiming an exemption in §115.441 of this title (relating to Exemptions) shall maintain records sufficient to demonstrate continuous compliance with the applicable exemption criteria. For example, maintaining records of ink, cleaning solvent, and fountain solution usage may be sufficient to demonstrate compliance with the exemption provided in §115.441(a) of this title for sources located on a property with combined VOC emissions less than 3.0 tons per year when uncontrolled.

(2) The owner or operator of an offset lithographic printing press shall use one of the following options to demonstrate compliance with the cleaning solution content limits in §115.442(b)(1) or (c)(1) of this title.

(A) Flow meters must be used to monitor the water and cleaning solution flow rates on a press with automatic cleaning equipment. The flow meters must be installed, maintained, and operated according to the manufacturer's instructions. The flow meters must be calibrated so that the VOC concentration of the cleaning solution complies with the requirements of §115.442(b)(1) or (c)(1) of this title. Records must be sufficient to demonstrate continuous compliance with the cleaning solution content limits in §115.442(b)(1) or (c)(1) of this title.

(B) The VOC concentration of each batch of cleaning solution must be determined using analytical data derived from the material safety data sheet (MSDS) or

equivalent information from the supplier that was derived using the approved test methods in §115.445 of this title. The concentration of all VOC used to prepare the batch and, if diluted prior to use, the proportions that each of these materials is used must be recorded for each batch of cleaning solution. Records must be sufficient to demonstrate continuous compliance with the cleaning solution content limits in §115.442(b)(1) or (c)(1) of this title.

(3) The owner or operator of an offset lithographic printing press shall use one of the following options to demonstrate compliance with the fountain solution content limits in §115.442(b)(2) - (4) or (c)(2) - (4) of this title.

(A) The VOC concentration of each batch of fountain solution must be monitored using a refractometer or a hydrometer that is corrected for temperature. The refractometer or hydrometer must have a visual, analog, or digital readout with an accuracy of 0.5% VOC. A standard solution must be used to calibrate the refractometer for the type of alcohol used in the fountain solution. The VOC content of the fountain solution may be monitored with a conductivity meter if it is determined that a refractometer or hydrometer cannot be used for the type of VOC in the fountain solution. The conductivity meter reading for the fountain solution must be referenced to the conductivity of the incoming water. Records must be sufficient to demonstrate continuous compliance with the fountain solution content limits in §115.442(b)(2) - (4) or (c)(2) - (4) of this title.

(B) The VOC concentration of each batch fountain solution must be determined using analytical data from the MSDS or equivalent information from the supplier that was derived using the approved test methods in §115.445 of this title. The concentration of all alcohols or alcohol substitutes used to prepare the batch and, if diluted prior to use, the proportions that each of these materials is used must be recorded for each batch of fountain solution. Records must be sufficient to demonstrate continuous compliance with the fountain solution content limits in §115.442(b)(2) - (4) or (c)(2) - (4) of this title.

(4) The owner or operator of an offset lithographic printing press using refrigeration equipment on the fountain solution reservoir shall monitor and record the fountain solution temperature at least once per hour. Temperature monitoring devices must be installed, maintained, and operated according to the manufacturer's specifications. Records must be sufficient to demonstrate continuous compliance with the fountain solution content limits in §115.442(b)(2) and (4) or (c)(2) and (4) of this title.

(5) The owner or operator of a heatset web offset lithographic printing press shall comply with the following monitoring and recordkeeping requirements to demonstrate continuous compliance with the control requirements in §115.442(b)(5) of this title.

(A) Operational parameters of any emission control device installed to comply with the requirements in §115.442(b)(5) of this title must be continuously measured and recorded. Monitors must be installed, calibrated, maintained, and operated according to the

manufacturer's instructions. Temperature monitors must be equipped with a continuous recorder and have an accuracy of ±0.5 degrees Fahrenheit or ±1.0% of the temperature being monitored, whichever is less stringent. Measuring and recording the operational parameters of the control device at least once every 15 minutes is sufficient to demonstrate compliance with this subparagraph. Records must be sufficient to demonstrate proper functioning of the device to design specifications and must include:

(i) the exhaust gas temperature of direct-flame incinerators and/or the gas temperature immediately upstream and downstream of any catalyst bed;

(ii) the total amount of VOC recovered by a carbon adsorption system or other solvent recovery system per calendar month; and

(iii) the exhaust gas VOC concentration of any carbon adsorption system to determine if breakthrough has occurred.

(B) An air flow direction measuring device must be used to demonstrate the dryer meets the 100% capture efficiency required in §115.442(b)(5) of this title.

(6) The owner or operator of an offset lithographic printing press shall maintain the results of any tests conducted using the approved test methods in §115.445 of this title.

(7) The owner or operator of an offset lithographic printing press shall maintain all records for at least two years and make such records available upon request to authorized representatives of the executive director, the United States Environmental Protection Agency, or any local air pollution agency with jurisdiction.

§115.449. Compliance Schedules.

(a) In the El Paso area, the owner or operator of all offset lithographic printing presses must be in compliance with §§115.442, 115.443, 115.445, and 115.446 of this title (relating to Control Requirements; Alternate Control Requirements; Approved Test Methods; and Monitoring and Recordkeeping Requirements) as soon as practicable, but no later than November 15, 1996.

(b) In Collin, Dallas, Denton, and Tarrant Counties, the owner or operator of all offset lithographic printing presses on a property that, when uncontrolled, emit a combined weight of volatile organic compounds (VOC) equal to or greater than 50 tons per calendar year, must be in compliance with §§115.442(a), 115.443, 115.445, and 115.446(a) of this title as soon as practicable, but no later than December 31, 2000.

(c) In Brazoria, Chambers, Fort Bend, Galveston, Harris, Liberty, Montgomery, and Waller Counties, the owner or operator of all offset lithographic printing presses on a property that, when uncontrolled, emit a combined weight of VOC equal to or greater than 25 tons per

calendar year, must be in compliance with §§115.442(a), 115.443, 115.445, and 115.446(a) of this title as soon as practicable, but no later than December 31, 2002.

(d) In Ellis, Johnson, Kaufman, Parker, and Rockwall Counties, the owner or operator of all offset lithographic printing presses on a property that, when uncontrolled, emit a combined weight of VOC equal to or greater than 50 tons per calendar year, shall comply with §§115.442(a), 115.443, 115.445, and 115.446(a) of this title as soon as practicable, but no later than March 1, 2009.

(e) The owner or operator of a major printing source, as defined in §115.440 of this title (relating to Applicability and Definitions), in Brazoria, Chambers, Collin, Dallas, Denton, Ellis, Fort Bend, Galveston, Harris, Johnson, Kaufman, Liberty, Montgomery, Parker, Rockwall, Tarrant, and Waller Counties, as defined in §115.10 of this title (relating to Definitions), shall comply with the requirements in this division no later than March 1, 2011, except as specified in subsections (b), (c), and (d) of this section.

(f) The owner or operator of a minor printing source, as defined in §115.440 of this title, in the Brazoria, Chambers, Collin, Dallas, Denton, Ellis, Fort Bend, Galveston, Harris, Johnson, Kaufman, Liberty, Montgomery, Parker, Rockwall, Tarrant, and Waller Counties, shall comply with the requirements in this division no later than March 1, 2012.

(g) The owner or operator of a major or minor printing source, as defined in §115.440 of this title, in Wise County, shall comply with the requirements in this division as soon as practicable, but no later than January 1, 2017.

(h) The owner or operator of a major or minor printing source, as defined in §115.440 of this title, in the Bexar County area subject to the requirements of this division shall comply with the requirements of this division no later than January 1, 2025.

(i) The owner or operator of an offset lithographic printing line in Brazoria, Bexar, Chambers, Collin, Dallas, Denton, Ellis, Fort Bend, Galveston, Harris, Johnson, Kaufman, Liberty, Montgomery, Parker, Rockwall, Tarrant, Waller, and Wise Counties that becomes subject to this division on or after the date specified in subsections (e) – (h) of this section, shall comply with the requirements in this division no later than 60 days after becoming subject.

SUBCHAPTER E: SOLVENT-USING PROCESSES
DIVISION 5: CONTROL REQUIREMENTS FOR SURFACE COATING PROCESSES
§§115.450, 115.451, 115.453, 115.458, 115.459

Statutory Authority

The amendments are adopted under Texas Water Code (TWC), §5.102, concerning general powers; §5.103, concerning Rules; TWC, §5.105, concerning General Policy, which authorize the commission to adopt rules necessary to carry out its powers and duties under the TWC; TWC, §7.002, concerning Enforcement Authority, which authorizes the commission to enforce the provisions of the Water Code and the Health and Safety Code within the commission's jurisdiction; and under Texas Health and Safety Code (THSC), §382.017, concerning Rules, which authorizes the commission to adopt rules consistent with the policy and purpose of the Texas Clean Air Act.

The amendments are also adopted under THSC, §382.002, concerning Policy and Purpose, which establishes the commission's purpose to safeguard the state's air resources, consistent with the protection of public health, general welfare, and physical property; THSC, §382.011, concerning General Powers and Duties, which authorizes the commission to control the quality of the state's air; THSC, §382.012, concerning the State Air Control Plan, which authorizes the commission to prepare and develop a general, comprehensive plan for the proper control of the state's air; THSC, §382.016, concerning Monitoring Requirements; Examination of Records, which authorizes the commission to prescribe reasonable requirements for measuring and monitoring the emissions of air contaminants; and THSC, §382.021, concerning Sampling Methods and Procedures.

The adopted amendments implement TWC, §§5.102, 5.103 and 7.002; and THSC, §§382.002, 382.011, 382.012, 382.016, 382.017, and 382.021.

§115.450. Applicability and Definitions.

(a) Applicability. In the Bexar County, Dallas-Fort Worth and Houston-Galveston-Brazoria areas, as defined in §115.10 of this title (relating to Definitions), the requirements in this division apply to the following surface coating processes, except as specified in paragraphs (6) through (8) of this subsection:

(1) large appliance surface coating;

(2) metal furniture surface coating;

(3) miscellaneous metal parts and products surface coating, miscellaneous plastic parts and products surface coating, pleasure craft surface coating, and automotive/transportation and business machine plastic parts surface coating at the original equipment manufacturer and off-site job shops that coat new parts and products or that re-coat used parts and products;

(4) motor vehicle materials applied to miscellaneous metal and plastic parts specified in paragraph (3) of this subsection, at the original equipment manufacturer and off-site job shops that coat new metal and plastic parts or that re-coat used parts and products;

(5) paper, film, and foil surface coating lines with the potential to emit from all coatings greater than or equal to 25 tons per year of volatile organic compounds (VOC) when uncontrolled;

(6) in the Bexar County and Dallas-Fort Worth areas, automobile and light-duty truck assembly surface coating processes conducted by the original equipment manufacturer and operators that conduct automobile and light-duty truck surface coating processes under contract with the original equipment manufacturer;

(7) as of the compliance date specified in §115.459(e) or (g) of this title (relating to Compliance Schedules), industrial maintenance coatings in the Dallas-Fort Worth area and/or the Houston-Galveston-Brazoria area if the commission has published notice for the applicable area in the *Texas Register*, as provided in §115.459(e) or (g) of this title, to require compliance with the applicable contingency measure control requirements of §115.453(f) or (g) of this title (relating to Control Requirements); and

(8) as of the compliance date specified in §115.459(f) or (h) of this title, traffic marking coatings in the Dallas-Fort Worth area and/or the Houston-Galveston-Brazoria area if

the commission has published notice for the applicable area in the *Texas Register*, as provided in §115.459(f) or (h) of this title, to require compliance with the applicable contingency measure control requirements of §115.453(h) or (i) of this title.

(b) General 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) Aerosol coating (spray paint)--A hand-held, pressurized, non-refillable container that expels an adhesive or a coating in a finely divided spray when a valve on the container is depressed.

(2) Air-dried coating--A coating that is cured at a temperature below 194 degrees Fahrenheit (90 degrees Celsius). These coatings may also be referred to as low-bake coatings.

(3) Baked Coating--A coating that is cured at a temperature at or above 194 degrees Fahrenheit (90 degrees Celsius). These coatings may also be referred to as high-bake coatings.

(4) Coating application system--Devices or equipment designed for the purpose of applying a coating material to a surface. The devices may include, but are not be limited to, brushes, sprayers, flow coaters, dip tanks, rollers, knife coaters, and extrusion coaters.

(5) Coating line--An operation consisting of a series of one or more coating application systems and associated flash-off area(s), drying area(s), and oven(s) wherein a surface coating is applied, dried, or cured. The coating line ends at the point the coating is dried or cured, or prior to any subsequent application of a different coating.

(6) Coating solids (or solids)--The part of a coating that remains on the substrate after the coating is dried or cured.

(7) Daily weighted average--The total weight of volatile organic compounds (VOC) emissions from all coatings subject to the same VOC limit in §115.453 of this title (relating to Control Requirements), divided by the total volume or weight of those coatings (minus water and exempt solvent), where applicable, or divided by the total volume or weight of solids, delivered to the application system on each coating line each day. Coatings subject to different VOC content limits in §115.453 of this title may not be combined for purposes of calculating the daily weighted average.

(8) Multi-component coating--A coating that requires the addition of a separate reactive resin, commonly known as a catalyst or hardener, before application to form an acceptable dry film. These coatings may also be referred to as two-component coatings.

(9) Normally closed container--A container that is closed unless an operator is actively engaged in activities such as adding or removing material.

(10) One-component coating--A coating that is ready for application as it comes out of its container to form an acceptable dry film. A thinner, necessary to reduce the viscosity, is not considered a component.

(11) Pounds of volatile organic compounds (VOC) per gallon of coating (minus water and exempt solvent)--The basis for content limits for surface coating processes that can be calculated by the following equation:

Figure: 30 TAC §115.450(b)(11) (No Change)

(12) Pounds of volatile organic compounds (VOC) per gallon of solids--The basis for emission limits for surface coating processes that can be calculated by the following equation:

Figure: 30 TAC §115.450(b)(12) (No Change)

(13) Spray gun--A device that atomizes a coating or other material and projects the particulates or other material onto a substrate.

14) Surface coating processes--Operations that use a coating application system.

(c) Specific surface coating definitions. The following meanings apply in this division unless the context clearly indicates otherwise.

(1) Automobile and light-duty truck manufacturing--The following definitions apply to this surface coating category.

(A) Adhesive--Any chemical substance that is applied for the purpose of bonding two surfaces together other than by mechanical means.

(B) Automobile and light-duty truck adhesive--An adhesive, including glass-bonding adhesive, used in an automobile or light-duty truck assembly surface coating process and applied for the purpose of bonding two vehicle surfaces together without regard to the substrates involved.

(C) Automobile and light-duty truck bedliner--A multi-component coating used in an automobile or light-duty truck assembly surface coating process and applied to a

cargo bed after the application of topcoat and outside of the topcoat operation to provide additional durability and chip resistance.

(D) Automobile and light-duty truck cavity wax--A coating, used in an automobile or light-duty truck assembly surface coating process, applied into the cavities of the vehicle primarily for the purpose of enhancing corrosion protection.

(E) Automobile and light-duty truck deadener--A coating used in an automobile or light-duty truck assembly surface coating process and applied to selected vehicle surfaces primarily for the purpose of reducing the sound of road noise in the passenger compartment.

(F) Automobile and light-duty truck gasket/gasket sealing material--A fluid used in an automobile or light-duty truck assembly surface coating process and applied to coat a gasket or replace and perform the same function as a gasket. Automobile and light-duty truck gasket/gasket sealing material includes room temperature vulcanization seal material.

(G) Automobile and light-duty truck glass-bonding primer--A primer, used in an automobile or light-duty truck assembly surface coating process, applied to windshield or other glass, or to body openings, to prepare the glass or body opening for the application of glass-bonding adhesives or the installation of adhesive-bonded glass. Automobile and light-duty truck glass-bonding primer includes glass-bonding/cleaning primers that perform both

functions (cleaning and priming of the windshield or other glass, or body openings) prior to the application of an adhesive or the installation of adhesive-bonded glass.

(H) Automobile and light-duty truck lubricating wax/compound--A protective lubricating material used in an automobile or light-duty truck assembly surface coating process and applied to vehicle hubs and hinges.

(I) Automobile and light-duty truck sealer--A high viscosity material used in an automobile or light-duty truck assembly surface coating process and generally, but not always, applied in the paint shop after the body has received an electrodeposition primer coating and before the application of subsequent coatings (e.g., primer-surfacer). The primary purpose of automobile and light-duty truck sealer is to fill body joints completely so that there is no intrusion of water, gases, or corrosive materials into the passenger area of the body compartment. Such materials are also referred to as sealant, sealant primer, or caulk.

(J) Automobile and light-duty truck trunk interior coating--A coating used in an automobile or light-duty truck assembly surface coating process outside of the primer-surfacer and topcoat operations and applied to the trunk interior to provide chip protection.

(K) Automobile and light-duty truck underbody coating--A coating used in an automobile or light-duty truck assembly surface coating process and applied to the undercarriage or firewall to prevent corrosion or provide chip protection.

(L) Automobile and light-duty truck weather strip adhesive--An adhesive used in an automobile or light-duty truck assembly surface coating process and applied to weather-stripping materials for the purpose of bonding the weather-stripping material to the surface of the vehicle.

(M) Automobile assembly surface coating process--The assembly-line coating of new passenger cars, or passenger car derivatives, capable of seating 12 or fewer passengers.

(N) Electrodeposition primer--A process of applying a protective, corrosion-resistant waterborne primer on exterior and interior surfaces that provides thorough coverage of recessed areas. Electrodeposition primer is a dip-coating method that uses an electrical field to apply or deposit the conductive coating onto the part; the object being painted acts as an electrode that is oppositely charged from the particles of paint in the dip tank. Electrodeposition primer is also referred to as E-Coat, Uni-Prime, and ELPO Primer.

(O) Final repair--The operation(s) performed and coating(s) applied to completely assembled motor vehicles or to parts that are not yet on a completely assembled vehicle to correct damage or imperfections in the coating. The curing of the coatings applied in these operations is accomplished at a lower temperature than that used for curing primer-surfacer and topcoat. This lower temperature cure avoids the need to send parts that are not

yet on a completely assembled vehicle through the same type of curing process used for primer-surfacer and topcoat and is necessary to protect heat-sensitive components on completely assembled vehicles.

(P) In-line repair--The operation(s) performed and coating(s) applied to correct damage or imperfections in the topcoat on parts that are not yet on a completely assembled vehicle. The curing of the coatings applied in these operations is accomplished at essentially the same temperature as that used for curing the previously applied topcoat. In-line repair is also referred to as high-bake repair or high-bake reprocess. In-line repair is considered part of the topcoat operation.

(Q) Light-duty truck assembly surface coating process--The assembly-line coating of new motor vehicles rated at 8,500 pounds gross vehicle weight or less and designed primarily for the transportation of property, or derivatives such as pickups, vans, and window vans.

(R) Primer-surfacer--An intermediate protective coating applied over the electrodeposition primer and under the topcoat. Primer-surfacer provides adhesion, protection, and appearance properties to the total finish. Primer-surfacer is also referred to as guide coat or surfacer. Primer-surfacer operations may include other coatings (e.g., anti-chip, lower-body anti-chip, chip-resistant edge primer, spot primer, blackout, deadener, interior color, basecoat replacement coating, etc.) that are applied in the same spray booth(s).

(S) Topcoat--The final coating system applied to provide the final color or a protective finish. The topcoat may be a monocoat color or basecoat/clearcoat system. In-line repair and two-tone are part of topcoat. Topcoat operations may include other coatings (e.g., blackout, interior color, etc.) that are applied in the same spray booth(s).

(T) Solids turnover ratio (RT')--The ratio of total volume of coating solids that is added to the electrodeposition primer system (EDP) in a calendar month divided by the total volume design capacity of the EDP system.

(2) Automotive/transportation and business machine plastic parts--The following definitions apply to this surface coating category.

(A) Adhesion prime--A coating that is applied to a polyolefin part to promote the adhesion of a subsequent coating. An adhesion prime is clearly identified as an adhesion prime or adhesion promoter on its accompanying material safety data sheet.

(B) Automotive/transportation plastic parts--Interior and exterior plastic components of automobiles, trucks, tractors, lawnmowers, and other mobile equipment.

