TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

AGENDA ITEM REQUEST

for Proposed Rulemaking

AGENDA REQUESTED: September 11, 2019

DATE OF REQUEST: August 23, 2019

INDIVIDUAL TO CONTACT REGARDING CHANGES TO THIS REQUEST, IF NEEDED: Paige Bond, (512) 239-2678

CAPTION: Docket No. 2019-0267-RUL. Consideration for publication of, and hearings on, proposed amendments to Sections 115.10, 115.111, 115.112, 115.119, and 115.421 of 30 TAC Chapter 115, Control of Air Pollution from Volatile Organic Compounds, and corresponding revisions to the State Implementation Plan.

The proposed rulemaking would revise Chapter 115, Subchapter B, Division 1, Storage of Volatile Organic Compounds, to implement volatile organic compounds (VOC) reasonably available control technology (RACT) for major source fixed roof oil and condensate storage tanks in order to ensure that RACT is implemented for all major sources in the Dallas-Fort Worth (DFW) 2008 eight-hour ozone serious nonattainment area, as required by Federal Clean Air Act, Section 172(c)(1) and Section 182(b)(2). The proposed rulemaking would extend implementation of RACT to new major VOC sources located in Wise County due to the reclassification of the DFW area from moderate to serious nonattainment. The proposed rulemaking would also correct inadvertent errors in Chapter 115, Subchapter E, Division 2, Surface Coating Processes, made during a previous Chapter 115 VOC RACT rulemaking (Rule Project No. 2013-048-115-AI, 40 TexReg 3907, June 19, 2015), to ensure consistency with the agency's intent. (Graham Bates, Amy Browning) (Rule Project No. 2019-075-115-AI)

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Copy to CCC Secretary? NO YES X

Texas Commission on Environmental Quality
Interoffice Memorandum

To: Commissioners **Date:** August 23, 2019

Thru: Bridget C. Bohac, Chief Clerk
Toby Baker, Executive Director

From: Tonya Baer, Deputy Director
Office of Air

Docket No.: 2019-0267-RUL

Subject: Commission Approval for Proposed Rulemaking
Chapter 115, Control of Air Pollution from Volatile Organic Compounds
VOC RACT Rules for the HGB and DFW 2008 Eight-Hour Ozone Nonattainment Area Reclassifications
Rule Project No. 2019-075-115-AI

Background and reason(s) for the rulemaking:
The Federal Clean Air Act (FCAA) requires states to submit plans to demonstrate attainment of the National Ambient Air Quality Standards (NAAQS) for nonattainment areas with a classification of moderate or higher. The Dallas-Fort Worth (DFW) 2008 eight-hour ozone NAAQS nonattainment area, consisting of Collin, Dallas, Denton, Ellis, Johnson, Kaufman, Parker, Rockwall, Tarrant, and Wise Counties, and the Houston-Galveston-Brazoria (HGB) 2008 eight-hour ozone NAAQS nonattainment area, consisting of Brazoria, Chambers, Fort Bend, Galveston, Harris, Liberty, Montgomery, and Waller Counties, were designated moderate nonattainment for the 2008 eight-hour ozone NAAQS of 0.075 parts per million (ppm) with a July 20, 2018 attainment date. Based on 2017 monitoring data[1], the DFW and HGB areas did not attain the 2008 eight-hour ozone NAAQS and did not qualify for a one-year attainment date extension in accordance with FCAA, §181(a)(5)[2]. On August 7, 2019, the United States Environmental Protection Agency (EPA) signed the final notice reclassifying the DFW and HGB areas to serious ozone nonattainment areas.

Since the DFW and HGB areas have been reclassified by the EPA, the state will be required to submit a state implementation plan (SIP) revision to fulfill the volatile organic compounds (VOC) reasonably available control technology (RACT) requirements mandated by FCAA, §172(c)(1) and §182(b)(2). The EPA's *Implementation of the 2008 National Ambient Air Quality Standards for Ozone: State Implementation Plan Requirements; Final Rule*, published in the *Federal Register* on March 6, 2015 (80 FR 12264), specifies an attainment date of July 20, 2021 for serious nonattainment areas. Depending on the classification of an area designated nonattainment for an ozone NAAQS, the major source threshold that determines what sources are subject to RACT

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[1] The attainment year ozone season is the ozone season immediately preceding a nonattainment area's attainment date.

[2] An area that fails to attain the 2008 ozone NAAQS by its attainment date would be eligible for the first one-year extension if, for the attainment year, the area's 4th highest daily maximum eight-hour average is at or below the level of the standard (75 parts per billion (ppb)); the DFW area's fourth highest daily maximum eight-hour average for 2017 was 77 ppb as measured at the Dallas North No. 2 monitor (C63/C679), and the HGB area's fourth highest daily maximum eight-hour average for 2017 was 79 ppb as measured at the Conroe Relocated monitor (C78/A321). The DFW area's design value for 2017 was 79 ppb and the HGB area's design value for 2017 was 81 ppb.

requirements varies. Under the 1997 eight-hour ozone NAAQS, the DFW area consisted of nine counties (Collin, Dallas, Denton, Ellis, Johnson, Kaufman, Parker, Rockwall, and Tarrant Counties) and was classified as a serious nonattainment area. The EPA's implementation rule for the 2008 eight-hour ozone NAAQS requires retaining the most stringent major source emission threshold for sources in an area to prevent backsliding (80 FR 12264). For this reason, the major source emission threshold remains at the level required for serious nonattainment areas, which is the potential to emit (PTE) of 50 tons per year (tpy) of VOC. Wise County was not part of the DFW 1997 eight-hour ozone NAAQS nonattainment area but was included as part of the DFW 2008 eight-hour ozone NAAQS nonattainment area; therefore, the major source threshold for Wise County is based on a classification of moderate under the 2008 standard, which is the PTE of 100 tpy of VOC. With the reclassification of the DFW area to serious nonattainment under the 2008 eight-hour ozone NAAQS, the major source emission threshold for all 10 counties, including Wise County, is the PTE of 50 tpy of VOC emissions. This proposed rulemaking would implement RACT in Wise County to reflect this change in the major source threshold for Wise County. Although the HGB area was also reclassified to serious nonattainment for the 2008 eight-hour ozone NAAQS, staff has determined that RACT is in place for all emission source categories in the HGB area; therefore, there are no changes proposed in this rulemaking to implement RACT in the HGB area.

Scope of the rulemaking:

A.) Summary of what the rulemaking will do:
The proposed rulemaking would revise Chapter 115, Subchapter B, Division 1, Storage of Volatile Organic Compounds, to implement VOC RACT for major source fixed roof oil and condensate storage tanks in Wise County. The proposed rule revisions would address major source storage tanks in Wise County by requiring fixed roof oil and condensate tanks with at least 50 tpy of uncontrolled VOC emissions from flashed gasses to operate a control device achieving at least 95% efficiency. In addition, these newly affected storage tanks would be required to comply with associated inspection, repair, testing, and recordkeeping requirements. Compliance with RACT requirements must be achieved no later than July 20, 2021. The proposed rule amendments would ensure that the FCAA mandates for VOC RACT are in place for the DFW area.

The rulemaking would not propose amendments to implement RACT for other emission source categories based on a determination by the executive director's staff, after analyzing the point source emissions inventory, Title V permits, new source review permits, and central registry databases, that there would be no other affected sources that would meet the rule applicability or that would be affected by the rule requirements.

The proposed rulemaking would include technical revisions intended to correct inadvertent errors in Chapter 115, Subchapter E, Division 2, Surface Coating Processes, made during a previous Chapter 115 VOC RACT rulemaking (Rule Project No. 2013-048-115-AI, 40 TexReg 3907, June 19, 2015), to ensure consistency with the agency's intent. The proposed rulemaking would revise two tables in §115.421 to correct inadvertent errors made to the emission limits applicable to the surface coating of miscellaneous

metal parts and products and the vehicle wipe-down solutions category. Non-substantive revisions would also be proposed as part of this rulemaking to remove obsolete language.

B.) Scope required by federal regulations or state statutes:
The proposed rulemaking would implement RACT for major sources of VOC emissions, as mandated by FCAA requirements. FCAA, §172(c)(1) requires the state to submit a SIP revision that incorporates all reasonably available control measures, including RACT, for sources of relevant pollutants. FCAA, §182(b)(2) requires the state to submit a SIP revision that implements RACT for all emission sources addressed in Control Techniques Guidelines (CTG) and all non-CTG major sources of VOC, including emission sources covered in an Alternative Control Technology document. The EPA defines RACT as the lowest emission limitation that a particular source is capable of meeting by the application of control technology that is reasonably available considering technological and economic feasibility (44 FR 53761).

C.) Additional staff recommendations that are not required by federal rule or state statute:
In addition to implementing RACT requirements for the DFW area, the proposed rulemaking would include technical corrections that would extend to the DFW, Beaumont-Port Arthur, and HGB nonattainment areas as well as El Paso, Gregg, Nueces, and Victoria Counties. The proposed technical corrections would amend errors in §115.421. The proposed amendment would correct the language used in the emission specifications tables for surface coating processes. Because this amendment is to correct a previous error, no practical or RACT impact is expected to result from this rule clarification.

Statutory authority:
The rule amendments would be proposed under Texas Water Code (TWC), §5.102, concerning General Powers, TWC, §5.103, concerning Rules, and TWC, §5.105, concerning General Policy, that authorize the commission to adopt rules necessary to carry out its powers and duties under the TWC; and under Texas Health and Safety Code (THSC), §382.017, concerning Rules, that authorizes the commission to adopt rules consistent with the policy and purposes of the Texas Clean Air Act. The rule amendments would also be proposed under THSC, §382.002, concerning Policy and Purpose, that 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, that authorizes the commission to control the quality of the state's air; THSC, §382.012, concerning State Air Control Plan, that authorizes the commission to prepare and develop a general, comprehensive plan for the control of the state's air; THSC, §382.014, Emissions Inventory, which authorizes the commission to require a person whose activities cause air contaminant emissions to submit information to enable the commission to develop an emissions inventory; THSC, §382.016, concerning Monitoring Requirements; Examination of Records, that authorizes the commission to prescribe requirements for owners or operators of sources to make and maintain records of emissions measurements; and THSC, §382.021, concerning Sampling Methods and Procedures, that authorizes the commission to prescribe the sampling methods and procedures to determine compliance with its rules. The rule amendments would also be proposed under 42 United States Code, §§7420 *et seq.*, which

requires states to submit SIP revisions that specify the manner in which the NAAQS will be achieved and maintained within each air quality control region of the state. The EPA published the final rule establishing the NAAQS for ozone in the *Federal Register* on March 27, 2008 (73 FR 16436).

