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*Thomas Estrada*

The repeal is adopted under Texas Water Code, §5.103, concerning Rules, and §5.105, concerning General Policy, that authorize the commission to adopt rules necessary to carry out its powers and duties under the Texas Water Code; and under Texas Health and Safety Code, §382.017, concerning Rules, that authorizes the commission to adopt rules consistent with the policy and purposes of the Texas Clean Air Act. The repeal is also adopted under Texas Health and Safety Code, §382.002, concerning Policy and Purpose, that establishes the commission's purpose to safeguard the state's air resources, consistent with the protection of public health, general welfare, and physical property; §382.011, concerning General Powers and Duties, that authorizes the commission to control the quality of the state's air; §382.012, concerning State Air Control Plan, that authorizes the commission to prepare and develop a general, comprehensive plan for the proper control of the state's air; and §382.016, concerning Monitoring Requirements Examination of Records, that authorizes the commission to prescribe reasonable requirements for measuring and monitoring the emissions of air contaminants.

This agency hereby certifies that the adoption has been reviewed by legal counsel and found to be a valid exercise of the agency's legal authority.

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## SUBCHAPTER D. PETROLEUM REFINING, NATURAL GAS PROCESSING, AND PETROCHEMICAL PROCESSES

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

#### **30 TAC §§115.352, 115.354 - 115.357, 115.359**

The Texas Commission on Environmental Quality (commission) adopts the amendments to §§115.352, 115.354 - 115.357, and 115.359; and corresponding revisions to the state implementation plan (SIP). Sections 115.352 and 115.354 - 115.357 are adopted *with changes* to the proposed text as published in the July 9, 2004, issue of the *Texas Register* (29 TexReg 6571). Section 115.359 is adopted *without change* and will not be republished.

The amended sections will be submitted to the United States Environmental Protection Agency (EPA) as revisions to the SIP.

BACKGROUND AND SUMMARY OF THE FACTUAL BASIS FOR THE ADOPTED RULES

The adopted amendments to §§115.352, 115.354 - 115.357, and 115.359 improve the language with regard to the commission's intent as to what is required by these sections, and remove provisions that require extensive recordkeeping and reporting but that do not contribute directly to emission reductions.

#### SECTION BY SECTION DISCUSSION

##### *General Administrative Rule Language Changes*

The commission adopts amendments to change the word "shall" to "must" or "may" and the word "which" to "that" in numerous locations in the rule language to conform to the drafting rules in the *Texas Legislative Council Drafting Manual*, October 2002. The commission also adopts amendments throughout the rule language to add hyphens to the terms "unsafe to monitor" and "unsafe to inspect" when the terms are used as adjectives.

The commission adopts amendments to spell out acronyms the first time they are used in a section and delete acronyms that are only used once in a section. The acronym "EPA" is spelled out as "United States Environmental Protection Agency" in §§115.352, 115.354, 115.356, 115.357, and 115.359. The term "Code of Federal Regulations" is acronymed as "CFR" in §115.352 and the acronym "CFR" is spelled out in §115.355. The acronym "HRVOC" is spelled out as "highly-reactive volatile organic compound" in §115.352. The acronym "API" is deleted in §115.355. The acronym "VOC" is deleted in §115.356. The acronym "kPa" is spelled out as "kiloPascals" in §115.357.

The commission adopts amendments to change all references from the Houston/Galveston area to the Houston/Galveston/Brazoria area in §§115.352 and 115.354 - 115.357 to correspond to federal references to the area.

##### *Section 115.352, Control Requirements*

The commission adopts the amendment to §115.352(2) that restores the language as it was prior to the amendments that were published in the January 3, 2003, issue of the *Texas Register* (28 TexReg 9835) with the exception of subparagraph (C) and the first sentence of subparagraph (D). The amendment deletes subparagraphs (A), (B), and (E) of the 2003 amendments that specified the procedure to be used to demonstrate that emissions from leaking components that cannot be repaired without a process unit shutdown, are less than the emissions that a shutdown would generate. The amendment removes this language from the general fugitive rules in Chapter 115, Subchapter D (concerning Petroleum Refining, Natural Gas Processing, and Petrochemical Processes) and concurrent rulemaking moves the language to Chapter 115, Subchapter H, Division 3 (concerning Fugitive Emissions), so that it now applies only to components in HRVOC service. In response to comments received, the adopted amendment adds a sentence at the end of paragraph (2) to state that the repair of a leaking component may be delayed until the next scheduled process unit shutdown if repair within 15 days after the leak is detected would require a process unit shutdown that would create more emissions than the repair would eliminate.

In response to comment, the commission adds §115.352(2)(C) to allow delay of repair of up to six months for pumps, compressors, or agitators if the repair is completed as soon as possible, but not later than six months after leak detection, and the repair involves upgrading existing seals or venting to a closed vent system and control device in accordance with 30 TAC §115.122(a)(2), concerning Control Requirements.

In response to comments, the commission adopts the amendment to §115.352(7) that changes the term "nonaccessible component" to "difficult-to-monitor component" to be consistent with the use of the term "difficult-to-monitor component" in Chapter 115, Subchapter H. The adopted amendment uses the terminology "difficult-to-monitor" instead of the proposed terminology "nonaccessible" because this term more accurately describes these components. The amendment also expands the use of the term "difficult-to-monitor component" to include components that would require a permit for confined space entry as defined in 29 CFR §1910.146 (concerning Permit-required confined spaces). Components that cannot be accessed for monitoring without permit-required confined space entry should be allowed the same reduction in monitoring frequency as elevated components. The amendment also adds the phrase "as specified in §115.356(4) of this . . ." at the end of paragraph (7) and in the last sentence of paragraph (9) to specify to whom the list must be made available.

The commission adopts the amendment to §115.352(8) that deletes the requirement to monitor new and reworked piping connections. The monitoring requirement is being moved to §115.354(11) so that it will be located in the same section with other monitoring requirements.

#### *Section 115.354, Monitoring and Inspection Requirements*

The commission adopts the amendment that changes the title of §115.354 from "Inspection Requirements" to the more descriptive title "Monitoring and Inspection Requirements" because the section contains requirements for both monitoring and inspection of fugitive components. To more clearly describe the requirements of the section, the amendment also changes the first sentence to state that affected persons must conduct a monitoring and inspection program.

The amendment changes the word "measure" in §115.354(1), (2), and (4) to the word "monitor" to maintain consistency with other language that refers to the required activity as "monitoring."