(C) Black coating--A coating that has a maximum lightness of 23 units and a saturation less than 2.8, where saturation equals the square root of A2 + B2. These

criteria are based on Cielab color space, 0/45 geometry. For spherical geometry, specular included, maximum lightness is 33 units.

(D) Business machine--A device that uses electronic or mechanical methods to process information, perform calculations, print or copy information, or convert sound into electrical impulses for transmission. This definition includes devices listed in Standard Industrial Classification codes 3572, 3573, 3574, 3579, and 3661 and photocopy machines, a subcategory of Standard Industrial Classification code 3861.

(E) Clear coating--A coating that lacks color and opacity or is transparent and that uses the undercoat as a reflectant base or undertone color.

(F) Coating of plastic parts of automobiles and trucks--The coating of any plastic part that is or will be assembled with other parts to form an automobile or truck.

(G) Coating of business machine plastic parts--The coating of any plastic part that is or will be assembled with other parts to form a business machine.

(H) Electrostatic prep coat--A coating that is applied to a plastic part solely to provide conductivity for the subsequent application of a prime, a topcoat, or other coating through the use of electrostatic application methods. An electrostatic prep coat is clearly identified as an electrostatic prep coat on its accompanying material safety data sheet.

(I) Flexible coating--A coating that is required to comply with engineering specifications for impact resistance, mandrel bend, or elongation as defined by the original equipment manufacturer.

(J) Fog coat--A coating that is applied to a plastic part for the purpose of color matching without masking a molded-in texture. A fog coat may not be applied at a thickness of more than 0.5 mil of coating solids.

(K) Gloss reducer--A coating that is applied to a plastic part solely to reduce the shine of the part. A gloss reducer may not be applied at a thickness of more than 0.5 mil of coating solids.

(L) Red coating--A coating that meets all of the following criteria:

(i) yellow limit: the hue of hostaperm scarlet;

(ii) blue limit: the hue of monastral red-violet;

(iii) lightness limit for metallics: 35% aluminum flake;

(iv) lightness limit for solids: 50% titanium dioxide white;

(v) solid reds: hue angle of -11 to 38 degrees and maximum lightness of 23 to 45 units; and

(vi) metallic reds: hue angle of -16 to 35 degrees and maximum lightness of 28 to 45 units. These criteria are based on Cielab color space, 0/45 geometry. For spherical geometry, specular included, the upper limit is 49 units. The maximum lightness varies as the hue moves from violet to orange. This is a natural consequence of the strength of the colorants, and real colors show this effect.

(M) Resist coat--A coating that is applied to a plastic part before metallic plating to prevent deposits of metal on portions of the plastic part.

(N) Stencil coat--A coating that is applied over a stencil to a plastic part at a thickness of 1.0 mil or less of coating solids. Stencil coats are most frequently letters, numbers, or decorative designs.

(O) Texture coat--A coating that is applied to a plastic part which, in its finished form, consists of discrete raised spots of the coating.

(P) Vacuum-metalizing coatings--Topcoats and basecoats that are used in the vacuum-metalizing process.

(3) Industrial maintenance coating--A high performance maintenance coating, including primers, sealers, undercoaters, intermediate coats, and topcoats, that is not applied to items meeting the definition for miscellaneous metal parts and products in §115.450(c)(6)(Q) of this section, and is formulated for application to stationary source substrates, including floors, exposed to one or more of the following extreme environmental conditions.

(A) Immersion in water, wastewater, or chemical solutions (aqueous and non-aqueous solutions), or chronic exposures of interior surfaces to moisture condensation; or

(B) Acute or chronic exposure to corrosive, caustic, or acidic agents, or to chemicals, chemical fumes, or chemical mixtures or solutions; or

(C) Frequent exposure to temperatures above 121˚C (250˚F); or

(D) Frequent heavy abrasion, including mechanical wear and frequent scrubbing with industrial solvents, cleansers, or scouring agents; or

(E) Exterior exposure of metal structures and structural components.

(4) Large appliance coating--The coating of doors, cases, lids, panels, and interior support parts of residential and commercial washers, dryers, ranges, refrigerators, freezers, water heaters, dishwashers, trash compactors, air conditioners, and other large appliances.

(A) Extreme high-gloss coating--A coating which, when tested by the American Society for Testing Material Test Method D523 adopted in 1980, shows a reflectance of 75% or more on a 60 degree meter.

(B) Extreme performance coating--A coating used on a metal surface where the coated surface is, in its intended use, subject to:

(i) chronic exposure to corrosive, caustic or acidic agents, chemicals, chemical fumes, chemical mixtures, or solutions;

(ii) repeated exposure to temperatures in excess of 250 degrees Fahrenheit (121 degrees Celsius);

(iii) repeated heavy abrasion, including mechanical wear and repeated scrubbing with industrial grade solvents, cleansers, or scouring agents; or

(iv) exposure to extreme environmental conditions, such as continuous outdoor exposure.

(C) Heat-resistant coating--A coating that must withstand a temperature of at least 400 degrees Fahrenheit (204 degrees Celsius) during normal use.

(D) Metallic coating--A coating that contains more than 0.042 pounds of metal particles per gallon of coating as applied. Metal particles are pieces of a pure elemental metal or a combination of elemental metals.

(E) Pretreatment coating--A coating that contains no more than 12% solids by weight and at least 0.50% acid by weight; is used to provide surface etching; and is applied directly to metal surfaces to provide corrosion resistance, adhesion, and ease of stripping.

(F) Solar-absorbent coating--A coating that has as its prime purpose the absorption of solar radiation.

(5) Metal furniture coating--The coating of metal furniture including, but not limited to, tables, chairs, wastebaskets, beds, desks, lockers, benches, shelves, file cabinets, lamps, and other metal furniture products or the coating of any metal part that will be a part of a nonmetal furniture product.

(A) Extreme high-gloss coating--A coating which, when tested by the American Society for Testing Material Test Method D523 adopted in 1980, shows a reflectance of 75% or more on a 60 degree meter.

(B) Extreme performance coating--A coating used on a metal surface where the coated surface is, in its intended use, subject to:

(i) chronic exposure to corrosive, caustic or acidic agents, chemicals, chemical fumes, chemical mixtures, or solutions;

(ii) repeated exposure to temperatures in excess of 250 degrees Fahrenheit (121 degrees Celsius);

(iii) repeated heavy abrasion, including mechanical wear and repeated scrubbing with industrial grade solvents, cleansers, or scouring agents; or

(iv) exposure to extreme environmental conditions, such as continuous outdoor exposure.

(C) Heat-resistant coating--A coating that must withstand a temperature of at least 400 degrees Fahrenheit (204 degrees Celsius) during normal use.

(D) Metallic coating--A coating containing more than 5.0 grams of metal particles per liter of coating as applied. Metal particles are pieces of a pure elemental metal or a combination of elemental metals.

(E) Pretreatment coating--A coating that contains no more than 12% solids by weight and at least 0.50% acid by weight; is used to provide surface etching; and is applied directly to metal surfaces to provide corrosion resistance, adhesion, and ease of stripping.

(F) Solar-absorbent coating--A coating that has as its primary purpose the absorption of solar radiation.

(6) Miscellaneous metal and plastic parts--The following definitions apply to this surface coating category.

(A) Camouflage coating--A coating used, principally by the military, to conceal equipment from detection.

(B) Clear coat--A coating that lacks opacity or is transparent and may or may not have an undercoat that is used as a reflectant base or undertone color.

(C) Drum (metal)--Any cylindrical metal shipping container with a capacity equal to or greater than 12 gallons but equal to or less than 110 gallons.

(D) Electric-dissipating coating--A coating that rapidly dissipates a high-voltage electric charge.

(E) Electric-insulting varnish--A non-convertible-type coating applied to electric motors, components of electric motors, or power transformers, to provide electrical, mechanical, and environmental protection or resistance.

(F) EMI/RFI shielding--A coating used on electrical or electronic equipment to provide shielding against electromagnetic interference (EMI), radio frequency interference (RFI), or static discharge.

(G) Etching filler--A coating that contains less than 23% solids by weight and at least 0.50% acid by weight and is used instead of applying a pretreatment coating followed by a primer.

(H) Extreme high-gloss coating--A coating which, when tested by the American Society for Testing and Materials Test Method D523 adopted in 1980, shows a reflectance of 75% or more on a 60 degree meter.

(I) Extreme performance coating--A coating used on a metal or plastic surface where the coated surface is, in its intended use, subject to one of the following

conditions. Extreme performance coatings include, but are not limited to, coatings applied to locomotives, railroad cars, farm machinery, marine shipping containers, downhole drilling equipment, and heavy-duty trucks:

(i) chronic exposure to corrosive, caustic or acidic agents, chemicals, chemical fumes, chemical mixtures, or solutions;

(ii) repeated exposure to temperatures in excess of 250 degrees Fahrenheit (121 degrees Celsius);

(iii) repeated heavy abrasion, including mechanical wear and repeated scrubbing with industrial grade solvents, cleansers, or scouring agents; or

(iv) exposure to extreme environmental conditions, such as continuous outdoor exposure.

(J) Heat-resistant coating--A coating that must withstand a temperature of at least 400 degrees Fahrenheit (204 degrees Celsius) during normal use.

(K) High performance architectural coating--A coating used to protect architectural subsections and meets the requirements of the American Architectural Manufacturers Association's publication number AAMA 2604-05 (Voluntary Specification,

Performance Requirements and Test Procedures for High Performance Organic Coatings on Aluminum Extrusions and Panels) or 2605-05 (Voluntary Specification, Performance Requirements and Test Procedures for Superior Performing Organic Coatings on Aluminum Extrusions and Panels).

(L) High temperature coating--A coating that is certified to withstand a temperature of 1000 degrees Fahrenheit (538 degrees Celsius) for 24 hours.

(M) Mask coating--A thin film coating applied through a template to coat a small portion of a substrate.

(N) Metallic coating--A coating containing more than 5.0 grams of metal particles per liter of coating as applied. Metal particles are pieces of a pure elemental metal or a combination of elemental metals.

(O) Military specification coating--A coating that has a formulation approved by a United States Military Agency for use on military equipment.

(P) Mold-seal coating--The initial coating applied to a new mold or a repaired mold to provide a smooth surface that when coated with a mold release coating, prevents products from sticking to the mold.

(Q) Miscellaneous metal parts and products--Parts and products considered miscellaneous metal parts and products include:

(i) large farm machinery (harvesting, fertilizing, and planting machines, tractors, combines, etc.);

(ii) small farm machinery (lawn and garden tractors, lawn mowers, rototillers, etc.);

(iii) small appliances (fans, mixers, blenders, crock pots, dehumidifiers, vacuum cleaners, etc.);

(iv) commercial machinery (computers and auxiliary equipment, typewriters, calculators, vending machines, etc.);

(v) industrial machinery (pumps, compressors, conveyor components, fans, blowers, transformers, etc.);

(vi) fabricated metal products (metal-covered doors, frames, etc.); and

(vii) any other category of coated metal products, including, but not limited to, those that are included in the Standard Industrial Classification Code major group 33 (primary metal industries), major group 34 (fabricated metal products), major group 35 (nonelectrical machinery), major group 36 (electrical machinery), major group 37 (transportation equipment), major group 38 (miscellaneous instruments), and major group 39 (miscellaneous manufacturing industries). Excluded are those surface coating processes specified in §115.420(c)(1) - (8) and (10) - (16) of this title (relating to Surface Coating Definitions) and paragraphs (1) - (4) and (6) - (8) of this subsection.

(R) Miscellaneous plastic parts and products--Parts and products considered miscellaneous plastic parts and products include, but are not limited to:

(i) molded plastic parts;

(ii) small and large farm machinery;

(iii) commercial and industrial machinery and equipment;

(iv) interior or exterior automotive parts;

(v) construction equipment;

(vi) motor vehicle accessories;

(vii) bicycles and sporting goods;

(viii) toys;

(ix) recreational vehicles;

(x) lawn and garden equipment;

(xi) laboratory and medical equipment;

(xii) electronic equipment; and

(xiii) other industrial and household products. Excluded are those surface coating processes specified in §115.420(c)(1) - (16) of this title and paragraphs (1) - (4) and (6) - (8) of this subsection.

(S) Multi-colored coating--A coating that exhibits more than one color when applied, is packaged in a single container, and applied in a single coat.

(T) Off-site job shop--A non-manufacturer of metal or plastic parts and products that applies coatings to such products at a site under contract with one or more parties that operate under separate ownership and control.

(U) Optical coating--A coating applied to an optical lens.

(V) Pail (metal)--Any cylindrical metal shipping container with a capacity equal to or greater than 1 gallon but less than 12 gallons and constructed of 29 gauge or heavier material.

(W) Pan-backing coating--A coating applied to the surface of pots, pans, or other cooking implements that are exposed directly to a flame or other heating elements.

(X) Prefabricated architectural component coating--A coating applied to metal parts and products that are to be used as an architectural structure.

(Y) Pretreatment coating--A coating that contains no more than 12% solids by weight and at least 0.50% acid by weight; is used to provide surface etching; and is applied directly to metal surfaces to provide corrosion resistance, adhesion, and ease of stripping.

(Z) Repair coating--A coating used to re-coat portions of a previously coated product that has sustained mechanical damage to the coating following normal surface coating processes.

(AA) Safety-indicating coating--A coating that changes physical characteristics, such as color, to indicate unsafe conditions.

(BB) Shock-free coating--A coating applied to electrical components to protect the user from electric shock. The coating has characteristics of being low-capacitance and high-resistance and having resistance to breaking down under high voltage.

(CC) Silicone-release coating--A coating that contains silicone resin and is intended to prevent food from sticking to metal surfaces such as baking pans.

(DD) Solar-absorbent coating--A coating that has as its primary purpose the absorption of solar radiation.

(EE) Stencil coating--A pigmented coating or ink that is rolled or brushed onto a template or stamp in order to add identifying letters, symbols, or numbers.

(FF) Touch-up coating--A coating used to cover minor coating imperfections appearing after the main surface coating process.

(GG) Translucent coating--A coating that contains binders and pigment and formulated to form a colored, but not opaque, film.

(HH) Vacuum-metalizing coating--The undercoat applied to the substrate on which the metal is deposited or the overcoat applied directly to the metal film. Vacuum metalizing or physical vapor deposition is the process whereby metal is vaporized and deposited on a substrate in a vacuum chamber.

(7) Motor vehicle materials--The following definitions apply to this surface coating category.

(A) Motor vehicle bedliner--A multi-component coating used in a process that is not an automobile or light-duty truck manufacturing coating process and is applied to a cargo bed after the application of topcoat to provide additional durability and chip resistance.

(B) Motor vehicle cavity wax--A coating used in a process that is not an automobile or light-duty truck manufacturing coating process and is applied into the cavities of the vehicle primarily for the purpose of enhancing corrosion protection.

(C) Motor vehicle deadener--A coating used in a process that is not an automobile or light-duty truck manufacturing coating process and is applied to selected vehicle

surfaces primarily for the purpose of reducing the sound of road noise in the passenger compartment.

(D) Motor vehicle gasket/sealing material--A fluid used in a process that is not an automobile or light-duty truck manufacturing coating process and is applied to coat a gasket or replace and perform the same function as a gasket. Automobile and light-duty truck gasket/gasket sealing material includes room temperature vulcanization seal material.

(E) Motor vehicle lubricating wax/compound--A protective lubricating material used in a process that is not an automobile or light-duty truck manufacturing coating process and is applied to vehicle hubs and hinges.

(F) Motor vehicle sealer--A high viscosity material used in a process that is not an automobile or light-duty truck manufacturing coating process and is generally, but not always, applied in the paint shop after the body has received an electrodeposition primer coating and before the application of subsequent coatings (e.g., primer-surfacer). The primary purpose of motor vehicle sealer is to fill body joints completely so that there is no intrusion of water, gases, or corrosive materials into the passenger area of the body compartment. Such materials are also referred to as sealant, sealant primer, or caulk.

(G) Motor vehicle trunk interior coating--A coating used in a process that is not an automobile or light-duty truck manufacturing coating process and is applied to the trunk interior to provide chip protection.

(H) Motor vehicle underbody coating--A coating used in a process that is not an automobile or light-duty truck manufacturing coating process and is applied to the undercarriage or firewall to prevent corrosion or provide chip protection.

(8) Paper, film, and foil coating--The coating of paper and pressure-sensitive tapes (regardless of substrate and including paper, fabric, and plastic film), related web coating processes on plastic film (including typewriter ribbons, photographic film, and magnetic tape), metal foil (including decorative, gift wrap, and packaging), industrial and decorative laminates, abrasive products (including fabric coated for use in abrasive products), and flexible packaging.

(A) Paper, film, and foil coating includes the application of a continuous layer of a coating material across the entire width or any portion of the width of a paper, film, or foil web substrate to:

(i) provide a covering, finish, or functional or protective layer to the substrate;

(ii) saturate the substrate for lamination; or

(iii) provide adhesion between two substrates for lamination.

(B) Paper, film, and foil coating excludes coating performed on or in-line with any offset lithographic, screen, letterpress, flexographic, rotogravure, or digital printing press; or size presses and on-machine coaters that function as part of an in-line papermaking system.

(9) Pleasure craft--Any marine or fresh-water vessel used by individuals for noncommercial, nonmilitary, and recreational purposes that is less than 65.6 feet in length. A vessel rented exclusively to, or chartered for, individuals for such purposes is considered a pleasure craft.

(A) Antifoulant coating--A coating applied to the underwater portion of a pleasure craft to prevent or reduce the attachment of biological organisms, and registered with the United States Environmental Protection Agency as a pesticide under the Federal Insecticide, Fungicide, and Rodenticide Act (7 United States Code, §136).

(B) Antifoulant sealer/tie coating--A coating applied over an antifoulant coating to prevent the release of biocides into the environment or to promote adhesion between an antifoulant coating and a primer or other antifoulants.

(C) Extreme high-gloss coating--A coating that achieves at least 90% reflectance on a 60 degree meter when tested by American Society for Testing and Materials Method D523-89.

(D) Finish primer-surfacer--A coating applied with a wet film thickness less than 10 mils prior to the application of a topcoat for purposes of providing corrosion resistance, adhesion of subsequent coatings, a moisture barrier, or promotion of a uniform surface necessary for filling in surface imperfections.

(E) High-build primer-surfacer--A coating applied with a wet film thickness of 10 mils or more prior to the application of a topcoat for purposes of providing corrosion resistance, adhesion of subsequent coatings, or a moisture barrier, or promoting a uniform surface necessary for filling in surface imperfections.

(F) High-gloss coating--A coating that achieves at least 85% reflectance on a 60 degree meter when tested by American Society for Testing and Materials Test Method D523-89.

(G) Pleasure craft coating--A marine coating, except unsaturated polyester resin (fiberglass) coatings, applied by brush, spray, roller, or other means to a pleasure craft.

(H) Pretreatment wash primer--A coating that contains no more than 25% solids by weight and at least 0.10% acids by weight; used to provide surface etching; and applied directly to fiberglass and metal surfaces to provide corrosion resistance and adhesion of subsequent coatings.

(I) Repair coating--A coating used to re-coat portions of a previously coated product that has sustained mechanical damage to the coating following normal surface coating processes.

(J) Topcoat--A final coating applied to the interior or exterior of a pleasure craft.

(K) Touch-up coating--A coating used to cover minor coating imperfections appearing after the main surface coating process.

(10) Traffic marking coating--A coating labeled and formulated for marking and striping streets, highways, or other traffic surfaces including, but not limited to, curbs, berms, driveways, parking lots, sidewalks, and airport runways.

§115.451. Exemptions.

(a) The volatile organic compounds (VOC) from coatings and solvents used in surface coating processes and associated cleaning operations not addressed by the surface coating categories in §115.421(3) - (7), (9), (10), and (13) - (16) of this title (relating to Emission Specifications) or §115.453 of this title (relating to Control Requirements) are excluded from the VOC emission calculations for the purposes of paragraphs (1) - (3) of this subsection. For example, architectural coatings applied in the field to stationary structures and their appurtenances, portable buildings, pavements, or curbs at a property would not be included in the calculations, except as specified in paragraphs (4) and (5) of this subsection.

(1) All surface coating processes on a property that, when uncontrolled, will emit a combined weight of VOC of less than 3.0 pounds per hour and 15 pounds in any consecutive 24-hour period are exempt from all of the requirements in §115.453 of this title except §115.453(f) - (i) of this title.