Effect on the:

A.) **Regulated community:**
The rulemaking may require owners or operators of affected sources in Wise County to install control equipment to meet emission specifications; implement work practices; or comply with monitoring, testing, and recordkeeping requirements. Costs associated with new equipment would be incurred by the owner or operator if the owner or operator were to choose to replace equipment to comply with the proposed rule requirements.

Amendments to the tables in §115.421 are corrections to a previous error and are expected to have no impact on the regulated community outside of the clarification of the rule.

B.) Public:
The public may benefit from improved air quality.

C.) Agency programs:
The rulemaking may increase the workload for Office of Compliance and Enforcement staff when inspecting affected facilities to verify compliance with any new or revised Chapter 115 requirements. Staff from the Environmental Law Division would be solicited for legal advice.

Stakeholder meetings:
No stakeholder meeting is planned for this rulemaking, but public hearings in Austin, Houston, and Arlington are planned during the rulemaking public comment period.

Potential controversial concerns and legislative interest:
The EPA's final notice reclassifying areas from moderate to serious for the 2008 eight-hour ozone NAAQS includes two RACT implementation dates: 1) an implementation date of August 3, 2020 for measures necessary to meet reasonable further progress (RFP) or demonstrate attainment; and 2) a RACT SIP submission deadline of August 3, 2020 with an implementation deadline of July 20, 2021 for RACT requirements not otherwise needed to demonstrate attainment. RACT measures are not necessary to meet RFP or demonstrate attainment for the DFW and HGB 2008 eight-hour ozone serious nonattainment areas; therefore, the RACT implementation deadline set for this proposed rulemaking is July 20, 2021, consistent with the EPA's final reclassification notice.

Will this rulemaking affect any current policies or require development of new policies?
This rulemaking would update RACT requirements for Wise County to be consistent with the rest of the DFW ozone nonattainment area and would address an error made during a

previous rulemaking. The rulemaking would not affect any current policies or require the development of new policies.

What are the consequences if this rulemaking does not go forward? Are there alternatives to rulemaking?
FCAA, §172(c)(1) and §182(b)(2) require the state to submit a SIP revision implementing RACT for all CTG emission source categories and all non-CTG major sources of VOC in the DFW and HGB areas. Failure to submit a SIP revision for each area could result in sanctions or promulgation of a federal implementation plan. Sanctions could include transportation funding restrictions, grant withholdings, and increased emissions offset requirements for new construction and major modification of stationary sources in the DFW and HGB ozone nonattainment areas.

Key points in the proposal rulemaking schedule:
Anticipated proposal date: September 11, 2019
Anticipated *Texas Register* publication date: September 27, 2019
Anticipated public hearing dates (if any): October 14, 2019 and October 17, 2019
Anticipated public comment period: September 13, 2019 - October 28, 2019
Anticipated adoption date: March 4, 2020

Agency contacts:
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The Texas Commission on Environmental Quality (TCEQ, agency, or commission) proposes amendments to §§115.10, 115.111, 115.112, 115.119, and 115.421.

If adopted, the amended sections of Chapter 115 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 Proposed Rules

The Federal Clean Air Act (FCAA) requires states to submit plans to demonstrate attainment of the National Ambient Air Quality Standards (NAAQS) for ozone nonattainment areas with a classification of moderate or higher. The Dallas-Fort Worth (DFW) 2008 eight-hour ozone nonattainment area, consisting of Collin, Dallas, Denton, Ellis, Johnson, Kaufman, Parker, Rockwall, Tarrant, and Wise Counties, was classified as a moderate nonattainment area for the 2008 eight-hour ozone NAAQS of 0.075 parts per million with a July 20, 2018, attainment date. Based on 2017 monitoring data, the DFW area did not attain the 2008 eight-hour ozone NAAQS and did not qualify for a one-year attainment date extension in accordance with the FCAA, §181(a)(5). On August 7, 2019, the EPA signed the final notice reclassifying the DFW and Houston-Galveston-Brazoria (HGB) areas as serious ozone nonattainment areas.

With the final reclassification to serious nonattainment, the state is required to submit a SIP revision to fulfill the volatile organic compounds (VOC) reasonably available

control technology (RACT) requirements mandated by FCAA, §172(c)(1) and §182(b)(2). Although the eight-county HGB area (Brazoria, Chambers, Fort Bend, Galveston, Harris, Liberty, Montgomery, and Waller Counties) was also reclassified to serious nonattainment for the 2008 eight-hour ozone NAAQS, the commission determined that RACT is in place for all emission source categories in the HGB area; therefore, there are no changes proposed in this rulemaking that affect the HGB area.

The EPA's *Implementation of the 2008 National Ambient Air Quality Standards for Ozone: State Implementation Plan Requirements; Final Rule*, published in the *Federal Register* on March 6, 2015 (80 FR 12264), specifies an attainment date of July 20, 2021 for serious nonattainment areas. FCAA, §172(c)(1) requires the state to submit a SIP revision that incorporates all reasonably available control measures, including RACT, for sources of relevant pollutants. FCAA, §182(b)(2) requires the state to submit a SIP revision that implements RACT for all emission sources addressed in Control Techniques Guideline (CTG) and all non-CTG major sources of VOC, including emission sources covered in an Alternative Control Technology (ACT) document. The EPA defines RACT as the lowest emission limitation that a particular source is capable of meeting by the application of control technology that is reasonably available considering technological and economic feasibility (44 FR 53761, September 17, 1979).

Depending on the classification of an area designated nonattainment for a NAAQS, the major source threshold that determines what sources are subject to RACT

requirements varies. Under the 1997 eight-hour ozone NAAQS, the DFW area consisted of nine counties (Collin, Dallas, Denton, Ellis, Johnson, Kaufman, Parker, Rockwall, and Tarrant Counties) and was classified as a serious nonattainment area. The EPA's implementation rule for the 2008 eight-hour ozone NAAQS requires retaining the most stringent major source emission threshold for sources in an area to prevent backsliding (80 FR 12264). For this reason, the major source emission threshold for those nine counties remains at the level required for serious nonattainment areas, which is the potential to emit (PTE) of 50 tons per year (tpy) of VOC. Wise County was not part of the DFW 1997 eight-hour ozone NAAQS nonattainment area but was included as part of the DFW 2008 eight-hour ozone NAAQS nonattainment area; therefore, the major source threshold for Wise County is based on a classification of moderate under the 2008 standard, which is the PTE of 100 tpy of VOC. With the reclassification of the DFW area to serious nonattainment under the 2008 eight-hour ozone NAAQS, the major source emission threshold for all 10 counties, including Wise County, is the PTE of 50 tpy of VOC emissions. This proposed rulemaking would implement RACT in Wise County to reflect this change in the major source threshold for Wise County.

The proposed rulemaking would revise Chapter 115, Subchapter B, Division 1, Storage of Volatile Organic Compounds, to implement VOC RACT for major source fixed roof oil and condensate storage tanks in Wise County. A previous DFW VOC RACT rulemaking (Rule Project Number 2013-048-115-AI, 40 TexReg 3907, June 19, 2015)

addressed CTG RACT for this source category. The proposed revisions would address major source storage tanks in Wise County by requiring fixed roof oil and condensate tanks with at least 50 tpy of uncontrolled VOC emissions from flashed gasses to operate a control device achieving at least 95% efficiency. In addition, these newly affected storage tanks would be required to comply with associated inspection, repair, testing, and recordkeeping requirements. RACT requirements must be complied with by no later than the attainment date for the DFW serious nonattainment area, July 20, 2021. The proposed amendments ensure that FCAA VOC RACT is in place for the DFW area. The commission invites comment on the technological and economic feasibility of the RACT rule revisions proposed in this division.

The commission is not proposing amendments to implement RACT for other emission source categories based on a determination, after analyzing the point source emissions inventory, Title V permits, new source review permits, and central registry databases, that there would be no other affected sources that would meet the rule applicability or that would be affected by the rule requirements. As part of this rulemaking, the commission is proposing technical revisions intended to correct inadvertent errors in Chapter 115, Subchapter E, Division 2, Surface Coating Processes, made during a previous RACT rulemaking (Rule Project Number 2013-048-115-AI), to ensure consistency with the agency's intent. The proposed technical corrections to §115.421 will correct the language used in the emission specifications tables for surface coating processes. Non-substantive revisions are also proposed as part of this rulemaking that

would remove obsolete language. The commission has determined that the proposed revisions would not negatively affect the status of the state's progress towards attainment with the ozone NAAQS, would not interfere with control measures, and would not prevent reasonable further progress toward attainment of the ozone NAAQS.

Section by Section Discussion

Although the purpose of this rulemaking is to implement RACT for the DFW 2008 eight-hour ozone nonattainment area, the commission is also proposing to revise portions of the rules to make technical corrections to surface coating emission specifications for. These technical corrections are intended to clarify the rules to be consistent with the agency's original intent. The specific changes are discussed in greater detail in this Section by Section Discussion in the corresponding portions related to the affected rule sections. The commission is requesting comment on any instance in which the proposed technical corrections would not achieve the commission's intended original intent of the rule.

Subchapter A, Definitions

§115.10, Definitions

The proposed rulemaking would amend §115.10(10) to remove obsolete language concerning Wise County's inclusion in the list of attainment counties. The language indicating that, beginning January 1, 2017, Wise County would no longer be considered

a covered attainment county is no longer necessary since that date has passed and Wise County is included in the definition for the DFW area in §115.10(11). The commission also proposes removing from the §115.10(10) definition the language concerning Wise County's nonattainment designation for the 2008 eight-hour ozone NAAQS no longer being legally effective upon the commission publishing notice in the *Texas Register* and Wise County, therefore, continuing to be defined as an attainment county. The litigation over the Wise County attainment status has been completed, and the commission proposes to remove this language since the commission cannot publish such a notice until Wise County is redesignated to attainment by the EPA. The removal of this language will allow for greater clarity in the definitions and remove any doubt concerning the nonattainment status of Wise County.

The proposed rulemaking would amend §115.10(11)(C) to remove obsolete language concerning the removal of Wise County from the definition of the DFW area. Wise County is a part of the DFW area and is included in the definition of the area along with Collin, Dallas, Denton, Ellis, Johnson, Kaufman, Parker, Rockwall, and Tarrant Counties. The commission seeks to remove language in paragraph (11)(C) that states that Wise County is no longer included in the definition of the DFW area upon publication in the *Texas Register* by the commission that the nonattainment designation for the 2008 eight-hour ozone NAAQS for Wise County is no longer legally effective. As with the language in paragraph (10), the litigation over the Wise County attainment status has been completed, and the commission proposes to remove this

language since the commission cannot publish such a notice until Wise County is redesignated to attainment by the EPA.