The commission adopts the amendment to §115.354(1)(A) to specify that only process drains receiving or contacting affected volatile organic compound wastewater streams, as defined in Subchapter B, Division 4 of this chapter (concerning Industrial Wastewater), are required to conduct the yearly hydrocarbon gas analyzer monitoring. This amendment ensures that drains with little or no potential for VOC emissions would not be subject to the annual monitoring requirement.

The commission adopts the amendment to §115.354(1)(B) and (C) to specify that only those difficult-to-monitor and unsafe-to-monitor components that would otherwise be subject to more frequent monitoring are subject to annual monitoring. Amendments published in the November 7, 2003, issue of the *Texas Register* (28 TexReg 9835) replaced the term "valves" with the more general term "components." The resulting language could have been interpreted to mean that all difficult-to-monitor and unsafe-to-monitor components would be subject to annual monitoring, even though some components (such as flanges) would not be subject to monitoring even if they were not difficult to monitor or unsafe to monitor. The amendment adds language specifying that annual monitoring for difficult-to-monitor and unsafe-to-monitor components is required only if the component would otherwise be subject to more frequent monitoring under §115.354(2). The adopted amendment also deletes the proposed reference to "paragraph (2) of this section" from the first

sentence of §115.354(1)(C), and replaces the reference to "complying with paragraph (2) of this section" with the words "conducting the monitoring" in the second sentence of paragraph (1)(C) to clarify that the exclusion for unsafe-to-monitor components is not limited to components that would otherwise be monitored quarterly. The amendment also adds the phrase "as specified in §115.356(4) of this . . ." to the sentence in paragraph (1)(C) that begins with "Components that . . ." to specify to whom the list must be made available. Finally, the amendment changes the phrase ". . . during safe to monitor times" to the phrase ". . . during times that are safe to monitor" to be consistent with the language in new paragraph (11).

The commission adopts the amendment to §115.354(3) that exempts flanges from weekly visual, audio, olfactory inspections if the flanges are monitored at least once each calendar year using EPA Test Method 21 as found in 40 CFR Part 60, Appendix A (October 17, 2000). Flanges that are monitored at the same frequency and with the same methodology for other reasons should be allowed the same exemption from weekly inspections as flanges that are monitored under the HRVOC rules. The amendment to §115.354(3) also specifies that flanges that cannot be safely inspected are not subject to the weekly inspection requirement, but must be inspected as soon as possible during a time it is safe to inspect. Flanges that are unsafe to inspect must be identified in a list made available upon request.

In response to comment, the commission adopts the amendment to §115.354(4) that allows an exclusion from monitoring relief valves that have vented to the atmosphere within 24 hours after venting if the relief valves are unsafe to monitor or difficult to monitor. Relief valves that are unsafe to monitor must be monitored as soon as possible during times that are safe and relief valves that are difficult to monitor must be monitored within 15 days after a release instead of within 24 hours.

The commission adopts the amendment to §115.354(5) that allows difficult-to-monitor leaking components to be identified by reference tagging. A leaking component may be detected by audio, visual, or olfactory inspection, but physically attaching a tag to the component may be extremely difficult. The amendment allows such leaks to be tagged at grade level with a reference to the elevated component.

In response to comment, the commission adds the words "the" and "period" to the second sentence of adopted §115.354(7) to more clearly define what is required.

In response to comment, the commission adopts the amendment that deletes §115.354(10), regarding the use of dataloggers and/or electronic data collection devices, from the general fugitive rules in Subchapter D and in concurrent rulemaking moves the requirement to Subchapter H, Division 3, so that it applies only to components in HRVOC service.

The commission adopts the amendment to renumber paragraph (11) as paragraph (10) because the existing paragraph (10) is deleted.

The commission adopts §115.354(11) that contains the requirement to monitor new and reworked piping connectors. The requirement previously located in §115.352(8) was moved to §115.354 to be located in the same section as other monitoring requirements. In response to comment, the word "connections" is replaced with the word "connectors" because connector is a term defined in 30 TAC §115.10 that more clearly describes the intent of the subsection. The adopted amendment deleted the proposed language that specified that joined fittings welded

completely around the circumference of the interface are not subject to this monitoring requirement, because the definition of "connector" in §115.10 specifically excludes these welded connections because of their low potential for leaks. Finally, the amendment changes the phrase ". . . during safe times" to the phrase ". . . during times that are safe to monitor" to be consistent with the language in paragraph (1)(C).

#### *Section 115.355, Approved Test Methods*

The commission adopts the amendment to add the most recent date of Test Method 21 of October 17, 2000, to the CFR citation in §115.355.

#### *Section 115.356, Recordkeeping Requirements*

The commission adopts the amendment that changes the title of §115.356 from "Monitoring and Recordkeeping Requirements" to "Recordkeeping Requirements" to better reflect the content of the section. The amendment also reworded the first sentence of §115.356 and paragraph (2)(C) to state the requirement more clearly.

The commission adopts the amendment to §115.356(2) that deletes subparagraph (D) and reletters the remaining subparagraphs as appropriate. Subparagraph (D) is deleted because it requires the maintenance of unnecessary records. Records of flange inspections are required only if a leak is detected.

The commission adopts the amendment to §115.356(2)(D), which is relettered from §115.356(2)(E), that deleted the phrase "data required in §115.354(10) of this title" because §115.354(10) is deleted.

The commission adopts the amendment that reletters §115.356(2)(F) as §115.356(2)(E) and adds the words "if applicable." This subparagraph lists the items for which records are required to be maintained for leaking components; however, some of these required data elements are not applicable for all components. The wording change specifies that only those records applicable for a particular leaking component need to be maintained. The amendment adds the CFR citation for Test Method 21 in §115.356(2)(E)(i). The amendment deletes §115.356(2)(E)(vi) and renumbers paragraphs (2)(E)(vii) and (viii) to (2)(E)(vi) and (vii) because records of extraordinary efforts to repair leaking components are no longer required. The amendment also deletes §115.356(2)(E)(ix). This requirement to maintain a record of the estimated VOC emission rate of the component is deleted from Subchapter D and moved in concurrent rulemaking to Subchapter H so that it will be applicable only to components in HRVOC service. The amendment reletters §115.356(2)(G) to §115.356(2)(F) because of the deletion of §115.356(2)(E).

The commission adopts the amendment that deletes §115.356(3). The requirement to maintain records of estimated VOC emissions from leaking components is deleted from Subchapter D and moved in concurrent rulemaking to Subchapter H so that it will be applicable only to components in HRVOC service. The amendment also renumbers §115.356(4) and (5) as §115.356(3) and (4), respectively.

