

The Texas Natural Resource Conservation Commission (commission) adopts amendments to Subchapter B, General Volatile Organic Compound Sources, §§115.142; Subchapter D, Petroleum Refining, Natural Gas Processing, and Petrochemical Processes, §§115.322, 115.323, 115.325, 115.327, and 115.329; Subchapter E, Solvent-Using Processes, §§115.412, 115.413, 115.415 -115.417, 115.419, 115.423, 115.426, 115.427, 115.432, 115.433, 115.435, 115.436, 115.439, and 115.442; and Subchapter F, Miscellaneous Industrial Sources, §§115.512, 115.517, and 115.519. These sections will be submitted to the United States Environmental Protection Agency (EPA) as proposed revisions to the state implementation plan (SIP). These sections are adopted *without changes* to the proposed text as published in the June 8, 2001 issue of the *Texas Register* (26 TexReg 4026) and will not be republished.

BACKGROUND AND SUMMARY OF THE FACTUAL BASIS FOR THE ADOPTED RULES

The commission adopts these amendments to Chapter 115, Control of Air Pollution from Volatile Organic Compounds (VOC), and revisions to the SIP in order to make a variety of changes which clarify and add flexibility to existing requirements, correct technical and typographical errors, update references to terms, and delete redundant language and language made obsolete by the passing of compliance dates. The adopted clarifications are consistent with rule interpretations made by the commission's Air Rule Interpretation Team. The amendments also add a minor recordkeeping requirement necessary to determine compliance with an exemption.

SECTION BY SECTION DISCUSSION

Throughout this rulemaking the outdated term “undesigned head” is replaced with the proper term “division” in response to revised *Texas Register* rules published in the February 13, 1998 issue of the *Texas Register* (23 TexReg 1289). Also throughout the rulemaking, the term “Centigrade” is replaced with the term "Celsius" which is now the term commonly used to describe this temperature scale. Justification for these changes will not be discussed any further in this preamble other than to point out where each change has been made.

Subchapter B, General Volatile Organic Compound Sources

Division 4, Industrial Wastewater

The adopted amendment to §115.142(2), Control Requirements, clarifies that the secondary seal requirements of §115.142(2)(F) only apply to external floating roof tanks. A misplaced phrase in the current rule makes the paragraph appear to apply to both internal and external floating roof tanks.

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

Division 2, Fugitive Emissions Control in Petroleum Refineries in Gregg, Nueces, and Victoria Counties

The adopted amendment to §115.322(1), Control Requirements, provides the correct reference to the definition of the term “leak.” The current rule language states that the definition of the term “leak” can be found in §115.10, Definitions. However, the term “leak” is no longer defined in §115.10 as the result of a previous rulemaking to remove redundant definitions because numerous terms found in §115.10 were already defined in §101.1, Definitions. The term “leak” was one of the definitions removed.

The adopted amendment to §115.323(1), Alternate Control Requirements, replaces the term “undesigned head” with “division.”

The adopted amendment to §115.325, Testing Requirements, replaces the term “undesigned head” with “division,” and the complete title of the division is added to the reference statement.

The adopted amendment to §115.327, Exemptions, replaces the term “undesigned head” with “division.” In §115.327(1), the complete title of the division is added to the reference statement. In §115.327(2) and (4), the reference to the division title is deleted because it is only needed the first time the division is referenced within a section. In §115.327(3), a typographical correction is made to correct the spelling of the term “Fahrenheit,” and the term "Centigrade" is changed to "Celsius."

The adopted amendment to §115.329, Counties and Compliance Schedules, adds clarifying language, replaces the term “undesigned head” with “division,” and adds the complete title of the division to the reference statement.

Subchapter E, Solvent-Using Processes

Division 1, Degreasing Processes

The title of this division is changed from “Degreasing and Cleanup Processes” to “Degreasing Processes” to more accurately reflect the content of the division.

The adopted amendment to §115.412, Control Requirements, incorporates the control requirements for Gregg, Nueces, and Victoria Counties into the current subsection (a) by deleting all of subsection (b), which currently contains the control requirements for these three counties, and specifying Gregg, Nueces, and Victoria Counties in the first subsection, which becomes an undesignated subsection. These changes are adopted to remove identical, redundant control requirements in the current subsection (b) to make the rule briefer and easier to read. Also to improve readability, a catch line is added to each paragraph that identifies the topics being covered. The term “solvent” is inserted in §115.412(1) and the term “degreasing” replaces “cleaning” in §115.412(2) so that the terms used in this chapter are consistent with the definitions in §101.1, Definitions. The term “Centigrade” is replaced with “Celsius” in §115.412(1)(A)(i). The adopted amendments to §115.412(1)(E) and (2)(D)(i) clarify how the freeboard ratio should be determined for cold solvent cleaning or open-top vapor degreasing units which have an upper portion which is narrower than the air/solvent or the air/vapor level or if the cover of a degreaser is hinged such that the opening is narrower than the overall width of a degreaser. The freeboard primarily serves to reduce drafts near the air/solvent or air/vapor interface. Having a narrower top would help to reduce the drafts near the air/solvent or air/vapor interface, thereby reducing the amount of solvent being evaporated. The freeboard ratio should be determined by dividing the freeboard height by the smallest interior dimension (i.e., length, width, or diameter). The smallest interior dimension could be located at any point, from the top or opening of the unit to the air/solvent or air/vapor level. This change is consistent with air rule interpretation R5-

412.001. Section 115.412(2)(E) is revised to correctly reference the proper subparagraph. The acronym “OSHA” is added after the phrase “Occupational Safety and Health Administration” in §115.412(2)(F)(xii) and replaces the term “Occupational Safety and Health Administration” in §115.412(3)(I)(i).

The adopted amendments to §115.413, Alternate Control Requirements, incorporate the alternate control requirements for Gregg, Nueces, and Victoria Counties into the current subsection (a) by deleting all of subsection (b), which currently contains the alternate control requirements for these three counties, and specifying Gregg, Nueces, and Victoria Counties in the first subsection, which becomes an undesignated subsection. These changes are adopted to remove identical, redundant alternate control requirements in the current subsection (b) to make the rule briefer and easier to read. The adopted amendments also reformat current subsection (a) by rephrasing the first portion of the text to clearly indicate the subject of the paragraphs to follow (alternate control requirements for degreasing processes), by moving the second portion of the text into a new paragraph (1), and by renumbering the existing paragraphs accordingly. These changes improve readability and are necessary to make the formatting of this rule consistent with that used in the corresponding §115.423, Alternate Control Requirements. The term “executive director” is lower-cased for consistency with other divisions. An incorrect reference to the “section” (which should have been “undesignated head”) is corrected to reference the “division.” Also, cross-references throughout this section are revised to reflect reformatting and renumbering changes adopted in other sections.

The adopted amendments to §115.415, Testing Requirements, rephrase the current subsection (a) to more clearly indicate the subject (testing requirements for degreasing processes) of the paragraphs to follow. The adopted revisions also incorporate the testing requirements for Gregg, Nueces, and Victoria Counties into the current subsection (a) by deleting all of subsection (b), which currently contains the testing requirements for these three counties, and specifying Gregg, Nueces, and Victoria Counties in the first subsection, which becomes an undesignated subsection. These changes are adopted to remove identical, redundant testing requirements in the current subsection (b) to make the rule briefer and easier read. Cross-references throughout this section are revised to reflect reformatting and renumbering changes in other sections. The adopted amendments to §115.415 also add a new paragraph (3), which authorizes the use of test methods other than those specifically listed in §115.415(1) or (2), provided that any new test method is validated using the procedures in 40 Code of Federal Regulations (CFR) 63, Appendix A, Test Method 301, with the executive director acting as the administrator. The adopted new language has previously been added to five other divisions within Chapter 115 with the EPA's approval. This revision is necessary because in some specific and unique situations the listed test methods may be inappropriate. The new paragraph increases flexibility by allowing the use of additional test methods which may be more cost-effective and more appropriate in certain unique situations.

The adopted amendments to §115.416, Recordkeeping Requirements, revise the sentence structure and replace the phrase “any open-top vapor or conveyORIZED degreasing operation” with the phrase “degreasing process” in the current subsection (a) for clarity and consistency with other sections in this division. The revisions also incorporate the recordkeeping requirements for Gregg, Nueces, and

Victoria Counties into the current subsection (a) by deleting all of subsection (b), which currently contains the recordkeeping requirements for these three counties, and specifying Gregg, Nueces, and Victoria Counties in the first subsection, which becomes an undesignated subsection. These changes are adopted to remove identical, redundant recordkeeping requirements in the current subsection (b) to make the rule briefer and easier to read. The adopted revision also replaces the phrase “Texas Natural Resource Conservation Commission (TNRCC)” with the administratively correct term “executive director,” and the acronym “EPA” replaces the phrase “United States Environmental Protection Agency (EPA).” A cross-reference is revised to reflect a reformatting and renumbering change in the referenced section. A new paragraph (3) adds a recordkeeping requirement for degreasing operations in Gregg, Nueces, and Victoria Counties which are exempt under current §115.417(b)(3), which becomes §115.417(5). The recordkeeping requirement is needed to determine compliance with the exemption. The requirement simply states that the operator must keep records in sufficient detail to document compliance with the exemption cutoff limit of 550 pounds of VOC emissions in any consecutive 24-hour period and is necessary to provide enforceability of the exemption. Please note that “any consecutive 24-hour period” is considered a rolling 24-hour period, rather than midnight of one calendar day to midnight of the next calendar day.

The adopted amendments to §115.417, Exemptions, incorporate the exemptions for Gregg, Nueces, and Victoria Counties into the current subsection (a) by deleting all of subsection (b), which currently contains the exemptions for these three counties, and specifying Gregg, Nueces, and Victoria Counties in the first subsection, which becomes an undesignated subsection. The size exemption for Gregg, Nueces, and Victoria Counties that is currently located in §115.417(b)(3) is still applicable; therefore,

the content of this paragraph becomes a new paragraph (5). These changes are adopted to remove identical, redundant exemptions in the current subsection (b) to make the rule briefer and easier to read. Cross-references throughout this section are revised to reflect reformatting and renumbering changes in other sections. The current §115.417(a)(2), which becomes §115.417(2), is restructured and reformatted to include two subparagraphs so that remote reservoir cold solvent cleaners can be specified as exempt from the freeboard and water cover requirements of §115.412(1)(E). Even though remote reservoirs are a subset of cold solvent cleaners (because they use liquid solvent to remove soils from part surfaces while maintaining the solvent below its boiling point), the two pieces of equipment do not operate in the same way because their designs are different. For a remote reservoir, the liquid solvent is pumped to a sink-like work area that drains solvent back into an enclosed container while parts are being cleaned, allowing no solvent to pool around the parts. For a cold solvent cleaner, the solvent does pool around the parts and therefore, a freeboard or water cover is necessary. The purpose of the freeboard is to ensure that when parts are placed into the solvent pool, there is enough empty air space between the solvent level and the top of the tank to minimize solvent drag out when an air stream passes over the open reservoir as well as to prevent solvent overflow when parts are placed in the pool, thus decreasing air emissions. Also, for the cold solvent cleaning system exemption in the adopted §115.417(2)(A), the “or if” statement is changed to a “provided that” statement. This is necessary so the exemption will be consistent with the EPA’s guidelines concerning the control of VOC emissions from solvent metal cleaning. The rule language in the current §115.417(a)(2) inadvertently allows a high vapor pressure solvent to be exempt from the requirements of §115.412(1)(E) as long as the solvent was not heated above 120 degrees Fahrenheit. This was never the intent of the EPA’s guidelines nor was it the intent of the commission.