Subchapter B, General Volatile Organic Compound Sources

Division 1, Storage of Volatile Organic Compounds

The proposed rulemaking would amend Chapter 115, Subchapter B, Division 1, to implement RACT requirements for the DFW area under the 2008 eight-hour ozone NAAQS. These proposed amendments would lower the major source threshold for Wise County to 50 tpy of uncontrolled flash emissions for fixed roof oil and condensate storage tanks to be consistent with the major source threshold for a serious nonattainment area. The other counties in the DFW area are currently subject to a 50 tpy major source threshold due to a serious nonattainment classification under the 1997 eight-hour ozone NAAQS. The proposed rulemaking would update exemptions, control requirements, and compliance schedules in this division as well as make any necessary edits and corrections to outdated or incorrect language. Although no changes are proposed for the inspection and repair requirements in §115.114, the requirements in subsection (a)(5) reference the flash gas provisions in §115.112(e) and would apply to the storage tanks newly affected by this proposed rulemaking.

§115.111, Exemptions

The commission proposes to amend the exemptions under §115.111(a)(12) to change the condensate throughput limit required for an exemption for a storage tank or tank

battery in Wise County storing condensate prior to custody transfer. The throughput limit required for an exemption would be lowered from 6,000 barrels (252,000 gallons) to 3,000 barrels (126,000 gallons) of condensate throughput per year on a rolling 12-month basis beginning July 20, 2021, the date specified in §115.119(f) of the compliance schedule. The proposed amendment to this rule states that, on or after July 20, 2021, the owner or operator of a storage tank or tank battery that exceeds the new 3,000-barrel throughput limit may be exempt from the requirements in §115.112(e)(4)(C). This exemption may be granted only if the owner or operator demonstrates, using the test methods found in §115.117, that the uncontrolled VOC emissions are less than 50 tpy on a rolling 12-month basis. The amendment to this exemption is needed to reflect the new major source threshold for VOC emissions that is required to implement RACT in Wise County. This new limit would ensure that RACT is in place for storage tanks storing condensate in Wise County consistent with the RACT requirements for the other nine DFW area counties covered under the exemption in subsection (a)(10).

§115.112, Control Requirements

The commission proposes to amend the control requirements under §115.112(e)(4)(C) and (5)(C). This amendment is needed to update the control requirements for VOC storage tanks to implement RACT in Wise County as part of the DFW serious ozone nonattainment area. The other nine counties in the DFW area are currently subject to major source RACT requirements due to a previous serious nonattainment

classification under the 1997 eight-hour ozone NAAQS. This proposed amendment establishes a new, lower major source threshold for fixed roof oil and condensate VOC storage tanks in Wise County and ensure RACT is in place as required under FCAA, §182(b).

The proposed amendment to §115.112(e)(4)(C) creates clauses (i) and (ii). The proposed new clauses would accommodate the transition from the current threshold of 6,000 barrels (252,000 gallons) per year on a rolling 12-month basis to the proposed new threshold of 3,000 barrels (126,000 gallons) per year on a rolling 12-month basis on July 20, 2021. The proposed addition of §115.112(e)(4)(C)(i) maintains the current standard for fixed roof tanks storing condensate and requires that flashed gases 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 6,000 barrels per year on a rolling 12-month basis. This proposed new clause applies only until the proposed July 20, 2021 compliance deadline, which is found under §115.119(f) in the compliance schedules and is the deadline for the RACT requirements proposed in this rulemaking. Accordingly, the proposed addition of §115.112(e)(4)(C)(ii) sets the new standard for fixed roof tanks storing condensate and requires that flashed gases 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 3,000 barrels per year on a rolling 12-month basis. This proposed new clause applies beginning on the date specified in §115.119(f), or July 20, 2021, and would ensure RACT is in place for major sources in

Wise County. The commission is using 6,000 barrels and 3,000 barrels per year thresholds because this equates to 100 tons and 50 tons of VOC emissions per year using the 33.3 pound per barrel emission factor.

The proposed amendment to §115.112(e)(5)(C) creates clauses (i) and (ii). The proposed new clauses would accommodate the transition from the current threshold of 100 tpy condensate throughput per year on a rolling 12-month basis to the proposed new threshold of 50 tpy condensate on a rolling 12-month basis on July 20, 2021. Specifically, proposed §115.112(e)(5)(C)(i) indicates that, for a fixed roof storage tank storing oil or condensate, flashed gases must be routed to a vapor control system if the uncontrolled VOC emissions from an individual storage tank, from the aggregate of storage tanks in a tank battery, or from the aggregate of the storage tanks at a pipeline breakout station equal or exceed 100 tpy on a rolling 12-month basis. This proposed new clause applies only until the July 20, 2021 compliance deadline, which is found in the compliance schedules under proposed, revised §115.119(f) and is the deadline for the RACT requirements proposed in this rulemaking. Proposed §115.112(e)(5)(C)(ii) indicates that, for a fixed roof storage tank storing oil or condensate, flashed gases must be routed to a vapor control system if the uncontrolled VOC emissions from an individual storage tank, from the aggregate of storage tanks in a tank battery, or from the aggregate of the storage tanks at a pipeline breakout station equal or exceed 50 tpy. This proposed new clause applies beginning on the date specified in proposed §115.119(f), or July 20, 2021, and would ensure RACT is in place for major sources in

Wise County.

§115.119, Compliance Schedules

The commission proposes to amend the compliance schedules found in existing §115.119(f) for Wise County. This proposed amendment would specify that in Wise County, the owner or operator of each VOC storage tank was required to be in compliance with the division by January 1, 2017, which was the compliance date associated with the previous RACT rulemaking (Rule Project Number 2013-048-115-AI). Proposed subsection (f) would further specify that owners or operators shall comply with the updated exemption in proposed §115.111(a) and updated control requirements in proposed §115.112(e)(4)(C)(ii) and (5)(C)(ii) no later than July 20, 2021, which is the attainment date for the DFW serious nonattainment area.

Subchapter E, Solvent-Using Processes

Division 2, Surface Coating Processes

§115.421, Emission Specifications

The commission proposes to amend the table in §115.421(8)(A), to add the phrase "Minus Water and Exempt Solvent" to the "Coating Type" column heading, making this concept applicable to each of the surface coating types listed for regulation. The commission also proposes to amend the table in §115.421(8)(A) to correct an inadvertent error made to the emission limits applicable to the surface coating of miscellaneous metal parts and products during the Chapter 115 VOC RACT

rulemaking (Rule Project Number 2013-048-115-AI). As a result of that rulemaking, the contents of §115.421 were significantly reformatted to improve readability and enhance the clarity of that rule. Part of the reformat was transferring the four miscellaneous metal parts and products surface coating emission limits from a list to a table. The accompanying preamble discussion indicated that only changes to formatting would be made and that no substantive changes to the requirements for this coating category were intended to be made. Prior to this adopted format change, determining compliance with the coating emission limits was on a pounds of VOC per gallon of coating, minus water and exempt solvent, basis. The proposed change will add the text "Minus Water and Exempt Solvent" to ensure the intent of this rule requirement is upheld. The existing miscellaneous metal parts and products emission specifications apply to affected surface coaters in the Beaumont-Port Arthur area, El Paso area, and Gregg, Nueces, and Victoria Counties, and in limited situations in the DFW and HGB areas. Most miscellaneous metal parts and products surface coaters in the DFW and HGB areas affected by the Chapter 115 rules are subject to the rules in Chapter 115, Subchapter E, Division 5. Because this change is to correct a previous error, no practical or RACT impact is expected to result from this rule clarification.

The commission proposes amendments to the table in §115.421(12), to remove the phrase "Minus Water and Exempt Solvent" from the heading of the "Coating Type" column and place it beside each of the coating types listed, except for the wipe-down solutions category. Similar to the miscellaneous metal parts and products surface

coating requirements, the commission proposes to amend the table in §115.421(12) to correct an inadvertent error made to the vehicle refinishing wipe-down solution emission specification made during the Chapter 115 VOC RACT rulemaking (Rule Project Number 2013-048-115-AI). Part of the reformat was transferring all the vehicle refinishing surface coating emission limits from a list to a table. The accompanying preamble discussion indicated that only changes to formatting would be made and that no substantive changes to the requirements for this coating category were intended to be made. Prior to this adopted format change, determining compliance with the wipe-down solution emission limit was on a pound of VOC per gallon of solution basis, evidenced by the omission of "excluding water and exempt solvent." While all the other surface coating types regulated under the vehicle refinishing category are calculated without the inclusion of water and exempt solvent, wipe-down solutions should be calculated with water and exempt solvent included. However, the table currently requires compliance on a pound of VOC per gallon of solution basis, excluding water and exempt solvent. The proposed change will add the text "including water and exempt solvent" to ensure the intent of this particular rule requirement is upheld. The existing vehicle refinishing emission specifications apply to affected surface coaters in the HGB and El Paso areas in addition to the DFW area. Because this change is to correct a previous error, no practical or RACT impact is expected to result from this rule clarification.

Fiscal Note: Costs to State and Local Government

Jené Bearse, Analyst in the Budget and Planning Division, determined that for the first

five-year period the proposed rulemaking is in effect, no fiscal implications are anticipated for the agency or for other units of state or local government as a result of administration or enforcement of the proposed rulemaking.

The rulemaking is proposed in order to comply with the FCAA and ensure that requirements relating to VOC RACT are in place for Wise County. The proposed rulemaking would revise the Texas Administrative Code to implement RACT for major sources and lower the applicability threshold to 50 tpy of uncontrolled VOC emissions triggering flashed gas control requirements and associated inspection, repair, testing, and recordkeeping requirements for fixed roof oil and condensate storage tanks in the county.

Public Benefits and Costs

Ms. Bearse also determined that for each year of the first five years the proposed rulemaking is in effect, the public benefit anticipated from the changes seen in the proposed rulemaking will be in compliance with federal law and continued protection of the environment and public health and safety combined with efficient and fair administration of VOC emission standards for Wise County and the DFW ozone nonattainment area.