The commission adopts the amendment that changes the word "valve" in renumbered paragraph (3) to the more general term "component" to make clear that records identifying components other than valves that are unsafe to monitor or difficult to monitor must be maintained. Additionally, the amendment to §115.356(3)(A) requires that records be maintained to identify and justify each unsafe-to-inspect flange.

The commission adopts the amendment to change the term "nonaccessible" in §115.356(3)(B) to "difficult-to-monitor" to be consistent with the change in terminology in §115.352(7).

The commission adopts the amendment to §115.356(3)(C) that provides several options for documenting component exemptions. The previous requirement to maintain records of each exemption by component would have required more extensive records for certain exempt components than would have been required for monitored components. The options listed allow more flexibility in recordkeeping while maintaining the integrity of the requirement to document the basis for exemptions. For example, a section of a process unit that handles only fluids having a vapor pressure of 0.044 pounds per square inch, absolute or less could be shown as such on a site plan instead of having each component listed separately as qualifying for the exemption in §115.357(1).

#### *Section 115.357, Exemptions*

The commission adopts the amendment to §115.357(2), (5) - (7), (10), and (11) to specify that the affected persons in the Beaumont/Port Arthur, Dallas/Fort Worth, El Paso, and Houston/Galveston/Brazoria (HGB) areas must comply with the recordkeeping requirements of §115.356(3)(C) to identify exempt components and justify the exemptions claimed.

The amendment to §115.357(1) requires that components in heavy liquid service that are exempt from instrument monitoring be inspected by visual, auditory, and/or olfactory means according to the same schedule as would be required for instrument monitoring rather than only by visual monitoring. The amendment results in inspection requirements for unmonitored heavy liquid components consistent with inspection requirements for unmonitored flanges.

The amendment to the exemption in §115.357(10) for connectors in instrumentation systems is expanded to include all components in the instrumentation system. The commission adopts §115.357(11) to exempt components in sampling connection systems as defined in 40 CFR §63.161 (January 17, 1997), that meet the requirements of 40 CFR §63.166(a) and (b) (June 20, 1996). These exemptions are consistent with exemptions in §115.787 for instrumentation and sampling connection systems in HRVOC service.

The commission adopts §115.357(12) to exempt insulated components from the monitoring requirements in §115.354(1), (2), and (4), because the removal of insulation in order to allow access by a monitor probe is expensive and could expose personnel to a safety hazard.

The commission adopts §115.357(13) that provides a *de minimis* vapor pressure cutoff of 0.002 pounds per square inch, absolute at 68 degrees Fahrenheit. Components with a VOC vapor pressure equal to or below this cutoff would be exempt from the requirements in this division. This cutoff is consistent with the commission's Air Permits Division policy that fugitive emissions from compounds with a vapor pressure below this level do not need to be calculated.

The amendment renumbers paragraphs (11) and (12) as paragraphs (13) and (14), respectively. The word "may" has been added to renumbered §115.357(14) to clarify that the exemptions in §115.357 do not exempt components in the HGB area from the requirements of Subchapter H. The previous wording could have been misconstrued to imply that certain components are subject to the Subchapter H requirements.

### Section 115.359, Counties and Compliance Schedules

The commission adopts the amendment to §115.359 that removes the reference to §115.356(2)(D) because that requirement is deleted, as noted earlier. In addition, the amendment changes the reference to the title of §115.356, which is also changed. The amendment to §115.359(3) deletes the reference to paragraph (4) because existing §115.356(3) is deleted, and §115.356(4) is renumbered as paragraph (3).

### FINAL REGULATORY IMPACT ANALYSIS DETERMINATION

The commission reviewed the rulemaking action in light of the regulatory analysis requirements of Texas Government Code, §2001.0225, and determined that the rulemaking action does not meet the definition of a "major environmental rule" as defined in that statute. A "major environmental rule" is 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.

The amendments to Chapter 115 and revisions to the SIP improve implementation of Chapter 115 by making changes to language and organization to improve the language with regard to the commission's intent as to what is required by the rules, and remove provisions that require extensive recordkeeping and reporting but that do not contribute directly to emission reductions. The amendments also delete certain requirements from Subchapter D and move them to Subchapter H so that they will be applicable only to sources of HRVOC in the HGB area. The amendments will not have adverse effects as a result of enforcement and administration of the amendments, because the amendments do not impose any new requirements. Many of these sources are owned or operated by utilities, petrochemical plants, refineries, and other industrial, commercial, or institutional groups, and each group could be considered a sector of the economy. This is based on the analysis provided in the proposal preamble, including the discussion in the PUBLIC BENEFITS AND COSTS section of the proposal preamble. The remaining amendments in this rulemaking are intended to correct typographical errors, update cross-references, add flexibility, and delete obsolete language. None of these amendments are expected to 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.

The amendments do not meet any of the four applicability criteria 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.

The amendments implement requirements of the Federal Clean Air Act (FCAA), codified in 42 United States Code (USC), §7410, *et seq.*, §110, which requires states to adopt a SIP that provides for "implementation, maintenance, and enforcement" of the primary national ambient air quality standard (NAAQS) in each air quality control region of the state. While

42 USC, §7410, does not require specific programs, methods, or reductions in order to meet the standard, SIPs must include "enforceable emission limitations and other control measures, means or techniques (including economic incentives such as fees, marketable permits, and auctions of emissions rights), as well as schedules and timetables for compliance as may be necessary or appropriate to meet the applicable requirements of this chapter," (meaning 42 USC, Chapter 85, Air Pollution Prevention and Control). It is true that the FCAA does require some specific measures for SIP purposes, such as the inspection and maintenance program, but those programs are the exception, not the rule, in the SIP structure of the FCAA. The provisions of the FCAA recognize that states are in the best position to determine what programs and controls are necessary or appropriate in order to meet the NAAQS. This flexibility allows states, affected industry, and the public, to collaborate on the best methods for attaining the NAAQS for the specific regions in the state. Even though the FCAA allows states to develop their own programs, this flexibility does not relieve a state from developing a program that meets the requirements of 42 USC, §7410. Thus, while specific measures are not generally required, the emission reductions are required. States are not free to ignore the requirements of 42 USC, §7410, and must develop programs to assure that the nonattainment areas of the state will be brought into attainment on schedule.