(2) Surface coating processes on a property that, when uncontrolled, will emit a combined weight of VOC of less than 100 pounds in any consecutive 24-hour period are exempt from §115.453(a) of this title if documentation is provided to and approved by both the executive director and the United States Environmental Protection Agency to demonstrate that necessary coating performance criteria cannot be achieved with coatings that satisfy applicable VOC limits and that control equipment is not technologically or economically feasible.

(3) Surface coating processes on a property where total coating and solvent usage does not exceed 150 gallons in any consecutive 12-month period are exempt from the VOC limits in §115.453(a) of this title.

(4) As of the applicable compliance date in §115.459(e) or (g) of this title, if the commission has published notice for the Dallas-Fort Worth and/or Houston-Galveston-Brazoria area in the *Texas Register*, as provided in §115.459(e) or (g) of this title, to require compliance for the applicable area with the industrial maintenance coatings contingency measure control requirements of §115.453(f) or (g) of this title, respectively, the exemptions in paragraphs (1) through (3) of this subsection no longer apply to industrial maintenance coatings. The owner or operator of a site may continue to exclude industrial maintenance coatings from the criteria in paragraphs (1) through (3) of this subsection for the purposes of determining applicability of this division for the purposes of coatings other than industrial maintenance coatings.

(5) As of the applicable compliance date in §115.459(f) or (h) of this title, if the commission has published notice for the Dallas-Fort Worth and/or Houston-Galveston-Brazoria area in the *Texas Register*, as provided in §115.459(f) or (h) of this title, to require compliance for the applicable area with the traffic marking coatings contingency measure control requirements of §115.453(h) or (i) of this title, respectively, the exemptions in paragraphs (1) through (3) of this subsection no longer apply to traffic marking coatings. The owner or operator of a site may continue to exclude traffic marking coatings from the criteria in paragraphs (1) through (3) of this subsection for the purposes of determining applicability of this division for the purposes of coatings other than traffic marking coatings.

(b) The following surface coating processes are exempt from the VOC limits for miscellaneous metal and plastic parts coatings in §115.453(a)(1)(C) - (F) of this title and motor vehicle materials in §115.453(a)(2) of this title:

(1) large appliance surface coating;

(2) metal furniture surface coating;

(3) automobile and light-duty truck assembly surface coating; and

(4) surface coating processes specified in §115.420(a)(1) - (9) and (11) - (16) of this title (relating to Applicability and Definitions).

(c) Paper, film, and foil surface coating processes are exempt from the coating application system requirements in §115.453(c) of this title and the coating use work practice requirements in §115.453(d)(1) of this title.

(d) Automobile and light-duty truck assembly surface coating processes are exempt from the coating application system requirements in §115.453(c) of this title and the cleaning-related work practice requirements in §115.453(d)(2) of this title.

(e) Automobile and light-duty truck assembly surface coating materials supplied in containers with a net volume of 16 ounces or less, or a net weight of 1.0 pound or less, are exempt from the VOC limits in Table 2 in §115.453(a)(3) of this title.

(f) The following miscellaneous metal part and product surface coatings and surface coating processes are exempt from the coating application system requirements in §115.453(c) of this title:

(1) touch-up coatings, repair coatings, and textured finishes;

(2) stencil coatings;

(3) safety-indicating coatings;

(4) solid-film lubricants;

(5) electric-insulating and thermal-conducting coatings;

(6) magnetic data storage disk coatings; and

(7) plastic extruded onto metal parts to form a coating.

(g) All miscellaneous plastic part airbrush surface coatings and surface coating processes where total coating usage is less than 5.0 gallons per year are exempt from the coating application system requirements in §115.453(c) of this title.

(h) The application of extreme high-gloss coatings to pleasure craft is exempt from the coating application system requirements in §115.453(c) of this title.

(i) The following miscellaneous plastic parts surface coatings and surface coating processes are exempt from the coating VOC limits in §115.453(a)(1)(D) of this title:

(1) touch-up and repair coatings;

(2) stencil coatings applied on clear or transparent substrates;

(3) clear or translucent coatings;

(4) any individual coating type used in volumes less than 50 gallons in any one year, if substitute compliant coatings are not available, provided that the total usage of all such coatings does not exceed 200 gallons per year, per property;

(5) reflective coating applied to highway cones;

(6) mask coatings that are less than 0.5 mil thick dried and the area coated is less than 25 square inches;

(7) electromagnetic interference/radio frequency interference (EMI/RFI) shielding coatings; and

(8) heparin-benzalkonium chloride-containing coatings applied to medical devices, if the total usage of all such coatings does not exceed 100 gallons per year, per property.

(j) The following automotive/transportation and business machine plastic part surface coatings and surface coating processes are exempt from the VOC limits in §115.453(a)(1)(E) of this title:

(1) texture coatings;

(2) vacuum-metalizing coatings;

(3) gloss reducers;

(4) texture topcoats;

(5) adhesion primers;

(6) electrostatic preparation coatings;

(7) resist coatings; and

(8) stencil coatings.

(k) Powder coatings and ultraviolet curable coatings applied during metal and plastic parts surface coating processes specified in §115.453(a)(1)(C) - (F) and (2) of this title are exempt from the requirements in this division, except as specified in §115.458(b)(5) of this title (relating to Monitoring and Recordkeeping Requirements).

(l) Aerosol coatings (spray paint) are exempt from the requirements in this division, except for §115.453(f) - (i) of this title.

(m) Coatings applied to test panels and coupons as part of research and development, quality control, or performance testing activities at paint research or manufacturing facilities are exempt from the requirements in this division.

(n) Pleasure craft touch-up and repair coatings supplied in containers less than or equal to 1.0 quart, are exempt from the VOC limits in §115.453(a)(1)(F) of this title provided that the total usage of all such coatings does not exceed 50 gallons per calendar year per property.

(o) Pleasure craft surface coating processes are exempt from the VOC limits in §115.453(a)(1)(C) and (D) of this title.

(p) Adhesives applied to miscellaneous metal and plastic parts listed in §115.453(a)(1)(C) - (F) and (2) of this title that meet a specific adhesive or adhesive primer application process definition in §115.470 of this title (relating to Applicability and Definitions) and are listed in Table 2 of §115.473(a) of this title (relating to Control Requirements) are not subject to the requirements in this division. Contact adhesives are not included in this exemption.

§115.453. Control Requirements.

(a) The following control requirements apply to surface coating processes subject to this division. Except as specified in paragraph (3) of this subsection, these limitations are based on the daily weighted average of all coatings, as defined in §101.1 of this title (relating to Definitions), as delivered to the application system. Upon the compliance date specified in §115.459(d) or (e) of this title (relating to Compliance Schedules), the requirements in subsection (f) or (h) of this section apply in the Dallas-Fort Worth area in addition to this

subsection, and upon the compliance date specified in §115.459(g) or (h) of this title, the requirements in subsection (g) or (i) of this section apply in the Houston-Galveston-Brazoria area in addition to this subsection.

(1) The following limits must be met by applying low-volatile organic compound (VOC) coatings to meet the specified VOC content limits on a pound of VOC per gallon of coating basis (lb VOC/gal coating) (minus water and exempt solvent), or by applying coatings in combination with the operation of a vapor control system, as defined in §115.10 (relating to Definitions), to meet the specified VOC emission limits on a pound of VOC per gallon of solids basis (lb VOC/gal solids). If a coating meets more than one coating type definition, then the coating with the least stringent VOC limit applies.

(A) Large appliances. If a coating does not meet a specific coating type definition, then it can be assumed to be a general-use coating and the VOC limit for general coating applies.

Figure: 30 TAC §115.453(a)(1)(A) (No Change)

(B) Metal furniture. If a coating does not meet a specific coating type definition, then it can be assumed to be a general-use coating and the VOC limit for general coating applies.

Figure: 30 TAC §115.453(a)(1)(B) (No Change)

(C) Miscellaneous metal parts and products. If a coating does not meet a specific coating type definition, then it can be assumed to be a general-use coating and the VOC limit for general coating applies.

Figure: 30 TAC §115.453(a)(1)(C) (No Change)

(D) Miscellaneous plastic parts and products. If a coating does not meet a specific coating category definition, then it can be assumed to be a general-use coating and the VOC limit for general coating applies.

Figure: 30 TAC §115.453(a)(1)(D) (No Change)

(E) Automotive/transportation and business machine plastic parts. For red, yellow, and black automotive/transportation coatings, except touch-up and repair coatings, the VOC limit is determined by multiplying the appropriate limit in Table 1 of this subparagraph by 1.15.

Figure: 30 TAC §115.453(a)(1)(E) (No Change)

(F) Pleasure craft. If a coating does not meet a specific coating category definition, then it can be assumed to be a general-use coating and the VOC limits for other coatings applies.

Figure: 30 TAC §115.453(a)(1)(F) (No Change)

(2) The coating VOC limits for motor vehicle materials applied to the metal and plastic parts in paragraph (1)(C) - (F) of this subsection, as delivered to the application system, must be met using low-VOC coatings (minus water and exempt solvent).

Figure: 30 TAC §115.453(a)(2) (No Change)

(3) The coating VOC limits for automobile and light-duty truck assembly surface coating processes must be met by applying low-VOC coatings.

Figure: 30 TAC §115.453(a)(3) (No Change)

(A) The owner or operator shall determine compliance with the VOC limits for electrodeposition primer operations on a monthly weighted average in accordance with §115.455(a)(2)(D) of this title (relating to Approved Test Methods and Testing Requirements).

(B) As an alternative to the VOC limit in Table 1 of this paragraph for final repair coatings, if an owner or operator does not compile records sufficient to enable determination of the daily weighted average, compliance may be demonstrated each day by meeting a standard of 4.8 lb VOC/gal coating (minus water and exempt solvent) on an occurrence weighted average basis. Compliance with the VOC limits on an occurrence weighted average basis must be determined in accordance with the procedure specified in §115.455(a)(2) of this title.

(C) The owner or operator shall determine compliance with the VOC limits in Table 2 of this paragraph in accordance with §115.455(a)(1) or (2)(C) of this title, as appropriate.

(4) The coating VOC limits for paper, film, and foil surface coating processes must be met by applying low-VOC coatings to meet the specified VOC content limits on a pound of VOC per pound of coating basis, as delivered to the application system, or by applying coatings in combination with the operation of a vapor control system to meet the specified VOC emission limits on a pound of VOC per pound of solids basis, as delivered to the application system.

Figure: 30 TAC §115.453(a)(4) (No Change)

(5) An owner or operator applying coatings in combination with the operation of a vapor control system to meet the VOC emission limits in paragraph (1) or (4) of this subsection shall use the following equation to determine the minimum overall control efficiency necessary to demonstrate equivalency. Control device and capture efficiency testing must be performed in accordance with the testing requirements in §115.455 (a)(3) and (4) of this title.

Figure: 30 TAC §115.453(a)(5) (No Change)

(b) Except for the surface coating process in subsection (a)(2) of this section, the owner or operator of a surface coating process may operate a vapor control system capable of achieving a 90% overall control efficiency as an alternative to subsection (a) of this section. Control device and capture efficiency testing must be performed in accordance with the testing requirements in §115.455(a)(3) and (4) of this title. If the owner or operator complies with the overall control efficiency option under this subsection, then the owner or operator is exempt from the application system requirements of subsection (c) of this section.

(c) The owner or operator of any surface coating process subject to this division shall not apply coatings unless one of the following coating application systems is used:

(1) electrostatic application;

(2) high-volume, low-pressure (HVLP) spray;

(3) flow coat;

(4) roller coat;

(5) dip coat;

(6) brush coat or hand-held paint rollers; or

(7) for metal and plastic parts surface coating processes specified in §115.450(a)(3) and (4) of this title (relating to Applicability and Definitions), airless spray or air-assisted airless spray; or

(8) other coating application system capable of achieving a transfer efficiency equivalent to or better than that achieved by HVLP spray. For the purpose of this requirement, the transfer efficiency of HVLP spray is assumed to be 65%. The owner or operator shall demonstrate that either the application system being used is equivalent to the transfer efficiency of an HVLP spray or that the application system being used has a transfer efficiency of at least 65%.

(d) The following work practices apply to the owner or operator of each surface coating process subject to this division.

(1) For all coating-related activities including, but not limited to, solvent storage, mixing operations, and handling operations for coatings and coating-related waste materials, the owner or operator shall:

(A) store all VOC-containing coatings and coating-related waste materials in closed containers;

(B) minimize spills of VOC-containing coatings;

(C) convey all coatings in closed containers or pipes;

(D) close mixing vessels and storage containers that contain VOC coatings and other materials except when specifically in use;

(E) clean up spills immediately; and

(F) for automobile and light-duty truck assembly coating processes, minimize VOC emissions from the cleaning of storage, mixing, and conveying equipment.

(2) For all cleaning-related activities including, but not limited to, waste storage, mixing, and handling operations for cleaning materials, the owner or operator shall:

(A) store all VOC-containing cleaning materials and used shop towels in closed containers;

(B) ensure that storage containers used for VOC-containing cleaning materials are kept closed at all times except when depositing or removing these materials;

(C) minimize spills of VOC-containing cleaning materials;

(D) convey VOC-containing cleaning materials from one location to another in closed containers or pipes;

(E) minimize VOC emissions from cleaning of storage, mixing, and conveying equipment;

(F) clean up spills immediately; and

(G) for metal and plastic parts surface coating processes specified in §115.450(a)(3) - (5) of this title (relating to Applicability and Definitions), minimize VOC emission from the cleaning of application, storage, mixing, and conveying equipment by

ensuring that equipment cleaning is performed without atomizing the cleaning solvent and all spent solvent is captured in closed containers.

(3) The owner or operator of automobile and light-duty truck assembly surface coating processes shall implement a work practice plan containing procedures to minimize VOC emissions from cleaning activities and purging of coating application equipment. Properties with a work practice plan already in place to comply with requirements specified in 40 Code of Federal Regulations (CFR) §63.3094(b) (as amended through April 20, 2006 (71 FR 20464)), may incorporate procedures for minimizing non-hazardous air pollutant VOC emissions to comply with the work practice plan required by this paragraph.

(e) A surface coating process that becomes subject to subsection (a) of this section by exceeding the exemption limits in §115.451 of this title (relating to Exemptions) is subject to the provisions in subsection (a) of this section even if throughput or emissions later fall below exemption limits unless emissions are maintained at or below the controlled emissions level achieved while complying with subsection (a) of this section and one of the following conditions is met.

(1) The project that caused throughput or emission rate to fall below the exemption limits in §115.451 of this title must be authorized by a permit, permit amendment, standard permit, or permit by rule required by Chapters 106 or 116 of this title (relating to Permits by Rule; and Control of Air Pollution by Permits for New Construction or Modification,

respectively). If a permit by rule is available for the project, the owner or operator shall continue to comply with subsection (a) of this section for 30 days after the filing of documentation of compliance with that permit by rule.

(2) If authorization by permit, permit amendment, standard permit, or permit by rule is not required for the project, the owner or operator shall provide the executive director 30 days notice of the project in writing.

(f) In the Dallas-Fort Worth area, in accordance with the schedule specified in 115.459(e) of this title, industrial maintenance coatings must meet a VOC limit of 2.1 pounds per gallon (250 grams per liter) of coating (minus water and exempt solvent), which must be met by applying low-VOC coatings.

(g) In the Houston-Galveston-Brazoria area, in accordance with the schedule specified in 115.459(g) of this title, industrial maintenance coatings must meet a VOC limit of 2.1 pounds per gallon (250 grams per liter) of coating (minus water and exempt solvent), which must be met by applying low-VOC coatings.

(h) In the Dallas-Fort Worth area, in accordance with the schedule specified in §115.459(f) of this title, traffic marking coatings must meet a VOC content limit of 100 grams of VOC per liter of coating (minus water and exempt solvent), which must be met by applying low-VOC coatings.

(i) In the Houston-Galveston-Brazoria area, in accordance with the schedule specified in §115.459(h) of this title, traffic marking coatings must meet a VOC content limit of 100 grams of VOC per liter of coating (minus water and exempt solvent), which must be met by applying low-VOC coatings.

§115.458. Monitoring and Recordkeeping Requirements.

(a) Monitoring requirements. The following monitoring requirements apply to the owner or operator of a surface coating process subject to this division that uses a vapor control system in accordance with §115.453 of this title (relating to Control Requirements). The owner or operator shall install and maintain monitors to accurately measure and record operational parameters of all required control devices to ensure the proper functioning of those devices in accordance with design specifications, including:

(1) continuous monitoring of the exhaust gas temperature immediately downstream of direct-flame incinerators or the gas temperature immediately upstream and downstream of any catalyst bed;

(2) the total amount of volatile organic compounds (VOC) recovered by carbon adsorption or other solvent recovery systems during a calendar month;

(3) continuous monitoring of carbon adsorption bed exhaust; and

(4) appropriate operating parameters for capture systems and control devices other than those specified in paragraphs (1) - (3) of this subsection.

(b) Recordkeeping requirements. The following recordkeeping requirements apply to the owner or operator of a surface coating process subject to this division.

(1) The owner or operator shall maintain records of the testing data or the material safety data sheets (MSDS) in accordance with the requirements in §115.455(a) of this title (relating to Approved Test Methods and Testing Requirements). The MSDS must document relevant information regarding each coating and solvent available for use in the affected surface coating processes including the VOC content, composition, solids content, and solvent density. Records must be sufficient to demonstrate continuous compliance with the applicable VOC limits in §115.453(a) or (f) - (i) of this title.

(2) Records must be maintained of the quantity and type of each coating and solvent consumed during the specified averaging period if any of the coatings, as delivered to the coating application system, exceed the applicable VOC limits. Such records must be sufficient to calculate the applicable weighted average of VOC content for all coatings.

(3) As an alternative to the recordkeeping requirements of paragraph (2) of this subsection, the owner or operator that qualifies for exemption under §115.451(a)(3) of this title (relating to Exemptions) may maintain records of the total gallons of coating and solvent used in each month and total gallons of coating and solvent used in the previous 12 months.

(4) The owner or operator shall maintain, on file, the capture efficiency protocol submitted under §115.455(a)(4) of this title. The owner or operator shall submit all results of the test methods and capture efficiency protocols to the executive director within 60 days of the actual test date. The owner or operator shall maintain records of the capture efficiency operating parameter values on-site for a minimum of one year. If any changes are made to capture or control equipment, the owner or operator is required to notify the executive director in writing within 30 days of these changes and a new capture efficiency or control device destruction or removal efficiency test may be required.

(5) The owner or operator claiming an exemption in §115.451 of this title shall maintain records sufficient to demonstrate continuous compliance with the applicable exemption criteria.

(6) Records must be maintained of any testing conducted in accordance with the provisions specified in §115.455(a) of this title.

(7) Records must be maintained a minimum of two years and be made available upon request to authorized representatives of the executive director, the United States Environmental Protection Agency, or any local air pollution agency with jurisdiction.

§115.459. Compliance Schedules.

(a) The owner or operator of a surface coating process in Brazoria, Chambers, Collin, Dallas, Denton, Ellis, Fort Bend, Galveston, Harris, Johnson, Kaufman, Liberty, Montgomery, Parker, Rockwall, Tarrant, and Waller Counties subject to this division shall comply with the requirements of this division, except as specified in §115.453(f) – (i) of this title (relating to Control Requirements), no later than March 1, 2013.

(b) The owner or operator of a surface coating process in Wise County shall comply with the requirements in this division, except as specified in §115.453(f) – (i) of this title, no later than January 1, 2017.

(c) The owner or operator of a surface coating process in the Bexar County area subject to the requirements of this division shall comply with the requirements in this division no later than January 1, 2025.

(d) The owner or operator of a surface coating process that becomes subject to this division on or after the applicable compliance date of this section shall comply with the requirements in this division no later than 60 days after becoming subject.

(e) The owner or operator of a surface coating process in Collin, Dallas, Denton, Ellis, Johnson, Kaufman, Parker, Rockwall, Tarrant, and Wise Counties shall comply with §115.453(f) of this title by no later than 270 days after the commission publishes notification in the *Texas Register* of its determination that this industrial maintenance coating contingency rule is necessary as a result of EPA publication of a notice in the Federal Register that the specified area failed to attain the applicable 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).