The proposed rulemaking may result in fiscal implications for a limited number of businesses or individuals. Owners or operators of fixed roof oil and condensate

storage tanks with uncontrolled VOC flash emissions of at least 50 tpy in Wise County will have to comply with the proposed rules. Those that are affected will be required to control flash emissions using a vapor control device achieving at least a 95% control efficiency. Associated inspection, repair, testing, and recordkeeping requirements will also apply to owners or operators of these storage tanks. The agency estimates this will affect 20 tank batteries in Wise County; however, fifteen of those are known to already have control devices installed.

If a person is required to install a vapor recovery unit at an affected site, the estimated cost in the first year is between $60,000 and $110,000. The recovered condensate is expected to offset some of the cost. Recovered condensate at 50 tpy in the Wise County area would be 339 barrels saved through recovery. The West Texas Intermediate Crude oil price was valued at $48.50 on March 13, 2019, making the value of the recovered condensate $19,351 per year. For this reason, a person should expect to recover their costs from the original purchase within the first six years.

Other costs may include the installation of a totalizing flow meter at $3,000 and the use of flares that meet the design standards listed in 40 Code of Federal Regulations (CFR) §60.18(b) - (f), to control VOC emissions from tanks. If the flare is not already subject to these requirements, the cost of a temperature monitor would range from $500 to $1,000. A design verification to meet 40 CFR §60.18, would cost approximately $3,000. In most cases, a flare or vapor recovery unit is assumed for each controlled

tank battery, not both, and owners and operators are expected to choose the most economical option. However, owners who install a vapor recovery unit may opt to also include a flare to control emissions when the vapor recovery unit is offline.

A person may experience expenses relating to inspection, maintenance, repair, and recordkeeping. Assuming the maximum number of required inspections, one per day, the total cost could be up to $5,559 per year. The low end of crude oil or condensate production requiring inspection would likewise yield inspection costs of $442 per year. Annual maintenance costs are estimated at $487 per tank battery, and repair costs are estimated at $161 per year per tank battery. An additional $100 per year may be required to keep records generated at each tank battery.

The probable economic cost (and savings) to owners or operators of fixed roof oil and condensate storage tanks with uncontrolled VOC flash emissions of at least 50 tons per year in Wise County for the first five years after implementation of the rule is as follows: Year 1: $98,697; Year 2: $15,602; Year 3: $15,602; Year 4: $15,602; and Year 5: $15,602.

Local Employment Impact Statement

The commission reviewed this proposed rulemaking and determined that a local employment impact statement is not required because the proposed rulemaking does not adversely affect a local economy in a material way for the first five years that the

proposed rulemaking is in effect.

Rural Communities Impact Assessment

The commission reviewed this proposed rulemaking and determined that the proposed rulemaking does not adversely affect rural communities in a material way for the first five years that the proposed rulemaking is in effect.

Small Business and Micro-Business Assessment

No adverse fiscal implications are anticipated for small or micro-businesses due to the implementation or administration of the proposed rulemaking for the first five-year period the proposed rulemaking is in effect.

Small Business Regulatory Flexibility Analysis

The commission reviewed this proposed rulemaking and determined that a Small Business Regulatory Flexibility Analysis is not required because the proposed rulemaking does not adversely affect a small or micro-business in a material way for the first five years the proposed rulemaking is in effect.

Government Growth Impact Statement

The commission prepared a Government Growth Impact Statement Assessment for this proposed rulemaking. The proposed rulemaking does not create or eliminate a government program and will not require an increase or decrease in future legislative

appropriations to the agency. The proposed rulemaking does not require the creation of new employee positions, eliminate current employee positions, or require an increase or decrease in fees paid to the agency. As required by federal law, the proposed rulemaking does expand an existing regulation and increase the number of individuals subject to its applicability. During the first five years, the proposed rulemaking should not impact, positively or negatively, the state's economy.

Draft Regulatory Impact Analysis Determination

The commission reviewed the amendments in light of the Regulatory Impact Analysis (RIA) requirements of Texas Government Code, §2001.0225, and determined that the amendments do not meet the definition of a major environmental rule as defined in that statute, and in addition, if they did meet the definition, would not be subject to the requirement to prepare an RIA.

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. The specific intent of the proposed rulemaking is to revise Chapter 115, Subchapter B, Division 1, to update the approved RACT requirements in the DFW 2008 eight-hour ozone nonattainment area. These proposed requirements would lower the major source threshold for Wise County to 50 tpy of

uncontrolled flash emissions for fixed roof oil and condensate storage tanks to be consistent with the major source threshold for a serious nonattainment area. Generally, the commission expects the proposed requirements to place minimal burden on affected owners and operators and that the proposed compliance date provides an adequate amount of time for these owners and operators to make all necessary installations and adjustments for compliance purposes.

The commission also proposes changes to two tables in Chapter 115, Subchapter E, Division 2, to correct inadvertent errors made to the emission limits applicable to the surface coating of miscellaneous metal parts and products and to vehicle refinishing wipe-down solution emission specifications. These errors were made during the Chapter 115 VOC RACT rulemaking (Rule Project Number 2013-048-115-AI). During that rulemaking, the contents of these tables were significantly reformatted to improve readability and enhance the clarity of the rule. The accompanying preamble discussion indicated that only changes to formatting were being made and that no substantive changes to the requirements for these categories were intended to be made. The proposed changes will ensure the intent of the rule requirement is upheld. These emission specifications apply to affected surface coaters in the Beaumont-Port Arthur area, El Paso area, and Gregg, Nueces, and Victoria Counties and in limited situations in the DFW and HGB areas. Because this change is to correct a previous error, no practical or RACT impact is expected to result from this rule clarification.

As discussed in the Fiscal Note section of this preamble, the proposed rulemaking is not anticipated to add any significant additional costs to affected individuals or businesses beyond what is already required to comply with these federal standards 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.

Additionally, this rulemaking does not meet any of the four applicability criteria for requiring an RIA for a major environmental rule, which are listed in Texas Government Code, §2001.0225(a). Texas Government Code, §2001.0225, 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 proposed rulemaking will update RACT requirements for crude oil and condensate storage tanks in the DFW area and correct errors in two tables for requirements for specific surface coating types and wipe-down solution types listed for regulation in the tables.

The FCAA requires states to submit plans to demonstrate attainment of the NAAQS for nonattainment areas with a classification of moderate or higher. The DFW 2008 eight-

hour ozone moderate nonattainment area failed to attain the 2008 standard by the July 20, 2018 attainment date for moderate areas and did not qualify for a one-year attainment date extension in accordance with the FCAA, §181(a)(5). On August 7, 2019, the EPA signed the final reclassification notice. With the final reclassification to serious nonattainment, the state is required to submit a SIP revision to fulfill the VOC RACT requirements mandated by FCAA, §172(c)(1) and §182(b)(2). This includes a SIP revision that implements RACT for all emission sources addressed in a CTG and all non-CTG major sources of VOC, including emission sources covered in an ACT document.

Depending on the classification of an area designated nonattainment for an ozone NAAQS, the major source threshold that determines what sources are subject to RACT requirements varies. The EPA's implementation rule for the 2008 eight-hour ozone NAAQS requires retaining the most stringent major source emission threshold level for sources in an area to prevent backsliding (80 FR 12264). For these reasons, the nine DFW area counties that were designated nonattainment under the 1997 eight-hour ozone NAAQS and classified as serious (Collin, Dallas, Denton, Ellis, Johnson, Kaufman, Parker, Rockwall, and Tarrant Counties) retain the major source emission threshold of a PTE of 50 tpy of VOC. Wise County, which was first designated nonattainment under the 2008 eight-hour ozone NAAQS, is currently subject to a major source threshold for moderate nonattainment areas, or a PTE of 100 tpy of VOC. With the reclassification of the 10-county DFW 2008 eight-hour ozone NAAQS

nonattainment area from moderate to serious, the major source emission threshold for Wise County lowers to the PTE of 50 tpy of VOC. This proposed rulemaking would implement RACT in Wise County to reflect this change in the major source threshold for Wise County.

The proposed rulemaking would revise Chapter 115, Subchapter B, Division 1, to implement VOC RACT for major source fixed roof oil and condensate storage tanks in Wise County. A previous DFW VOC RACT rulemaking (Rule Project Number 2013-048-115-AI) addressed CTG RACT for this source category. The proposed rulemaking would address major source storage tanks in Wise County by requiring fixed roof oil and condensate tanks with at least 50 tpy of uncontrolled VOC emissions from flashed gasses to operate a control device achieving at least 95% efficiency. In addition, these newly affected storage tanks would be required to comply with associated inspection, repair, testing, and recordkeeping requirements. Compliance with RACT requirements must be achieved by no later than July 20, 2021. The proposed rule amendments ensure that the FCAA mandates for VOC RACT are in place for all counties in the DFW eight-hour ozone nonattainment area for the 2008 eight-hour ozone NAAQS.

The proposed rulemaking implements requirements of 42 United States Code (USC), §7410, which requires states to adopt a SIP that provides for the implementation, maintenance, and enforcement of the NAAQS in each air quality control region of the state. While 42 USC, §7410, generally does not require specific programs, methods, or

reductions in order to meet the standards, the SIP must include enforceable emission limitations and other control measures, means, or techniques (including economic incentives such as fees, marketable permits, and auctions of emissions rights), as well as, schedules and timetables for compliance as may be necessary or appropriate to meet the applicable requirements of this chapter (42 USC, Chapter 85, Air Pollution Prevention and Control). The provisions of the FCAA recognize that states are in the best position to determine what programs and controls are necessary or appropriate in order to meet the NAAQS. This flexibility allows states, affected industry, and the public to collaborate on the best methods for attaining the NAAQS for the specific regions in the state. Even though the FCAA allows states to develop their own programs, this flexibility does not relieve a state from developing a program that meets the requirements of 42 USC, §7410. States are not free to ignore the requirements of 42 USC, §7410, and must develop programs to assure that their contributions to nonattainment areas are reduced so that these areas can be brought into attainment on schedule. The proposed rulemaking would revise rules in Chapter 115, Subchapter B, Division 1, to update the approved RACT requirements for major source crude oil and condensate storage tanks in the DFW 2008 eight-hour ozone nonattainment area and correct previous errors in two tables for requirements for specific surface coating types and wipe-down solution types listed for regulation in the tables.

The requirement to provide a fiscal analysis of proposed regulations in the Texas

Government Code was amended by Senate Bill (SB) 633 during the 75th Texas Legislature, 1997. The intent of SB 633 was to require agencies to conduct an RIA 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, concluding that "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 proposed rulemaking from the full analysis unless the rule was a major environmental rule that exceeds a federal law.