The requirement to provide a fiscal analysis of proposed regulations in the Texas Government Code was amended by Senate Bill (SB) 633, 75th Legislature, 1997. The intent of SB 633 was to require agencies to conduct a regulatory impact analysis of extraordinary rules. These are identified in the statutory language as major environmental rules that will have a material adverse impact and will exceed a requirement of state law, federal law, or a delegated federal program, or are adopted solely under the general powers of the agency. With the understanding that this requirement would seldom apply, the commission provided a cost estimate for SB 633 that concluded "based on an assessment of rules adopted by the agency in the past, it is not anticipated that the bill will have significant fiscal implications for the agency due to its limited application." The commission also noted that the number of rules that would require assessment under the provisions of the bill was not large. This conclusion was based, in part, on the criteria set forth in the bill that exempted proposed rules from the full analysis unless the rule was a major environmental rule that exceeds a federal law. As discussed earlier in this preamble, 42 USC, §7410, does not require specific programs, methods, or reductions in order to meet the NAAQS; thus, states must develop programs for each nonattainment area to ensure that area will meet the attainment deadlines. Because of the ongoing need to address nonattainment issues, the commission routinely proposes and adopts SIP rules. The legislature is presumed to understand this federal scheme. If each rule proposed for inclusion in the SIP was considered to be a major environmental rule that exceeds federal law, then every SIP rule would require the full regulatory impact analysis contemplated by SB 633. This conclusion is inconsistent with the conclusions reached by the commission in its cost estimate and by the Legislative Budget Board in its fiscal notes. Because the legislature is presumed to understand the fiscal impacts of the bills it passes, and that presumption is based on information provided by state agencies and the Legislative Budget Board, the commission believes that the intent of SB 633 was only to require the full regulatory impact analysis for rules that are extraordinary in nature. While the SIP rules will have a broad impact, that impact is

no greater than is necessary or appropriate to meet the requirements of 42 USC, §7410. For these reasons, rules adopted for inclusion in the SIP fall under the exception in Texas Government Code, §2001.0225(a), because they are specifically required by federal law.

In addition, 42 USC, §7502(a)(2), requires attainment as expeditiously as practicable, and 42 USC, §7511a(d), requires states to submit ozone attainment demonstration SIPs for severe ozone nonattainment areas such as the HGB area. As discussed earlier in this preamble, controls on upsets and routine industrial VOC emissions are necessary to address some of the elevated ozone levels observed in the HGB area; these controls will result in reductions in ozone formation in the HGB area and help bring the HGB area into compliance with the air quality standards established under federal law as NAAQS for ozone. Compliance with these rules will reduce ambient VOC and ozone in the HGB area and the commission is submitting these to the EPA as one of several measures in the federally approved SIP. Therefore, the amendments are necessary components of and consistent with the ozone attainment demonstrations SIP for the HGB area, as required by 42 USC, §7410.

The commission has consistently applied this construction to its rules since this statute was enacted in 1997. Since that time, the legislature has revised the Texas Government Code, but left this provision substantially unamended. The commission presumes that "when an agency interpretation is in effect at the time the legislature amends the laws without making substantial change in the statute, the legislature is deemed to have accepted the agency's interpretation." *Central Power & Light Co. v. Sharp*, 919 S.W.2d 485, 489 (Tex. App. Austin 1995), *writ denied with per curiam opinion respecting another issue*, 960 S.W.2d 617 (Tex. 1997); *Bullock v. Marathon Oil Co.*, 798 S.W.2d 353, 357 (Tex. App. Austin 1990), *no writ*. Cf. *Humble Oil & Refining Co. v. Calvert*, 414 S.W.2d 172 (Tex. 1967); *Sharp v. House of Lloyd, Inc.*, 815 S.W.2d 245 (Tex. 1991); *Southwestern Life Ins. Co. v. Montemayor*, 24 S.W.3d 581 (Tex. App.-Austin 2000), *pet. denied*; and *Coastal Indust. Water Auth. v. Trinity Portland Cement Div.*, 563 S.W.2d 916 (Tex. 1978).

As discussed earlier in this preamble, this rulemaking implements requirements of 42 USC, §7410. There is no contract or delegation agreement that covers the topic that is the subject of this rulemaking. Therefore, the amendments do not exceed a standard set by federal law, exceed an express requirement of state law, exceed a requirement of a delegation agreement, nor are adopted solely under the general powers of the agency. Finally, this rulemaking was not developed solely under the general powers of the agency, but is authorized by specific sections of the Texas Health and Safety Code and Texas Water Code that are cited in the STATUTORY AUTHORITY section of this preamble, including Texas Health and Safety Code (also known as the Texas Clean Air Act), §§382.011, 382.012, 382.016, 382.017, and 382.021. Therefore, this rulemaking is not subject to the regulatory analysis provisions of Texas Government Code, §2001.0225(b), because the amendments do not meet any of the four applicability requirements.

#### TAKINGS IMPACT ASSESSMENT

The commission completed a takings impact analysis for the rulemaking action under Texas Government Code, §2007.043. The adopted amendments will not impose any new requirements on individuals or businesses required to comply with the rules. The purposes of the amendments are to improve the language with regard to the commission's intent as to what is required by

the rules, and to remove certain requirements for sources in general VOC service and make the requirements applicable only to sources in HRVOC service. The amendments also make a variety of changes that correct typographical errors, update cross-references, add flexibility, and amend requirements to achieve the intended emission reductions of the program. The commission does not anticipate any adverse fiscal implications resulting from the implementation of the amendments, and the amendments will not place a burden on private, real property.

Texas Government Code, §2007.003(b)(4), provides that Chapter 2007 does not apply to this rulemaking action, because it is reasonably taken to fulfill an obligation mandated by federal law. The emission limitations and control requirements within this rulemaking action were developed in order to meet the ozone NAAQS set by the EPA under 42 USC, §7409. States are primarily responsible for ensuring attainment and maintenance of NAAQS once the EPA has established them. Under 42 USC, §7410, and related provisions, states must submit, for approval by the EPA, SIPs that provide for the attainment and maintenance of NAAQS through control programs directed to sources of the pollutants involved. Therefore, one purpose of this rulemaking action is to meet the air quality standards established under federal law as NAAQS.

In addition, Texas Government Code, §2007.003(b)(13), states that Chapter 2007 does not apply to an action that: 1) is taken in response to a real and substantial threat to public health and safety; 2) is designed to significantly advance the health and safety purpose; and 3) does not impose a greater burden than is necessary to achieve the health and safety purpose. Although the adopted amendments do not directly prevent a nuisance or prevent an immediate threat to life or property, they do prevent a real and substantial threat to public health and safety and significantly advance the health and safety purpose. This action is taken in response to the Beaumont/Port Arthur, Dallas/Fort Worth, El Paso, and HGB areas exceeding the federal ozone NAAQS, which adversely affects public health, primarily through irritation of the lungs. The action significantly advances the health and safety purpose by reducing ozone levels in these areas. Consequently, these amendments meet the exemption in Texas Government Code, §2007.003(b)(13). This rulemaking action therefore meets the requirements of Texas Government Code, §2007.003(b)(4) and (13). For these reasons, the amendments do not constitute a takings under Chapter 2007.