(f) The owner or operator of a surface coating process in Collin, Dallas, Denton, Ellis, Johnson, Kaufman, Parker, Rockwall, Tarrant, and Wise Counties shall comply with §115.453(h) of this title by no later than 270 days after the commission publishes notification in the *Texas Register* of its determination that this traffic marking coating contingency rule is necessary as a result of EPA publication of a notice in the *Federal Register* that the specified area failed to attain the applicable 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).

(g) The owner or operator of a surface coating process in Brazoria, Chambers, Fort Bend, Galveston, Harris, Liberty, Montgomery, and Waller Counties shall be in compliance with §115.453(g) of this title by no later than 270 days after the commission publishes notification in the *Texas Register* of its determination that this industrial maintenance coating contingency rule is necessary as a result of EPA publication of a notice in the *Federal Register* that the specified area failed to attain the applicable National Ambient Air Quality Standard for ozone by the attainment deadline or failed to demonstrate reasonable further progress as set forth in the 1990 Amendments to the Federal Clean Air Act, §172(c)(9).

(h) The owner or operator of a surface coating process in Brazoria, Chambers, Fort Bend, Galveston, Harris, Liberty, Montgomery, and Waller Counties shall be in compliance with §115.453(i) of this title by no later than 270 days after the commission publishes notification in the *Texas Register* of its determination that this traffic marking coating contingency rule is necessary as a result of EPA publication of a notice in the *Federal Register* that the specified area failed to attain the applicable 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).

SUBCHAPTER E: SOLVENT-USING PROCESSES
DIVISION 6: INDUSTRIAL CLEANING SOLVENTS
§§115.460, 115.461, 115.463, 115.465, 115.468, 115.469

Statutory Authority

The amendments are adopted under Texas Water Code (TWC), §5.102, concerning general powers; §5.103, concerning Rules; TWC, §5.105, concerning General Policy, which authorize the commission to adopt rules necessary to carry out its powers and duties under the TWC; TWC, §7.002, concerning Enforcement Authority, which authorizes the commission to enforce the provisions of the Water Code and the Health and Safety Code within the commission's jurisdiction; and under Texas Health and Safety Code (THSC), §382.017, concerning Rules, which authorizes the commission to adopt rules consistent with the policy and purpose of the Texas Clean Air Act.

The amendments are also adopted under THSC, §382.002, concerning Policy and Purpose, which establishes the commission's purpose to safeguard the state's air resources, consistent with the protection of public health, general welfare, and physical property; THSC, §382.011, concerning General Powers and Duties, which authorizes the commission to control the quality of the state's air; THSC, §382.012, concerning the State Air Control Plan, which authorizes the commission to prepare and develop a general, comprehensive plan for the proper control of the state's air; THSC, §382.016, concerning Monitoring Requirements; Examination of Records, which authorizes the commission to prescribe reasonable requirements for measuring and monitoring the emissions of air contaminants; and THSC, §382.021, concerning Sampling

Methods and Procedures.

The adopted amendments implement TWC, §§5.102, 5.103 and 7.002; and THSC, §§382.002, 382.011, 382.012, 382.016, 382.017, and 382.021.

§115.460. Applicability and Definitions.

(a) Applicability. Except as specified in §115.461 of this title (relating to Exemptions), the requirements in this division apply to solvent cleaning operations in the Bexar County, Dallas-Fort Worth and Houston-Galveston-Brazoria areas, as defined in §115.10 of this title (relating to Definitions). Residential cleaning and janitorial cleaning are not considered solvent cleaning operations.

(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 indicates otherwise.

(1) Aerosol can--A hand-held, non-refillable container that expels pressurized product by means of a propellant-induced force.

(2) Application device--A device used to apply adhesive, coating, ink, or polyester resin materials.

(3) Application line--A portion of a motor vehicle assembly production line which applies surface and other coatings to motor vehicle bodies, hoods, fenders, cargo boxes, doors, and grill opening panels.

(4) Blanket--A synthetic rubber mat used in offset-lithography to transfer or offset an image from a planographic printing plate to the paper or other substrate.

(5) Blanket wash--A solvent used to remove ink from the blanket of a press.

(6) Cured coating, cured ink, or cured adhesive--A coating, ink, or adhesive, which is dry to the touch.

(7) Electrical and electronic components--Components and assemblies of components that generate, convert, transmit, or modify electrical energy. Electrical and electronic components include, but are not limited to, wires, windings, stators, rotors, magnets, contacts, relays, printed circuit boards, printed wire assemblies, wiring boards, integrated circuits, resistors, capacitors, and transistors. Cabinets that house electrical and electronic components are not considered electrical and electronic components. In the context of the provisions in §115.461(d) and (e) of this title (relating to Exemptions) and §115.463(e) of this title (relating to Control Requirements), Electronic component is defined as that portion of an

assembly, including circuit card assemblies, printed wire assemblies, printed circuit boards, soldered joints, ground wires, bus bars, and other electrical fixtures, except for the actual cabinet in which the components are housed; and Electrical component is defined as an internal component such as wires, windings, stators, rotors, magnets, contacts, relays, energizers, and connections in an apparatus that generates or transmits electrical energy including, but not limited to: alternators, generators, transformers, electric motors, cables, and circuit breakers, except for the actual cabinet in which the components are housed. Electrical components of graphic arts application equipment and hot-line tools are also included in this category.

(8) Electron beam ink--An ink that dries by chemical reaction caused by high energy electrons.

(9) Facility--A business or businesses engaged in solvent cleaning operations which are owned or operated by the same person or persons and are located on the same or contiguous parcels.

(10) Grams of VOC per liter of material--The weight of VOC per volume of material and can be calculated by the following equation.

Figure: 30 TAC §115.460(b)(10)

$$Grams\ of\ VOC\ per\ liter\ of\ material = \frac{W_s - W_w - W_{es}}{V_m}$$

Where:

W_s = Weight of volatile compounds in grams

W_w = Weight of water in grams

W_{es} = Weight of exempt solvents, as defined in §101.1 of this title (relating to Definitions), in grams

V_m = Volume of material in liters

(11) Graphic arts--All gravure, letterpress, flexographic, and lithographic printing processes.

(12) Gravure printing-- An intaglio process in which the ink is carried in minute etched or engraved wells on a roll or cylinder. The excess ink is removed from the surface by a doctor blade.

(13) High precision optic--An optical element used in an electro-optical device and is designed to sense, detect, or transmit light energy, including specific wavelengths of light energy and changes in light energy levels.

(14) Hot-line tool--A specialized tool used primarily on the transmission systems, sub-transmission systems and distribution systems for replacing and repairing circuit components or for other types of work with electrically energized circuits.

(15) Janitorial cleaning--The cleaning of building or facility components including, but not limited to, floors, ceilings, walls, windows, doors, stairs, bathrooms, furnishings, and exterior surfaces of office equipment, and excludes the cleaning of work areas where manufacturing or repair activity is performed.

(16) Letterpress printing--The method in which the image area is raised relative to the non-image area and the ink is transferred to the paper directly from the image surface.

(17) Liquid-tight food container--A paperboard container that can hold liquid food and food products without leaking even when it is held upside-down.

(18) Lithographic printing--A plane-o-graphic method in which the image and non-image areas are on the same plane.

(19) Magnet wire--Wire used in electromagnetic field application in electrical machinery and equipment such as transformers, motors, generators, and magnetic tape recorders.

(20) Magnet wire coating operation--The process of applying insulation coatings such as varnish or enamel on magnet wire where wire is continuously drawn through a coating applicator.

(21) Maintenance cleaning--A solvent cleaning operation or activity carried out to keep clean general work areas where manufacturing or repair activity is performed, to clean tools, machinery, molds, forms, jigs, and equipment. This definition does not include the cleaning of coatings, adhesives, or ink application equipment.

(22) Manufacturing process--The process of making goods or articles by hand or by machinery.

(23) Medical device--An instrument, apparatus, implement, machine, contrivance, implant, in vitro reagent or other similar article, including any component or accessory, that meets one of the following conditions:

(A) it is intended for use in the diagnosis of disease or other conditions, or in the cure, mitigation, treatment, or prevention of disease; or

(B) it is intended to affect the structure or any function of the body; or

(C) it is defined in the National Formulary of the United States Pharmacopeia, or any supplement to them.

(24) Medical device and pharmaceutical preparation operations--Medical devices, pharmaceutical products, and associated manufacturing and product handling equipment and material, work surfaces, maintenance tools, and room surfaces that are subject to the United States Federal Drug Administration current Good Manufacturing/Laboratory Practice, or Center for Disease Control or National Institute of Health guidelines for biological disinfection of surfaces.

(25) Medical or pharmaceutical work surface--An area of a medical device or pharmaceutical facility where solvent cleaning is performed on work surfaces including, but not limited to, tables, countertops, and laboratory benches. Medical or pharmaceutical work surface shall not include items defined under janitorial cleaning.

(26) Non-absorbent container--A container made of nonporous material, which does not allow the migration of the liquid solvent through it.

(27) On-press component--A part, component, or accessory of a press that is cleaned while still being physically attached to the press.

(28) On-press screen cleaning--A solvent cleaning activity carried out during press runs in screen printing operation to remove excess inks and contaminants from a screen that is still attached to the press.

(29) Packaging printing--Any lithographic, flexographic, gravure, or letterpress printing that results in identifying or beautifying paper, paperboard, or cardboard products to be used as containers, enclosures, wrappings, or boxes.

(30) Pharmaceutical product--A preparation or compound of medicinal drugs including, but not limited to, a prescription drug, analgesic, decongestant, antihistamine, cough suppressant, vitamin, mineral and herb, and is used by humans or animals for consumption to enhance personal health.

(31) Photocurable resin--A chemical material that solidifies upon exposure to light.

(32) Polyester resin operation--The fabrication, rework, repair, or touch-up of composite products for commercial, military, or industrial uses by mixing, pouring, manual application, molding, impregnating, injecting, forming, spraying, pultrusion, filament winding, or centrifugally casting with polyester resins.

(33) Precision optics--The optical elements used in electro-optical devices that are designed to sense, detect, or transmit light energy, including specific wavelengths of light energy and changes of light energy levels.

(34) Printing--In the graphic arts, is any operation that imparts color, design, alphabet, or numerals on a substrate.

(35) Removable press component--A part, component, or accessory of a press that is physically attached to the press but is disassembled and removed from the press prior to being cleaned. Rollers, blankets, metering rollers, dampening rollers, ink trays, printing plates, fountains, impression cylinders and plates shall not be considered as removable press components.

(36) Repair cleaning--A solvent cleaning operation or activity carried out during a repair process.

(37) Repair process--The process of returning a damaged object or an object not operating properly to good condition.

(38) Roller wash--A solvent used to remove ink from the rollers of a press.

(39) Scientific instrument--An instrument (including the components, assemblies, and subassemblies used in their manufacture) and associated accessories and reagents that is used for the detection, measurement, analysis, separation, synthesis, or sequencing of various compounds.

(40) Screen printing--A process in which the printing ink passes through a web or a fabric to which a refined form of stencil has been applied. The stencil openings determine the form and dimensions of the imprint.

(41) Solvent--A volatile organic compound-containing liquid used to perform solvent cleaning operations.

(42) Solvent cleaning operation--The removal of uncured adhesives, inks, and coatings; and contaminants such as dirt, soil, oil, and grease from parts, products, tools, machinery, equipment, vessels, floors, walls, and other work production-related areas using a solvent. In the context of the provisions in §115.461(d) and (e) of this title and §115.463(e) of this title, each distinct method of cleaning in a cleaning process that consists of a series of cleaning methods shall constitute a separate solvent cleaning operation.

(43) Solvent flushing--The use of a solvent to remove uncured adhesives, uncured inks, uncured coatings, or contaminants from the internal surfaces and passages of the equipment by flushing solvent through the equipment.

(44) Specialty flexographic printing--Flexographic printing on polyethylene or polypropylene food packaging, fertilizer bags, or liquid-tight food containers.

(45) Stereolithography--A type of printing process that employs a system using a light to solidify photocurable resins in a desired configuration in order to produce a 3-dimensional object.

(46) Stripping--The removal of cured coatings, cured inks, or cured adhesives.

(47) Surface preparation--The removal of contaminants such as dust, soil, oil, grease, etc., prior to coating, adhesive, or ink applications.

(48) Ultraviolet ink--An ink that dries by polymerization reaction induced by ultraviolet energy.

(49) Volatile organic compound (VOC) composite partial pressure--The sum of the partial pressures of the compounds that meet the definition of VOC in §101.1 of this title (relating to Definitions). The VOC composite partial pressure is calculated as follows.

Figure: 30 TAC §115.460(b)(12) (No change)

§115.461. Exemptions.

(a) Solvent cleaning operations located on a property with total actual volatile organic compounds (VOC) emissions of less than 3.0 tons per calendar year from all cleaning solvents,

when uncontrolled, are exempt from the requirements of this division, except as specified in §115.468(b)(2) of this title (relating to Monitoring and Recordkeeping Requirements). When calculating the VOC emissions, solvents used for solvent cleaning operations that are exempt from this division under subsections (b) – (d) and (f) of this section are excluded.

(b) The owner or operator of any process or operation subject to another division of this chapter that specifies solvent cleaning operation requirements related to that process or operation is exempt from the requirements in this division.

(c) A solvent cleaning operation is exempt from this division if:

(1) the process or operation that the solvent cleaning operation is associated with is subject to another division in this chapter; and

(2) the VOC emissions from the solvent cleaning operation are controlled in accordance with an emission specification or control requirement of the division that the process or operation is subject to.

(d) The following are exempt from the VOC limits in §115.463(a) of this title (relating to Control Requirements:

(1) electrical and electronic components;

(2) precision optics;

(3) numisimatic dies;

(4) resin mixing, molding, and application equipment;

(5) coating, ink, and adhesive mixing, molding, and application equipment;

(6) stripping of cured inks, cured adhesives, and cured coatings;

(7) research and development laboratories;

(8) medical device or pharmaceutical preparation operations;

(9) performance or quality assurance testing of coatings, inks, or adhesives;

(10) architectural coating manufacturing and application operations;

(11) magnet wire coating operations;

(12) semiconductor wafer fabrication;

(13) coating, ink, resin, and adhesive manufacturing;

(14) polyester resin operations;

(15) flexographic and rotogravure printing processes;

(16) screen printing operations; and

(17) digital printing operations.

(e) If the commission publishes notice in the *Texas Register*, as provided in §115.469(d) of this title (relating to Compliance Schedules) for the Dallas-Fort Worth area, or §115.469(e) of this title for the Houston-Galveston-Brazoria area, or both areas, to require compliance with the contingency measure control requirements of §115.463(e) of this title, then the exemptions in subsections (a) - (d) of this section are no longer available, and the following exemptions apply in the applicable area as of the compliance date specified in §115.469(d) or (e) of this title.

(1) In the Dallas-Fort Worth area, in accordance with the schedule specified in §115.469(d) of this title, the following types of cleaning are exempt from the VOC content limits in §115.463(e)(1) of this title:

(A) Cleaning of solar cells, laser hardware, scientific instruments, and high-precision optics;

(B) Cleaning conducted with performance laboratory tests on coatings, adhesives, or inks; research and development programs; and laboratory tests in quality assurance laboratories;

(C) Cleaning of paper-based gaskets, and clutch assemblies where rubber is bonded to metal by means of an adhesive;

(D) Cleaning of cotton swabs to remove cottonseed oil before cleaning of high-precision optics;

(E) Medical device and pharmaceutical facilities using up to 1.5 gallons per day of solvents;

(F) The cleaning of photocurable resins from stereolithography equipment and models;

(G) Cleaning of adhesive application equipment used for thin metal laminating operations provided the clean-up solvent used contains no more than 950 grams of VOC per liter;

(H) Cleaning of electronic or electrical cables provided the clean-up solvent used contains no more than 400 grams of VOC per liter;

(I) Touch up cleaning performed on printed circuit boards where surface mounted devices have already been attached provided that the solvent used contains no more than 800 grams of VOC per liter;

(J) Cleaning carried out in batch loaded cold cleaners, vapor degreasers, conveyorized degreasers, or motion picture film cleaning equipment;

(K) Janitorial cleaning, including graffiti removal; and

(L) Stripping of cured coatings, cured ink, or cured adhesives.

(2) In the Houston-Galveston-Brazoria area, in accordance with the schedule specified in §115.469(e) of this title, the following types of cleaning are exempt from the VOC content limits in §115.463(e)(2) of this title:

(A) Cleaning of solar cells, laser hardware, scientific instruments, and high-precision optics;

(B) Cleaning conducted with performance laboratory tests on coatings, adhesives, or inks; research and development programs; and laboratory tests in quality assurance laboratories;

(C) Cleaning of paper-based gaskets, and clutch assemblies where rubber is bonded to metal by means of an adhesive;

(D) Cleaning of cotton swabs to remove cottonseed oil before cleaning of high-precision optics;

(E) Medical device and pharmaceutical facilities using up to 1.5 gallons per day of solvents;

(F) The cleaning of photocurable resins from stereolithography equipment and models;

(G) Cleaning of adhesive application equipment used for thin metal laminating operations provided the clean-up solvent used contains no more than 950 grams of VOC per liter;

(H) Cleaning of electronic or electrical cables provided the clean-up solvent used contains no more than 400 grams of VOC per liter;

(I) Touch up cleaning performed on printed circuit boards where surface mounted devices have already been attached provided that the solvent used contains no more than 800 grams of VOC per liter;

(J) Cleaning carried out in batch loaded cold cleaners, vapor degreasers, conveyorized degreasers, or motion picture film cleaning equipment;

(K) Janitorial cleaning, including graffiti removal; and

(L) Stripping of cured coatings, cured ink, or cured adhesives.

(f) Cleaning solvents supplied in aerosol cans are exempt from the VOC limits in §115.463(a) of this title if total aerosol use for the property is less than 160 fluid ounces per day.

§115.463. Control Requirements.

(a) Except as specified in subsection (e) of this section, the owner or operator shall limit the volatile organic compounds (VOC) content of cleaning solutions to:

(1) 0.42 pound of VOC per gallon of solution (lb VOC/gal solution), as applied; or

(2) limit the composite partial vapor pressure of the cleaning solution to 8.0 millimeters of mercury at 20 degrees Celsius (68 degrees Fahrenheit.

(b) As an alternative to subsection (a) of this section, the owner or operator shall operate a vapor control system capable of achieving an overall control efficiency of 85% by mass. Control device and capture efficiency testing must be performed in accordance with the testing requirements in §115.465 of this title (relating to Approved Test Methods and Testing Requirements).

(c) The owner or operator of a solvent cleaning operation shall implement the following work practices during the handling, storage, and disposal of cleaning solvents and shop towels:

(1) cover open containers and used applicators;

(2) minimize air circulation around solvent cleaning operations;

(3) properly dispose of used solvent and shop towels; and

(4) implement equipment practices that minimize emissions (e.g. maintaining cleaning equipment to repair solvent leaks).

(d) A solvent cleaning operation that becomes subject to subsection (a) of this section by exceeding the exemption limits in §115.461 of this title (relating to Exemptions) is subject to

the provisions in subsection (a) of this section even if throughput or emissions later fall below exemption limits unless emissions are maintained at or below the controlled emissions level achieved while complying with subsection (a) of this section and one of the following conditions is met.

(1) The project that caused throughput or emission rate to fall below the exemption limits in §115.461 of this title must be authorized by a permit, permit amendment, standard permit, or permit by rule required by Chapter 116 or Chapter 106 of this title (relating to Control of Air Pollution by Permits for New Construction or Modification; and Permits by Rule, respectively). If a permit by rule is available for the project, the owner or operator shall continue to comply with subsection (a) of this section for 30 days after the filing of documentation of compliance with that permit by rule.

(2) If authorization by permit, permit amendment, standard permit, or permit by rule is not required for the project, the owner or operator shall provide the executive director 30 days notice of the project in writing.

(e) If the commission has published notice in the *Texas Register*, as provided in §115.469(d) or (e) of this title (relating to Compliance Schedules), to require compliance with the contingency measure control requirements for the Dallas-Fort Worth area, the Houston-Galveston-Brazoria area, or both areas the following control requirements apply instead of subsection (a) of this section.