As discussed earlier in this preamble, the FCAA does not always require specific programs, methods, or reductions in order to meet the NAAQS; thus, states must develop programs for each area contributing to nonattainment to help ensure that those areas will meet the attainment deadlines. Because of the ongoing need to address nonattainment issues, and to meet the requirements of 42 USC, §7410, the commission routinely proposes and adopts rulemaking to revise the SIP. The legislature is presumed to understand this federal scheme. If each rule proposed for inclusion in the

SIP was considered to be a major environmental rule that exceeds federal law, then every rulemaking to revise the SIP would require the full RIA contemplated by SB 633. This conclusion 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 commission believes that the intent of SB 633 was only to require the full RIA for rulemaking that is extraordinary in nature. While the rulemaking included in the SIP will have a broad impact, the impact is no greater than is necessary or appropriate to meet the requirements of the FCAA. For these reasons, rulemaking proposed for inclusion in the SIP fall under the exception in Texas Government Code, §2001.0225(a), because they are required by federal law.

The commission has consistently applied this construction to its rulemaking 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, 489 (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 rulemaking 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." The legislature specifically identified Texas Government Code, §2001.0225, as falling under this standard. The commission has substantially complied with the requirements of Texas Government Code, §2001.0225.

The specific intent of the proposed rulemaking is to update the approved RACT requirements for major source crude oil and condensate storage tanks in the DFW 2008 eight-hour ozone nonattainment area and correct previous errors in two tables for requirements for specific surface coating types and wipe-down solution types listed for regulation in the tables. The proposed rulemaking does not exceed a standard set by federal law or exceed an express requirement of state law. No contract or delegation agreement covers the topic that is the subject of this proposed rulemaking. Therefore, this proposed rulemaking is not subject to the regulatory

analysis provisions of Texas Government Code, §2001.0225(b), because it does not meet the definition of a "Major environmental rule"; it also does not meet any of the four applicability criteria for a major environmental rule.

The commission invites public comment regarding the Draft RIA determination during the public comment period.

Takings Impact Assessment

The commission evaluated the proposed rulemaking and performed an assessment of whether Texas Government Code, Chapter 2007, is applicable. For nonattainment areas classified as moderate and above, FCAA, §172(c)(1) and §182(b)(2), requires the state to submit a SIP revision that implements RACT for all major stationary sources of VOC. The specific purpose of the proposed rulemaking is to revise rules in Chapter 115, Subchapter B, Division 1, to update the approved RACT requirements for major source crude oil and condensate storage tanks in the DFW 2008 eight-hour ozone nonattainment area based on a serious classification. The proposed rulemaking will also correct errors made in a previous rulemaking to two tables in Chapter 115, Subchapter E, Division 2. This proposed rulemaking will clarify requirements for specific surface coating types and wipe-down solution types listed for regulation. Texas Government Code, §2007.003(b)(4), provides that Texas Government Code, Chapter 2007, does not apply to this proposed rulemaking because it is an action reasonably taken to fulfill an obligation mandated by federal law.

In addition, the commission's assessment indicates that Texas Government Code, Chapter 2007, does not apply to this proposed rulemaking because this is an action that is taken in response to a real and substantial threat to public health and safety; is designed to significantly advance the health and safety purpose; and does not impose a greater burden than is necessary to achieve the health and safety purpose. Thus, this action is exempt under Texas Government Code, §2007.003(b)(13). The proposed rulemaking fulfills the FCAA requirement to implement RACT in nonattainment areas. These revisions will result in VOC emission reductions in ozone nonattainment areas that may contribute to the timely attainment of the ozone standard and reduced public exposure to VOC. Consequently, the proposed rulemaking meets the exemption criteria in Texas Government Code, §2007.003(b)(4) and (13). For these reasons, Texas Government Code, Chapter 2007, does not apply to this proposed rulemaking.

Consistency with the Coastal Management Program

The commission reviewed the proposed rulemaking and found the proposal is a rulemaking identified in the Coastal Coordination Act implementation rules, 31 TAC §505.11(b)(2), relating to rules subject to the Coastal Management Program (CMP), and will, therefore, require that goals and policies of the CMP be considered during the rulemaking process.

The commission reviewed this rulemaking for consistency with the CMP goals and

policies in accordance with the regulations of the Coastal Coordination Advisory Committee and determined that the rulemaking will not affect any coastal natural resource areas because the rules only affect counties outside the CMP area and is, therefore, consistent with CMP goals and policies.

Written comments on the consistency of this rulemaking may be submitted to the contact person at the address listed under the Submittal of Comments section of this preamble.

Effect on Sites Subject to the Federal Operating Permits Program

Chapter 115 contains applicable requirements under 30 TAC Chapter 122, Federal Operating Permits. Because of this, owners or operators subject to the Federal Operating Permit Program must, consistent with the revision process in Chapter 122, revise their operating permit to include the revised Chapter 115 requirements for each emission unit affected by the revisions to Chapter 115 at their site.

Announcement of Hearing

The commission will hold a public hearing on this proposal in Houston on October 14, 2019, at 2:00 p.m. in the auditorium of the Texas Department of Transportation located at 7600 Washington Avenue; and in Arlington on October 17, 2019 at 2:00 p.m. in the Arlington City Council Chambers located at 101 Abram Street. The hearings are structured for the receipt of oral or written comments by interested persons.

Individuals may present oral statements when called upon in order of registration. Open discussion will not be permitted during the hearings; however, commission staff members will be available to discuss the proposal 30 minutes prior to the hearings.

Persons who have special communication or other accommodation needs who are planning to attend the hearing should contact Sandy Wong, Office of Legal Services at (512) 239-1802 or 1-800-RELAY-TX (TDD). Requests should be made as far in advance as possible.

Submittal of Comments

Written comments may be submitted to Paige Bond, MC 205, Office of Legal Services, Texas Commission on Environmental Quality, P.O. Box 13087, Austin, Texas 78711-3087, or faxed to (512) 239-4808. Electronic comments may be submitted at: *https://www6.tceq.texas.gov/rules/ecomments/*. File size restrictions may apply to comments being submitted via the eComments system. All comments should reference Rule Project Number 2019-075-115-AI. The comment period closes on October 28, 2019. Copies of the proposed rulemaking may be obtained from the commission's website at *https://www.tceq.texas.gov/rules/propose_adopt.html*. For further information, please contact Graham Bates, Air Quality Planning Section, (512) 239-2606.

SUBCHAPTER A: DEFINITIONS

§115.10

Statutory Authority

The amended section is proposed under Texas Water Code (TWC), §5.102, concerning General Powers, that provides the commission with the general powers to carry out its duties under the TWC; TWC, §5.103, concerning Rules, that authorizes the commission to adopt rules necessary to carry out its powers and duties under the TWC; TWC, §5.105, concerning General Policy, that authorizes the commission by rule to establish and approve all general policy of the commission; and under Texas Health and Safety Code (THSC), §382.017, concerning Rules, that authorizes the commission to adopt rules consistent with the policy and purposes of the Texas Clean Air Act. The amended sections are also proposed under THSC, §382.002, concerning Policy and Purpose, that 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, that authorizes the commission to control the quality of the state's air; THSC, §382.012, concerning State Air Control Plan, that 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, that authorizes the commission to prescribe reasonable requirements for the measuring and monitoring of air contaminant emissions; and THSC, §382.021, concerning Sampling Methods and Procedures, that authorizes the commission to prescribe the sampling methods and procedures to

determine compliance with its rules. The amended sections are also proposed under the Federal Clean Air Act (FCAA), 42 United States Code (USC), §§7401, *et seq.*, which requires states to submit SIP revisions that specify the manner in which the National Ambient Air Quality Standards will be achieved and maintained within each air quality control region of the state.

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

§115.10. Definitions.

Unless specifically defined in Texas Health and Safety Code, Chapter 382 (also known as the Texas Clean Air Act) or in the rules of the commission, the terms used by the commission have the meanings commonly ascribed to them in the field of air pollution control. In addition to the terms which are defined by the Texas Clean Air Act, the following terms, when used in this chapter, have the following meanings, 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) 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.

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

(5) 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.

(6) 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.

(7) 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.

(8) Connector--A flanged, screwed, or other joined fitting used to connect two pipe lines or a pipe line 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.

(9) 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.

(10) Covered attainment counties--Anderson, Angelina, Aransas, Atascosa, Austin, Bastrop, Bee, Bell, Bexar, 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, [Wise,] and Wood Counties. [Beginning January 1, 2017 this paragraph no longer applies to Wise County. Upon the date the commission publishes notice in the *Texas Register* that the Wise County nonattainment designation for the 2008 Eight-Hour Ozone National Ambient Air Quality Standard is no longer legally effective, Wise County is included under this definition of covered attainment counties as it was prior to January 1, 2017.]

(11) 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 E, Division 3 of this chapter (relating to Flexographic and Rotogravure Printing);

(iv) 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. [Upon the date the commission publishes notice in the *Texas Register* that the Wise County nonattainment designation for the 2008 Eight-Hour Ozone National Ambient Air Quality Standard is no longer legally effective, Wise County is no longer included in this definition of the Dallas-Fort Worth area.]

(12) 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.

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

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

(15) 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.

(16) 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.

(17) 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.

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

(19) 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.

(20) 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).

(21) 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.

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

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

(24) 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.

(25) 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.

(26) 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.

(27) 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.

(28) 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.

(29) 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.

(30) 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.

(31) 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.

(32) 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.

(33) 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.

(34) 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.

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

(36) 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.

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

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

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

(40) 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.

(41) 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.

(42) 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.

(43) 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.

(44) 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).

(45) 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.

(46) 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.

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

(48) 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.

(49) 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.

(50) 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.

(51) 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

§§115.111, 115.112, 115.119

Statutory Authority

The amended sections are proposed under Texas Water Code (TWC), §5.102, concerning General Powers, that provides the commission with the general powers to carry out its duties under the TWC; TWC, §5.103, concerning Rules, that authorizes the commission to adopt rules necessary to carry out its powers and duties under the TWC; TWC, §5.105, concerning General Policy, that authorizes the commission by rule to establish and approve all general policy of the commission; and under Texas Health and Safety Code (THSC), §382.017, concerning Rules, that authorizes the commission to adopt rules consistent with the policy and purposes of the Texas Clean Air Act. The amended sections are also proposed under THSC, §382.002, concerning Policy and Purpose, that 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, that authorizes the commission to control the quality of the state's air; THSC, §382.012, concerning State Air Control Plan, that 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, that authorizes the commission to prescribe reasonable requirements for the measuring and monitoring of air contaminant emissions; and THSC, §382.021, concerning

Sampling Methods and Procedures, that authorizes the commission to prescribe the sampling methods and procedures to determine compliance with its rules. The amended sections are also proposed under the Federal Clean Air Act (FCAA), 42 United States Code (USC), §§7401, *et seq.*, which requires states to submit SIP revisions that specify the manner in which the National Ambient Air Quality Standards will be achieved and maintained within each air quality control region of the state.