#### CONSISTENCY WITH THE COASTAL MANAGEMENT PROGRAM

The commission reviewed the rulemaking action and found that the adoption is an action identified in Coastal Coordination Act Implementation Rules, 31 TAC §505.11, or will affect an action/authorization identified in §505.11, and therefore will require that applicable goals and policies of the Texas Coastal Management Program (CMP) be considered during the rulemaking process.

The commission determined that under 31 TAC §505.22 the rulemaking action is consistent with the applicable CMP goals and policies. The CMP goal applicable to this rulemaking action is the goal to protect, preserve, and enhance the diversity, quality, quantity, functions, and values of coastal natural resource areas (31 TAC §501.12(1)). No new sources of air contaminants will be authorized and ozone levels will be reduced as a result of these amendments. The CMP policy applicable to this rulemaking action is the policy that commission rules comply with regulations in 40 CFR, to protect and enhance air quality in the coastal area

(31 TAC §501.14(q)). This rulemaking action complies with 40 CFR. Therefore, in compliance with 31 TAC §505.22(e), this rule-making action is consistent with CMP goals and policies.

#### EFFECT ON SITES SUBJECT TO THE FEDERAL OPERATING PERMIT PROGRAM

Chapter 115 is an applicable requirement under 30 TAC Chapter 122; therefore, owners or operators subject to the federal operating permit program must, consistent with the revision process in Chapter 122, revise their operating permits to include the revised Chapter 115 requirements for each emission unit affected by the revisions to Chapter 115 at their sites.

#### PUBLIC COMMENT

Public hearings for this rulemaking were held on August 2, 2004, in Houston; August 3, 2004, in Beaumont; and August 5, 2004, in Austin. The following persons submitted written or oral comment: BP Products North America, Inc. (BP); Chevron Phillips Chemical Company, L.P. (Chevron-Phillips); Dow Chemical Company (Dow); Environmental Defense; EPA; ExxonMobil; Galveston-Houston Association for Smog Prevention (GHASP); Sierra Club - Houston Regional Group (Sierra Club); Texas Chemical Council (TCC); Texas Oil and Gas Association (TxOGA); and Valero.

#### RESPONSE TO COMMENTS

Dow and TCC generally supported the direction of the proposal. BP supported the TCC comments. Chevron-Phillips and Dow supported the TCC comments regarding the general VOC fugitives rules. Environmental Defense, GHASP, and Sierra Club generally opposed the proposal. Dow, ExxonMobil, GHASP, TCC, TxOGA, Valero, and EPA expressed concerns and/or suggested changes to the proposal.

#### RESPONSE

The commission appreciates the comments.

Dow and TCC supported the deletion of §115.352(2)(A), (B), and (E) and suggested that an additional sentence be included to fully restore the previous language as it existed prior to the amendments that were published in the January 3, 2003, issue of the *Texas Register* (28 TexReg 9835).

#### RESPONSE

The commission appreciates the support. The suggested sentence has been added at the end of §115.352(2) to fully restore the previous language.

ExxonMobil, TxOGA, and Valero supported the deletion of §115.352(2)(A), (B), and (E), and stated that the existing prescriptive rule would drive mandatory shutdowns to repair leaking components that would create emissions that would actually be a greater impact contrary to the rule objective. ExxonMobil, TxOGA, and Valero noted that both VOC and nitrogen oxides (NO<sub>x</sub>) emissions associated with a shutdown should be considered because both pollutants are ozone precursors. ExxonMobil, TxOGA, and Valero asserted that most VOC emissions generated during a shutdown would be abated in a control device such as a flare, which will generate additional NO<sub>x</sub> emissions. ExxonMobil, TxOGA, and Valero also noted that the short-term impact of shutdown emissions should be considered. The calculation in the current rule focuses on the overall net emissions from leaking components over the entire time frame until the next shutdown. These emissions would be a small daily amount, while the shutdown emissions would be over a short time period and thus could have a greater potential to

contribute to an ozone event. ExxonMobil, TxOGA, and Valero further noted that a shutdown should not be required during ozone alerts. ExxonMobil, TxOGA, and Valero commented that calculation of emissions from leaking components should be only forward in time, from the time of decision until the scheduled shutdown, because emissions that occurred prior to that time cannot be offset. ExxonMobil, TxOGA, and Valero also commented that correlation equations should be allowed for leaking components in heavy liquid service if the components are monitored, because using the default pegged rate would overstate the impact of these leaks. ExxonMobil, TxOGA, and Valero commented that no time limit should be set for extraordinary efforts to repair leaking valves as a condition of the components being excluded from the delay of repair emission calculations. ExxonMobil, TxOGA, and Valero commented that shutdown to repair leaking fugitive components within 15 days is impractical. ExxonMobil, TxOGA, and Valero noted that proper planning for a unit shutdown would require at least three months, and often as much as a year, and commented that moving up the date of the next scheduled shutdown should be an option. ExxonMobil, TxOGA, and Valero also noted that shutdown emissions depend on the scope of work planned, because this would affect the amount of unit equipment that would have to be cleared for repair work. Technology and procedures for clearing equipment for repairs and controlling emissions are being improved over time. ExxonMobil, TxOGA, and Valero commented that the rules should encourage the evolution of procedures to minimize shutdown emissions and not penalize them by driving more frequent shutdowns. ExxonMobil, TxOGA, and Valero commented that some units have made successful efforts to minimize shutdown-related emissions, such that a low level of emissions from leaking components could trigger a required shutdown. ExxonMobil, TxOGA, and Valero suggested that a minimal threshold be developed below which a shutdown to repair leaking components would not be required. ExxonMobil, TxOGA, and Valero also noted that monitoring of all leaking components repaired during a shutdown within 30 days was impractical.

#### RESPONSE

These comments reflect the rule that was in effect prior to these adopted amendments, and not the proposed rule that was published in the July 9, 2004, issue of the *Texas Register* (29 TexReg 6571). The comments provide support for the changes that were proposed and are now being adopted. As pointed out by the commenters, the requirements could have a detrimental effect on ozone levels by requiring a facility to shut down during the ozone season, causing an increase in VOC and NO<sub>x</sub> emissions over a period of a few days, in order to eliminate emissions that have occurred over a period of years. The shutdown requirements could also have the unintended consequence of penalizing facilities that have minimized shutdown emissions by requiring them to shut down more frequently to repair leaking components.