Figure: 30 TAC §115.463(e)

Table 1: VOC Content Limits for Industrial Cleaning Solvents

Solvent Cleaning Category	VOC Content Limit (pounds VOC per gallon)	VOC Content Limit (grams VOC per liter)
(A) Product Cleaning During Manufacturing Process or Surface Preparations for Coating, Adhesives, or Ink Application		
(i) General	0.21	25
(ii) Electrical Components and Electronic Components	0.83	100
(iii) Medical Devices and Pharmaceuticals	6.7	800
(B) Repair and Maintenance Cleaning		
(i) General	0.21	25
(ii) Electrical and Electronic Components	0.83	100
(iii) Medical Devices and Pharmaceuticals		
(A) Tools, Equipment, Machinery	6.7	800
(B) Medical or Pharmaceutical Work Surfaces	5.0	600
(C) Cleaning of Coatings or Adhesives Application Equipment	0.21	25
(D) Cleaning of Ink Application Equipment		

Solvent Cleaning Category	VOC Content Limit (pounds VOC per gallon)	VOC Content Limit (grams VOC per liter)
(i) General	0.21	25
(ii) Flexographic Printing	0.21	25
(iii) Gravure Printing		
(A) Publications	0.83	100
(B) Packaging	0.21	25
(iv) Lithographic (Offset) or Letter Press Printing		
(A) Roller Wash, Blanket Wash, and On-press Components	0.83	100
(B) Removable Press Components	0.21	25
(v) Screen Printing	0.83	100
(vi) Ultraviolet Ink/Electron Beam Ink Application Equipment (except screen printing)	0.83	100
(vii) Specialty Flexographic Printing	0.83	100
(E) Cleaning of Polyester resin Application Equipment	0.21	25

(1) In the Dallas-Fort Worth area, in accordance with the schedule specified in §115.469(d) of this title, the limits in Table 1 of this subsection apply.

(2) In the Houston-Galveston-Brazoria area, in accordance with the schedule specified in §115.469(e) of this title, the limits in Table 1 of this subsection apply.

§115.465. Approved Test Methods and Testing Requirements.

The owner or operator shall demonstrate compliance with the control requirements in §115.463 of this title (relating to Control Requirements) by applying the following test methods, as appropriate.

(1) Compliance with the volatile organic compound (VOC) limits in §115.463(a) or (e) of this title must be determined by the following methods, as applicable:

(A) Method 24 (40 Code of Federal Regulations (CFR) Part 60, Appendix A);

(B) American Society for Testing and Materials Method D2879, Standard Test Method for Vapor Pressure-Temperature Relationship and Initial Decomposition Temperature of Liquids by Isoteniscope to demonstrate compliance with §115.463(a)(2) of this title;

(C) using standard reference texts for the true vapor pressure of each VOC component to demonstrate compliance with §115.463(a)(2) of this title; or

(D) using analytical data from the cleaning solvent supplier or manufacturer's material safety data sheet.

(2) The owner or operator subject to §115.463(b) of this title shall measure the capture efficiency using applicable procedures outlined in 40 CFR §52.741, Subpart O, Appendix B (as amended through October 21, 1996 (61 FR 54559)). These procedures are: Procedure T - Criteria for and Verification of a Permanent or Temporary Total Enclosure; Procedure L - VOC Input; Procedure G.2 - Captured VOC Emissions (Dilution Technique); Procedure F.1 - Fugitive VOC Emissions from Temporary Enclosures; and Procedure F.2 - Fugitive VOC Emissions from Building Enclosures.

(A) The following exemptions apply to capture efficiency testing requirements.

(i) If a source installs a permanent total enclosure that meets the specifications of Procedure T and that directs all VOC to a control device, then the capture efficiency is assumed to be 100%, and the source is exempted from capture efficiency testing requirements. This does not exempt the source from performance of any control device efficiency testing that may be required. In addition, a source must demonstrate all criteria for a permanent total enclosure are met during testing for control efficiency.

(ii) If a source uses a vapor control system designed to collect and recover VOC (e.g., carbon adsorption system), an explicit measurement of capture efficiency is

not necessary if the following conditions are met. The overall control of the system can be determined by directly comparing the input liquid VOC to the recovered liquid VOC. The general procedure for use in this situation is given in 40 CFR §60.433 (as amended through October 17, 2000 (65 FR 61761)), with the following additional restrictions.

(I) The source must be able to equate solvent usage with solvent recovery on a 24-hour (daily) basis, rather than a 30-day weighted average. This verification must be done within 72 hours following each 24-hour period of the 30-day period.

(II) The solvent recovery system (i.e., capture and control system) must be dedicated to a single process line (e.g., one process line venting to a carbon adsorber system) or if the solvent recovery system controls multiple process lines, the source must be able to demonstrate that the overall control (i.e., the total recovered solvent VOC divided by the sum of liquid VOC input to all process lines venting to the control system) meets or exceeds the most stringent standard applicable for any process line venting to the control system.

(B) The capture efficiency must be calculated using one of the following protocols referenced. Any affected source must use one of these protocols, unless a suitable alternative protocol is approved by the executive director and the United States Environmental Protection Agency (EPA).

(i) Gas/gas method using temporary total enclosure (TTE). The EPA specifications to determine whether a temporary enclosure is considered a TTE are given in Procedure T. The capture efficiency equation to be used for this protocol is:

Figure: 30 TAC §115.465(2)(B)(i) (No Change)

(ii) Liquid/gas method using TTE. The EPA specifications to determine whether a temporary enclosure is considered a TTE are given in Procedure T. The capture efficiency equation to be used for this protocol is:

Figure: 30 TAC §115.465(2)(B)(ii) (No Change)

(iii) Gas/gas method using the building or room enclosure (BE) in which the affected source is located and in which the mass of VOC captured and delivered to a control device and the mass of fugitive VOC that escapes from the BE are measured while operating only the affected facility. All fans and blowers in the BE must be operating as they would under normal production. The capture efficiency equation to be used for this protocol is:

Figure: 30 TAC §115.465(2)(B)(iii) (No Change)

(iv) Liquid/gas method using a BE in which the mass of liquid VOC input to process and the mass of fugitive VOC that escapes from the BE are measured while

operating only the affected facility. All fans and blowers in the BE must be operated as they would under normal production. The capture efficiency equation to be used for this protocol is:

Figure: 30 TAC §115.465(2)(B)(iv) (No Change)

(C) The operating parameters selected for monitoring of the capture system for compliance with the requirements in §115.468(a) of this title (relating to Monitoring and Recordkeeping Requirements) must be monitored and recorded during the initial capture efficiency testing and thereafter during facility operation. The executive director may require a new capture efficiency test if the operating parameter values change significantly from those recorded during the initial capture efficiency test.

(3) In addition to the requirements of paragraph (2) of this section, the owner or operator shall determine compliance with §115.463(b) of this title by applying the following test methods, as appropriate:

(A) Methods 1 - 4 (40 CFR Part 60, Appendix A) for determining flow rates, as necessary;

(B) Method 25 (40 CFR Part 60, Appendix A) for determining total gaseous nonmethane organic emissions as carbon;

(C) Method 25A or 25B (40 CFR Part 60, Appendix A) for determining total gaseous organic concentrations using flame ionization or nondispersive infrared analysis; and

(D) additional performance test procedures described in 40 CFR §60.444 (as amended through October 18, 1983 (48 FR 48375)).

(4) Minor modifications to the methods in paragraphs (1) - (3) of this section may be approved by the executive director. Methods other than those specified in paragraphs (1) - (3) of this section may be used if approved by the executive director and validated using Method 301 (40 CFR Part 63, Appendix A). For the purposes of this paragraph, substitute "executive director" each place that Method 301 references "administrator."

§115.468. Monitoring and Recordkeeping Requirements.

(a) Monitoring requirements. The following monitoring requirements apply to the owner or operator of a solvent cleaning operation subject to this division that uses a vapor control system in accordance with §115.463(b) of this title (relating to Control Requirements). The owner or operator shall install and maintain monitors to accurately measure and record operational parameters of all required control devices, as necessary, to ensure the proper functioning of those devices in accordance with design specifications, including:

(1) continuous monitoring of the exhaust gas temperature immediately downstream of direct-flame incinerators or the gas temperature immediately upstream and downstream of any catalyst bed;

(2) the total amount of volatile organic compounds (VOC) recovered by carbon adsorption or other solvent recovery systems during a calendar month;

(3) continuous monitoring of carbon adsorption bed exhaust; and

(4) appropriate operating parameters for vapor control systems other than those specified in paragraphs (1) - (3) of this subsection.

(b) Recordkeeping requirements. The following recordkeeping requirements apply to the owner or operator of a solvent cleaning operation subject to this division.

(1) The owner or operator shall maintain records of the testing data, the material safety data sheet, or documentation of the standard reference texts used to determine the true vapor pressure of each VOC component, in accordance with the requirements in §115.465(1) of this title (relating to Approved Test Methods and Testing Requirements). The concentration of all VOC used to prepare the cleaning solution and, if diluted prior to use, the proportions that each of these materials is used must be recorded. Records must be sufficient to demonstrate continuous compliance with the VOC limits in §115.463(a) and (e) of this title.

(2) The owner or operator claiming an exemption in §115.461 of this title (relating to Exemptions) shall maintain records sufficient to demonstrate continuous compliance with the applicable exemption criteria.

(3) The owner or operator claiming exemption from this division in accordance with §115.461(c) of this title shall maintain records indicating the applicable division the process or operation is subject to as specified in §115.461(c)(1) of this title and the control requirements or emission specifications used to control the VOC emissions from the solvent cleaning operation as specified in §115.461(c)(2) of this title. The owner or operator shall also comply with the applicable recordkeeping requirements from the division the process or operation is subject to sufficient to demonstrate that the VOC emissions from the solvent cleaning operation are controlled in accordance with the control requirements or emission specifications of that division.

(4) The owner or operator shall maintain records of any testing conducted in accordance with the provisions specified in §115.465(2) - (4) of this title.

(5) Records must be maintained a minimum of two years and be made available upon request to authorized representatives of the executive director, the United States Environmental Protection Agency, or any local air pollution agency with jurisdiction.

§115.469. Compliance Schedules.

(a) In Brazoria, Chambers, Collin, Dallas, Denton, Ellis, Fort Bend, Galveston, Harris, Johnson, Kaufman, Liberty, Montgomery, Parker, Rockwall, Tarrant, Waller, and Wise Counties the compliance date has passed for control requirements in §115.463(a) – (d) of this title (relating to Control Requirements) and all associated requirements, and the owner or operator of a solvent cleaning operation shall continue to comply with the requirements in this division, except as specified in subsection (d) and (e) of this section.

(b) The owner or operator of a solvent cleaning operation in the Bexar County area subject to the requirements of this division shall comply with the requirements in this division no later than January 1, 2025.

(c) The owner or operator of a solvent cleaning operation that becomes subject to this division on or after the applicable compliance date in this section shall comply with the requirements in this division no later than 60 days after becoming subject.

(d) The owner or operator of a solvent cleaning operation in Collin, Dallas, Denton, Ellis, Johnson, Kaufman, Parker, Rockwall, Tarrant, and Wise Counties shall be in compliance with the requirements of §115.463(e) of this title (relating to Control Requirements) no later than 270 days after the commission publishes notification in the *Texas Register* of its determination that the industrial cleaning solvent contingency requirements are necessary as a result of EPA publication of a notice in the *Federal Register* that the specified area failed to attain the

applicable National Ambient Air Quality Standard for ozone by the attainment deadline or failed to demonstrate reasonable further progress as set forth in the 1990 Amendments to the federal Clean Air Act, §172(c)(9).

(e) The owner or operator of a solvent cleaning operation in Brazoria, Chambers, Fort Bend, Galveston, Harris, Liberty, Montgomery, and Waller Counties shall be in compliance with the requirements of §115.463(e) of this title no later than 270 days after the commission publishes notification in the *Texas Register* of its determination that the contingency requirements are necessary as a result of EPA publication of a notice in the *Federal Register* that the specified area failed to attain the applicable National Ambient Air Quality Standard for ozone by the attainment deadline or failed to demonstrate reasonable further progress as set forth in the 1990 Amendments to the federal Clean Air Act.

SUBCHAPTER E: SOLVENT-USING PROCESSES
DIVISION 7: MISCELLANEOUS INDUSTRIAL ADHESIVES
§§115.470, 115.471, 115.473 – 115.475, 115.478, 115.479

Statutory Authority

The amendments are adopted under Texas Water Code (TWC), §5.102, concerning general powers; §5.103, concerning Rules; TWC, §5.105, concerning General Policy, which authorize the commission to adopt rules necessary to carry out its powers and duties under the TWC; TWC, §7.002, concerning Enforcement Authority, which authorizes the commission to enforce the provisions of the Water Code and the Health and Safety Code within the commission's jurisdiction; and under Texas Health and Safety Code (THSC), §382.017, concerning Rules, which authorizes the commission to adopt rules consistent with the policy and purpose of the Texas Clean Air Act.

The amendments are also adopted under THSC, §382.002, concerning Policy and Purpose, which establishes the commission's purpose to safeguard the state's air resources, consistent with the protection of public health, general welfare, and physical property; THSC, §382.011, concerning General Powers and Duties, which authorizes the commission to control the quality of the state's air; THSC, §382.012, concerning the State Air Control Plan, which authorizes the commission to prepare and develop a general, comprehensive plan for the proper control of the state's air; THSC, §382.016, concerning Monitoring Requirements; Examination of Records, which authorizes the commission to prescribe reasonable requirements for measuring and monitoring the emissions of air contaminants; and THSC, §382.021, concerning Sampling Methods and Procedures.

The adopted amendments implement TWC, §§5.102, 5.103 and 7.002; and THSC, §§382.002, 382.011, 382.012, 382.016, 382.017, and 382.021.

§115.470. Applicability and Definitions.

(a) Applicability. Except as specified in §115.471 of this title (relating to Exemptions), the requirements in this division apply to the owner or operator of a manufacturing operation using adhesives or adhesive primers for any of the application processes specified in §115.473 of this title (relating to Control Requirements) in the Bexar County, Dallas-Fort Worth and Houston-Galveston-Brazoria areas, as defined in §115.10 of this title (relating to Definitions). Adhesives or adhesive primers applied in the field (e.g., construction jobs in the field) are not subject to this division.

(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) Acrylonitrile-butadiene-styrene or ABS welding--Any process to weld acrylonitrile-butadiene-styrene pipe.

(2) Adhesive--Any chemical substance applied for the purpose of bonding two surfaces together other than by mechanical means.

(3) Adhesive primer--Any product intended by the manufacturer for application to a substrate, prior to the application of an adhesive, to provide a bonding surface.

(4) Aerosol adhesive or adhesive primer--An adhesive or adhesive primer packaged as an aerosol product in which the spray mechanism is permanently housed in a non-refillable can designed for handheld application without the need for ancillary hoses or spray equipment.

(5) Aerospace component--Any fabricated part, processed part, assembly of parts, or completed unit of any aircraft including but not limited to airplanes, helicopters, missiles, rockets, and space vehicles. This definition includes electronic components.

(6) Application process--A series of one or more application systems and any associated drying area or oven where an adhesive or adhesive primer is applied, dried, or cured. An application process ends at the point where the adhesive is dried or cured, or prior to any subsequent application of a different adhesive. It is not necessary for an application process to have an oven or flash-off area.

(7) Application system--Devices or equipment designed for the purpose of applying an adhesive or adhesive primer to a surface. The devices may include, but are not limited to, brushes, sprayers, flow coaters, dip tanks, rollers, and extrusion coaters.

(8) Ceramic tile installation adhesive--Any adhesive intended by the manufacturer for use in the installation of ceramic tiles.

(9) Chlorinated polyvinyl chloride plastic or CPVC plastic welding--A polymer of the vinyl chloride monomer that contains 67% chlorine and is normally identified with a chlorinated polyvinyl chloride marking.

(10) Chlorinated polyvinyl chloride welding or CPVC welding--An adhesive labeled for welding of chlorinated polyvinyl chloride.

(11) Contact adhesive--An adhesive:

(A) designed for application to both surfaces to be bonded together;

(B) allowed to dry before the two surfaces are placed in contact with each other;

(C) forms an immediate bond that is impossible, or difficult, to reposition after both adhesive-coated surfaces are placed in contact with each other;

(D) does not need sustained pressure or clamping of surfaces after the adhesive-coated surfaces have been brought together using sufficient momentary pressure to establish full contact between both surfaces; and

(E) does not include rubber cements that are primarily intended for use on paper substrates or vulcanizing fluids that are designed and labeled for tire repair only.

(12) Cove base--A flooring trim unit, generally made of vinyl or rubber, having a concave radius on one edge and a convex radius on the opposite edge that is used in forming a junction between the bottom wall course and the floor or to form an inside corner.

(13) Cove base installation adhesive--Any adhesive intended by the manufacturer to be used for the installation of cove base or wall base on a wall or vertical surface at floor level.

(14) Cyanoacrylate adhesive--Any adhesive with a cyanoacrylate content of at least 95% by weight.

(15) Daily weighted average--The total weight of volatile organic compounds (VOC) emissions from all adhesives or adhesive primers subject to the same VOC content limit in §115.473(a) of this title (relating to Control Requirements), divided by the total volume of those adhesives or adhesive primers (minus water and exempt solvent) delivered to the application system each day. Adhesives or adhesive primers subject to different emission standards in §115.473(a) of this title must not be combined for purposes of calculating the daily weighted average. In addition, determination of compliance is based on each adhesive or adhesive primer application process.

(16) Ethylene propylenediene monomer (EPDM) roof membrane--A prefabricated single sheet of elastomeric material composed of ethylene propylenediene monomer and that is field-applied to a building roof using one layer or membrane material.

(17) Flexible vinyl--Non-rigid polyvinyl chloride plastic with a 5.0% by weight plasticizer content.

(18) Indoor floor covering installation adhesive--Any adhesive intended by the manufacturer for use in the installation of wood flooring, carpet, resilient tile, vinyl tile, vinyl-backed carpet, resilient sheet and roll, or artificial grass. Adhesives used to install ceramic tile and perimeter-bonded sheet flooring with vinyl backing onto a non-porous substrate, such as flexible vinyl, are excluded from this definition.

(19) Laminate--A product made by bonding together two or more layers of material.

(20) Metal to urethane/rubber molding or casting adhesive--Any adhesive intended by the manufacturer to bond metal to high density or elastomeric urethane or molded rubber materials, in heater molding or casting processes, to fabricate products such as rollers for computer printers or other paper handling equipment.

(21) Motor vehicle adhesive--An adhesive, including glass-bonding adhesive, used in a process that is not an automobile or light-duty truck assembly coating process, applied for the purpose of bonding two vehicle surfaces together without regard to the substrates involved.

(22) Motor vehicle glass-bonding primer--A primer, used in a process that is not an automobile or light-duty truck assembly coating process, applied to windshield or other glass, or to body openings, to prepare the glass or body opening for the application of glass-bonding adhesives or the installation of adhesive-bonded glass. Motor vehicle glass-bonding primer includes glass-bonding/cleaning primers that perform both functions (cleaning and priming of the windshield or other glass, or body openings) prior to the application of adhesive or the installation of adhesive-bonded glass.

(23) Motor vehicle weatherstrip adhesive--An adhesive, used in a process that is not an automobile or light-duty truck assembly coating process, applied to weatherstripping materials for the purpose of bonding the weatherstrip material to the surface of the vehicle.

(24) Multipurpose construction adhesive--Any adhesive intended by the manufacturer for use in the installation or repair of various construction materials, including but not limited to drywall, subfloor, panel, fiberglass reinforced plastic (FRP), ceiling tile, and acoustical tile.

(25) Outdoor floor covering installation adhesive--Any adhesive intended by the manufacturer for use in the installation of floor covering that is not in an enclosure and that is exposed to ambient weather conditions during normal use.

(26) Panel installation--The installation of plywood, pre-decorated hardboard or tileboard, fiberglass reinforced plastic, and similar pre-decorated or non-decorated panels to studs or solid surfaces using an adhesive formulated for that purpose.

(27) Perimeter bonded sheet flooring installation--The installation of sheet flooring with vinyl backing onto a nonporous substrate using an adhesive designed to be applied only to a strip of up to four inches wide around the perimeter of the sheet flooring.

(28) Plastic solvent welding adhesive--Any adhesive intended by the manufacturer for use to dissolve the surface of plastic to form a bond between mating surfaces.

(29) Plastic solvent welding adhesive primer--Any primer intended by the manufacturer for use to prepare plastic substrates prior to bonding or welding.

(30) Plastic foam--Foam constructed of plastics.