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

§115.111. Exemptions.

(a) The following exemptions apply in the Beaumont-Port Arthur, Dallas-Fort Worth, El Paso, and Houston-Galveston-Brazoria areas, as defined in §115.10 of this title (relating to Definitions), 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 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, 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, 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, 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)(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 50 tons per year on a rolling 12-month basis. This exemption no longer applies 15 months after the date the commission publishes notice in the *Texas Register* as specified in

§115.119(b)(1)(C) of this title (relating to Compliance Schedules) that the Dallas-Fort Worth area has been reclassified as a severe nonattainment area for the 1997 Eight-Hour Ozone National Ambient Air Quality Standard.

(11) In the Dallas-Fort Worth area, except in Wise County, on or after the date specified in §115.119(b)(1)(C) of this title, 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)(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 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) 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. On or after July 20, 2021, 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) 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.

(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.

(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 as currently exists in TAC)

Table I(a): Required Control for a Storage Tank Storing Volatile Organic Compounds (VOC) Other than Crude Oil and Condensate

True Vapor Pressure (pounds per square inch absolute (psia))	Storage Capacity (gallon (gal))	Control Requirements
≥ 1.5 psia and < 11 psia	> 1,000 gal and ≤ 25,000 gal	Submerged fill pipe or Vapor control system
≥ 1.5 psia and < 11 psia	> 25,000 gal and ≤ 40,000 gal	Internal floating roof [cover], or External floating roof (any type), or Vapor control system
≥ 1.5 psia and < 11 psia	> 40,000 gal	Internal floating roof [cover], or External floating roof with primary seal (any type) and secondary seal, or Vapor control system
≥ 11 psia	> 1,000 gal and ≤ 25,000 gal	Submerged fill pipe or Vapor control system
≥ 11 psia	> 25,000 gal	Submerged fill pipe and Vapor control system

Table II(a): Required Control for a Storage Tank Storing Crude Oil and Condensate

True Vapor Pressure (pounds per square inch absolute (psia))	**Storage Capacity (gallon (gal))**	**Control Requirements**
≥ 1.5 psia and < 11 psia	> 1,000 gal and ≤ 40,000 gal	Submerged fill pipe or Vapor control system
≥ 1.5 psia and < 11 psia	> 40,000 gal	Internal floating roof, or External floating roof with primary seal (any type) and secondary seal, or Vapor control system
≥ 11 psia	> 1,000 gal and ≤ 40,000 gal	Submerged fill pipe or Vapor control system
≥ 11 psia	> 40,000 gal	Submerged fill pipe and Vapor control system

(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.

(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 as currently exists in TAC)

Table I(b). Required Control for a Storage Tank Storing Volatile Organic Compounds (VOC) Other than Crude Oil and Condensate

True Vapor Pressure (pounds per square inch absolute (psia))	Storage Capacity (gallon (gal))	Control Requirements
≥ 1.5 psia and < 11 psia	> 1,000 gal and ≤ 25,000 gal	Submerged fill pipe or Vapor control system

≥ 1.5 psia and < 11 psia	> 25,000 gal	Internal floating roof or external floating roof (any type) or Vapor control system
≥ 11 psia	> 1,000 gal and ≤ 25,000 gal	Submerged fill pipe or Vapor control system
≥ 11 psia	> 25,000 gal	Submerged fill pipe and Vapor control system

(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 Houston-Galveston-Brazoria and Dallas-Fort Worth areas beginning March 1, 2013, except as specified in §115.119 of this title (relating to Compliance Schedules) and in paragraph (3) of this subsection.

(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 as currently exists in TAC)

Table 1: Required Control for a Storage Tank Storing Volatile Organic Compounds Other Than Crude Oil and Condensate

True Vapor Pressure (pounds per square inch absolute (psia))	Storage Capacity (gallon (gal))	Control Requirements
≥ 1.5 psia and < 11 psia	> 1,000 gal and ≤ 25,000 gal	Submerged fill pipe or Vapor control system
≥ 1.5 psia and < 11 psia	> 25,000 gal and ≤ 40,000 gal	Internal floating roof, or External floating roof (any type), or Vapor control system
≥ 1.5 psia and < 11 psia	> 40,000 gal	Internal floating roof, or External floating roof with primary seal (any type) and secondary seal, or Vapor control system
≥ 11 psia	> 1,000 gal and ≤ 25,000 gal	Submerged fill pipe or Vapor control system
≥ 11 psia	> 25,000 gal	Submerged fill pipe and Vapor control system

Table 2: Required Control for a Storage Tank Storing Crude Oil and Condensate

True Vapor Pressure (pounds per square inch absolute (psia))	**Storage Capacity (gallon (gal))**	**Control Requirements**
≥ 1.5 psia and < 11 psia	> 1,000 gal and ≤ 40,000 gal	Submerged fill pipe, or Vapor control system
≥ 1.5 psia and < 11 psia	> 40,000 gal	Internal floating roof, or External floating roof with primary seal (any type) and secondary seal, or Vapor control system
≥ 11 psia	> 1,000 gal and ≤ 40,000 gal	Submerged fill pipe, or Vapor control system
≥ 11 psia	> 40,000 gal	Submerged fill pipe, and Vapor control system

(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; and

(iii) 95% in the Dallas-Fort Worth 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:

(i) 3,000 barrels (126,000 gallons) per year on a rolling 12-month basis; or

(ii) 15 months after the date the commission publishes notice in the *Texas Register* as specified in §115.119(b)(1)(C) of this title that the Dallas-Fort Worth area has been reclassified as a severe nonattainment area for the 1997 Eight-Hour Ozone National Ambient Air Quality Standard, 1,500 barrels (63,000 gallons) per year on a rolling 12-month basis; and

(C) in Wise County: [, 6,000 barrels (252,000 gallons) per year on a rolling 12-month basis.]

(i) 6,000 barrels (252,000 gallons) per year on a rolling 12-month basis, until the date specified in clause (ii) of this subparagraph; and

(ii) 3,000 barrels (126,000 gallons) per year on a rolling 12-month basis beginning July 20, 2021, as specified in §115.119(f) of this title.

(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:

(i) 50 tons per year on a rolling 12-month basis; or

(ii) 15 months after the date the commission publishes notice in the *Texas Register* as specified in §115.119(b)(1)(C) of this title that the Dallas-Fort Worth area has been reclassified as a severe nonattainment area for the 1997 Eight-Hour Ozone National Ambient Air Quality Standard, 25 tons per year on a rolling 12-month basis; and

(C) in Wise County: [, 100 tons per year on a rolling 12-month basis.]

(i) 100 tons per year on a rolling 12-month basis, until the date specified in clause (ii) of this subparagraph; and

(ii) 50 tons per year on a rolling 12-month basis beginning July 20, 2021, as specified in §115.119(f) of this title.

(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 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.

§115.119. 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) as soon as practicable, but 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.

(C) As soon as practicable but no later than 15 months after the commission publishes notice in the *Texas Register* that the Dallas-Fort Worth area, except Wise County, has been reclassified as a severe nonattainment area for the 1997 Eight-Hour Ozone National Ambient Air Quality Standard the owner or operator of a storage tank storing crude oil or condensate prior to custody transfer or at a pipeline breakout station is required to be in compliance with the control requirements in §115.112(e)(4)(B)(ii) and (5)(B)(ii) of this title except as specified in §115.111(a)(11) of this title (relating to Exemptions).

(2) The owner or operator is no longer required to comply with §115.112(a) of this title beginning March 1, 2013.

(3) 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 as soon as practicable, but 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 as soon as practicable, but 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 as soon as practicable, but no later than March 1, 2013.

(e) 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 [shall comply] with this division by [as soon as practicable, but no later than] January 1, 2017, and shall continue to comply with this division, except that compliance with §§115.111(a)(12),

(e)(4)(C)(ii) and (5)(C)(ii) of this title is required as soon as practicable, but no later than July 20, 2021.

(g) 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.

SUBCHAPTER E: SOLVENT-USING PROCESSES

DIVISION 2: SURFACE COATING PROCESSES

§115.421

Statutory Authority

The amended section is proposed under Texas Water Code (TWC), §5.102, concerning General Powers, that provides the commission with the general powers to carry out its duties under the TWC; TWC, §5.103, concerning Rules, that authorizes the commission

to adopt rules necessary to carry out its powers and duties under the TWC; TWC, §5.105, concerning General Policy, that authorizes the commission by rule to establish and approve all general policy of the commission; and under Texas Health and Safety Code (THSC), §382.017, concerning Rules, that authorizes the commission to adopt rules consistent with the policy and purposes of the Texas Clean Air Act. The amended sections are also proposed under THSC, §382.002, concerning Policy and Purpose, that 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, that authorizes the commission to control the quality of the state's air; THSC, §382.012, concerning State Air Control Plan, that 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, that authorizes the commission to prescribe reasonable requirements for the measuring and monitoring of air contaminant emissions; and THSC, §382.021, concerning Sampling Methods and Procedures, that authorizes the commission to prescribe the sampling methods and procedures to determine compliance with its rules. The amended sections are also proposed under the Federal Clean Air Act (FCAA), 42 United States Code (USC), §§7401, *et seq.*, which requires states to submit SIP revisions that specify the manner in which the National Ambient Air Quality Standard will be achieved and maintained within each air quality control region of the state.

The amended section implements THSC, §§382.002, 382.011, 382.012, 382.016, 382.017, 382.021 and FCAA, 42 USC, §§7401 *et seq.*

§115.421. Emission Specifications.

The owner or operator of the surface coating processes specified in §115.420(a) of this title (relating to Applicability and Definitions) shall not cause, suffer, allow, or permit volatile organic compound (VOC) emissions to exceed the specified emission limits in paragraphs (1) - (16) of this subsection. These limitations are based on the daily weighted average of all coatings delivered to each coating line, except for those in paragraph (9) of this subsection which are based on paneling surface area, and those in paragraph (15) of this subsection which, if using an averaging approach, must use one of the daily averaging equations within that paragraph. The owner or operator of a surface coating operation subject to paragraph (10) of the subsection may choose to comply by using the monthly weighted average option as defined in §115.420(c)(1)(YY) of this title.