Environmental Defense, GHASP, and Sierra Club opposed the proposed deletion of §115.352(2)(A), (B), and (E). The Sierra Club stated that more stringent delay-of-repair emission estimates are needed to ensure that regulated entities are repairing leaking components as soon as possible and are not abusing the delay of repair provisions. GHASP expressed concern about the removal of language setting out requirements for undertaking "extraordinary efforts" to control leaks. GHASP noted that in

the absence of this language investigators will have a more difficult time establishing whether a plant is addressing leaks in a timely manner.

#### RESPONSE

The commission made no changes to the rules in response to these comments. The deleted provisions are more stringent than EPA requirements for reasonably available control technology (RACT) and would add a significant cost burden to entities without having any direct environmental benefit. Costs for the additional shutdowns that could be required by the rule have been estimated as \$2.5 million to \$5 million per year, not including the additional recordkeeping requirements to document the calculation of projected emissions. Moreover, as discussed in the previous comment, the requirements could have a detrimental effect by requiring a facility to shut down during the ozone season, causing an increase in VOC and NO<sub>x</sub> emissions over a period of a few days, in order to eliminate emissions that would have occurred over a period of years. Regulated entities are required by §115.356(2)(E) to maintain records of the date a leaking component is discovered, the date that a first attempt at repair is made, the date the component is repaired, the date and instrument reading of the recheck procedure that verified the repair, and the date on which a non-repairable leaking component is placed on the shutdown list. These records allow investigators to determine whether leaks are addressed in a timely manner.

GHASP was opposed to the proposed deletions "at the request of industry." GHASP stated that the use of this language in the proposal demonstrates that the changes cannot be justified as in the public interest. GHASP expressed a belief that one reason for the change was to ensure that the requirements do not apply to any facilities outside the Houston region, but noted that the rule deletions would also reduce requirements for facilities not in HRVOC service in the Houston region.

#### RESPONSE

The commission made no changes to the rules in response to these comments. The commission evaluates all proposed rules and rule changes with regard to the public interest, regardless of which person or group originally suggested the changes. The rule deletions reduce requirements for facilities not in HRVOC service in the HGB area, as noted by GHASP. Maintaining the deleted requirements could have a detrimental effect in the HGB area by requiring a facility to shut down during the ozone season, causing an increase in VOC and NO<sub>x</sub> emissions over a period of a few days, in order to eliminate emissions that have occurred over a period of years.

TCC requested that an additional provision be added to §115.352(2) to allow for delay of repair up to six months after a leak is detected for pumps, compressors, or agitators if the repair would require replacement of the existing seal design with dual mechanical seals including a barrier fluid, a system with no externally actuated shaft penetrating the housing, or a closed vent system and control device. The additional provision would make the Subchapter D rules consistent with the Subchapter H rules for HRVOC fugitives and with federal fugitive rules.

#### RESPONSE

The commission agrees that by not allowing the six-month delay of repair for upgrading seal systems for pumps and compressors, the Subchapter D requirements for general VOC fugitives are more stringent than the Subchapter H requirements for HRVOC

fugitives. Sources subject to Subchapter H must also continue to comply with Subchapter D requirements. For this reason, the commission added §115.352(2)(C) to include the suggested change for pumps and compressors.

Dow suggested a similar change as suggested by TCC in the previous comment but Dow's change would exclude agitators because agitators are not subject to the provisions of the general VOC rules. Dow also suggested more general wording that would allow the delay of repair for replacing the existing seal design with one that the owner or operator expects will provide better performance instead of limiting the delay to the specified replacement options. Dow noted that replacement of single seal systems is generally not required but is desired, and that documentation of procedures documenting how a replacement was determined to be required would be lengthy and burdensome. Dow expressed a belief that the replacement of existing dual mechanical seal systems or sealless pumps with more efficient systems should also qualify for delay of repair.

#### RESPONSE

Dow's statement that "agitators are not subject to the provisions of the general VOC rules" is not correct, because the definition of component in §115.10 as "A piece of equipment, including, but not limited to, pumps, valves, compressors, connectors, and pressure relief valves, which has the potential to leak VOC" includes agitators. There are no requirements to monitor agitators in the general VOC rules, but if a leak is detected by other means, the leak would be required to be repaired in accordance with the control requirements of §115.352. The commission is not including Dow's suggested wording to allow delay for replacement with a seal design that "the owner or operator expects will provide better performance." The owner or operator is not required to demonstrate how it determined that replacement of a single seal with one of the listed options is "required" in order to repair a leaking pump. The new provision, as worded, does not prevent replacing existing dual mechanical seal systems or sealless pumps with more efficient systems. The language suggested by Dow is too subjective and would be practicably unenforceable.

TCC suggested that the terms "nonaccessible component" in §115.352(7), "inaccessible component," and "difficult-to-monitor component" be combined into a single term "difficult-to-monitor" that combines all three concepts. TCC further suggested that the term "difficult-to-monitor" be defined in §115.10.

#### RESPONSE

The commission replaced the term "nonaccessible" with the term "difficult-to-monitor" because this term more accurately describes these components. The commission declines to add the definition of "difficult-to-monitor" to §115.10 or to include the concept of "inaccessible" with "difficult-to-monitor." The term "inaccessible" is used to refer to components that are inaccessible to a monitor probe because of insulation, while the terms "nonaccessible" and "difficult-to-monitor" refer to components that are difficult to access due to their location.

ExxonMobil, TxOGA, and Valero supported the revisions to move all the inspection requirements to §115.354, which is the section concerning inspections.

#### RESPONSE

The commission appreciates the support.

TCC suggested rewording §115.354(1)(A) to specify that only process drains that are subject to the monitoring and control requirements of Subchapter B, Division 4 of this chapter are required to be monitored. ExxonMobil, TxOGA, and Valero suggested that only drains that receive VOCs above 10% should be required to be monitored.