The adopted amendment to §115.419, Counties and Compliance Schedules, adds clarifying language and replaces the term “undesignated head” with the term “division.”

Subchapter E, Division 2, Surface Coating Processes

The adopted amendments to §115.423, Alternate Control Requirements, clarify the requirements for when a vapor control system is used to control emissions from coating operations. Specifically, current §115.423(3) is reformatted into two paragraphs to add an equation specifying how to determine the minimum overall control efficiency necessary to demonstrate equivalency with the emission limitations of §115.421 when a vapor control system is used to control emissions from coating operations. The owner or operator can choose to use either a daily weighted average or the maximum VOC content in the equation. Use of the maximum VOC content (i.e., the worst-case scenario) has the advantage of being a one-time calculation. The phrase “of any surface coating facility” is deleted from adopted paragraph (3)(B) because it is redundant.

The adopted amendments to §115.426, Monitoring and Recordkeeping Requirements, clarify that records of non-exempt solvent washings are not required if an owner or operator using non-exempt solvents for washing directs the non-exempt solvent into a container that prevents evaporation into the atmosphere. This change is consistent with air rule interpretation R5-412.005.

The adopted amendments to §115.427, Exemptions, delete a portion of §115.427(a)(3)(C) that explains that coatings which are not subject to a standard in §115.421(a)(1) - (15) are not included in the exemption calculation and move it to §115.427(a)(3) so it is clear that this statement applies to all of the

exemptions listed under this paragraph. The same clarifying statement is also added to §115.427(b)(1).

The phrase “volatile organic compound (VOC)” is replaced by the acronym “VOC.”

The adopted amendments also relocate the exemption for aerosol coating (spray paint) by deleting the current §115.427(a)(3)(J) and placing this exemption in a new §115.427(a)(6). This revision is necessary because this exemption was intended to apply to all surface coating operations (see the April 3, 1998 issue of the *Texas Register* (23 TexReg 3505)); however, the current location of this exemption inadvertently excludes vehicle refinishing (body shops). The current §115.427(a)(3)(K) is renumbered to become a new §115.427(a)(3)(J) as a result of the deletion of the current §115.427(a)(3)(J).

Revisions are adopted for current §115.427(a)(3)(K), which is renumbered as §115.427(a)(3)(J), because the current rule language does not state from what requirements the aerospace vehicles cleaning and coating activities are exempt. The subparagraph was added to the Surface Coating Processes Division effective July 20, 2000, as published in the July 14, 2000 issue of the *Texas Register* (25 TexReg 6752). The EPA’s Control of Volatile Organic Compound Emissions from Coating Operations at Aerospace Manufacturing and Rework Operations (aerospace CTG) was the basis for the July 20, 2000 rule revision. The adopted rule language was based on rule language provided in the Aerospace Manufacturing and Rework Operations Model Rule, found in Appendix B of the aerospace CTG. In the aerospace CTG’s model rule it stated: “this rule does not apply to the following activities where cleaning and coating of aerospace components and vehicles may take place: research and development, quality control, laboratory testing, and electronic parts and assemblies (except for cleaning and coating of completed assemblies).” From this statement, it is clear that the intent was for the surface coating

requirements not to apply to the activities outlined above; therefore, the clarifying phrase “are exempt from this division” is added to the subparagraph.

The adopted amendment to §115.427(b)(2)(C) and the deletion of §115.427(b)(2)(D) is necessary to make the format of the rule language in §115.427(b) consistent with that in §115.427(a). On April 7, 1998, the commission adopted rule language that updated the terminology in the existing miscellaneous metal parts/products exemption from “fully assembled marine vessels and fixed offshore structures” to “ships and offshore oil or gas drilling platforms” for consistency with the new requirements for surface coating of ships and offshore oil and gas drilling platforms. The term “and” is added to §115.427(b)(2)(B) because §115.427(b)(2)(C) is now the last subparagraph in the paragraph.

Subchapter E, Division 3, Flexographic and Rotogravure Printing

The adopted amendments to §115.432, Control Requirements, change the term "standard exemption" to "permit by rule" throughout the section due to the requirements of Senate Bill 766, 76th Legislature, 1999, which amended the Texas Clean Air Act (TCAA) and created "permits by rule." The phrase “carbon adsorption or incineration system” is replaced with the more general term "vapor control system" in §115.432(a)(1)(C) and (b)(3) because control systems used to reduce VOC emissions may encompass more than just carbon adsorption or incineration systems. In §115.432(a)(2), the phrase “no more than” replaces “at or below” and “to” replaces “and” for clarification. A reference to Chapter 106, relating to Permits by Rule, is added in §115.432(a)(2)(A) because it is the chapter that contains the permits by rule discussed in the section. In §115.432(a)(2)(B), the administratively correct term “executive director” replaces the phrase “Texas Natural Resource Conservation Commission,” and the

language is corrected to include authorizations by permit amendment and standard permit, instead of just permit and permit by rule.

The adopted amendments to §115.433, Alternate Control Requirements, make administrative corrections to replace the term “section” (which should have been “undesigned head”) with “division” and lower-case the term “executive director.”

The adopted amendments to §115.435, Testing Requirements, change references from "carbon adsorber" to "carbon adsorption system" for clarification. The term and acronym, Texas Air Control Board (TACB), is replaced with the administratively correct term "executive director." The acronyms “CFR,” “EPA,” and “VOC” are added as needed throughout the section to replace the terms “Code of Federal Regulations,” “United States Environmental Protection Agency (EPA),” and “volatile organic compound,” respectively. In addition, the phrase “of the 30-day period” is added to §115.435(a)(7)(A)(ii)(I) to clarify that "daily" refers to each 24-hour period of the 30-day period.

The adopted amendments to §115.436, Monitoring and Recordkeeping Requirements, replace “Texas Air Control Board” and its acronym TACB with the administratively correct term "executive director," and “United States Environmental Protection Agency (EPA)” is replaced with just the acronym.

The adopted amendments to §115.439, Counties and Compliance Schedules, delete subsections (a) - (d) because the language is obsolete due to the passing of a July 31, 1993 compliance date and add new language in an undesignated subsection stating that all affected persons in Brazoria, Chambers, Collin,

Dallas, Denton, El Paso, Fort Bend, Galveston, Gregg, Hardin, Harris, Jefferson, Liberty, Montgomery, Nueces, Orange, Tarrant, Victoria, and Waller Counties shall continue to comply with applicable sections of this division (relating to Flexographic and Rotogravure Printing) as required by §115.930 (relating to Compliance Dates).

Subchapter E, Division 4, Offset Lithographic Printing

The adopted amendments to §115.442(1)(E), Control Requirements, replace "this regulation" with "the fountain solution limitations of this paragraph" for clarification.

Subchapter F, Miscellaneous Industrial Sources

Division 1, Cutback Asphalt

The adopted amendments to §115.512, Control Requirements, add the word "by" to further clarify that §115.512(1) only applies to state, municipal, and county agencies.

The adopted amendments to §115.517, Exemptions, correct a cross-reference from §115.512(3) to §115.512(2) needed as the result of the renumbering of §115.512 effective August 18, 1999. (See the August 13, 1999 issue of the *Texas Register*).

The adopted amendments to §115.519, Counties and Compliance Schedules, delete subsections (a) and (b) because the language is obsolete due to the passing of December 31, 1992, and April 16, 1993, compliance dates and add new language stating that all affected persons in Brazoria, Chambers, Collin, Dallas, Denton, El Paso, Fort Bend, Galveston, Hardin, Harris, Jefferson, Liberty, Montgomery,

Nueces, Orange, Tarrant, and Waller Counties shall continue to comply with applicable sections of this division (relating to Cutback Asphalt) as required by §115.930 (relating to Compliance Dates).

FINAL REGULATORY IMPACT ANALYSIS DETERMINATION

The commission reviewed the adopted rulemaking in light of the regulatory analysis requirements of Texas Government Code, §2001.0225, and determined that this rulemaking is not subject to §2001.0025 because it does not meet the definition of a “major environmental rule” as defined in that statute. “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, productivity, competition, jobs, the environment, or the public health and safety of the state or a sector of the state.

This rulemaking is not a major environmental rule because its primary purpose is to clarify procedural and technical requirements for facilities subject to Chapter 115 rules. Specifically, the amended sections clarify the requirements for cold solvent cleaners and the applicability of the requirements; provide additional test methods for degreasing processes to be used under certain circumstances; require degreasing operations exempt under §115.417(5) from the control requirements in §115.412 to keep records to document compliance with the exemption conditions; clarify an exemption from recordkeeping for certain surface coating facility owners or operators; and clarify rule language to correct errors, update references, and delete redundant and obsolete language. Also, the fiscal impacts associated with this rulemaking are not anticipated to be significant.

In addition, a regulatory impact analysis is not required because the rules do not meet any of the four applicability criteria for requiring a regulatory analysis of a “major environmental rule” as defined in the Texas Government Code. Section 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. This rulemaking does not exceed a standard set by federal law, and the adopted technical requirements are consistent with applicable federal standards. In addition, this rulemaking does not exceed an express requirement of state law and is not adopted solely under the general powers of the agency, but is specifically authorized by the provisions cited in the STATUTORY AUTHORITY section of this preamble. Finally, this rulemaking does not exceed a requirement of a delegation agreement or contract to implement a state and federal program. The commission invited public comment on the draft regulatory impact analysis determination, and no comments were received.

TAKINGS IMPACT ASSESSMENT

The commission prepared a takings impact assessment for the adopted rules pursuant to Texas Government Code, §2007.043. The following is a summary of that assessment. The primary purpose of the rulemaking is to revise specific rules in Chapter 115 to clarify and add flexibility to existing requirements, correct errors, update references, and delete redundant and obsolete language.

Promulgation and enforcement of these rules will be neither a statutory nor a constitutional taking

because they do not affect private real property. Specifically, the adopted rules do not affect a landowner's rights in private real property because this rulemaking does not burden (constitutionally), nor restrict or limit the owner's right to property and reduce its value by 25% or more beyond that which would otherwise exist in the absence of the rules. Therefore, these rules do not constitute a taking under the Texas Government Code, Chapter 2007.

CONSISTENCY WITH THE COASTAL MANAGEMENT PROGRAM

The commission reviewed this rulemaking for consistency with the Texas Coastal Management Program (CMP) goals and policies in accordance with the regulations of the Coastal Coordination Council, and determined that the rulemaking is consistent with the applicable CMP goals and policies. The commission received a letter from the Texas Department of Transportation stating that it reviewed the proposed amendments as they relate to actions or rules subject to the CMP and that it had no comments or suggestions to offer. No other comments regarding the CMP consistency review were received.