(1) Large appliance coating. VOC emissions from the application, flashoff, and oven areas during the coating of large appliances (prime and topcoat, or single coat) must not exceed 2.8 pounds per gallon of coating (minus water and exempt solvent) delivered to the application system (0.34 kilogram/liter (kg/liter)).

(2) Metal furniture coating. VOC emissions from metal furniture coating lines (prime and topcoat, or single coat) must not exceed 3.0 pounds per gallon of coating (minus water and exempt solvent) delivered to the application system (0.36 kg/liter).

(3) Coil coating. VOC emissions from the coating (prime and topcoat, or single coat) of metal coils must not exceed 2.6 pounds per gallon of coating (minus water and exempt solvent) delivered to the application system (0.31 kg/liter).

(4) Paper coating. VOC emissions from the coating of paper (or specified tapes or films) must not exceed 2.9 pounds per gallon of coating (minus water and exempt solvent) delivered to the application system (0.35 kg/liter).

(5) Fabric coating. VOC emissions from the coating of fabric must not exceed 2.9 pounds per gallon of coating (minus water and exempt solvent) delivered to the application system (0.35 kg/liter).

(6) Vinyl coating. VOC emissions from the coating of vinyl fabrics or sheets must not exceed 3.8 pounds per gallon of coating (minus water and exempt solvent) delivered to the application system (0.45 kg/liter). Plastisol coatings should not be included in calculations.

(7) Can coating. The following VOC emission limits must be achieved, on the basis of VOC solvent content per unit of volume of coating (minus water and exempt solvent) delivered to the application system:

Figure: 30 TAC §115.421(7) (No change as currently exists in TAC.)

Affected Operation	Pounds of Volatile Organic Compounds (VOC) per Gallon of Coating	Kilogram of VOC per Liter of Coating
Sheet Basecoat (Exterior and Interior) and Over-Varnish	2.8	0.34
Two-Piece Can Exterior (Base-Coat and Over-Varnish)	2.8	0.34
Two- and Three-Piece Can Interior Body Spray, Two-Piece Can Exterior End (Spray or Roll Coat)	4.2	0.51
Three-Piece Can Side-Seam Spray	5.5	0.66
End Sealing Compound	3.7	0.44

(8) Miscellaneous metal parts and products (MMPP) coating.

(A) VOC emissions from the coating of MMPP must not exceed the following limits for each surface coating type:

Figure: 30 TAC §115.421(8)(A)

[Figure: 30 TAC §115.421(8)(A)]

Coating Type (Minus Water and Exempt Solvent)	Pounds of Volatile Organic Compounds (VOC) per Gallon of Coating	Kilogram of VOC per Gallon of Coating

Clear Coat or an Interior Protective Coating for Pails and Drums	4.3	0.52
Low-Bake Coating or Coating Using Air or Forced Air Driers	3.5	0.42
Extreme Performance Coating, Including Milling Maskants	3.5	0.42
All Other Coating Applications that Pertain to MMPP, Including High-Bake Coatings	3.0	0.36

(B) If more than one emission limitation in subparagraph (A) of this paragraph applies to a specific coating, then the least stringent emission limitation applies.

(C) All VOC emissions from non-exempt solvent washings must be included in determination of compliance with the emission limitations in subparagraph (A) of this paragraph unless the solvent is directed into containers that prevent evaporation into the atmosphere.

(9) Factory surface coating of flat wood paneling. The following emission limits apply to each product category of factory-finished paneling (regardless of the number of coats applied):

Figure: 30 TAC §115.421(9) (No change as currently exists in TAC.)

Product Category	Pounds of volatile organic compounds (VOC) per 1,000 Square Feet of Coated Surface	Kilograms of VOC per 100 Meters Squared of Coated Surface
Printed Interior Wall Panels Made of Hardwood Plywood and Thin Particle Board (Less Than 1/4 Inch) in Thickness	6.0	2.9
Natural Finish Hardwood Plywood Panels	12.0	5.8
Hardwood Paneling with Class II Finish (American National Standard Institute Standard PS-59-73)	10.0	4.8

(10) Aerospace coatings. The VOC content of coatings, including any VOC-containing materials added to the original coating supplied by the manufacturer, that are applied to aerospace vehicles or components must not exceed the following limits (in grams of VOC per liter of coating, less water and exempt solvent). The following applications are exempt from the VOC content limits of this paragraph: manufacturing or re-work of space vehicles or antique aerospace vehicles or components of each; touchup; United States Department of Defense classified coatings; and separate coating formulations in volumes less than 50 gallons per year to a maximum of 200 gallons per year for all such formulations at an account.

(A) For the broad categories of primers, topcoats, and chemical milling maskants (Type I/II) which are not specialty coatings as listed in subparagraph (B) of this paragraph:

(i) primer, 350;

(ii) topcoats (including self-priming topcoats), 420; and

(iii) chemical milling maskants:

(I) Type I, 622; and

(II) Type II, 160.

(B) For specialty coatings:

Figure: 30 TAC §115.421(10)(B) (No change as currently exists in TAC.)

VOLATILE ORGANIC COMPOUND (VOC) LIMITS FOR SPECIALTY COATINGS (IN GRAMS OF VOC PER LITER OF COATING, LESS WATER AND EXEMPT SOLVENT)

Coating type . . . . . Limit:
Ablative Coating 600
Adhesion Promoter 890
Adhesive Bonding Primers:
Cured at 250˚F or below 850
Cured above 250˚F 1030
Adhesives:
Commercial Interior Adhesive 760
Cyanoacrylate Adhesive 1,020
Fuel Tank Adhesive 620
Nonstructural Adhesive 360
Rocket Motor Bonding Adhesive 890

Rubber-based Adhesive 850
Structural Autoclavable Adhesive 60
Structural Nonautoclavable Adhesive . . 850
Antichafe Coating 660
Bearing Coating 620
Caulking and Smoothing Compounds 850
Chemical Agent-Resistant Coating 550
Clear Coating 720
Commercial Exterior Aerodynamic
Structure Primer 650
Compatible Substrate Primer 780
Corrosion Prevention Compound 710
Cryogenic Flexible Primer 645
Dry Lubricative Material 880
Cryoprotective Coating 600
Electric or Radiation-Effect Coating 800
Electrostatic Discharge and Electromagnetic
Interference (EMI) Coating 800
Elevated-Temperature Skydrol-Resistant
Commercial Primer 740
Epoxy Polyamide Topcoat 660
Fire-Resistant (interior) Coating 800
Flexible Primer 640
Flight-Test Coatings:
Missile or Single Use Aircraft 420
All Other 840
Fuel-Tank Coating 720
High-Temperature Coating 850
Insulation Covering 740
Intermediate Release Coating 750
Lacquer 830
Maskants:
Bonding Maskant 1,230
Critical Use and Line Sealer Maskant...1,020
Seal Coat Maskant.....1,230
Metallized Epoxy Coating 740
Mold Release 780
Optical Anti-Reflective Coating 750
Part Marking Coating 850
Pretreatment Coating 780
Rain Erosion-Resistant Coating 850
Rocket Motor Nozzle Coating 660
Scale Inhibitor 880
Screen Print Ink 840

Sealant:
Extrudable/Rollable/Brushable Sealant 280
Sprayable Sealant 600
Silicone Insulation Material 850
Solid Film Lubricant 880
Specialized Function Coating 890
Temporary Protective Coating 320
Thermal Control Coating 800
Wet Fastener installation Coating 675
Wing Coating 850

(11) Automobile and light-duty truck manufacturing coating. The following VOC emission limits must be achieved, on the basis of solvent content per unit volume of coating (minus water and exempt solvents) delivered to the application system or for primer surfacer and top coat application, compliance may be demonstrated on the basis of VOC emissions per unit volume of solids deposited as determined by §115.425(3) of this title (relating to Testing Requirements).

Figure: 30 TAC §115.421(11) (No change as currently exists in TAC.)

Operation (Including Application, Flashoff, and Oven Areas)	Coating Delivered (Minus Water and Exempt Solvent) Pounds of Volatile Organic Compounds (VOC) per Gallon of Coating	Coating Delivered (Minus Water and Exempt Solvent) Kilogram of VOC per Liter of Coating	Solids Deposited Pounds of VOC per Gallon of Solids	Solids Deposited Kilograms per Liter of Solids
Prime Application (Body and Front-End Sheet Metal)	1.2	0.15	Not Applicable	Not Applicable
Primer Surfacer	2.8	0.34	15.1	1.81

Application				
Topcoat Application	2.8	0.34	15.1	1.81
Final Repair Application End Sealing Compound	4.8	0.58	*	*

* As an alternative to the emission limitation of 4.8 pounds of VOC per gallon of coating applied for final repair, if a source owner does not compile records sufficient to enable determination of a daily weighted average VOC content, compliance with the final repair emission limitation may be demonstrated each day by meeting a standard of 4.8 pounds of VOC per gallon of coating (minus water and exempt solvents) on an occurrence weighted average basis. Compliance with such alternative emission limitation shall be determined in accordance with the procedure specified in §115.425(3) of this title.

(12) Vehicle refinishing coating (body shops). VOC emissions from coatings or solvents must not exceed the following limits, as delivered to the application system. Additional control requirements for vehicle refinishing (body shops) are referenced in §115.422 of this title (relating to Control Requirements).

Figure: 30 TAC §115.421(12)

[Figure: 30 TAC §115.421(12)]

Coating Type [(Minus Water and Exempt Solvent)]	Pounds of Volatile Organic Compounds (VOC) per Gallon of Coating	Kilograms of VOC per Liter of Coating
Primer or Primer Surfacers (minus water and exempt solvent)	5.0	0.60
Precoat (minus water and exempt solvent)	5.5	0.66

Pretreatment (minus water and exempt solvent)	6.5	0.78
Single-Stage Topcoats (minus water and exempt solvent)	5.0	0.60
Basecoat or Clearcoat Systems (minus water and exempt solvent)	5.0	0.60
Three-Stage Systems (minus water and exempt solvent)	5.2	0.62
Specialty Coatings (minus water and exempt solvent)	7.0	0.84
Sealers (minus water and exempt solvent)	6.0	0.72
Wipe-Down Solutions	1.4	0.17

(13) Surface coating of mirror backing.

(A) VOC emissions from the coating of mirror backing must not exceed the following limits for each surface coating application method:

(i) 4.2 pounds per gallon (0.50 kg/liter) of coating (minus water and exempt solvent) delivered to a curtain coating application system; and

(ii) 3.6 pounds per gallon (0.43 kg/liter) of coating (minus water and exempt solvent) delivered to a roll coating application system.