(31) Plastics--Synthetic materials chemically formed by the polymerization of organic (carbon-based) substances. Plastics are usually compounded with modifiers, extenders, or reinforcers and are capable of being molded, extruded, cast into various shapes and films, or drawn into filaments.

(32) Polyvinyl chloride plastic or PVC plastic--A polymer of the chlorinated vinyl monomer that contains 57% chlorine.

(33) Polyvinyl chloride welding adhesive or PVC welding adhesive--Any adhesive intended by the manufacturer for use in the welding of polyvinyl chloride plastic pipe.

(34) Porous material--A substance that has tiny openings, often microscopic, in which fluids may be absorbed or discharged, including, but not limited to, paper and

corrugated paperboard. For the purposes of this definition, porous material does not include wood.

(35) Pounds of volatile organic compounds (VOC) per gallon of adhesive (minus water and exempt solvent)--The basis for content limits for application processes that can be calculated by the following equation:

Figure: 30 TAC §115.470(b)(35) (No change)

(36) Pounds of volatile organic compounds (VOC) per gallon of solids--The basis for content limits for application processes that can be calculated by the following equation:

Figure: 30 TAC §115.470(b)(36) (No Change)

(37) Reinforced plastic composite--A composite material consisting of plastic reinforced with fibers.

(38) Rubber--Any natural or manmade rubber substrate, including, but not limited to, styrene-butadiene rubber, polychloroprene (neoprene), butyl rubber, nitrile rubber, chlorosulfonated polyethylene, and ethylene propylene diene terpolymer.

(39) Sheet rubber lining installation--The process of applying sheet rubber liners by hand to metal or plastic substrates to protect the underlying substrate from corrosion or abrasion. These processes also include laminating sheet rubber to fabric by hand.

(40) Single-ply roof membrane--A prefabricated single sheet of rubber, normally ethylene propylenediene terpolymer, that is field-applied to a building roof using one layer of membrane material. For the purposes of this definition, single-ply roof membrane does not include membranes prefabricated from ethylene propylenediene monomer.

(41) Single-ply roof membrane installation and repair adhesive--Any adhesive labeled for use in the installation or repair of single-ply roof membrane. Installation includes, as a minimum, attaching the edge of the membrane to the edge of the roof and applying flashings to vents, pipes, and ducts that protrude through the membrane. Repair includes gluing the edges of torn membrane together, attaching a patch over a hole, and reapplying flashings to vents, pipes, or ducts installed through the membrane.

(42) Single-ply roof membrane adhesive primer--Any primer labeled for use to clean and promote adhesion of the single-ply roof membrane seams or splices prior to bonding.

(43) Specialty adhesives--A contact adhesive that is used to bond all of the following substrates to any surface: melamine covered board, metal, unsupported vinyl, Teflon,

ultra-high molecular weight polyethylene, rubber, and wood veneer 1/16 inch or less in thickness.

(44) Structural glazing--A process that includes the application of adhesive to bond glass, ceramic, metal, stone, or composite panels to exterior building frames.

(45) Subfloor installation--The installation of subflooring material over floor joists, including the construction of any load-bearing joists. Subflooring is covered by a finish surface material.

(46) Thin metal laminating adhesive--Any adhesive intended by the manufacturer for use in bonding multiple layers of metal to metal or metal to plastic in the production of electronic or magnetic components in which the thickness of the bond line(s) is less than 0.25 mil.

(47) Tire repair--A process that includes expanding a hole, tear, fissure, or blemish in a tire casing by grinding or gouging, applying adhesive, and filling the hole or crevice with rubber.

(48) Undersea-based weapon system components--The fabrication of parts, assembly of parts or completed units of any portion of a missile launching system used on undersea ships.

(49) Waterproof resorcinol glue--A two-part resorcinol-resin-based adhesive designed for applications where the bond line must be resistant to conditions of continuous immersion in fresh or salt water.

§115.471. Exemptions.

(a) Except as specified in subsection (d) of this section, the owner or operator of application processes located on a property with actual combined emissions of volatile organic compounds (VOC) less than 3.0 tons per calendar year, when uncontrolled, from all adhesives, adhesive primers, and solvents used during related cleaning operations, is exempt from the requirements of this division, except as specified in §115.478(b)(2) of this title (relating to Monitoring and Recordkeeping Requirements). When calculating the VOC emissions, adhesives and adhesive primers that are exempt under subsections (b) and (c) of this section are excluded.

(b) Except as specified in subsection (d) of this section, the following application processes are exempt from the VOC limits in §115.473(a) of this title (relating to Control Requirements) and the application system requirements in §115.473(b) of this title:

(1) adhesives or adhesive primers being tested or evaluated in any research and development, quality assurance, or analytical laboratory;

(2) adhesives or adhesive primers used in the assembly, repair, or manufacture of aerospace components or undersea-based weapon system components;

(3) adhesives or adhesive primers used in medical equipment manufacturing operations;

(4) cyanoacrylate adhesive application processes;

(5) aerosol adhesive and aerosol adhesive primer application processes;

(6) polyester-bonding putties used to assemble fiberglass parts at fiberglass boat manufacturing properties and at other reinforced plastic composite manufacturing properties; and

(7) processes using adhesives and adhesive primers that are supplied to the manufacturer in containers with a net volume of 16 ounces or less or a net weight of 1.0 pound or less.

(c) Except as specified in subsection (d) of this section, the owner or operator of any process or operation subject to another division of this chapter that specifies VOC content limits for adhesives or adhesive primers used during any of the application processes listed in §115.473(a) of this title, is exempt from the requirements in this division. Adhesives and

adhesive primers used for miscellaneous metal and plastic parts surface coating processes in §115.453(a)(1)(C) - (F) and (2) of this title (related to Control Requirements) meeting a specialty application process definition in §115.470 of this title (relating to Applicability and Definitions) are not included in this exemption. Contact adhesives are not included in this exemption. When an adhesive or adhesive primer meets more than one adhesive application process definition in §115.470 of this title, the least stringent applicable VOC content limit applies.

(d) If the commission publishes notice in the *Texas Register*, as provided in §115.479(c) of this title (relating to Compliance Schedules) for either the Dallas-Fort Worth area or §115.479(d) of this title for the Houston-Galveston-Brazoria area, or both areas, to require compliance with the contingency measure control requirements of §115.473(e) of this title for the Dallas-Fort Worth area and/or §115.473(f) of this title for the Houston-Galveston-Brazoria area, then the exemptions in subsections (a) - (c) of this section are no longer available, and the following exemptions apply in the applicable area as of the compliance date specified in §115.479(c) or (e) of this title.

(1) The owner or operator of application processes who demonstrates that the total volume of noncompliant products, including all adhesives, adhesive primers, and solvents used during related cleaning operations, located on the property is less than 55 gallons per calendar year is exempt from the requirements of this division, except as specified in §115.478(b)(2) of this title. The owner or operator may not use this paragraph to exclude noncompliant adhesives used in architectural applications; contact adhesives; special purpose

contact adhesives; adhesives used on porous substrates; rubber vulcanization adhesives and top and trim adhesives.

(2) The requirements in §115.473(e) and (f) do not apply to:

(A) adhesives or adhesive primers used in the assembly, repair, or manufacture of aerospace components;

(B) adhesive tape;

(C) aerosol adhesives and primers dispensed from non-refillable aerosol spray systems;

(D) regulated products sold in quantities of one fluid ounce or less;

(E) adhesives used to glue flowers to parade floats;

(F) adhesives used to fabricate orthotics and prosthetics under a medical doctor's prescription;

(G) shoe repair, luggage, and handbag adhesives;

(H) research and development programs and quality assurance labs;

(I) solvent welding operations used in the manufacturing of medical devices; or

(J) adhesives used in tire repair.

§115.473. Control Requirements.

(a) The owner or operator shall limit volatile organic compounds (VOC) emissions from all adhesives and adhesive primers used during the specified application processes to the following VOC content limits in pounds of VOC per gallon of adhesive (lb VOC/gal adhesive) (minus water and exempt solvent compounds), as delivered to the application system. These limits are based on the daily weighted average of all adhesives or adhesive primers delivered to the application system each day. If an adhesive or adhesive primer is used to bond dissimilar substrates together, then the applicable substrate category with the least stringent VOC content limit applies. The requirements in this subsection are replaced with the requirements in subsection (e) of this section in the Dallas-Fort Worth area upon the compliance date specified in §115.479(c) of this title (relating to Compliance Schedules) or with the requirements in subsection (f) of this section in the Houston-Galveston-Brazoria area upon the compliance date specified in §115.479(d) of this title.

Figure: 30 TAC §115.473(a) (No Change)

(1) The owner or operator shall meet the VOC content limits in this subsection by using one of the following options.

(A) The owner or operator shall apply low-VOC adhesives or adhesive primers.

(B) The owner or operator shall apply adhesives or adhesive primers in combination with the operation of a vapor control system.

(2) As an alternative to paragraph (1) of this subsection, the owner or operator may operate a vapor control system capable of achieving an overall control efficiency of 85% of the VOC emissions from adhesives and adhesive primers. Control device and capture efficiency testing must be performed in accordance with the testing requirements in §115.475(3) and (4) of this title (relating to Approved Test Methods and Testing Requirements). If the owner or operator complies with the overall control efficiency option under this paragraph, then the owner or operator is exempt from the application system requirements of subsection (b) of this section.

(3) An owner or operator applying adhesives or adhesive primers in combination with a vapor control system to meet the VOC content limits in paragraph (1) of this subsection, shall use the following equation to determine the minimum overall control efficiency necessary

to demonstrate equivalency. Control device and capture efficiency testing must be performed in accordance with the testing requirements in §115.475(3) and (4) of this title.

Figure: 30 TAC §115.473(a)(3) (No Change)

(b) The owner or operator of any application process subject to this division shall not apply adhesives or adhesive primers unless one of the following application systems is used:

(1) electrostatic spray;

(2) high-volume, low-pressure spray (HVLP);

(3) flow coat;

(4) roll coat or hand application, including non-spray application methods similar to hand or mechanically powered caulking gun, brush, or direct hand application;

(5) dip coat;

(6) airless spray;

(7) air-assisted airless spray; or

(8) other application system capable of achieving a transfer efficiency equivalent to or better than that achieved by HVLP spray. For the purpose of this requirement, the transfer efficiency of HVLP spray is assumed to be 65%. The owner or operator shall demonstrate that either the application system being used is equivalent to the transfer efficiency of an HVLP spray or that the application system being used has a transfer efficiency of at least 65%.

(c) The following work practices apply to the owner or operator of each application process subject to this division.

(1) For the storage, mixing, and handling of all adhesives, adhesive primers, thinners, and adhesive-related waste materials, the owner or operator shall:

(A) store all VOC-containing adhesives, adhesive primers, and process-related waste materials in closed containers;

(B) ensure that mixing and storage containers used for VOC-containing adhesives, adhesive primers, and process-related waste materials are kept closed at all times;

(C) minimize spills of VOC-containing adhesives, adhesive primers, and process-related waste materials; and

(D) convey VOC-containing adhesives, adhesive primers, and process-related waste materials from one location to another in closed containers or pipes.

(2) For the storage, mixing, and handling of all surface preparation materials and cleaning materials, the owner or operator shall:

(A) store all VOC-containing cleaning materials and used shop towels in closed containers;

(B) ensure that storage containers used for VOC-containing cleaning materials are kept closed at all times except when depositing or removing these materials;

(C) minimize spills of VOC-containing cleaning materials;

(D) convey VOC-containing cleaning materials from one location to another in closed containers or pipes; and

(E) minimize VOC emissions from the cleaning of application, storage, mixing, and conveying equipment by ensuring that equipment cleaning is performed without atomizing the cleaning solvent and all spent solvent is captured in closed containers.

(d) An application process that becomes subject to subsection (a) of this section by exceeding the exemption limits in §115.471(a) of this title (relating to Exemptions) is subject to the provisions in subsection (a) of this section even if throughput or emissions later fall below exemption limits unless emissions are maintained at or below the controlled emissions level achieved while complying with subsection (a) of this section and one of the following conditions is met.

(1) The project that caused a throughput or emission rate to fall below the exemption limits in §115.471(a) of this title must be authorized by a permit, permit amendment, standard permit, or permit by rule required by Chapters 106 or 116 of this title (relating to Permits by Rule; and Control of Air Pollution by Permits for New Construction or Modification, respectively). If a permit by rule is available for the project, the owner or operator shall continue to comply with subsection (a) of this section for 30 days after the filing of documentation of compliance with that permit by rule.

(2) If authorization by permit, permit amendment, standard permit, or permit by rule is not required for the project, the owner or operator shall provide the executive director 30 days notice of the project in writing.

(e) In accordance with the compliance schedule for contingency requirements in §115.479(c) of this title in the Dallas-Fort Worth area, the owner or operator shall apply low-VOC adhesives or adhesive primers to limit VOC emissions from all adhesives and adhesive

primers used during the specified application processes to the VOC content limits listed in the tables in this subsection in grams of VOC per liter of adhesive (minus water and exempt solvent compounds), as delivered to the application system. If an adhesive or adhesive primer is used to bond dissimilar substrates together, then the applicable substrate category with the least stringent VOC content limit applies.

Figure: 30 TAC §115.473(e)

Table 1.

Category	Grams of volatile organic compounds (VOC) per liter adhesive
Computer Diskette Manufacturing Adhesive	350
Contact Adhesive	80
Edge Glue Adhesive	250
Plastic Welding Cement	
ABS Welding Cement	325
ABS to PVC Transition Cement	510
CPVC Welding Cement	490
CPVC For Life-Safety Systems	490
Higher Viscosity CPVC	490
PVC Welding Cement	510
All Other Plastic Welding Cements	100
Rubber Vulcanization Adhesive	850
Special Purpose Contact Adhesive	250
Thin Metal Laminating Adhesive	780
Tire Tread Adhesive	100
Top and Trim Adhesive	540
Waterproof Resorcinol Glue	170

Table 1.	
Category	Grams of volatile organic compounds (VOC) per liter adhesive
All Other Adhesives	250

Table 2.	
Substrate Specific Adhesives	Grams of volatile organic compounds (VOC) per liter adhesive
Metal	30
Plastic Foams	50
Porous Material (except wood)	50
Wood	30
Fiberglass	80
Reinforced Plastic Composite	200

Table 3.	
Adhesive Primers	Grams of volatile organic compounds (VOC) per liter adhesive
Plastic	550
Pressure Sensitive	785
Traffic Marking Tape	150
Vehicle Glass	700
Roof Adhesive Primers	250
All Other Adhesive Primers	250

(f) In accordance with the compliance schedule for contingency requirements in §115.479(d) of this title in the Houston-Galveston-Brazoria area, the owner or operator shall

apply low-VOC adhesives or adhesive primers to limit VOC emissions from all adhesives and adhesive primers used during the specified application processes to the VOC content limits listed in the tables in this subsection in grams of VOC per liter of adhesive (minus water and exempt solvent compounds), as delivered to the application system. If an adhesive or adhesive primer is used to bond dissimilar substrates together, then the applicable substrate category with the least stringent VOC content limit applies.

Figure: 30 TAC §115.473(f)

Table 1.	
Category	Grams of volatile organic compounds (VOC) per liter adhesive
Computer Diskette Manufacturing Adhesive	350
Contact Adhesive	80
Edge Glue Adhesive	250
Plastic Welding Cement	
ABS Welding Cement	325
ABS to PVC Transition Cement	510
CPVC Welding Cement	490
CPVC For Life-Safety Systems	490
Higher Viscosity CPVC	490
PVC Welding Cement	510
All Other Plastic Welding Cements	100
Rubber Vulcanization Adhesive	850
Special Purpose Contact Adhesive	250
Thin Metal Laminating Adhesive	780
Tire Tread Adhesive	100
Top and Trim Adhesive	540

Table 1.	
Category	Grams of volatile organic compounds (VOC) per liter adhesive
Waterproof Resorcinol Glue	170
All Other Adhesives	250

Table 2.	
Substrate Specific Adhesives	Grams of volatile organic compounds (VOC) per liter adhesive
Metal	30
Plastic Foams	50
Porous Material (except wood)	50
Wood	30
Fiberglass	80
Reinforced Plastic Composite	200

Table 3.	
Adhesive Primers	Grams of volatile organic compounds (VOC) per liter adhesive
Plastic	550
Pressure Sensitive	785
Traffic Marking Tape	150
Vehicle Glass	700
Roof Adhesive Primers	250
All Other Adhesive Primers	250

§115.475. Approved Test Methods and Testing Requirements.

The owner or operator shall demonstrate compliance with the volatile organic compounds (VOC) content limits in §115.473(a), (e), or (f) of this title (relating to Control Requirements), as applicable, by applying the following test methods, as appropriate. Where a test method also inadvertently measures compounds that are exempt solvent, an owner or operator may exclude the exempt solvent when determining compliance with a VOC content limit. As an alternative to the test methods in this section, the VOC content of an adhesive or adhesive primer may be determined by using analytical data from the material safety data sheet.

(1) Except for reactive adhesives, compliance with the VOC content limits in §115.473(a), (e), or (f) of this title, as applicable, must be determined using Method 24 (40 Code of Federal Regulations (CFR) Part 60, Appendix A).

(2) Compliance with the VOC content limits for reactive adhesives in §115.473(a), (e), or (f) of this title, as applicable, must be determined using 40 CFR Part 63, Subpart PPPP, Appendix A, (as amended through April 24, 2007 (72 FR 20237)).

(3) The owner or operator of an application process subject to §115.473 of this title shall measure the capture efficiency using the applicable procedures outlined in 40 CFR §52.741, Subpart O, Appendix B (as amended through October 21, 1996 (61 FR 54559)). These procedures are: Procedure T-Criteria for and Verification of a Permanent or Temporary Total Enclosure; Procedure L - VOC Input; Procedure G.2 - Captured VOC Emissions (Dilution

Technique); Procedure F.1 - Fugitive VOC Emissions from Temporary Enclosures; and Procedure F.2 - Fugitive VOC Emissions from Building Enclosures.

(A) The following exemptions apply to capture efficiency testing requirements.

(i) If a source installs a permanent total enclosure that meets the specifications of Procedure T and that directs all VOC to a control device, then the capture efficiency is assumed to be 100%, and the source is exempted from capture efficiency testing requirements. This does not exempt the source from performance of any control device efficiency testing that may be required. In addition, a source must demonstrate all criteria for a permanent total enclosure are met during testing for control efficiency.

(ii) If a source uses a vapor control system designed to collect and recover VOC (e.g., carbon adsorption system), an explicit measurement of capture efficiency is not necessary if the following conditions are met. The overall control efficiency of the system can be determined by directly comparing the input liquid VOC to the recovered liquid VOC. The general procedure for use in this situation is given in 40 CFR §60.433 (as amended through October 17, 2000 (65 FR 61761)), with the following additional restrictions.

(I) The source must be able to equate solvent usage with solvent recovery on a 24-hour (daily) basis, rather than a 30-day weighted average. This verification must be done within 72 hours following each 24-hour period of the 30-day period.

(II) The solvent recovery system (i.e., capture and control system) must be dedicated to a single process line (e.g., one process line venting to a carbon adsorber system) or if the solvent recovery system controls multiple process lines, the source must be able to demonstrate that the overall control efficiency (i.e., the total recovered solvent VOC divided by the sum of liquid VOC input to all process lines venting to the control system) meets or exceeds the most stringent standard applicable for any process line venting to the control system.

(B) The capture efficiency must be calculated using one of the following protocols referenced unless a suitable alternative protocol is approved by the executive director and the United States Environmental Protection Agency (EPA).