EFFECT ON SITES SUBJECT TO THE FEDERAL OPERATING PERMITS PROGRAM

Because Chapter 115 contains applicable requirements under 30 TAC Chapter 122, Federal Operating Permits, 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.

HEARING AND COMMENTERS

A public hearing was offered in Austin, Texas on July 3, 2001, and the public comment period ended on July 9, 2001. The commission received a letter from the Texas Department of Transportation stating that it reviewed the proposed amendments as they relate to actions or rules subject to the CMP and that it had no comments or suggestions to offer. No other comments were received.

STATUTORY AUTHORITY

The amendment is adopted under Texas Water Code (TWC), §5.103, which authorizes the commission to adopt rules necessary to carry out its powers and duties under the TWC; Texas Health and Safety Code, TCAA, §382.017, which provides the commission authority to adopt rules consistent with the policy and purposes of the TCAA; §382.002, which establishes the commission's purpose to safeguard the state's air resources, consistent with the protection of public health, general welfare, and physical property; §382.011, which authorizes the commission to control the quality of the state's air; §382.012, which authorizes the commission to develop plans to protect the state's air; and §382.016, which authorizes the commission to require that records of the air contaminant emissions from a source or activity be made and maintained.

SUBCHAPTER B: GENERAL VOLATILE ORGANIC COMPOUND SOURCES

DIVISION 4: INDUSTRIAL WASTEWATER

§115.142

§115.142. Control Requirements.

The owner or operator of an affected source category within a plant in the Beaumont/Port Arthur, Dallas/Fort Worth, El Paso, and Houston/Galveston areas, as defined in §115.10 of this title (relating to Definitions), shall comply with the following control requirements. Any component of a wastewater storage, handling, transfer, or treatment facility, if the component contains an affected volatile organic compounds (VOC) wastewater stream, shall be controlled in accordance with either paragraph (1) or (2) of this section, except for properly operated biotreatment units which shall meet the requirements of paragraph (3) of this section. In the Dallas/Fort Worth and El Paso areas, and until December 31, 2002 in the Houston/Galveston area, the control requirements apply from the point of generation of an affected VOC wastewater stream until the affected VOC wastewater stream is either returned to a process unit or is treated to remove VOC so that the wastewater stream no longer meets the definition of an affected VOC wastewater stream. In the Beaumont/Port Arthur area, and after December 31, 2002 in the Houston/Galveston area, the control requirements apply from the point of generation of an affected VOC wastewater stream until the affected VOC wastewater stream is either returned to a process unit, or is treated to reduce the VOC content of the wastewater stream by 90% by weight and also reduce the VOC content of the same VOC wastewater stream to less than 1,000 parts per million by weight. For wastewater streams which are combined and then treated to remove VOC,

the amount of VOC to be removed from the combined wastewater stream shall be at least the total amount of VOC that would be removed to treat each individual affected VOC wastewater stream so that they no longer meet the definition of affected VOC wastewater stream, except for properly operated biotreatment units which shall meet the requirements of paragraph (3) of this section. For this division, a component of a wastewater storage, handling, transfer, or treatment facility shall include, but is not limited to, wastewater storage tanks, surface impoundments, wastewater drains, junctions boxes, lift stations, weirs, and oil-water separators.

(1) The wastewater component shall meet the following requirements.

(A) All components shall be fully covered or be equipped with water seal controls.

(B) All openings shall be closed and sealed, except when the opening is in actual use for its intended purpose or the component is maintained at a pressure less than atmospheric pressure.

(C) All liquid contents shall be totally enclosed.

(D) For junction boxes and vented covers, the following requirements apply.

(i) In the Dallas/Fort Worth and El Paso areas, and until December 31, 2002 in the Houston/Galveston area, if any cover, other than a junction box cover, is equipped with a vent, the vent shall be equipped with either a vapor control system which maintains a minimum control efficiency of 90% or a closed system which prevents the flow of VOC vapors from the vent during normal operation. Any junction box vent shall be equipped with a vent pipe at least 90 centimeters (cm) (36 inches (in.)) in length and no more than 10.2 cm (4.0 in.) in diameter.

(ii) In the Beaumont/Port Arthur area, and after December 31, 2002 in the Houston/Galveston area, the following requirements apply.

(I) If any cover or junction box cover, except for junction boxes described in subclause (II) of this clause, is equipped with a vent, the vent shall be equipped with either a vapor control system which maintains a minimum control efficiency of 90% or a closed system which prevents the flow of VOC vapors from the vent during normal operation.

(II) Any junction box that is filled and emptied by gravity flow (i.e., there is no pump) or is operated with no more than slight fluctuations in the liquid level may be vented to the atmosphere, provided it is equipped with:

(-a-) a vent pipe at least 90 cm (36 in.) in length and no more than 10.2 cm (4.0 in.) in diameter; and

(-b-) water seal controls which are installed and maintained at the wastewater entrance(s) to or exit from the junction box restricting ventilation in the individual drain system and between components in the individual drain system. Upon request by the executive director, EPA, or any local program with jurisdiction, the owner or operator shall demonstrate (e.g., by visual inspection or smoke test) that the junction box water seal controls are properly designed and restrict ventilation.

(E) All gauging and sampling devices shall be vapor-tight except during gauging or sampling.

(F) Any loading or unloading to or from a portable container by pumping shall be performed with a submerged fill pipe.

(G) All seals and cover connections shall be maintained in proper condition. For purposes of this paragraph, "proper condition" means that covers shall have a tight seal around the edge and shall be kept in place except as allowed by this division, that seals shall not be broken or have gaps, and that sewer lines shall have no visible gaps or cracks in joints, seals, or other emission interfaces.

(H) If any seal or cover connection is found to not be in proper condition, the repair or correction shall be completed as soon as possible but within 15 days of detection, unless the

repair or correction is technically impossible without requiring a unit shutdown, in which case the repair or correction shall be made before the end of the next unit shutdown.

(2) If a wastewater component is equipped with an internal or external floating roof, it shall meet the following requirements.

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

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

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

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

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

(F) For external floating roof storage tanks, the secondary seals shall be the rim-mounted type (i.e., the seal shall be continuous from the floating roof to the tank wall). The accumulated area of gaps that exceed 1/8 in. (0.32 cm) in width between the secondary seal and tank wall shall be no greater than 1.0 in.² per foot (21 cm²/meter) of tank diameter.

(3) In the Beaumont/Port Arthur area, and after December 31, 2002 in the Houston/Galveston area, each properly operated biotreatment unit shall meet the following requirements.

(A) The VOC content of the wastewater shall be reduced by 90% by weight;
and

(B) The average concentration of suspended biomass maintained in the aeration basin of the biotreatment unit shall equal or exceed 1.0 kilogram per cubic meter (kg/m³), measured as total suspended solids.

(4) Any wastewater component that becomes subject to this division by exceeding the provisions of §115.147 of this title (relating to Exemptions) or an affected VOC wastewater stream as defined in §115.140 of this title (relating to Industrial Wastewater Definitions) will remain subject to the requirements of this division, even if the component later falls below those provisions, unless and until emissions are reduced to no more than the controlled emissions level existing prior to the

implementation of the project by which throughput or emission rate was reduced to less than the applicable exemption levels in §115.147 of this title; and

(A) the project by which throughput or emission rate was reduced is authorized by any permit or permit amendment or standard permit or exemption from permitting required by Chapter 116 or Chapter 106 of this title (relating to Control of Air Pollution by Permits for New Construction or Modification; and Exemptions from Permitting). If an exemption from permitting is available for the project, compliance with this division must be maintained for 30 days after the filing of documentation of compliance with that exemption from permitting; or

(B) if authorization by permit, permit amendment, standard permit, or exemption from permitting is not required for the project, the owner or operator has given the executive director 30 days' notice of the project in writing.

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

**DIVISION 2: FUGITIVE EMISSION CONTROL IN PETROLEUM REFINERIES
IN GREGG, NUECES, AND VICTORIA COUNTIES**

§§115.322, 115.323, 115.325, 115.327, 115.329

STATUTORY AUTHORITY

The amendments are adopted under Texas Water Code (TWC), §5.103, which authorizes the commission to adopt rules necessary to carry out its powers and duties under the TWC; Texas Health and Safety Code, TCAA, §382.017, which provides the commission authority to adopt rules consistent with the policy and purposes of the TCAA; §382.002, which establishes the commission's purpose to safeguard the state's air resources, consistent with the protection of public health, general welfare, and physical property; §382.011, which authorizes the commission to control the quality of the state's air; §382.012, which authorizes the commission to develop plans to protect the state's air; and §382.016, which authorizes the commission to require that records of the air contaminant emissions from a source or activity be made and maintained.

§115.322. Control Requirements.

For Gregg, Nueces, and Victoria Counties, no person shall operate a petroleum refinery without complying with the following requirements:

(1) No component shall be allowed to have a volatile organic compound (VOC) leak as defined in §101.1 of this title (relating to Definitions) for more than 15 calendar days after the leak is found, except as provided in paragraph (2) of this section.

(2) A first attempt at repair shall be made no later than five calendar days after the leak is found, and the component shall be repaired no later than 15 calendar days after the leak is found, unless the repair of a component would require a unit shutdown which would create more emissions than the repair would eliminate. A component in gas/vapor or light liquid service is considered to be repaired when it is monitored with an instrument using Test Method 21 and shown to no longer have a leak after adjustments or alterations to the component. A component in heavy liquid service is considered to be repaired when it is monitored by audio, visual, and olfactory means and shown to no longer have a leak after adjustments or alterations to the component. If the repair of a component would require a unit shutdown which would create more emissions than the repair would eliminate, the repair may be delayed until the next scheduled shutdown.

(3) All leaking components, as defined in paragraph (1) of this section, which cannot be repaired until the unit is shut down for turnaround shall be identified for such repair by tagging. The executive director at his discretion may require early unit turnaround or other appropriate action based on the number and severity of tagged leaks awaiting turnaround.

(4) Except for safety pressure relief valves, no valves shall be installed or operated at the end of a pipe or line containing a VOC, unless the pipe or line is sealed with a second valve, a blind

flange, a plug, or a cap. The sealing device may be removed only while a sample is being taken or during maintenance operations, and when closing the line, the upstream valve shall be closed first.

(5) Pipeline valves and pressure relief valves in gaseous VOC service shall be marked in some manner that will be readily obvious to monitoring personnel.

§115.323. Alternate Control Requirements.

For all affected persons in Gregg, Nueces, and Victoria Counties, the following alternate control techniques may apply:

(1) Any alternate methods of demonstrating and documenting continuous compliance with the applicable control requirements or exemption criteria in this division (relating to Fugitive Emission Control in Petroleum Refineries in Gregg, Nueces, and Victoria Counties) may be approved by the executive director in accordance with §115.910 of this title (relating to Availability of Alternate Means of Control) if emission reductions are demonstrated to be substantially equivalent.

(2) The executive director may approve an alternate monitoring method if the refinery operator can demonstrate that the alternate monitoring method satisfies the conditions of §115.324(7) of this title (relating to Inspection Requirements). Any request for an alternate monitoring method must be made in writing to the executive director.