(B) All VOC emissions from solvent washings must be included in determination of compliance with the emission limitations in subparagraph (A) of this

paragraph, unless the solvent is directed into containers that prevent evaporation into the atmosphere.

(14) Surface coating of wood parts and products. VOC emissions from the coating of wood parts and products must not exceed the following limits, as delivered to the application system, for each surface coating type. All VOC emissions from solvent washings must be included in determination of compliance with the emission limitations in this paragraph, unless the solvent is directed into containers that prevent evaporation into the atmosphere.

Figure: 30 TAC §115.421(14) (No change as currently exists in TAC.)

Coating Type (Minus Water and Exempt Solvent)	Pounds of Volatile Organic Compounds (VOC) per Gallon of Coating	Kilograms of VOC per Liter of Coating
Clear Topcoat	5.9	0.71
Wash Coat	6.5	0.78
Final Repair Coat	6.0	0.72
Semitransparent Wiping and Glazing Stain	6.6	0.79
Semitransparent Spray Stains and Toners	6.9	0.83
Opaque Ground Coats and Enamels	5.5	0.66
Clear Sealers	6.2	0.74
Clear Shellac	5.4	0.65
Opaque Shellac	5.0	0.60
Varnish	5.0	0.60
All Other Coatings	7.0	0.84

(15) Surface coating at wood furniture manufacturing facilities. For facilities which are subject to this paragraph, adhesives are not considered to be coatings or finishing materials.

(A) VOC emissions from finishing operations must be limited by:

(i) using topcoats with a VOC content no greater than 0.8 kilogram of VOC per kilogram of solids (0.8 pound of VOC per pound of solids), as delivered to the application system; or

(ii) using a finishing system of sealers with a VOC content no greater than 1.9 kilograms of VOC per kilogram of solids (1.9 pounds of VOC per pound of solids), as applied, and topcoats with a VOC content no greater than 1.8 kilograms of VOC per kilogram of solids (1.8 pounds of VOC per pound of solids), as delivered to the application system; or

(iii) for wood furniture manufacturing facilities using acid-cured alkyd amino vinyl sealers or acid-cured alkyd amino conversion varnish topcoats, using sealers and topcoats that meet the following criteria:

(I) if the wood furniture manufacturing facility uses acid-cured alkyd amino vinyl sealers and acid-cured alkyd amino conversion varnish

topcoats, the sealer must contain no more than 2.3 kilograms of VOC per kilogram of solids (2.3 pounds of VOC per pound of solids), as applied, and the topcoat must contain no more than 2.0 kilograms of VOC per kilogram of solids (2.0 pounds of VOC per pound of solids), as delivered to the application system; or

(II) if the wood furniture manufacturing facility uses a sealer other than an acid-cured alkyd amino vinyl sealer and acid-cured alkyd amino conversion varnish topcoats, the sealer must contain no more than 1.9 kilograms of VOC per kilogram of solids (1.9 pounds of VOC per pound of solids), as applied, and the topcoat must contain no more than 2.0 kilograms of VOC per kilogram of solids (2.0 pounds of VOC per pound of solids), as delivered to the application system; or

(III) if the wood furniture manufacturing facility uses an acid-cured alkyd amino vinyl sealer and a topcoat other than an acid-cured alkyd amino conversion varnish topcoat, the sealer must contain no more than 2.3 kilograms of VOC per kilogram of solids (2.3 pounds of VOC per pound of solids), as applied, and the topcoat must contain no more than 1.8 kilograms of VOC per kilogram of solids (1.8 pounds of VOC per pound of solids), as delivered to the application system; or

(iv) using an averaging approach and demonstrating that actual daily emissions from the wood furniture manufacturing facility are less than or

equal to the lower of the actual versus allowable emissions using one of the following inequalities:

Figure: 30 TAC §115.421(15)(A)(iv) (No change as currently exists in TAC.)

0.9 (0.8 (TC1 + TC2 + . . .)) > (ERTC1) (TC1) + (ERTC2) (TC2) + ...) (Inequality 1)

0.9 {1.8 (TC1 + TC2 + . . .)} + {1.9 (SE1 + SE2 + . . .)} + (Inequality 2) {9.0 (WC1 + WC2 + . . .)} + {1.2 (BC1 + BC2 + . . .)} + {0.791 (ST1 + ST2 + . . .)} > {ERTC1 (TC1) + ERTC2 (TC2) + . . .} + {ERSE1 (SE1) + ERSE2 (SE2) + . . .} + (ERWC1 (WC1) + ERWC2 (WC2) + . . .} + {ERBC1 (BC1) + ERBC2 (BC2) + . . .} + {ERST1 (ST1) + ERST2 (ST2) + . . .}

Where:

TC_i = kilograms of solids of topcoat "i" used;

SE_i = kilograms of solids of sealer "i" used;

WC_i = kilograms of solids of washcoat "i" used;

BC_i = kilograms of solids of basecoat "i" used;

ST_i = liters of stain "i" used;

ER_{TCi} = volatile organic compounds (VOC) content of topcoat "i" in kilograms of VOC per kilogram of solids, as delivered to the application system;

ER_{SEi} = VOC content of sealer "i" in kilograms of VOC per kilogram of solids, as delivered to the application system;

ER_{WCi} = VOC content of washcoat "i" in kilograms of VOC per kilogram of solids, as delivered to the application system;

ER_{BCi} = VOC content of basecoat "i" in kilograms of VOC per kilogram of solids, as delivered to the application system; and

ER_{STi} = VOC content of stain "i" in kilograms of VOC per kilogram of solids, as delivered to the application system.

(v) using a vapor control system that will achieve an equivalent reduction in emissions as the requirements of clauses (i) or (ii) of this subparagraph. If this option is used, the requirements of §115.423(3) of this title do not apply; or

(vi) using a combination of the methods presented in clauses (i) - (v) of this subparagraph.

(B) Strippable booth coatings used in cleaning operations must not contain more than 0.8 kilogram of VOC per kilogram of solids (0.8 pound of VOC per pound of solids), as delivered to the application system.

(16) Marine coatings.

(A) The following VOC emission limits apply to the surface coating of ships and offshore oil or gas drilling platforms at shipbuilding and ship repair operations, and are based upon the VOC content of the coatings as delivered to the application system.

Figure: 30 TAC §115.421(16)(A) (No change as currently exists in TAC.)

Coating Category	Grams of volatile organic	Pounds of VOC per	Grams of VOC per	Grams of VOC per

	compounds (VOC) per liter coating (minus water and exempt solvent)[a, b]	**gallon coating (minus water and exempt solvent)[a, b]**	**liter solids[c] when t≥4.5°C (40°F)**	**liter of solids[c] when t<4.5°C (40°F)[d]**
General use	340	2.83	571	728
Specialty:				
Air flask	340	2.83	571	728
Antenna	530	4.42	1,439	-----
Antifoulant	400	3.33	765	971
Heat resistant	420	3.5	841	1,069
High-gloss	420	3.5	841	1,069
High-temperature	500	4.17	1,237	1,597
Inorganic zing high-build	340	2.83	571	728
Military exterior	340	2.83	571	728
Mist	610	2.08	2,235	-----
Navigational aids	550	4.58	1,597	-----
Nonskid	340	2.83	571	728
Nuclear	420	3.50	841	1,069
Organic zinc	360	3.00	630	802
Pretreatment wash primer	780	6.50	11,095	-----
Repair and maintenance of thermoplastics	550	4.58	1,597	-----
Rubber camouflage	340	2.83	571	728
Sealant for thermal spray aluminum	610	5.08	2,235	-----
Special marking	490	4.08	1,178	-----
Specialty interior	340	2.83	571	728
Tack coat	610	5.08	2,235	-----
Undersea	340	2.83	571	728

weapons systems				
Weld-through preconstruction primer	650	5.42	2,885	-----

[a]The limits are expressed in two sets of equivalent units: grams per liter of coating (minus water and exempt solvent); and grams per liter of solids. Either set of limits may be used to demonstrate compliance.
[b]To convert from grams/liter to pounds/gallon, multiply by (3.785 liters/gallon)(pound/453.6 grams) or 1/120. For compliance purposes, metric units define the standards.
[c]VOC limits expressed in units of mass of VOC per volume of solids were derived from the VOC limits expressed in units of mass of VOC per volume of coating assuming the coatings contain no water or exempt compounds and that the volumes of all components within a coating are additive.
[d]These limits apply during cold-weather time periods (i.e., temperatures below 4.5 degrees Celsius (40 degrees Fahrenheit)). Cold-weather allowances are not given to coatings in categories that permit less than 40% solids nonvolatiles) content by volume. Such coatings are subject to the same limits regardless of weather conditions.

(B) For a coating to which thinning solvent is routinely or sometimes added, the owner or operator shall determine the VOC content as follows.

(i) Prior to the first application of each batch, designate a single thinner for the coating and calculate the maximum allowable thinning ratio (or ratios, if the shipbuilding and ship repair operation complies with the cold-weather limits in addition to the other limits specified in subparagraph (A) of this paragraph) for each batch as follows.

Figure: 30 TAC §115.421(16)(B)(i) (No change as currently exists in TAC.)

$$R = \frac{(V_s)(\text{VOC limit}) - m_{VOC}}{D_{th}} \quad \text{(Equation 1)}$$

Where:

R = Maximum allowable thinning ratio for a given batch (liters of thinner per liter of coating as supplied);
V_s = Volume fraction of solids in the batch as supplied (liter of solids per liter of coating as supplied);
VOC limit = Maximum allowable as-applied volatile organic compounds (VOC) content of the coating (grams of VOC per liter of solids);
m_{VOC} = VOC content of the batch as supplied (grams of VOC per liter of coating as supplied); and
D_{th} = Density of the thinner (grams per liter).

(ii) If the volume fraction of solids in the batch as supplied V_s is not supplied directly by the coating manufacturer, the owner or operator shall determine V_s as follows.

Figure: 30 TAC §115.421(16)(B)(ii) (No change as currently exists in TAC.)

$$V_s = \frac{1 - (m_{volatiles})}{D_{avg}} \quad \text{(Equation 2)}$$

Where:

V_s = Volume fraction of solids in the batch (liter of solids per liter of coating);
$m_{volatiles}$ = Total volatiles in the batch, including volatile organic compounds (VOC),

water, and exempt compounds (grams per liter of coating); and
D_{avg} = Average density of volatiles in the batch (grams per liter).