(i) Gas/gas method using temporary total enclosure (TTE). The EPA specifications to determine whether a temporary enclosure is considered a TTE are given in Procedure T. The capture efficiency equation to be used for this protocol is:

Figure: 30 TAC §115.475(3)(B)(i) (No Change)

(ii) Liquid/gas method using TTE. The EPA specifications to determine whether a temporary enclosure is considered a TTE are given in Procedure T. The capture efficiency equation to be used for this protocol is:

Figure: 30 TAC §115.475(3)(B)(ii) (No Change)

(iii) Gas/gas method using the building or room enclosure (BE) in which the affected source is located and in which the mass of VOC captured and delivered to a control device and the mass of fugitive VOC that escapes from BE are measured while operating only the affected facility. All fans and blowers in the BE must be operating as they would under normal production. The capture efficiency equation to be used for this protocol is:

Figure: 30 TAC §115.475(3)(B)(iii) (No Change)

(iv) Liquid/gas method using a BE in which the mass of liquid VOC input to process and the mass of fugitive VOC that escapes from BE are measured while operating only the affected facility. All fans and blowers in the BE must be operated as they would under normal production. The capture efficiency equation to be used for this protocol is:

Figure: 30 TAC §115.475(3)(B)(iv) (No Change)

(C) The operating parameters selected for monitoring the capture system for compliance with the requirements in §115.478(a) of this title (relating to Monitoring and Recordkeeping requirements) must be monitored and recorded during the initial capture efficiency testing and thereafter during facility operation. The executive director may require a new capture efficiency test if the operating parameter values change significantly from those recorded during the initial capture efficiency test.

(4) In addition to the requirements of paragraph (3) of this section, the owner or operator shall determine compliance with §115.473(a)(2) of this title by applying the following test methods, as appropriate:

(A) Methods 1 - 4 (40 CFR Part 60, Appendix A) for determining flow rates, as necessary;

(B) Method 25 (40 CFR Part 60, Appendix A) for determining total gaseous nonmethane organic emissions as carbon;

(C) Method 25A or 25B (40 CFR Part 60, Appendix A) for determining total gaseous organic concentrations using flame ionization or nondispersive infrared analysis; and

(D) additional performance test procedures described in 40 CFR §60.444 (as amended through October 18, 1983 (48 FR 48375)).

(5) Minor modifications to the methods in paragraphs (1) - (4) of this section may be approved by the executive director. Methods other than those specified in paragraphs (1) - (4) of this section may be used if approved by the executive director and validated using Method 301 (40 CFR Part 63, Appendix A). For the purposes of this paragraph, substitute "executive director" each place that Method 301 references "administrator."

§115.478. Monitoring and Recordkeeping Requirements.

(a) Monitoring requirements. The following monitoring requirements apply to the owner or operator of an application process subject to this division that uses a vapor control system in accordance with §115.473(a)(2) of this title (relating to Control Requirements). The owner or operator shall install and maintain monitors to accurately measure and record operational parameters of all required control devices, as necessary, to ensure the proper functioning of those devices in accordance with design specifications, including:

(1) continuous monitoring of the exhaust gas temperature immediately downstream of direct-flame incinerators or the gas temperature immediately upstream and downstream of any catalyst bed;

(2) the total amount of volatile organic compounds (VOC) recovered by carbon adsorption or other solvent recovery systems during a calendar month;

(3) continuous monitoring of carbon adsorption bed exhaust; and

(4) appropriate operating parameters for vapor control systems other than those specified in paragraphs (1) - (3) of this subsection.

(b) Recordkeeping requirements. The following recordkeeping requirements apply to the owner or operator of an application process subject to this division.

(1) The owner or operator shall maintain records of the testing data or the material safety data sheet in accordance with the requirements in §115.475(1) of this title (relating to Approved Test Methods and Testing Requirements). Records must be sufficient to demonstrate continuous compliance with the applicable VOC limits in §115.473(a), (e), or (f) of this title.

(2) The owner or operator of an application process claiming an exemption in §115.471 of this title (relating to Exemptions) shall maintain records sufficient to demonstrate continuous compliance with the applicable exemption criteria.

(3) The owner or operator shall maintain records of any testing conducted at an affected facility in accordance with the provisions specified in §115.475(3) and (4) of this title.

(4) Records must be maintained a minimum of two years and made available upon request to authorized representatives of the executive director, the United States Environmental Protection Agency, or any local air pollution agency with jurisdiction.

§115.479. Compliance Schedules.

(a) In Brazoria, Chambers, Collin, Dallas, Denton, Ellis, Fort Bend, Galveston, Harris, Johnson, Kaufman, Liberty, Montgomery, Parker, Rockwall, Tarrant, Waller, and Wise Counties, the compliance date has passed and the owner or operator of an application process shall continue to comply with this division except as specified in subsections (c) and (d) of this section.

(b) The owner or operator of an application process that becomes subject to this division on or after the applicable compliance date in this section shall comply with the requirements in this division no later than 60 days after becoming subject.

(c) The owner or operator of an application process in Collin, Dallas, Denton, Ellis, Johnson, Kaufman, Parker, Rockwall, Tarrant, and Wise Counties shall comply with §115.473(e) of this title (relating to Control Requirements) by no later than 270 days after the commission publishes notification in the *Texas Register* of its determination that this contingency rule is necessary as a result of EPA publication of a notice in the *Federal Register* that the specified area failed to attain the applicable National Ambient Air Quality Standard for ozone by the attainment deadline or failed to demonstrate reasonable further progress as set forth in the 1990 Amendments to the Federal Clean Air Act, §172(c)(9).

(d) The owner or operator of an application process in Brazoria, Chambers, Fort Bend, Galveston, Harris, Liberty, Montgomery, and Waller Counties shall be in compliance with §115.473(f) of this title by no later than 270 days after the commission publishes notification in the *Texas Register* of its determination that this contingency rule is necessary as a result of EPA publication of a notice in the *Federal Register* that the specified area failed to attain the applicable National Ambient Air Quality Standard for ozone by the attainment deadline or failed to demonstrate reasonable further progress as set forth in the 1990 Amendments to the Federal Clean Air Act, §172(c)(9).

(e) The owner or operator of an application process in the Bexar County area subject to the requirements of this division shall comply with the requirements of this division no later

than January 1, 2025.

SUBCHAPTER F: MISCELLANEOUS INDUSTRIAL SOURCES
DIVISION 1: USE OF ASPHALT
§§115.510, 115.512, 115.515 – 115.517, 115.519

Statutory Authority

The amendments are adopted under Texas Water Code (TWC), §5.102, concerning general powers; §5.103, concerning Rules; TWC, §5.105, concerning General Policy, which authorize the commission to adopt rules necessary to carry out its powers and duties under the TWC; TWC, §7.002, concerning Enforcement Authority, which authorizes the commission to enforce the provisions of the Water Code and the Health and Safety Code within the commission's jurisdiction; and under Texas Health and Safety Code (THSC), §382.017, concerning Rules, which authorizes the commission to adopt rules consistent with the policy and purpose of the Texas Clean Air Act.

The amendments are also adopted under THSC, §382.002, concerning Policy and Purpose, which establishes the commission's purpose to safeguard the state's air resources, consistent with the protection of public health, general welfare, and physical property; THSC, §382.011, concerning General Powers and Duties, which authorizes the commission to control the quality of the state's air; THSC, §382.012, concerning the State Air Control Plan, which authorizes the commission to prepare and develop a general, comprehensive plan for the proper control of the state's air; THSC, §382.016, concerning Monitoring Requirements; Examination of Records, which authorizes the commission to prescribe reasonable requirements for measuring and monitoring the emissions of air contaminants; and THSC, §382.021, concerning Sampling Methods and Procedures.

The adopted amendments implement TWC, §§5.102, 5.103 and 7.002; and THSC, §§382.002, 382.011, 382.012, 382.016, 382.017, and 382.021.

§115.510. Definitions.

The following terms, when used in this division (relating to Use of Asphalt), shall have the following meanings, unless the context clearly indicates otherwise. Additional definitions for terms used in this division are found in §115.10 of this title (relating to Definitions), §101.1 of this title (relating to Definitions), and §3.2 of this title (relating to Definitions).

(1) Asphalt emulsion or emulsified asphalt--An emulsion consisting of a continuous and discontinuous phase, composed principally of a semisolid or liquid asphaltic base, water, and an emulsifying agent.

(2) Conventional cutback asphalt-Any cutback asphalt which does not meet the definition of an exempt cutback asphalt.

(3) Cutback asphalt--Any asphaltic cement which has been liquified by blending with petroleum solvents (diluents).

(4) Exempt cutback asphalt--Any cutback asphalt which, when tested in accordance with American Society of Testing Materials Test Method D 402, "Distillation of

Cutback Asphalt Products," as published in the 1997 edition of the Annual Book of ASTM Standards, shows the distillate fraction recovered up to 260 degrees Celsius (500 degrees Fahrenheit) to be less than 5.0% by volume of the total distillate recovered up to a temperature of 316 degrees Celsius (680 degrees Fahrenheit).

§115.512. Control Requirements.

(a) The following control requirements shall apply in Nueces, Bastrop, Caldwell, Hays, Travis, and Williamson Counties and the Beaumont-Port Arthur, Bexar County, Dallas-Fort Worth, El Paso, and Houston-Galveston-Brazoria areas, as defined in §115.10 of this title (relating to Definitions).

(1) The use of conventional cutback asphalt containing volatile organic compounds (VOC) solvents for the paving of roadways, driveways, or parking lots is restricted to no more than 7.0% of the total annual volume averaged over a two-year period of asphalt used by or specified for use by any state, municipal, or county agency who uses or specifies the type of asphalt application.

(2) In the Beaumont-Port Arthur, Bexar County, Dallas-Fort Worth, El Paso, and Houston-Galveston-Brazoria areas and in Bastrop, Caldwell, Hays, Travis, and Williamson Counties, no person shall allow the use, application, sale, or offering for sale of conventional cutback asphalt containing VOC solvents for paving roadways, driveways, or parking lots during the period from April 16 to September 15 of any year.

(3) Except as specified in subsection (b) of this section, when asphalt emulsion is used or produced, the maximum VOC content shall not exceed 12% by weight or the following limitations, whichever is more stringent:

(A) 0.5% by weight for seal coats;

(B) 3.0% by weight for seal coats when unwashed aggregate is used;

(C) 8.0% by weight for mixing with open graded aggregate gradations with less than 1.0% by weight of materials passing sieve number 200 adhering to the coarse aggregate fraction (1/4 inch in diameter or greater); and

(D) 12% by weight for mixing with dense graded aggregate gradations when used to produce a mix designed to have 10% or less voids when fully compacted.

(b) If the commission has published notice in the *Texas Register*, as provided in §115.519(c) or (d) of this title (relating to Counties and Compliance Schedules), to require compliance with the contingency measure control requirements for the Dallas-Fort Worth area and/or Houston-Galveston-Brazoria area, the following control requirements apply instead of subsection (a)(3) of this section.

(1) In the Dallas-Fort Worth area, in accordance with the schedule specified in §115.519(c) of this title, no person shall allow the use, application, sale, or offering for sale of emulsified asphalt containing VOC solvents for paving roadways, driveways, or parking lots during the period from March 1 to November 30 of any year unless the VOC content is no more than 0.5% by volume. During the months of January, February, and December of any year the VOC content shall be no more than:

(A) 0.5% by weight for seal coats;

(B) 3.0% by weight for seal coats when unwashed aggregate is used;

(C) 8.0% by weight for mixing with open graded aggregate gradations with less than 1.0% by weight of materials passing sieve number 200 adhering to the coarse aggregate fraction (1/4 inch in diameter or greater); and

(D) 12% by weight for mixing with dense graded aggregate gradations when used to produce a mix designed to have 10% or less voids when fully compacted.

(2) In the Houston-Galveston-Brazoria area, in accordance with the schedule specified in §115.519(d) of this title, no person shall allow the use, application, sale, or offering for sale of emulsified asphalt containing VOC solvents for paving roadways, driveways, or parking lots during the period from January 1 to December 31 of any year unless the VOC content is no more than 0.5% by volume.

§115.515. Testing Requirements.

(a) Compliance with §115.510 and §115.512(a) of this title (relating to Definitions; and Control Requirements) shall be determined by applying the following test methods, as appropriate:

(1) American Society of Testing and Materials (ASTM) Test Method D 244, "Standard Test Methods for Emulsified Asphalts, Sections 11 to 15, Residue and Oil Distillate by Distillation," for determining volatile organic compound (VOC) content of asphalt emulsions;

(2) ASTM Test Method D 402, "Standard Test Method for Distillation of Cut-Back Asphaltic Products," for determining the VOC content of cutback asphalt;

(3) 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; or

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

(b) Once triggered to meet contingency requirements, the following testing requirements apply in addition to those specified in subsection (a) of this section to determine compliance with §115.512(b) of this title (relating to Control Requirements)

(1) American Association of State Highway and Transportation Officials (AASHTO) Test Method AASHTO T 59, Section 6, Residue and Oil Distillate by Distillation, or American Society of Testing and Materials (ASTM) Test Method D 244, Sections 11 to 15, Residue and Oil Distillate by Distillation for determining volatile organic compound (VOC) content by volume of emulsified asphalt;

(2) 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; or

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

§115.516. Recordkeeping Requirements.

In Nueces, Bastrop, Caldwell, Hays, Travis, and Williamson Counties and the Beaumont-Port Arthur, Bexar County, Dallas-Fort Worth, El Paso, and Houston-Galveston-Brazoria areas, any state, municipal, or county agency who uses or specifies the use of cutback asphalt or asphalt emulsion shall maintain records sufficient to document compliance with applicable restrictions and shall make such records available upon request to representatives of the executive director, EPA, or the local air pollution control agency having jurisdiction in the area.

§115.517. Exemptions.

For persons in Nueces, Bastrop, Caldwell, Hays, Travis, and Williamson Counties and the Beaumont-Port Arthur, Bexar County, Dallas-Fort Worth, El Paso, and Houston-Galveston-Brazoria areas, as defined in §115.10 of this title (relating to Definitions), the following are exempt from the provisions of §115.512(2) of this title (relating to Control Requirements):

(1) asphalt concrete made with cutback asphalt, used for patching, which is stored in a long-life stockpile (longer than one-month storage); and

(2) cutback asphalt used solely as a penetrating prime coat.

§115.519. Counties and Compliance Schedules.

(a) In Brazoria, Chambers, Collin, Dallas, Denton, Ellis, El Paso, Fort Bend, Galveston, Hardin, Harris, Jefferson, Johnson, Kaufman, Liberty, Montgomery, Nueces, Orange, Parker, Rockwall, Tarrant, Waller, and Wise Counties, the compliance date has passed for control requirements in 115.512(a) of this title (relating to Control Requirements) and all associated requirements, and all affected persons shall continue to comply with this division, except as specified in subsections (c) and (d) of this section. The compliance date for ozone attainment counties which have been added voluntarily to this division remain listed in §115.519(b).

(b) All affected persons in Bastrop, Caldwell, Hays, Travis, and Williamson Counties shall comply with this division no later than December 31, 2005.

(c) All affected persons in Collin, Dallas, Denton, Ellis, Johnson, Kaufman, Parker, Rockwall, Tarrant, and Wise Counties shall be in compliance with the requirements of §115.512(b)(1) of this title no later than 270 days after the commission publishes notification in the *Texas Register* of its determination that the contingency requirements are necessary as a result of EPA publication of a notice in the *Federal Register* that the specified area failed to attain the applicable National Ambient Air Quality Standard for ozone by the attainment deadline or failed to demonstrate reasonable further progress as set forth in the 1990 Amendments to the Federal Clean Air Act, §172(c)(9).

(d) All affected persons in Brazoria, Chambers, Fort Bend, Galveston, Harris, Liberty, Montgomery, and Waller Counties shall be in compliance with the requirements of §115.512(b)(2) of this title no later than 270 days after the commission publishes notification in the *Texas Register* of its determination that the contingency requirements are necessary as a result of EPA publication of a notice in the *Federal Register* that the specified area failed to attain the applicable National Ambient Air Quality Standard for ozone by the attainment deadline or failed to demonstrate reasonable further progress as set forth in the 1990 Amendments to the Federal Clean Air Act.

(e) All affected persons in the Bexar County area shall comply with this division no later than January 1, 2025.

(f) All affected persons that become subject to this division on or after the applicable compliance date in this section shall comply with the requirements in this division no later than 60 days after becoming subject.

SUBCHAPTER F: MISCELLANEOUS INDUSTRIAL SOURCES
DIVISION 2: PHARMACEUTICAL MANUFACTURING FACILITIES
§§115.531, 115.532, 115.534 – 115.537, 115.539

Statutory Authority

The amendments are adopted under Texas Water Code (TWC), §5.102, concerning general powers; §5.103, concerning Rules; TWC, §5.105, concerning General Policy, which authorize the commission to adopt rules necessary to carry out its powers and duties under the TWC; TWC, §7.002, concerning Enforcement Authority, which authorizes the commission to enforce the provisions of the Water Code and the Health and Safety Code within the commission's jurisdiction; and under Texas Health and Safety Code (THSC), §382.017, concerning Rules, which authorizes the commission to adopt rules consistent with the policy and purpose of the Texas Clean Air Act.

The amendments are also adopted under THSC, §382.002, concerning Policy and Purpose, which establishes the commission's purpose to safeguard the state's air resources, consistent with the protection of public health, general welfare, and physical property; THSC, §382.011, concerning General Powers and Duties, which authorizes the commission to control the quality of the state's air; THSC, §382.012, concerning the State Air Control Plan, which authorizes the commission to prepare and develop a general, comprehensive plan for the proper control of the state's air; THSC, §382.016, concerning Monitoring Requirements; Examination of Records, which authorizes the commission to prescribe reasonable requirements for measuring and monitoring the emissions of air contaminants; and THSC, §382.021, concerning Sampling Methods and Procedures.

The adopted amendments implement TWC, §§5.102, 5.103 and 7.002; and THSC, §§382.002, 382.011, 382.012, 382.016, 382.017, and 382.021.

§115.531. Emission Specifications.

(a) For the Beaumont-Port Arthur, Bexar County, Dallas-Fort Worth, El Paso, and Houston-Galveston-Brazoria areas, as defined in §115.10 of this title (relating to Definitions), the owner or operator of a synthesized pharmaceutical manufacturing facility shall satisfy the following emission specifications.

(1) Reactors, distillation units, crystallizers, centrifuges, and vacuum dryers. The emission of volatile organic compounds (VOC) from these sources shall be controlled by means of surface condensers from which the condenser outlet gas temperature must not exceed the following.

Figure 30 TAC §115.531(a)(1) (NO change)

(2) Air dryers and exhaust systems. VOC emissions from all air dryers and production equipment exhaust systems shall be reduced to not more than 33 lb/day (15 kg/day) or controlled in accordance with §115.532(a)(4) of this title (relating to Control Requirements).

(3) Loading facilities. VOC emissions from truck or railcar deliveries to storage tanks at loading facilities shall be controlled in accordance with §115.532(a)(4) of this title (relating to Control Requirements).

(b) For Gregg, Nueces, and Victoria Counties, the owner or operator of a synthesized pharmaceutical manufacturing facility shall satisfy the following emission specifications.

(1) Reactors, distillation units, crystallizers, centrifuges, and vacuum dryers. The emission of VOC from these sources shall be controlled by means of surface condensers from which the condenser outlet gas temperature must not exceed the following.

Figure 30 TAC §115.531(b)(1)) (No change)

(2) Air dryers and exhaust systems. VOC emissions from all air dryers and production equipment exhaust systems shall be reduced to not more than 33 lb/day (15 kg/day) or controlled in accordance with 115.532(b)(4) of this title (relating to Control Requirements).

(3) Loading facilities. VOC emissions from truck or railcar deliveries to storage tanks at loading facilities shall be controlled in accordance with 115.532(b)(4) of this title (relating to be Control Requirements).

§115.532. Control Requirements.

(a) For the Beaumont-Port Arthur, Bexar County, Dallas-Fort Worth, El Paso, and Houston-Galveston-Brazoria areas, the owner or operator of a synthesized pharmaceutical manufacturing facility shall provide the following specified controls.

(1) Tanks.

(A) All in-process tanks that contain volatile organic compounds (VOC) at any time shall be kept covered, except when production, sampling, maintenance, or inspection procedures require operator access.

(B) All storage tanks that store VOC shall have pressure vacuum conservation vents installed which are set at plus or minus 0.8 inches of water (plus or minus 0.2 kPa), unless a more effective control system is used.

(2) Centrifuges and filters. Centrifuges, rotary vacuum filters, and other filters having an exposed liquid surface which process liquids containing VOC shall be enclosed.

(3) Leaks.

(A) All liquid leaks containing VOC from a process unit or storage tank shall be repaired the first time the equipment is off-line long enough to complete the repair.

(B) All liquid or gaseous leaks of VOC observed during loading operations shall be repaired immediately. Loading operations shall be discontinued until the leak is repaired.

(4) Air dryers, production equipment exhaust systems, and loading facilities. Sources affected by §115.531(a) of this title (relating to Emission Specifications) shall be controlled by a system with a reduction efficiency of at least 90% of the uncontrolled emissions.