§115.325. Testing Requirements.

For all affected persons in Gregg, Nueces, and Victoria Counties, compliance with this division (relating to Fugitive Emission Control in Petroleum Refineries in Gregg, Nueces, and Victoria Counties) shall be determined by applying the following test methods, as appropriate:

(1) Test Method 21 (40 CFR 60, Appendix A, effective 6/22/90) for determining volatile organic compound (VOC) leaks. The leak detection equipment can be calibrated with methane, propane, or hexane, but the meter readout must be as parts per million by volume (ppmv) hexane;

(2) determination of true vapor pressure using ASTM Test Method D323-82 for the measurement of Reid vapor pressure, adjusted for 68 degrees Fahrenheit (20 degrees Centigrade) in accordance with API Publication 2517, Third Edition, 1989; or

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

§115.327. Exemptions.

For all affected persons in Gregg, Nueces, and Victoria Counties, the following exemptions shall apply:

(1) Valves with a nominal size of two inches (5 cm) or less are exempt from the requirements of this division (relating to Fugitive Emission Control in Petroleum Refineries in Gregg, Nueces, and Victoria Counties), provided allowable emissions at any refinery from sources affected by these sections after controls are applied with exemptions will not exceed by more than 5.0% such allowable emissions with no exemptions. Any person claiming an exemption for valves two inches (5 cm) nominal size or smaller under this section shall, at the time he provides his control plan, also provide the following information:

(A) identification of valves or classes of valves to be exempted;

(B) an estimate of uncontrolled emissions from exempted valves, and an estimate of emissions if controls were applied, plus an explanation of how the estimates were derived; and

(C) an estimate of the total volatile organic compound (VOC) emissions within the refinery from sources affected by §115.322 of this title (relating to Control Requirements), §115.324 of this title (relating to Inspection Requirements), and §115.326 of this title (relating to Recordkeeping Requirements) after controls are applied and assuming no exemptions for small valves, plus an explanation of how the estimate was derived.

(2) Components which contact a process fluid that contains less than 10% VOC by weight are exempt from the requirements of this division.

(3) Components which contact a process liquid containing a VOC having a true vapor pressure equal to or less than 0.147 psia (1.013 kPa) at 68 degrees Fahrenheit (20 degrees Celsius) are exempt from the requirements of §115.324 of this title if the components are inspected visually according to the inspection schedules specified within this same section.

(4) Petroleum refineries or individual process units in a temporary nonoperating status shall submit a plan for compliance with the provisions of this division, as soon as practicable, but no later than one month before the process unit is scheduled for start-up and be in compliance as soon as practicable, but no later than three months after start-up. All petroleum refineries affected by this section shall notify the executive director of any nonoperating refineries or individual process units when they are shut down and dates of any start-ups as they occur.

(5) Pressure relief devices connected to an operating flare header, components in continuous vacuum service, storage tank valves, and valves that are not externally regulated (such as in-line check valves) are exempt from the monitoring requirement of §115.324 of this title (relating to Inspection Requirements).

(6) Compressors in hydrogen service are exempt from the requirements of §115.324 of this title if the owner or operator demonstrates that the percent hydrogen content can be reasonably expected to always exceed 50% by volume.

§115.329. Counties and Compliance Schedules.

All affected persons in Gregg, Nueces, and Victoria Counties shall continue to comply with applicable sections of this division (relating to Fugitive Emission Control in Petroleum Refineries in Gregg, Nueces, and Victoria Counties) as required by §115.930 of this title (relating to Compliance Dates).

SUBCHAPTER E: SOLVENT-USING PROCESS

DIVISION 1: DEGREASING PROCESSES

§§115.412, 115.413, 115.415 - 115.417, 115.419

STATUTORY AUTHORITY

The amendments are adopted under Texas Water Code (TWC), §5.103, which authorizes the commission to adopt rules necessary to carry out its powers and duties under the TWC; Texas Health and Safety Code, TCAA, §382.017, which provides the commission authority to adopt rules consistent with the policy and purposes of the TCAA; §382.002, which establishes the commission's purpose to safeguard the state's air resources, consistent with the protection of public health, general welfare, and physical property; §382.011, which authorizes the commission to control the quality of the state's air; §382.012, which authorizes the commission to develop plans to protect the state's air; and §382.016, which authorizes the commission to require that records of the air contaminant emissions from a source or activity be made and maintained.

§115.412. Control Requirements.

In the Beaumont/Port Arthur, Dallas/Fort Worth, El Paso, and Houston/Galveston areas as defined in §115.10 of this title (relating to Definitions) and in Gregg, Nueces, and Victoria Counties, the following control requirements shall apply.

(1) Cold solvent cleaning. No person shall own or operate a system utilizing a volatile organic compound (VOC) for the cold solvent cleaning of objects without the following controls.

(A) A cover shall be provided for each cleaner which shall be kept closed whenever parts are not being handled in the cleaner. The cover shall be designed for easy one-handed operation if any of the following exists:

(i) the true vapor pressure of the solvent is greater than 0.3 psia (2 kPa) as measured at 100 degrees Fahrenheit (38 degrees Celsius);

(ii) the solvent is agitated; or

(iii) the solvent is heated.

(B) An internal cleaned-parts drainage facility, for enclosed draining under a cover, shall be provided for all cold solvent cleaners.

(C) A permanent label summarizing the operating requirements in subparagraph (F) of this paragraph shall be attached to the cleaner in a conspicuous location near the operator.

(D) If a solvent spray is used, it must be a solid fluid stream (not a fine, atomized, or shower-type spray) and at an operating pressure of ten psig or less as necessary to prevent splashing above the acceptable freeboard.

(E) The system shall be equipped with a freeboard that provides a ratio equal to or greater than 0.7, or a water cover (solvent must be insoluble in and heavier than water). To determine the freeboard ratio, the freeboard height measurement is taken from the top of the degreaser to the top of the air/solvent level. This number is then divided by the smallest width measurement. The width measurement is taken at the smallest interior dimension. This dimension could be located at any point, from the top or opening of the unit to the air/solvent level.

(F) The operating procedures shall be as follows.

(i) Waste solvent shall not be disposed of or transferred to another party such that the waste solvent can evaporate into the atmosphere. Waste solvents shall be stored only in covered containers.

(ii) The degreaser cover shall be kept closed whenever parts are not being handled in the cleaner.

(iii) Parts shall be drained for at least 15 seconds or until dripping ceases.

(iv) Porous or absorbent materials, such as cloth, leather, wood, or rope, shall not be degreased.

(2) Open-top vapor degreasing. No person shall own or operate a system utilizing a VOC for the open-top vapor degreasing of objects without the following controls:

(A) a cover that can be opened and closed easily without disturbing the vapor zone;

(B) the following devices which will automatically shut off the sump heat:

(i) a condenser coolant flow sensor and thermostat which will detect if the condenser coolant is not circulating or if the condenser coolant temperature exceeds the solvent manufacturer's recommendations;

(ii) a solvent level sensor which will detect if the solvent level drops below acceptable design limits; and

(iii) a vapor level sensor which will detect if the vapor level rises above acceptable design limits;

(C) a spray safety switch which will shut off the spray pump to prevent spraying above the vapor level;

(D) one of the following controls:

(i) a freeboard that provides a ratio equal to or greater than 0.75 and, if the degreaser opening is greater than 10 ft² (1m²), a powered cover. To determine the freeboard ratio, the freeboard height measurement is taken from the top of the degreaser to the top of the air/vapor level. This number is then divided by the smallest width measurement. The width measurement is taken at the smallest interior dimension. This dimension could be located at any point, from the top or opening of the unit to the air/vapor level;

(ii) a properly sized refrigerated chiller capable of achieving 85% or greater control of VOC emissions;

(iii) an enclosed design where the cover or door opens only when the dry part is actually entering or exiting the degreaser; or

(iv) a carbon adsorption system with ventilation equal to or greater than 50 cfm/ft² (15m³/min per m²) of air/vapor area (with the cover open) and exhausting less than 25 ppm of solvent by volume averaged over one complete adsorption cycle;

(E) a permanent, conspicuous, label summarizing the operating procedures listed in subparagraph (F) of this paragraph;

(F) the following operating procedures:

(i) the cover shall be closed at all times except when processing work loads through the degreaser;

(ii) parts shall be positioned so that complete drainage is obtained;

(iii) parts shall be moved in and out of the degreaser at less than 11 ft/min (3.3 m/min);

(iv) the work load shall be retained in the vapor zone at least 30 seconds or until condensation ceases;

(v) any pools of solvent on the cleaned parts shall be removed by tipping the part before withdrawing it from the vapor zone;

(vi) parts shall be allowed to dry within the degreaser freeboard area for at least 15 seconds or until visually dry;

(vii) porous or absorbent materials, such as cloth, leather, wood, or rope, shall not be degreased;

(viii) work loads shall not occupy more than half of the degreaser open top surface area;

(ix) solvent shall not be sprayed above the vapor level;

(x) solvent leaks shall be repaired immediately, or the degreaser shall be shut down until repairs are made;

(xi) waste solvent shall not be disposed of or transferred to another party such that the waste solvent will evaporate into the atmosphere. Waste solvent shall be stored only in covered containers;

(xii) exhaust ventilation for systems other than those which vent to a major control device shall not exceed 65 cfm per ft² (20 m³/min per m²) of degreaser open area, unless necessary to meet Occupational Safety and Health Administration (OSHA) requirements or unless a carbon adsorption system is installed as a major control device. Ventilation fans or other sources of air agitation shall not be used near the degreaser opening;

(xiii) water shall not be visibly detectable in the solvent exiting the water separator.

(3) Conveyorized degreasing. No person shall own or operate a system utilizing a VOC for the conveyorized cleaning of objects without the following controls:

(A) one of the following major control devices:

(i) a properly sized refrigerated chiller capable of achieving 85% or greater control of VOC emissions; or

(ii) a carbon adsorption system with ventilation equal to or greater than 50 cfm/ft² (15 m³/min/m²) of air/vapor area (when downtime covers are open) and exhausting less than 25 ppm of solvent by volume averaged over one complete adsorption cycle;

(B) a drying tunnel or other means, such as rotating (tumbling) basket if space is available, to prevent solvent liquid or vapor carry-out;

(C) a condenser flow switch and thermostat which will shut off sump heat if the condenser coolant is not circulating or if the condenser coolant discharge temperature exceeds the solvent manufacturer's recommendation;

(D) a spray safety switch which will shut off the spray pump if the vapor level drops more than four inches (ten cm);

(E) a vapor level control thermostat which will shut off the sump heat when the vapor level rises above the designed operating level;

(F) entrances and exits which silhouette work loads so that the average clearance (between parts and edge of the degreaser opening) is either less than four inches (ten cm) or less than 10% of the width of the opening;

(G) downtime covers which close off the entrance and exit during nonoperating hours;

(H) a permanent, conspicuous label near the operator summarizing the operating requirements in subparagraph (I) of this paragraph;

(I) the following operating procedures:

(i) exhaust ventilation for systems other than those which vent to a major control device shall not exceed 65 cfm/ft^2 ($20 \text{ m}^3/\text{min}/\text{m}^2$) of degreaser opening, unless necessary to meet OSHA requirements or unless a carbon adsorption system is installed as a major control device. Ventilation fans shall not be used near the degreaser opening;

- (ii) parts shall be positioned so that complete drainage is obtained;
- (iii) vertical conveyor speed shall be maintained at less than 11 ft/min (3.3 m/min);
- (iv) waste solvent shall not be disposed of, or transferred to another party, such that the waste solvent can evaporate into the atmosphere. Waste solvent shall be stored only in covered containers;
- (v) leaks shall be repaired immediately or the degreaser shall be shut down until repairs are made;
- (vi) water shall not be visibly detectable in the solvent exiting the water separator;
- (vii) downtime covers shall be placed over entrances and exits of conveyORIZED degreasers immediately after the conveyor and exhaust are shut down and removed just before they are started up;
- (viii) porous or absorbent materials, such as cloth, leather, wood, or rope, shall not be degreased.