#### RESPONSE

The commission made no change in response to these comments. Under the TCC suggested wording, process drains that receive or contact affected VOC wastewater streams that are exempt from the control requirements in Subchapter B, Division 4 would not be subject to the annual monitoring. These drains may still have potential for VOC emissions and should be monitored. The rule as written would not require monitoring of drains receiving wastewater with less than 1,000 parts per million by weight (ppmw) of VOC at a flow rate greater than or equal to ten liters per minute, or wastewater with less than 10,000 ppmw VOC at any flow rate. These thresholds are adequate to ensure that process drains with little or no potential for VOC emissions would not be subject to the annual monitoring requirement. The 10% VOC cutoff requested by ExxonMobil, TxOGA, and Valero would be equivalent to a VOC concentration of 100,000 ppmw, which would be less stringent than the cutoff in Subchapter B, Division 4, and would not require monitoring of a number of drains with potential for VOC emissions.

ExxonMobil, TxOGA, and Valero commented that only accessible components should require annual monitoring in accordance with §115.354(1).

#### RESPONSE

The amended §115.354(1)(B) and (C) specifies that only those difficult-to-monitor and unsafe-to-monitor components that would otherwise be subject to more frequent monitoring would be subject to annual monitoring. The commission appreciates the support for this change.

Dow, ExxonMobil, TCC, and TxOGA commented that the exclusion for unsafe-to-monitor components in §115.354(1)(C) is unduly restricted to components that are monitored on a quarterly basis and suggested that the reference to paragraph (2) be deleted. They noted that any component for which monitoring or inspection would expose personnel to immediate danger should be considered as unsafe to monitor or inspect.

#### RESPONSE

The commission revised §115.354(1)(C) to clarify that the exclusion for unsafe-to-monitor components is not restricted to components that are monitored on a quarterly basis.

ExxonMobil, TxOGA, and Valero supported the change to §115.354(3) that allows components required to be monitored for reasons other than the HRVOC rules to be exempt from inspection requirements.

#### RESPONSE

The commission appreciates the support.

TCC requested that language be added to §115.354(3) to specify that components other than flanges that are unsafe to inspect would only be monitored during safe-to-monitor times.

#### RESPONSE

The commission declines to make the suggested change. Section 115.354(3) specifies inspection requirements only for

flanges, not other connectors or components, therefore, there is no need to include language stating that other components are to be monitored only during safe-to-monitor times.

TCC suggested that the word "measure" be replaced with "monitor" in §115.354(1), (2), and (4) to more accurately describe the required activity.

#### RESPONSE

The commission made the requested change to be consistent with other references that require "monitoring" of fugitive components.

ExxonMobil, TxOGA, and Valero commented that monitoring of a relief valve after a relief event as required by §115.354(4) may require alternative means of testing due to difficult access. TCC requested that §115.354(4) be revised to specify that relief valves that are unsafe to monitor be exempt from the requirement to monitor them within 24 hours after a release.

#### RESPONSE

The commission agrees that personnel should not be exposed to danger as a result of complying with the requirement. Therefore, the commission added an exemption from monitoring relief valves that are unsafe to monitor, provided the relief valve is monitored during a safe-to-monitor time as soon as possible after relieving. The commission also acknowledges that monitoring difficult-to-monitor relief valves within 24 hours after a release may not be feasible, and changed the requirement to specify that difficult-to-monitor relief valves must be monitored as soon as possible after a release, but at least within 15 days.

ExxonMobil, TxOGA, and Valero expressed support for the change to §115.354(5) that would allow nonaccessible leaking components to be identified by reference tagging.

#### RESPONSE

The commission appreciates the support.

ExxonMobil, TxOGA, and Valero commented on §115.354(6), which allows the executive director to increase monitoring in a process area if there are an excessive number of leaks. ExxonMobil, TxOGA, and Valero noted that there is no guidance or criteria by which the executive director determines that there is an excessive number of leaks.

#### RESPONSE

The commission made no change to the rule in response to these comments. The cited provision has been part of the fugitive rules for more than ten years, and no change was proposed to this paragraph. The determination of what is excessive may depend on the nature of the process area and the specific component types located in the process area. Therefore, the executive director must have sufficient flexibility to make case-by-case evaluations.

Dow and TCC suggested a revision to §115.354(7) to add the words "the" and "period" as follows: ". . . the percent of valves leaking must be determined by dividing the sum of valves leaking during *the* current monitoring *period* and valves for which repair has been delayed . . ."

#### RESPONSE

The commission agrees that the suggested change more clearly states the intent of the provision and changed the provision accordingly.

ExxonMobil, TxOGA, and Valero commented that an acceptable rate for monitoring as required in §115.354(10)(A) should only be determined when necessary as part of an auditing plan and asserted that, given the extreme variability of contributing conditions, it is not feasible to determine an acceptable rate of monitoring for each and every monitoring run.

#### RESPONSE

These comments reflect the rule that was in effect prior to these adopted amendments, and not the proposed rule that was published in the July 9, 2004, issue of the *Texas Register* (29 TexReg 6571). The comments provide support for the changes that were proposed and are now being adopted.

Dow suggested deleting the requirement in §115.354(10) to use a default pegged value of 100,000 parts per million by volume (ppmv) for readings that are higher than the upper end of the scale (pegged) even when using the highest scale setting or a dilution probe. Dow stated that there is no logical reason to change the ppmv reading from what is recorded in the field to a pegged value of 100,000 ppmv, and that to do so would require software changes or manual data revisions. Dow stated that it uses an analyzer with a linear range of 1 - 10,000 ppmv and a dynamic range up to 50,000 ppmv and that accuracy declines as the reading goes above the linear range into the dynamic range. Dow also stated that it does not use a dilution probe. If the instrument detects a reading above 10,000 ppmv, the data logger records the actual screening value and transfers it to the database. For most emission calculations Dow would use the 10,000 ppmv pegged value, but for emission calculations for components for which delay of repair is sought under Subchapter H it uses the 100,000 ppmv pegged value as required by §115.782(c)(1)(B)(i)(II).

#### RESPONSE

The commission declines to make the requested change. It is the commission's intent to require the use of actual, monitored values or to use the highest pegged value to encourage the recording of actual monitored values. The commenter has the option of using the actual recorded values up to 50,000 ppmv or to use a dilution probe when necessary to obtain actual readings up to 100,000 ppmv. The commission also notes that if the commenter is obtaining a reading, the monitor is not "pegged."