(5) Pharmaceutical manufacturing facility. Any pharmaceutical manufacturing facility that becomes subject to the provisions of paragraphs (1) - (4) of this subsection by exceeding provisions of §115.537(a) of this title (relating to Exemptions) will remain subject to the provisions of this subsection, even if throughput or emissions later fall below exemption limits, unless and until emissions are reduced to no more than the controlled emissions level existing before implementation of the project by which throughput or emission rate was reduced to less than the applicable exemption limits in §115.537(a) of this title; and:

(A) the project by which throughput or emission rate was reduced is authorized by any permit or permit amendment or standard permit or permit by rule required by Chapter 116 or Chapter 106 of this title (relating to Control of Air Pollution by Permit for New Construction or Modification; and Permits by Rule). If a permit by rule is available for the project, compliance with this subsection must be maintained for 30 days after the filing of documentation of compliance with that permit by rule; or

(B) if authorization by permit, permit amendment, standard permit, or permit by rule is not required for the project, the owner/operator has given the executive director 30 days' notice of the project in writing.

(b) For Gregg, Nueces, and Victoria Counties, the owner or operator of a synthesized pharmaceutical manufacturing facility shall provide the following specified controls.

(1) Tanks.

(A) All in-process tanks that contain VOC at any time shall be kept covered, except when production, sampling, maintenance, or inspection procedures require operator access.

(B) All storage tanks that store VOC shall have pressure vacuum conservation vents installed which are set at plus or minus 0.8 inches of water (plus or minus 0.2 kPa), unless a more effective control system is used.

(2) Centrifuges and filters. Centrifuges, rotary vacuum filters, and other filters having an exposed liquid surface which process liquids containing VOC shall be enclosed.

(3) Leaks.

(A) All liquid leaks containing VOC from a process unit or storage tank shall be repaired the first time the equipment is off-line long enough to complete the repair.

(B) All liquid or gaseous leaks of VOC observed during loading operations shall be repaired immediately. Loading operations shall be discontinued until the leak is repaired.

(4) Air dryers, production equipment exhaust systems, and loading facilities. Sources affected by §115.531(b) of this title shall be controlled by a system with a reduction efficiency of at least 90% of the uncontrolled emissions.

§115.534. Inspection Requirements.

(a) For all affected persons in the Beaumont-Port Arthur, Bexar County, Dallas-Fort Worth, El Paso, and Houston-Galveston-Brazoria areas, the following inspection requirements shall apply.

(1) Inspection for visible liquid leaks, visible fumes, or significant odors resulting from the transfer of volatile organic compounds (VOC) from trucks or railcars to storage tanks at loading facilities shall be conducted by the owner or operator of any pharmaceutical manufacturing facility.

(2) VOC loading or unloading through the affected transfer lines shall be discontinued immediately when a leak is observed and shall not be resumed until the observed leak is repaired.

(b) For all affected persons in Gregg, Nueces, and Victoria Counties, the following inspection requirements shall apply.

(1) Inspection for visible liquid leaks, visible fumes, or significant odors resulting from the transfer of VOC from trucks or railcars to storage tanks at loading facilities shall be conducted by the owner or operator of any pharmaceutical manufacturing facility.

(2) VOC loading or unloading through the affected transfer lines shall be discontinued immediately when a leak is observed and shall not be resumed until the observed leak is repaired.

§115.535. Testing Requirements.

(a) For the Beaumont-Port Arthur, Bexar County, Dallas-Fort Worth, El Paso, and Houston-Galveston-Brazoria areas, compliance with this division (relating to Pharmaceutical Manufacturing Facilities) shall be determined by applying the following test methods, as appropriate:

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

(2) Test Method 18 (40 CFR 60, Appendix A) for determining gaseous organic compound emissions by gas chromatography;

(3) Test Method 25 (40 CFR 60, Appendix A) for determining total gaseous nonmethane organic emissions as carbon;

(4) Test Methods 25A or 25B (40 CFR 60, Appendix A) for determining total gaseous organic concentrations using flame ionization or nondispersive infrared analysis;

(5) determination of true vapor pressure using American Society of Testing and Materials (ASTM) Test Method D323-82 for the measurement of Reid vapor pressure, adjusted for actual storage temperature in accordance with API Publication 2517, Third Edition, 1989; or

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

(b) For Gregg, Nueces, and Victoria Counties, compliance with this division shall be determined by applying the following test methods, as appropriate:

(1) Test Methods 1-4 (40 CFR 60, Appendix A) for determining flow rate, as necessary;

(2) Test Method 18 (40 CFR 60, Appendix A) for determining gaseous organic compound emissions by gas chromatography;

(3) Test Method 25 (40 CFR 60, Appendix A) for determining total gaseous nonmethane organic emissions as carbon;

(4) Test Methods 25A or 25B (40 CFR 60, Appendix A) for determining total gaseous organic concentrations using flame ionization or nondispersive infrared analysis;

(5) determination of true vapor pressure using ASTM Test Method D323-82 for the measurement of Reid vapor pressure, adjusted for actual storage temperature in accordance with API Publication 2517, Third Edition, 1989; or

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

§115.536. Monitoring and Recordkeeping Requirements.

(a) For the Beaumont-Port Arthur, Bexar County, Dallas-Fort Worth, El Paso, and Houston-Galveston-Brazoria areas, the following recordkeeping requirements shall apply.

(1) The owner or operator of any pharmaceutical manufacturing facility which utilizes a surface condenser to control emissions of volatile organic compound (VOC) from process units affected by §115.531(a)(1) of this title (relating to Emission Specifications) shall install and maintain monitors to continuously measure and record the outlet gas temperature to ensure proper functioning in accordance with design specifications.

(2) The owner or operator of any pharmaceutical manufacturing facility which utilizes a vapor recovery system to satisfy the requirements of §115.531(a) of this title (relating to Emission Specifications) or §115.532(a) of this title (relating to Control Requirements) shall:

(A) install and maintain monitors to continuously measure and record operational parameters of all required control devices as necessary to ensure the proper functioning of those devices in accordance with design specifications, including:

(i) the exhaust gas temperature of direct-flame incinerators and/or the gas temperature immediately upstream and downstream of any catalyst bed;

(ii) the exhaust gas VOC concentration of any carbon adsorption system, as defined in §115.10 of this title (relating to Definitions), to determine if breakthrough has occurred;

(iii) the total amount of VOC recovered by carbon adsorption or other solvent recovery systems during a calendar month; or

(iv) the daily emission rate of VOC from the control device;

(B) maintain a record of the dates and reasons for any maintenance and repair of the required control devices and the estimated quantity and duration of VOC emissions during such activities.

(3) The owner or operator of any pharmaceutical manufacturing facility which is exempted from the requirements in accordance with the provisions of §115.537(a) of this title (relating to Exemptions) shall maintain a record of the following information, as appropriate:

(A) the vapor pressure of materials transferred at loading facilities, stored in tanks, or processed in centrifuges and filters; and

(B) the daily emissions rate of VOC.

(4) The owner or operator of any affected pharmaceutical manufacturing facility shall maintain records of any testing conducted at an affected facility in accordance with the provisions specified in §115.535(a) of this title (relating to Testing Requirements).

(5) The owner or operator of any affected pharmaceutical manufacturing facility shall maintain all records at the affected facility for at least two years and make such records available upon request to representatives of the executive director, United States Environmental Protection Agency (EPA), or local air pollution control agency.

(b) For Gregg, Nueces, and Victoria Counties, the following recordkeeping requirements shall apply.

(1) The owner or operator of any pharmaceutical manufacturing facility which utilizes a surface condenser to control emissions of VOC from process units affected by §115.531(b)(1) of this title (relating to Emission Specifications) shall install and maintain monitors to continuously measure and record the outlet gas temperature to ensure proper functioning in accordance with design specifications.

(2) The owner or operator of any pharmaceutical manufacturing facility which utilizes a vapor recovery system to satisfy the requirements of §115.531(b) of this title (relating to Emission Specifications) or §115.532(b) of this title (relating to Control Requirements) shall:

(A) install and maintain monitors to continuously measure and record operational parameters of all required control devices as necessary to ensure the proper functioning of those devices in accordance with design specifications, including:

(i) the exhaust gas temperature of direct-flame incinerators and/or the gas temperature immediately upstream and downstream of any catalyst bed;

(ii) in Victoria County, the exhaust gas VOC concentration of any carbon adsorption system, as defined in §115.10 of this title (relating to Definitions), to determine if breakthrough has occurred;

(iii) the total amount of VOC recovered by carbon adsorption or other solvent recovery systems during a calendar month; or

(iv) the daily emission rate of VOC from the control device;

(B) maintain a record of the dates and reasons for any maintenance and repair of the required control devices and the estimated quantity and duration of VOC emissions during such activities.

(3) The owner or operator of any pharmaceutical manufacturing facility which is exempted from the requirements in accordance with the provisions of §115.537(b) of this title (relating to Exemptions) shall maintain a record of the following information, as appropriate:

(A) the vapor pressure of materials transferred at loading facilities, stored in tanks, or processed in centrifuges and filters; and

(B) the daily emissions rate of VOC.

(4) The owner or operator of any affected pharmaceutical manufacturing facility shall maintain records of any testing conducted at an affected facility in accordance with the provisions specified in §115.535(b) of this title (relating to Testing Requirements).

(5) The owner or operator of any affected pharmaceutical manufacturing facility shall maintain all records at the affected facility for at least two years and make such records available upon request to representatives of the executive director, EPA, or local air pollution control agency.

§115.537. Exemptions.

(a) For the Beaumont-Port Arthur, Bexar County, Dallas-Fort Worth, El Paso, and Houston-Galveston-Brazoria areas, the following exemptions shall apply:

(1) Storage tanks at loading facilities with capacities less than or equal to 2,000 gallons (7,571 liters) are exempt from the requirements of §115.531(a)(3) of this title (relating to Emission Specifications).

(2) Storage tanks at loading facilities that store volatile organic compounds (VOC) with vapor pressures less than or equal to 4.1 psia (28 kPa) at 68 degrees Fahrenheit (20

degrees Celsius) are exempt from the requirements of §115.531(a)(3) of this title (relating to Emission Specifications).

(3) Storage tanks containing VOC with vapor pressures less than or equal to 1.5 psia (10.3 kPa) at 68 degrees Fahrenheit (20 degrees Celsius) are exempt from the requirements of §115.532(a)(1)(B) of this title (relating to Control Requirements).

(4) Centrifuges and filters which process liquids containing VOC with vapor pressures less than 0.5 psia (3.4 kPa) at 68 degrees Fahrenheit (20 degrees Celsius) are exempt from the requirements of §115.532(a)(2) of this title (relating to Control Requirements).

(5) Any individual unit which, when uncontrolled, will emit a combined weight of VOC less than 15 lbs. (6.8 kg) in any continuous 24-hour period is exempt from the provisions of §115.531(a) and §115.532(a) of this title.

(b) For Gregg, Nueces, and Victoria Counties, the following exemptions shall apply.

(1) Storage tanks at loading facilities with capacities less than or equal to 2,000 gallons (7,571 liters) are exempt from the requirements of §115.531(b)(3) of this title (relating to Emission Specifications).

(2) Storage tanks at loading facilities that store VOC with vapor pressures less than or equal to 4.1 psia (28 kPa) at 68 degrees Fahrenheit (20 degrees Celsius) are exempt from the requirements of §115.531(b)(3) of this title (relating to Emission Specifications).

(3) Storage tanks containing VOC with vapor pressures less than or equal to 1.5 psia (10.3 kPa) at 68 degrees Fahrenheit (20 degrees Celsius) are exempt from the requirements of §115.532(b)(1)(B) of this title (relating to Control Requirements).

(4) Centrifuges and filters which process liquids containing VOC with vapor pressures less than 0.5 psia (3.4 kPa) at 68 degrees Fahrenheit (20 degrees Celsius) are exempt from the requirements of §115.532(b)(2) of this title (relating to Control Requirements).

(5) Any facility which, when uncontrolled, will emit a combined weight of VOC less than 550 pounds (249.5 kg) in any continuous 24-hour period is exempt from the provisions of §115.531(b) of this title (relating to Emission Specifications) and §115.532(b) of this title (relating to Control Requirements).

§115.539. Counties and Compliance Schedules.

(a) All affected persons in Brazoria, Chambers, Collin, Dallas, Denton, El Paso, Fort Bend, Galveston, Gregg, Hardin, Harris, Jefferson, Liberty, Montgomery, Nueces, Orange, Tarrant, Victoria, and Waller Counties shall continue to comply with this division (relating to

Pharmaceutical Manufacturing Facilities) as required by §115.930 of this title (relating to Compliance Dates).

(b) All affected persons in Ellis, Johnson, Kaufman, Parker, and Rockwall Counties shall comply with this division as soon as practicable, but no later than March 1, 2009.

(c) All affected persons in the Bexar County area shall comply with this division as soon as practicable, but no later than January 1, 2025.

SUBCHAPTER J: ADMINISTRATIVE PROVISIONS
DIVISION 1: ALTERNATE MEANS OF CONTROL
§§115.901, 115.911

Statutory Authority

The amendments are adopted under Texas Water Code (TWC), §5.102, concerning general powers; §5.103, concerning Rules; TWC, §5.105, concerning General Policy, which authorize the commission to adopt rules necessary to carry out its powers and duties under the TWC; TWC, §7.002, concerning Enforcement Authority, which authorizes the commission to enforce the provisions of the Water Code and the Health and Safety Code within the commission's jurisdiction; and under Texas Health and Safety Code (THSC), §382.017, concerning Rules, which authorizes the commission to adopt rules consistent with the policy and purpose of the Texas Clean Air Act.

The amendments are also adopted under THSC, §382.002, concerning Policy and Purpose, which establishes the commission's purpose to safeguard the state's air resources, consistent with the protection of public health, general welfare, and physical property; THSC, §382.011, concerning General Powers and Duties, which authorizes the commission to control the quality of the state's air; THSC, §382.012, concerning the State Air Control Plan, which authorizes the commission to prepare and develop a general, comprehensive plan for the proper control of the state's air; THSC, §382.016, concerning Monitoring Requirements; Examination of Records, which authorizes the commission to prescribe reasonable requirements for measuring and monitoring the emissions of air contaminants; and THSC, §382.021, concerning Sampling Methods and Procedures.

The adopted amendments implement TWC, §§5.102, 5.103 and 7.002; and THSC, §§382.002, 382.011, 382.012, 382.016, 382.017, and 382.021.

§115.901. Insignificant Emissions.

For persons in covered attainment counties that consist of Aransas, Bexar, Calhoun, Matagorda, San Patricio, and Travis Counties, the executive director, after consultation with appropriate local governmental agencies, may exempt a specific compound or a specific vent gas stream from the application of this chapter if the executive director determines that the emissions from the compound or specific vent gas stream will not make a significant contribution to air contaminants in the atmosphere. This section no longer applies in Bexar County after December 31, 2024.

§115.911. Criteria for Approval of Alternate Means of Control Plans.

An alternate means of control (AMOC) plan shall be approved if it meets each of the following criteria, as applicable.

(1) All facilities covered by the AMOC plan are and remain in the same account number.

(2) The AMOC plan must propose annual emission limits in tons per year for each source in the AMOC plan that, when collectively compared against actual annual emissions generated in 1990 (or subsequent years if a source in an AMOC was not operational prior to 1990), result in net emissions reductions equal to or greater than reductions that would be achieved if each source complied with all applicable requirements of this chapter.

(3) If the AMOC plan involves any source with a proposed annual emission limit which exceeds the baseline as defined in §115.912(a) of this title (relating to Calculations for Determining Alternate Means of Control Reductions), the AMOC plan must provide additional reductions made at alternative sources which comply with the guidelines in §115.912 of this title and are at least equal to the amount the source exceeds its baseline, multiplied by the applicable factor provided in the following subparagraphs.

(A) For sources located in the Beaumont-Port Arthur area, as defined in §115.10 of this title (relating to Definitions), the applicable factor is 1.2.

(B) For sources located in the Dallas-Fort Worth area, as defined in §115.10 of this title, the applicable factor is 1.3

(C) For sources located in the El Paso area, as defined in §115.10 of this title, the applicable factor is 1.2.

(D) For sources located in the Houston-Galveston-Brazoria area, as defined in §115.10 of this title, the applicable factor is 1.3.

(E) For sources located in the Bexar County area, as defined in §115.10 of this title, the applicable factor is 1.15.

(F) For sources located in other areas in Texas, the applicable factor is 1.1.

(4) The AMOC application must demonstrate that the sum of the maximum daily potentials to emit from the sources subject to the proposed AMOC plan shall not be more than 200 pounds per day greater than the sum of the maximum daily potentials to emit from those sources if the emissions were controlled in accordance with this chapter. For each nonattainment area, the executive director shall establish a limit upon the sum of the increases of the maximum daily potentials to emit from all AMOC plans in the nonattainment area. The limit shall be set so that the sum of the maximum daily potentials to emit shall not increase the measurable or modeled ozone level by one part per billion.

(5) The AMOC must be implemented and reductions created after January 1, 1991.

(6) Reductions in actual emissions accounted for in the AMOC plan must be surplus and remain surplus to reductions required by this chapter and any netting or offsetting

requirements of §§116.150, 116.151, 116.160, and 116.161 of this title (relating to New Major Source or Major Modification in Ozone Nonattainment Areas; New Major Source or Major Modification in Nonattainment Area Other Than Ozone; Prevention of Significant Deterioration Requirements; and Source Located in an Attainment Area with a Greater Than De Minimis Impact). Reductions for which the state has claimed credit in a State Implementation Plan may not be utilized as reductions in an AMOC plan.

(7) Mobile sources and indirect sources (Federal Clean Air Act, §110(a)(5)(C)) shall not be included in the AMOC plan.

(8) For purposes of demonstrating reductions and establishing emission limits in any AMOC plan, quantification of emissions must be accomplished using any of the following methods as specified by the executive director:

(A) test methods approved by the executive director for the direct measurement of emissions, either continuously or periodically;

(B) calculation equations which are a function of process or control system parameters, activity levels, and/or throughput or production rates;

(C) mass-balance calculations which are a function of inventory, usage, and/or disposal records;

(D) other appropriate methods acceptable to the executive director; or

(E) any combination of these approaches.

(9) The AMOC plan must establish emission limits and/or control requirements for all sources in the plan which render the proposed annual emission limits enforceable.

(10) The AMOC plan must include all necessary and appropriate provisions for monitoring, testing, reporting, and recordkeeping as specified by the executive director. The frequency of AMOC required monitoring, testing, reporting, and recordkeeping shall be sufficient to reasonably ensure compliance with applicable emission limits and/or control requirements. The monitoring, testing, reporting, and recordkeeping shall be at least as reliable, readily retrievable, and retained for a comparable period of time as the underlying requirements of this chapter.

(A) If this chapter includes monitoring, testing, reporting, and/or recordkeeping requirements for sources of the type(s) to be covered by an alternate emission limitation and/or control requirement, then such requirement may be used to render the AMOC plan enforceable. If this chapter does not include readily transferable monitoring, testing, reporting, and/or recordkeeping requirements for sources of the type(s) to be covered by an alternate emission limitation and/or control requirement, then priority may be given to any such set of requirements adopted under other commission rules for the control of volatile

organic compounds (VOC) emissions from sources of the type(s) to be covered by an alternate emission limitation and/or control requirement.

(B) If this chapter includes emission limits and/or control requirements for sources of the type(s) to be covered by an alternate emission limitation and/or control requirement, then such alternative emission limitation and/or control requirement may be based on the same averaging time as is applied to those same type sources under this chapter. If this chapter does not include emission limitations and/or control requirements for sources of the type(s) to be covered by an alternate emission limit and/or control requirement, then priority may be given to averaging times for emission limits and/or control requirements on similar units governed by other commission rules limiting VOC emissions from sources of the type(s) to be covered by an alternate emission limit and/or control requirement.

(C) If no such commission monitoring, testing, reporting, and/or recordkeeping rules have been adopted that satisfy the criteria of subparagraphs (A) and (B) of this paragraph, then such requirements or averaging times shall be established on a case-by-case basis.

(D) Additional or more frequent monitoring, testing, reporting, and/or recordkeeping may be required by the executive director to ensure the integrity of any AMOC plan.