§115.413. Alternate Control Requirements.

The alternate control requirements for degreasing processes in the Beaumont/Port Arthur, Dallas/Fort Worth, El Paso, and Houston/Galveston areas and in Gregg, Nueces, and Victoria Counties are as follows.

(1) Alternate methods of demonstrating and documenting continuous compliance with the applicable control requirements or exemption criteria in this division may be approved by the executive director in accordance with §115.910 of this title (relating to Availability of Alternate Means of Control) if emission reductions are demonstrated to be substantially equivalent.

(2) An alternative capture and control system for cold solvent cleaners with a demonstrated overall volatile organic compound (VOC) emission reduction efficiency of 65 % or greater may be used in lieu of the requirements of §115.412(1) of this title (relating to Control Requirements), if approved by the executive director.

(3) An alternate capture and control system for open-top vapor or conveyORIZED degreasers with a demonstrated overall VOC emission reduction efficiency of 85 % or greater may be used in lieu of the requirements of §115.412(2)(D) or (3)(A) of this title, if approved by the executive director.

§115.415. Testing Requirements.

The testing requirements for degreasing processes in the Beaumont/Port Arthur, Dallas/Fort Worth, El Paso, and Houston/Galveston areas and in Gregg, Nueces, and Victoria Counties are as follows.

(1) Compliance with §115.412(1) of this title (relating to Control Requirements) shall be determined by applying the following test methods, as applicable:

(A) determination of true vapor pressure using American Society for Testing Materials (ASTM) Test Method D323-89, ASTM Test Method D2879, ASTM Test Method D4953, ASTM Test Method D5190, or ASTM Test Method D5191 for the measurement of Reid vapor pressure (RVP), adjusted for actual storage temperature in accordance with American Petroleum Institute (API) Publication 2517, Third Edition, 1989; or

(B) minor modifications to these test methods and procedures approved by the executive director.

(2) Compliance with §115.412(2)(D)(iv) and (3)(A)(ii) of this title and §115.413(3) of this title (relating to Alternate Control Requirements) shall be determined by applying the following test methods, as appropriate:

(A) Test Methods 1-4 (40 Code of Federal Regulations (CFR) 60, Appendix

A) for determining flow rates, as necessary;

(B) Test Method 18 (40 CFR 60, Appendix A) for determining gaseous organic

compound emissions by gas chromatography;

(C) Test Method 25 (40 CFR 60, Appendix A) for determining total gaseous

nonmethane organic emissions as carbon;

(D) Test Methods 25A or 25B (40 CFR 60, Appendix A) for determining total

gaseous organic concentrations using flame ionization or nondispersive infrared analysis; or

(E) minor modifications to these test methods and procedures approved by the

executive director.

(3) Test methods other than those specified in paragraphs (1) and (2) of this section may be used if validated by 40 CFR 63, Appendix A, Test Method 301. For the purposes of this paragraph, substitute “executive director” each place that Test Method 301 references “administrator.”

§115.416. Recordkeeping Requirements.

The owner or operator of each degreasing process in the Beaumont/Port Arthur, Dallas/Fort Worth, El Paso, and Houston/Galveston areas and in Gregg, Nueces, and Victoria Counties shall maintain the following records at the facility for at least two years and shall make such records available upon request to representatives of the executive director, EPA, or the local air pollution control agency having jurisdiction in the area:

(1) a record of control equipment maintenance, such as replacement of the carbon in a carbon adsorption unit;

(2) the results of all tests conducted at the facility in accordance with the requirements described in §115.415(2) of this title (relating to Testing Requirements);

(3) for each degreasing operation in Gregg, Nueces, and Victoria Counties which is exempt under §115.417(5) of this title (relating to Exemptions), records of solvent usage in sufficient detail to document continuous compliance with this exemption.

§115.417. Exemptions.

The following exemptions apply in the Beaumont/Port Arthur, Dallas/Fort Worth, El Paso, and Houston/Galveston areas and in Gregg, Nueces, and Victoria Counties.

(1) Any cold solvent cleaning system is exempt from the provisions of §115.412(1)(B) of this title (relating to Control Requirements) and may use an external drainage facility in place of an internal type drainage system, if the true vapor pressure of the solvent is less than or equal to 0.6 psia (4.1 kPa) as measured at 100 degrees Fahrenheit (38 degrees Celsius) or if a cleaned part cannot fit into an internal drainage facility.

(2) The following are exempt from the requirements of §115.412(1)(E) of this title:

(A) a cold solvent cleaning system for which the true vapor pressure of the solvent is less than or equal to 0.6 psia (4.1 kPa) as measured at 100 degrees Fahrenheit (38 degrees Celsius), provided that the solvent is not heated above 120 degrees Fahrenheit (49 degrees Celsius); and

(B) remote reservoir cold solvent cleaners.

(3) Any conveyORIZED degreaser with less than 20 ft² (2 m²) of air/vapor interface is exempt from the requirement of §115.412(3)(A) of this title.

(4) An owner or operator who operates a remote reservoir cold solvent cleaner which uses solvent with a true vapor pressure equal to or less than 0.6 psia (4.1 kPa) measured at 100 degrees Fahrenheit (38 degrees Celsius) and which has a drain area less than 16 in² (100 cm²) and who properly disposes of waste solvent in enclosed containers is exempt from §115.412(1) of this title.

(5) In Gregg, Nueces, and Victoria Counties, degreasing operations located on any property which can emit, when uncontrolled, a combined weight of VOC less than 550 pounds (249.5 kg) in any consecutive 24-hour period are exempt from the provisions of §115.412 of this title.

§115.419. Counties and Compliance Schedules.

All affected persons in Brazoria, Chambers, Collin, Dallas, Denton, El Paso, Fort Bend, Galveston, Gregg, Hardin, Harris, Jefferson, Liberty, Montgomery, Nueces, Orange, Tarrant, Victoria, and Waller Counties shall continue to comply with applicable sections of this division (relating to Degreasing Processes) as required by §115.930 of this title (relating to Compliance Dates).

SUBCHAPTER E: SOLVENT-USING PROCESSES

DIVISION 2: SURFACE COATING PROCESSES

§§115.423, 115.426, 115.427

STATUTORY AUTHORITY

The amendments are adopted under Texas Water Code (TWC), §5.103, which authorizes the commission to adopt rules necessary to carry out its powers and duties under the TWC; Texas Health and Safety Code, TCAA, §382.017, which provides the commission authority to adopt rules consistent with the policy and purposes of the TCAA; §382.002, which establishes the commission's purpose to safeguard the state's air resources, consistent with the protection of public health, general welfare, and physical property; §382.011, which authorizes the commission to control the quality of the state's air; §382.012, which authorizes the commission to develop plans to protect the state's air; and §382.016, which authorizes the commission to require that records of the air contaminant emissions from a source or activity be made and maintained.

§115.423. Alternate Control Requirements.

The alternate control requirements for surface coating processes in the Beaumont/Port Arthur, Dallas/Fort Worth, El Paso, and Houston/Galveston areas and in Gregg, Nueces, and Victoria Counties are as follows.

(1) Emission calculations for surface coating operations performed to satisfy the conditions of §101.23 of this title (relating to Alternate Emission Reduction "Bubble" Policy), §115.910 of this title (relating to Availability of Alternate Means of Control), or other demonstrations of equivalency with the specified emission limits in this division (relating to Surface Coating Processes) shall be based on the pounds of volatile organic compounds (VOC) per gallon of solids for all affected coatings. The following equation shall be used to convert emission limits from pounds of VOC per gallon of coating to pounds of VOC per gallon of solids:

Figure: 30 TAC §115.423(1)

$$S = C / (1 - C / D)$$

where:

S = the applicable emission limit from §115.421 expressed on a pounds of VOC per gallon of solids basis

C = the applicable emission limit from §115.421 expressed on a pounds of VOC per gallon of coating basis

D = an assumed solvent density of 7.36 pounds of VOC per gallon

(2) Any alternate methods of demonstrating and documenting continuous compliance with the applicable control requirements or exemption criteria in this division, such as use of improved transfer efficiency, may be approved by the executive director in accordance with §115.910 of this title if emission reductions are demonstrated to be substantially equivalent.

(3) If a vapor control system is used to control emissions from coating operations:

(A) the capture and abatement system shall be capable of achieving and maintaining emission reductions equivalent to the emission limitations of §115.421 of this title (relating to Emission Specifications) and an overall control efficiency of at least 80% of the VOC emissions from those coatings. The following equation shall be used to determine the minimum overall control efficiency necessary to demonstrate equivalency with the emission limitations of §115.421 of this title:

Figure: 30 TAC §115.423(3)(A)

$$E = (\text{VOC}_a - S) / \text{VOC}_a$$

where:

E = the required overall control efficiency

VOC_a = the VOC content of the coatings used on the coating line expressed on a pounds of VOC per gallon of coating basis. The owner or operator may choose to use either a daily weighted average or the maximum VOC content.

S = the applicable emission limit from §115.421 of this title expressed on a pounds of VOC per gallon of solids basis (as calculated in paragraph (1) of this section)

(B) the owner or operator shall submit design data for each capture system and emission control device which is proposed for use to the executive director for approval. In the Beaumont/Port Arthur, Dallas/Fort Worth, El Paso, and Houston/Galveston areas, capture efficiency testing shall be performed in accordance with §115.425(4) of this title (relating to Testing Requirements).

(4) For any surface coating process or processes at a specific property, the executive director may approve requirements different from those in §115.421(a)(9) or (b)(8) of this title based upon his determination that such requirements will result in the lowest emission rate that is technologically and economically reasonable. When he makes such a determination, the executive director shall specify the date or dates by which such different requirements shall be met and shall specify any requirements to be met in the interim. If the emissions resulting from such different requirements equal or exceed 25 tons a year for a property, the determinations for that property shall be reviewed every five years. Executive director approval does not necessarily constitute satisfaction of all

federal requirements nor eliminate the need for approval by the EPA in cases where specified criteria for determining equivalency have not been clearly identified in applicable sections of this chapter.

§115.426. Monitoring and Recordkeeping Requirements.

The following recordkeeping requirements apply to the owner or operator of each surface coating process in the Beaumont/Port Arthur, Dallas/Fort Worth, El Paso, and Houston/Galveston areas and in Gregg, Nueces, and Victoria Counties. Records of non-exempt solvent washings are not required to be kept if the non-exempt solvent is directed into containers that prevent evaporation into the atmosphere.

(1) The owner or operator shall satisfy the following recordkeeping requirements.

(A) A material data sheet shall be maintained which documents the volatile organic compound (VOC) content, composition, solids content, solvent density, and other relevant information regarding each coating and solvent available for use in the affected surface coating processes sufficient to determine continuous compliance with applicable control limits.

(B) Records shall be maintained of the quantity and type of each coating and solvent consumed during the specified averaging period if any of the coatings, as delivered to the coating application system, exceed the applicable control limits. Such records shall be sufficient to calculate the applicable weighted average of VOC for all coatings.

(i) As an alternative to the recordkeeping requirements of this subparagraph, any vehicle refinishing (body shop) operation subject to §115.421(a)(8)(B) of this title may substitute the recordkeeping requirements specified in §106.436 of this title (relating to Auto Body Refinishing Facility (Previously Standard Exemption 124) provided that all coatings and solvents meet the emission limits of §115.421(a)(8)(B) of this title. If a vehicle refinishing (body shop) operation uses any coating(s) or solvent(s) which exceeds the limits of §115.421(a)(8)(B) of this title, then that vehicle refinishing (body shop) operation shall maintain daily records of the quantity and type of each coating and solvent consumed in sufficient detail to calculate the daily weighted average of VOC for all coatings and solvents.

(ii) As an alternative to the recordkeeping requirements of this subparagraph, any wood parts and products coating operation subject to §115.421(a)(13) of this title may substitute the recordkeeping requirements specified in §106.231 of this title (relating to Manufacturing, Refinishing, and Restoring Wood Products) provided that all coatings and solvents meet the emission limits of §115.421(a)(13) of this title. If a wood parts and products coating operation uses any coating(s) or solvent(s) which exceeds the limits of §115.421(a)(13) of this title, then that wood parts and products coating operation shall maintain daily records of the quantity and type of each coating and solvent consumed in sufficient detail to calculate the daily weighted average of VOC for all coatings and solvents.

(iii) As an alternative to the recordkeeping requirements of this subparagraph, any surface coating operation that qualifies for exemption under §115.427(a)(3)(C) of

this title (relating to Exemptions) shall maintain records of total gallons of coating and solvent used in each month, and total gallons of coating and solvent used in the previous 12 months.

(C) Records shall be maintained of any testing conducted at an affected facility in accordance with the provisions specified in §115.425 of this title (relating to Testing Requirements).

(D) Records required by subparagraphs (A) - (C) of this paragraph shall be maintained for at least two years and shall be made available upon request by representatives of the executive director, EPA, or any local air pollution control agency.

(2) The owner or operator of any surface coating facility which utilizes a vapor control system approved by the executive director in accordance with §115.423(3) of this title (relating to Alternate Control Requirements) shall:

(A) install and maintain monitors to accurately measure and record operational parameters of all required control devices, as necessary, to ensure the proper functioning of those devices in accordance with design specifications, including:

(i) continuous monitoring of the exhaust gas temperature immediately downstream of direct-flame incinerators and/or the gas temperature immediately upstream and downstream of any catalyst bed;

(ii) the total amount of VOC recovered by carbon adsorption or other solvent recovery systems during a calendar month,

(iii) continuous monitoring of carbon adsorption bed exhaust; and

(iv) appropriate operating parameters for vapor control systems other than those specified in clauses (i) - (iii) of this subparagraph;

(B) maintain records of any testing conducted in accordance with the provisions specified in §115.425(2) of this title; and

(C) maintain all records at the affected facility for at least two years and make such records available to representatives of the executive director, EPA, or any local air pollution control agency, upon request.

(3) The owner or operator shall maintain, on file, the capture efficiency protocol submitted under §115.425(4) of this title. The owner or operator shall submit all results of the test methods and capture efficiency protocols to the executive director within 60 days of the actual test date. The owner or operator shall maintain records of the capture efficiency operating parameter values on site for a minimum of one year. If any changes are made to capture or control equipment, the owner or operator is required to notify the executive director in writing within 30 days of these

changes and a new capture efficiency and/or control device destruction or removal efficiency test may be required.

(4) Records shall be maintained sufficient to document the applicability of the conditions for exemptions referenced in §115.427 of this title.

(5) The following additional requirements apply to each aerospace vehicle or component coating process subject to §115.421(a)(11) or (b)(10) of this title. The owner or operator shall:

(A) for coatings:

(i) maintain a current list of coatings in use with category and VOC content as applied; and

(ii) record coating usage on an annual basis;

(B) for aqueous and semiaqueous hand-wipe cleaning solvents, maintain a list of materials used with corresponding water contents;

(C) for vapor pressure compliant hand-wipe cleaning solvents:

(i) maintain a current list of cleaning solvents in use with their respective vapor pressures or, for blended solvents, VOC composite vapor pressures; and

(ii) maintain a record cleaning solvent usage on an annual basis;

(D) for cleaning solvents with a vapor pressure greater than 45 mm Hg at 20 degrees Celsius used in exempt hand-wipe cleaning operations:

(i) maintain a list of exempt hand-wipe cleaning processes;

(ii) maintain a record cleaning solvent usage on an annual basis.

(6) Except for specialty coatings, compliance with the recordkeeping requirements of 40 CFR §63.752, (National Emission Standards for Aerospace Manufacturing and Rework Facilities), is considered to represent compliance with the requirements of this section (relating to Monitoring and Recordkeeping Requirements).

§115.427. Exemptions.

(a) For the Beaumont/Port Arthur, Dallas/Fort Worth, El Paso, and Houston/Galveston areas, the following exemptions shall apply:

(1) The following coating operations are exempt from §115.421(a)(9) of this title (relating to Emission Specifications):

(A) exterior of fully assembled aircraft, except as required by §115.421(a)(9)(A)(v) of this title, and after December 31, 2001, all aerospace vehicles and components;

(B) vehicle refinishing (body shops), except as required by §115.421(a)(8)(B) and (C) of this title; and

(C) ships and offshore oil or gas drilling platforms, except as required by §115.421(a)(15) of this title.

(2) The following coating operations are exempt from §115.421(a)(10) of this title:

(A) the manufacture of exterior siding;

(B) tile board; or

(C) particle board used as a furniture component.

(3) The following exemptions apply to surface coating operations, except for aircraft prime coating controlled by §115.421(a)(9)(A)(v) of this title and vehicle refinishing (body shops)

controlled by §115.421(a)(8)(B) and (C) of this title. Excluded from the volatile organic compound (VOC) emission calculations are coatings and solvents used in surface coating activities which are not addressed by the surface coating categories of §115.421(a)(1) - (15) of this title. For example, architectural coatings (i.e., coatings which are applied in the field to stationary structures and their appurtenances, to portable buildings, to pavements, or to curbs) at a property would not be included in the calculations.

(A) Surface coating operations on a property which, when uncontrolled, will emit a combined weight of VOC of less than three pounds per hour and 15 pounds in any consecutive 24-hour period are exempt from §115.421(a) of this title and §115.423 of this title (relating to Alternate Control Requirements).

(B) Surface coating operations on a property which, when uncontrolled, will emit a combined weight of VOC of less than 100 pounds in any consecutive 24-hour period are exempt from §115.421(a) and §115.423 of this title if documentation is provided to and approved by both the executive director and the EPA to demonstrate that necessary coating performance criteria cannot be achieved with coatings which satisfy applicable emission specifications and that control equipment is not technically or economically feasible.

(C) Surface coating operations on a property for which total coating and solvent usage does not exceed 150 gallons in any consecutive 12-month period are exempt from §115.421(a) and §115.423 of this title.

(D) Mirror backing coating operations located on a property which, when uncontrolled, emit a combined weight of VOC less than 25 tons in one year (based on historical coating and solvent usage) are exempt from this division (relating to Surface Coating Processes).

(E) Wood furniture manufacturing facilities which are subject to and are complying with §115.421(a)(14) of this title and §115.422(3) of this title (relating to Control Requirements) are exempt from §115.421(a)(13) of this title. These wood furniture manufacturing facilities shall continue to comply with §115.421(a)(13) of this title until these facilities are in compliance with §115.421(a)(14) and §115.422(3) of this title.

(F) Wood furniture manufacturing facilities which, when uncontrolled, emit a combined weight of VOC from wood furniture manufacturing operations less than 25 tons per year are exempt from §115.421(a)(14) and §115.422(3) of this title.

(G) Wood parts and products coating facilities in Hardin, Jefferson, and Orange Counties are exempt from §115.421(a)(13) of this title.

(H) Shipbuilding and ship repair operations in Hardin, Jefferson, and Orange Counties which, when uncontrolled, emit a combined weight of VOC from ship and offshore oil or gas drilling platform surface coating operations less than 100 tons per year are exempt from §115.421(a)(15) and §115.422(4) of this title.

(I) Shipbuilding and ship repair operations in Brazoria, Chambers, Fort Bend, Galveston, Harris, Liberty, Montgomery, and Waller Counties which, when uncontrolled, emit a combined weight of VOC from ship and offshore oil or gas drilling platform surface coating operations less than 25 tons per year are exempt from §115.421(a)(15) and §115.422(4) of this title.

(J) The following activities where cleaning and coating of aerospace vehicles or components may take place are exempt from this division: research and development, quality control, laboratory testing, and electronic parts and assemblies; except for cleaning and coating of completed assemblies.

(4) Vehicle refinishing (body shops) in Hardin, Jefferson, and Orange Counties are exempt from §115.421(a)(8)(B) and §115.422(1) and (2) of this title.

(5) The coating of vehicles at in-house (fleet) vehicle refinishing operations and the coating of vehicles by private individuals are exempt from §115.421(a)(8)(B) and §115.422(1) and (2) of this title. This exemption is not applicable if the coating of a vehicle by a private individual occurs at a commercial operation.

(6) Aerosol coatings (spray paint) are exempt from this division.

(b) For Gregg, Nueces, and Victoria Counties, the following exemptions shall apply:

(1) Surface coating operations located at any property which, when uncontrolled, will emit a combined weight of VOC less than 550 pounds (249.5 kg) in any continuous 24-hour period are exempt from §115.421(b) of this title. Excluded from this calculation are coatings and solvents used in surface coating activities which are not addressed by the surface coating categories of §115.421(b)(1) - (10) of this title. For example, architectural coatings (i.e., coatings which are applied in the field to stationary structures and their appurtenances, to portable buildings, to pavements, or to curbs) at a property would not be included in the calculation.

(2) The following coating operations are exempt from §115.421(b)(8) of this title:

(A) exterior of fully assembled aircraft, and after December 31, 2001,
all aerospace vehicles and components;

(B) vehicle refinishing (body shops); and

(C) ships and offshore oil or gas drilling platforms.

(3) The following coating operations are exempt from §115.421(b)(9) of this title:

(A) the manufacture of exterior siding;

(B) tile board; or

(C) particle board used as a furniture component.

(4) Aerosol coatings (spray paint) are exempt from this division.

SUBCHAPTER E: SOLVENT-USING PROCESSES

DIVISION 3: FLEXOGRAPHIC AND ROTOGRAVURE PRINTING

§§115.432, 115.433, 115.435, 115.436, 115.439

STATUTORY AUTHORITY

The amendments are adopted under Texas Water Code (TWC), §5.103, which authorizes the commission to adopt rules necessary to carry out its powers and duties under the TWC; Texas Health and Safety Code, TCAA, §382.017, which provides the commission authority to adopt rules consistent with the policy and purposes of the TCAA; §382.002, which establishes the commission's purpose to safeguard the state's air resources, consistent with the protection of public health, general welfare, and physical property; §382.011, which authorizes the commission to control the quality of the state's air; §382.012, which authorizes the commission to develop plans to protect the state's air; and §382.016, which authorizes the commission to require that records of the air contaminant emissions from a source or activity be made and maintained.

§115.432. Control Requirements.

(a) For the Beaumont/Port Arthur, Dallas/Fort Worth, El Paso, and Houston/Galveston areas as defined in §115.10 of this title (relating to Definitions), the following control requirements shall apply.

(1) No person shall operate or allow the operation of a packaging rotogravure, publication rotogravure, or flexographic printing line that uses solvent-containing ink unless volatile organic compound (VOC) emissions are limited by one of the following:

(A) application to the substrate of low solvent ink with a volatile fraction containing 25% by volume or less of VOC solvent and 75% by volume or more of water and exempt solvent;

(B) application to the substrate of high solids solvent-borne ink containing 60% by volume or more of nonvolatile material (minus water and exempt solvent); or

(C) operation of a vapor control system to reduce the VOC emissions from an effective capture system by at least 90% by weight. The design and operation of the capture system for each printing line must be consistent with good engineering practice and shall be required to provide for an overall reduction in VOC emissions, as demonstrated to the satisfaction of the executive director, upon request, of at least the following weight percentages:

(i) 75% for a publication rotogravure process;

(ii) 65% for a packaging rotogravure process; or

(iii) 60% for a flexographic printing process.

(2) Any graphic arts facility that becomes subject to the provisions of paragraph (1)(A), (B), or (C) of this subsection by exceeding provisions of §115.437(a) of this title (relating to Exemptions) will remain subject to the provisions of this subsection, even if throughput or emissions later fall below exemption limits unless and until emissions are reduced to no more than the controlled emissions level existing prior to implementation of the project by which throughput or emission rate was reduced to less than the applicable exemption limits in §115.437(a) of this title and:

(A) the project by which throughput or emission rate was reduced is authorized by any permit or permit amendment or standard permit or permit by rule required by Chapter 116 of this title (relating to Control of Air Pollution by Permit for New Construction or Modification) or Chapter 106 of this title (relating to Permits by Rule). If a permit by rule is available for the project, compliance with this subsection must be maintained for 30 days after the filing of documentation of compliance with that permit by rule; or

(B) if authorization by permit, permit amendment, standard permit, or permit by rule is not required for the project, the owner/operator has given the executive director 30 days' notice of the project in writing.

(3) Any capture efficiency testing of the capture system must be conducted in accordance with §115.435(a) of this title (relating to Testing Requirements).

(b) For Gregg, Nueces, and Victoria Counties, no person shall operate or allow the operation of a packaging rotogravure, publication rotogravure, or flexographic printing line that uses solvent-containing ink, unless VOC emissions are limited by one of the following:

(1) application to the substrate of low solvent ink with a volatile fraction containing 25% by volume or less of VOC solvent and 75% by volume or more of water and exempt solvent;

(2) application to the substrate of high solids solvent-borne ink containing 60% by volume or more of nonvolatile material (minus water and exempt solvent); or

(3) operation of a vapor control system to reduce the VOC emissions from an effective capture system by at least 90% by weight. The design and operation of the capture system for each printing line must be consistent with good engineering practice and shall be required to provide for an overall reduction in VOC emissions, as demonstrated to the satisfaction of the executive director upon request of at least the following weight percentages:

(A) 75% for a publication rotogravure process;

(B) 65% for a packaging rotogravure process; or

(C) 60% for a flexographic printing process.

§115.433. Alternate Control Requirements.

(a) For all affected persons in the Beaumont/Port Arthur, Dallas/Fort Worth, El Paso, and Houston/Galveston areas, alternate methods of demonstrating and documenting continuous compliance with the applicable control requirements or exemption criteria in this division may be approved by the executive director in accordance with §115.910 of this title (relating to Availability of Alternate Means of Control) if emission reductions are demonstrated to be substantially equivalent.

(b) For all affected persons in Gregg, Nueces, and Victoria Counties, alternate methods of demonstrating and documenting continuous compliance with the applicable control requirements or exemption criteria in this division may be approved by the executive director in accordance with §115.910 of this title (relating to Availability of Alternate Means of Control) if emission reductions are demonstrated to be substantially equivalent.

§115.435. Testing Requirements.

(a) For the Beaumont/Port Arthur, Dallas/Fort Worth, El Paso, and Houston/Galveston areas, compliance shall be determined by applying the following test methods, as appropriate:

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

(2) Test Method 24 (40 CFR 60, Appendix A) for determining the volatile organic compound (VOC) content and density of printing inks and related coatings;

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

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

(5) EPA guidelines series document "Procedures for Certifying Quantity of Volatile Organic Compounds Emitted by Paint, Ink, and Other Coatings," EPA-450/3-84-019, as in effect December 1984;

(6) additional performance test procedures described in 40 CFR 60.444;

(7) the capture efficiency which shall be measured using applicable procedures outlined in 40 CFR, Part 52.741, Subpart O, Appendix B. These procedures are: Procedure T - Criteria for and Verification of a Permanent or Temporary Total Enclosure; Procedure L - VOC Input; Procedure G.2 - Captured VOC Emissions (Dilution Technique); Procedure F.1 - Fugitive VOC Emissions from Temporary Enclosures; Procedure F.2 - Fugitive VOC Emissions from Building Enclosures.

(A) The following are exemptions to capture efficiency testing requirements.

(i) If a source installs a permanent total enclosure (PTE) which meets the specifications of Procedure T and which directs all VOC to a control device, then the capture efficiency is assumed to be 100%, and the source is exempted from capture efficiency testing requirements. This does not exempt the source from performance of any control device efficiency testing that may be required. In addition, a source must demonstrate all criteria for a PTE are met during testing for control efficiency.

(ii) If a source uses a control device designed to collect and recover VOC (e.g., carbon adsorption system), an explicit measurement of capture efficiency is not necessary if the following conditions are met. The overall control of the system can be determined by directly comparing the input liquid VOC to the recovered liquid VOC. The general procedure for use in this situation is given in 40 CFR §60.433 with the following additional restrictions.

(I) The source must be able to equate solvent usage with solvent recovery on a 24-hour (daily) basis, rather than a 30-day weighted average. This must be done within 72 hours following each 24-hour period of the 30-day period specified in 40 CFR §60.433.

(II) The solvent recovery system (i.e., capture and control system) must be dedicated to a single process line (e.g., one process line venting to a carbon adsorption system); or if the solvent recovery system controls multiple process lines, the source must be able to demonstrate that the overall control (i.e., the total recovered solvent VOC divided by the sum of liquid

VOC input to all process lines venting to the control system) meets or exceeds the most stringent standard applicable for any process line venting to the control system.

(B) The capture efficiency shall be calculated using one of the following four protocols referenced. Any affected source must use one of these protocols, unless a suitable alternative protocol is approved by the executive director and EPA.

(i) Gas/gas method using temporary total enclosure (TTE). EPA specifications to determine whether a temporary enclosure is considered a TTE are given in Procedure T. The capture efficiency equation to be used for this protocol is: $CE = G_w / (G_w + F_w)$, where: CE = capture efficiency, decimal fraction; G_w = mass of VOC captured and delivered to control device using a TTE (use Procedure G.2); F_w = mass of fugitive VOC that escapes from a TTE (use Procedure F.1).

(ii) Liquid/gas method using TTE. EPA specifications to determine whether a temporary enclosure is considered a TTE are given in Procedure T. The capture efficiency equation to be used for this protocol is: $CE = (L - F) / L$, where: CE = capture efficiency, decimal fraction; L = mass of liquid VOC input to process (use Procedure L); F = mass of fugitive VOC that escapes from a TTE (use Procedure F.1).

(iii) Gas/gas method using the building or room in which the affected

source is located as the enclosure (BE) and in which G and F are measured while operating only the affected facility. All fans and blowers in the BE must be operating as they would under normal production. The capture efficiency equation to be used for this protocol is: $CE = G / (G + F_b)$, where: CE = capture efficiency, decimal fraction; G = mass of VOC captured and delivered to a control device (use Procedure G.2); F_b = mass of fugitive VOC that escapes from building enclosure (use Procedure F.2).

(iv) Liquid/gas method using a BE in which L and F are measured while operating only the affected facility. All fans and blowers in the building or room must be operated as they would under normal production. The capture efficiency equation to be used for this protocol is: $CE = (L - F_b) / L$, where: CE = capture efficiency, decimal fraction; L = mass of liquid VOC input to process (use Procedure L); F_b = mass of fugitive VOC that escapes from BE (use Procedure F.2).

(C) The following conditions must be met in measuring capture efficiency.

(i) Any error margin associated with a test protocol may not be incorporated into the results of a capture efficiency test.

(ii) All affected facilities shall accomplish the initial capture efficiency testing by July 31, 1992, in Brazoria, Dallas, El Paso, Galveston, Harris, Jefferson, Orange, and Tarrant Counties, and by July 31, 1993, in Chambers, Collin, Denton, Fort Bend, Hardin, Liberty,

Montgomery, and Waller Counties.

(iii) During an initial pretest meeting, the executive director and the source owner or operator shall identify those operating parameters which shall be monitored to ensure that capture efficiency does not change significantly over time. These parameters shall be monitored and recorded initially during the capture efficiency testing and thereafter during facility operation. The executive director may require a new capture efficiency test if the operating parameter values change significantly from those recorded during the initial capture efficiency test;

(8) minor modifications to these test methods and procedures approved by the executive director.

(b) For Gregg, Nueces, and Victoria Counties, compliance shall be determined by applying the following test methods, as appropriate:

(1) Test Methods 1-4 (40 CFR 60, Appendix A) for determining flow rates, as necessary;

(2) Test Method 24 (40 CFR 60, Appendix A) for determining the VOC content and density of printing inks and related coatings;

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

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

(5) EPA guidelines series document "Procedures for Certifying Quantity of Volatile Organic Compounds Emitted by Paint, Ink, and Other Coatings," EPA-450/3-84-019, as in effect December 1984;

(6) additional performance test procedures described in 40 CFR 60.444; or

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

§115.436. Monitoring and Recordkeeping Requirements.

(a) For the Beaumont/Port Arthur, Dallas/Fort Worth, El Paso, and Houston/Galveston areas, the owner or operator of any rotogravure or flexographic printing facility shall:

(1) maintain records of the volatile organic compound (VOC) content of all inks as applied to the substrate. Additionally, records of the quantity of each ink and solvent used shall be

maintained. The composition of inks may be determined by the methods referenced in §115.435(a) of this title (relating to Testing Requirements) or by examining the manufacturer's formulation data and the amount of dilution solvent added to adjust the viscosity of inks prior to application to the substrate;

(2) maintain daily records of the quantity of each ink and solvent used at a facility subject to the requirements of an alternate means of control approved by the executive director in accordance with §115.433(a) of this title (relating to Alternate Control Requirements) which allows the application of inks exceeding the applicable control limits. Such records must be sufficient to demonstrate compliance with the applicable emission limitation on a daily weighted average;

(3) install and maintain monitors to continuously measure and record operational parameters of any emission control device installed to meet applicable control requirements. Such records must be sufficient to demonstrate proper functioning of those devices to design specifications, including:

(A) the exhaust gas temperature of direct-flame incinerators and/or gas temperature immediately upstream and downstream of any catalyst bed;

(B) the total amount of VOC recovered by a carbon adsorption or other solvent recovery system during a calendar month;

(C) the exhaust gas VOC concentration of any carbon adsorption system, as

defined in §115.10 of this title (relating to Definitions), to determine if breakthrough has occurred; and

(D) the dates and reasons for any maintenance and repair of the required control devices and the estimated quantity and duration of VOC emissions during such activities;

(4) maintain the results of any testing conducted at an affected facility in accordance with the provisions specified in §115.435(a) of this title (relating to Testing Requirements);

(5) maintain all records at the affected facility for at least two years and make such records available upon request to representatives of the executive director, EPA, or the local air pollution agency having jurisdiction in the area; and

(6) maintain on file the capture efficiency protocol submitted under §115.435(a)(7) of this title (relating to Testing Requirements). The owner or operator shall submit all results of the test methods and capture efficiency protocols to the executive director within 60 days of the actual test date. The source owner or operator shall maintain records of the capture efficiency operating parameter values on-site for a minimum of one year. If any changes are made to capture or control equipment, the owner or operator is required to notify the executive director in writing within 30 days of these changes, and a new capture efficiency and/or control device destruction or removal efficiency test may be required.

(b) For Gregg, Nueces, and Victoria Counties, the owner or operator of any rotogravure or flexographic printing facility shall:

- (1) maintain records of the VOC content of all inks as applied to the substrate.

Additionally, records of the quantity of each ink and solvent used shall be maintained. The composition of inks may be determined by the methods referenced in §115.435(b) of this title (relating to Testing Requirements) or by examining the manufacturer's formulation data and the amount of dilution solvent added to adjust the viscosity of inks prior to application to the substrate;

- (2) maintain daily records of the quantity of each ink and solvent used at a facility subject to the requirements of an alternate means of control approved by the executive director in accordance with §115.433(b) of this title (relating to Alternate Control Requirements) which allows the application of inks exceeding the applicable control limits. Such records must be sufficient to demonstrate compliance with the applicable emission limitation on a daily weighted average;

- (3) install and maintain monitors to continuously measure and record operational parameters of any emission control device installed to meet applicable control requirements. Such records must be sufficient to demonstrate proper functioning of those devices to design specifications, including:

- (A) the exhaust gas temperature of direct-flame incinerators and/or the gas temperature immediately upstream and downstream of any catalyst bed;

(B) the total amount of VOC recovered by a carbon adsorption or other solvent recovery system during a calendar month;

(C) in Victoria County, the exhaust gas VOC concentration of any carbon adsorption system, as defined in §115.10 of this title (relating to Definitions), to determine if breakthrough has occurred; and

(D) the dates and reasons for any maintenance and repair of the required control devices and the estimated quantity and duration of VOC emissions during such activities;

(4) maintain the results of any testing conducted at an affected facility in accordance with the provisions specified in §115.435(b) of this title (relating to Testing Requirements); and

(5) maintain all records at the affected facility for at least two years and make such records available upon request to representatives of the executive director, EPA, or the local air pollution agency having jurisdiction in the area.

§115.439. Counties and Compliance Schedules.

All affected persons in Brazoria, Chambers, Collin, Dallas, Denton, El Paso, Fort Bend, Galveston, Gregg, Hardin, Harris, Jefferson, Liberty, Montgomery, Nueces, Orange, Tarrant, Victoria, and Waller Counties shall continue to comply with applicable sections of this division (relating

to Flexographic and Rotogravure Printing) as required by §115.930 of this title (relating to Compliance Dates).

SUBCHAPTER E: SOLVENT-USING PROCESSES

DIVISION 4: OFFSET LITHOGRAPHIC PRINTING

§115.442

STATUTORY AUTHORITY

The amendment is adopted under Texas Water Code (TWC), §5.103, which authorizes the commission to adopt rules necessary to carry out its powers and duties under the TWC; Texas Health and Safety Code, TCAA, §382.017, which provides the commission authority to adopt rules consistent with the policy and purposes of the TCAA; §382.002, which establishes the commission's purpose to safeguard the state's air resources, consistent with the protection of public health, general welfare, and physical property; §382.011, which authorizes the commission to control the quality of the state's air; §382.012, which authorizes the commission to develop plans to protect the state's air; and §382.016, which authorizes the commission to require that records of the air contaminant emissions from a source or activity be made and maintained.

§115.442. Control Requirements.

For the Dallas/Fort Worth, El Paso, and Houston/Galveston areas as defined in §115.10 of this title (relating to Definitions), the following control requirements shall apply:

(1) No person shall operate or allow the operation of an offset lithographic printing line that uses solvent-containing ink, unless volatile organic compound (VOC) emissions are limited by the following:

(A) Any person who owns or operates a heatset web offset lithographic printing press that uses alcohol in the fountain solution shall maintain total fountain solution alcohol to 5.0% or less (by volume). Alternatively, a standard of 10.0% or less (by volume) alcohol may be used if the fountain solution containing alcohol is refrigerated to less than 60 degrees Fahrenheit.

(B) Any person who owns or operates a nonheatset web offset lithographic printing press which prints newspaper and that uses alcohol in the fountain solution shall eliminate the use of alcohol in the fountain solution. Non-alcohol additives or alcohol substitutes can be used to accomplish the total elimination of alcohol use.

(C) Any person who owns or operates a nonheatset web offset lithographic printing press which does not print newspaper and that uses alcohol in the fountain solution shall maintain the use of alcohol at 5.0% or less (by volume). Alternatively, a standard of 10.0% or less (by volume) alcohol may be used if the fountain solution is refrigerated to less than 60 degrees Fahrenheit.

(D) Any person who owns or operates a sheetfed offset lithographic printing press shall maintain the use of alcohol at 10.0% or less (by volume). Alternatively, a standard of 12.0% or less (by volume) alcohol may be used if the fountain solution is refrigerated to less than 60

degrees Fahrenheit.

(E) Any person who owns or operates any type of offset lithographic printing press shall be considered in compliance with the fountain solution limitations of this paragraph if the only VOCs in the fountain solution are in nonalcohol additives or alcohol substitutes, so that the concentration of VOCs in the fountain solution is 3.0% or less (by weight). The fountain solution shall not contain any isopropyl alcohol.

(F) Any person who owns or operates an offset lithographic printing press shall reduce VOC emissions from cleaning solutions by one of the following methods:

(i) using cleaning solutions with a VOC content of 50% or less (by volume, as used); or

(ii) using cleaning solutions with a VOC content of 70% or less (by volume, as used) and incorporating a towel handling program which ensures that all waste ink, solvents, and cleanup rags shall be stored in closed containers until removed from the site by a licensed disposal/cleaning service.

(2) No person shall operate or allow the operation of a heatset offset lithographic printing press unless VOC emissions from the press dryer exhaust vent are reduced 90% by weight or a

maximum dryer exhaust outlet concentration of 20 ppmv is maintained, whichever is less stringent when the press is in operation.

SUBCHAPTER F: MISCELLANEOUS INDUSTRIAL SOURCES

DIVISION 1: CUTBACK ASPHALT

§§115.512, 115.517, 115.519

STATUTORY AUTHORITY

The amendments are adopted under Texas Water Code (TWC), §5.103, which authorizes the commission to adopt rules necessary to carry out its powers and duties under the TWC; Texas Health and Safety Code, TCAA, §382.017, which provides the commission authority to adopt rules consistent with the policy and purposes of the TCAA; §382.002, which establishes the commission's purpose to safeguard the state's air resources, consistent with the protection of public health, general welfare, and physical property; §382.011, which authorizes the commission to control the quality of the state's air; §382.012, which authorizes the commission to develop plans to protect the state's air; and §382.016, which authorizes the commission to require that records of the air contaminant emissions from a source or activity be made and maintained.

§115.512. Control Requirements.

The following control requirements shall apply in Nueces County and the Beaumont/Port Arthur, Dallas/Fort Worth, El Paso, and Houston/Galveston areas as defined in §115.10 of this title (relating to Definitions).

(1) The use of conventional cutback asphalt containing volatile organic compounds (VOC) solvents for the paving of roadways, driveways, or parking lots is restricted to no more than 7.0% of the total annual volume averaged over a two-year period of asphalt used by or specified for use by any state, municipal, or county agency who uses or specifies the type of asphalt application.

(2) In the Beaumont/Port Arthur, Dallas/Fort Worth, El Paso, and Houston/Galveston areas, no person shall allow the use, application, sale, or offering for sale of conventional cutback asphalt containing VOC solvents for paving roadways, driveways, or parking lots during the period from April 16 to September 15 of any year.

(3) When asphalt emulsion is used or produced, the maximum VOC content shall not exceed 12% by weight or the following limitations, whichever is more stringent:

(A) 0.5% by weight for seal coats;

(B) 3.0% by weight for chip seals when dusty or dirty aggregate is used;

(C) 8.0% by weight for mixing with open graded aggregate with less than 1.0% by weight of dust or clay-like materials adhering to the coarse aggregate fraction (1/4 inch in diameter or greater); and

(D) 12% by weight for mixing with dense graded aggregate when used to produce a mix designed to have 10% or less voids when fully compacted.

§115.517. Exemptions.

For persons in Nueces County and the Beaumont/Port Arthur, Dallas/Fort Worth, El Paso, and Houston/Galveston Areas, the following are exempt from the provisions of §115.512(2) of this title (relating to Control Requirements):

- (1) asphalt concrete made with cutback asphalt, used for patching, which is stored in a long-life stockpile (longer than one-month storage); and
- (2) cutback asphalt used solely as a penetrating prime coat.

§115.519. Counties and Compliance Schedules.

All affected persons in Brazoria, Chambers, Collin, Dallas, Denton, El Paso, Fort Bend, Galveston, Hardin, Harris, Jefferson, Liberty, Montgomery, Nueces, Orange, Tarrant, and Waller Counties shall continue to comply with applicable sections of this division (relating to Cutback Asphalt) as required by §115.930 of this title (relating to Compliance Dates).