EPA expressed disappointment at the proposed deletion of the requirements in §115.354(10) to employ data loggers for record-keeping. EPA stated that the use of data loggers is the most practical way to maintain data for large facilities and that the requirement to establish the time of each data entry is a practical way to help insure that the leak surveys are performed carefully. EPA further stated that careful performance of the leak surveys is the most important factor in the effectiveness of the fugitive emission control program, and that it was unclear why this "seemingly cost effective method of attempting to ensure effectiveness of the program is proposed to not be implemented, especially in light of the evidence that VOC emissions are underestimated." EPA expressed a belief that part of the underestimation likely stems from overestimation of the effectiveness of the fugitive emission control program. GHASP, Sierra Club, and Environmental Defense also opposed the deletion of §115.354(10). GHASP expressed concern that removing the requirements for use of electronic data collection devices during monitoring; use of an electronic database; and documentation of an auditing process to assure proper calibration, identify response time failures, and

assess pace anomalies would make it more difficult for investigators to verify that plants are meeting the expectations of the pollution control plan relied on in the SIP. GHASP also noted that the greater diligence required by the Subchapter D rules seems highly warranted, considering the importance of other reactive VOC emissions. Environmental Defense stated that eliminating existing monitoring, recordkeeping, and control requirements would be a major step backward, and that the proposed deletions would render stepped-up inspection and enforcement efforts to ensure that facilities are complying with monitoring and control requirements impossible.

#### RESPONSE

The deleted provisions that are more stringent than EPA requirements for RACT and would not have any direct environmental benefit. The requirement to determine an acceptable rate of monitoring for each and every monitoring run may not be feasible due to the extreme variability of contributing conditions. The absence of the detailed records on the company's leak monitoring would not impact the commission's ability to conduct its own leak surveys to determine whether the company is conducting Method 21 fugitive monitoring properly. The commission is not restricted from taking an enforcement action if the commission determines that the company is not performing its leak detection and repair program properly.

TCC requested that §115.354(11) be changed to require new connectors to be monitored before the end of the monitoring period in which the installation occurred, instead of within 30 days as is now required. TCC also suggested changing the word "connections" to "connectors"; requiring new connectors to be inspected for leaks by audio, visual, and/or olfactory methods within 30 days of being placed in VOC service; and deleting the last sentence stating that "Joined fittings welded completely around the circumference of the interface are not subject to this requirement." TCC noted that new connectors are usually put into service during turnarounds and that monitoring a specific subset of all components in a process unit within 30 days after a turnaround would be difficult and inefficient. Dow suggested that §115.354(11) be changed to require new connections to be monitored within 90 days and stated that the longer time period would allow for better alignment with the regular quarterly monitoring of other components. Dow also suggested that an exclusion be made for connectors that are nonaccessible or unsafe to monitor.

#### RESPONSE

The commission changed the word "connections" to "connector" because the word "connector" is a term defined in §115.10 that more clearly describes the intent of the subsection. The commission agrees that personnel should not be exposed to danger as a result of complying with the requirement and thus has added an exemption from monitoring connectors that are unsafe to monitor provided they are monitored as soon as possible during a safe-to-monitor time. The commission does not agree to extend the time period for monitoring or to allow an exclusion for nonaccessible (now described as "difficult-to-monitor") components. New connectors are most likely to leak within a short time after they are placed in service and should be monitored as soon as possible so these leaks can be detected and repaired promptly.

ExxonMobil, TxOGA, and Valero supported the proposed deletion of the requirement to maintain records of all audio, visual, and olfactory inspections, and commented that records should be required only when a leaking component is found.

## RESPONSE

The commission appreciates the support for the change.

Dow and TCC suggested that §115.356(2)(E)(vi), which requires maintaining records of the dates and nature of each extraordinary effort to repair leaking components, be deleted because references to extraordinary efforts to repair are otherwise proposed for deletion from Subchapter D.

## RESPONSE

The commission agrees that maintaining the records of extraordinary efforts to repair leaking components is not needed because documentation of such efforts is not required to justify delay of repair of these components. The commission made the change in response to this comment.

TCC suggested that the phrase "if applicable" be deleted from §115.356(2)(E) because it is unnecessary. ExxonMobil, TxOGA, and Valero commented that some of the required data elements are not applicable for all components.

## RESPONSE

The commission included the phrase to clarify that only the applicable records need to be maintained. The commission made no change in response to these comments.

TCC suggested that the word "and" at the end of §115.356(2)(E)(vii) be deleted because the following item is proposed for deletion.

## RESPONSE

The word "and" at the end of §115.356(2)(E)(vii) is necessary because subparagraphs (A) - (F) are a series of records on components and process areas. The commission made no change in response to this comment.

Dow and TCC requested that §115.356(2) and (3)(C) be expanded to specify that the options in §115.781(a)(1) - (6) are acceptable as documentation for exemptions. ExxonMobil, TxOGA, and Valero commented that the documentation of exemption for each component is infeasible.

## RESPONSE

The commission agrees that the options in §115.781(a)(1) - (6) provide sufficient documentation to provide the basis for claimed exemptions and changed the rule accordingly.

Dow and TCC requested that an exemption from monitoring be added for components that are insulated and therefore inaccessible to monitoring with a hydrocarbon analyzer. Dow and TCC also requested that insulated components be exempt from audio, visual, or olfactory inspections.

## RESPONSE

The commission agrees that the rules should not require insulation to be removed for the purpose of conducting monitoring, because the removal of insulation could result in safety hazards and could increase the chance of leaks due to thermal stresses. Therefore, the commission provided an exemption from monitoring insulated components. The commission does not agree that insulated components should be exempt from audio, visual, or olfactory inspections because removing insulation is not necessary to conduct these inspections.

TCC suggested that the commission replace the word "schedules" in §115.357(1) with the word "frequency."

## RESPONSE

The commission declines to make the suggested change because the word "schedules" more clearly describes the required activity.

ExxonMobil, TxOGA, and Valero commented that components contacting low vapor pressure materials referenced in §115.357(1) should require alternate audible, visual, and olfactory inspections, not just visual.

## RESPONSE

This comment reflects the rule that was in effect prior to these adopted amendments, and not the proposed rule that was published in the July 9, 2004, issue of the *Texas Register* (29 TexReg 6571). The commission appreciates the support for the change to require audio, visual, and olfactory inspections for the low vapor pressure components instead of just visual.

ExxonMobil, TCC, and TxOGA requested that the exemption in §115.357(3) be revised to specify that compressors in hydrogen service are exempt if the hydrogen content exceeds 50% by volume during normal operations, excluding times of upsets, shutdowns, maintenance activities, or start-ups.

## RESPONSE

The commission made no change to the rule in response to this comment. The exemption for compressors in hydrogen service was included in the RACT requirements because an exemption for these compressors was allowed in the new source performance standards for equipment leaks of VOC from petroleum refineries in 40 CFR Subpart GGG, §60.593(b). The 40 CFR Subpart GGG provision does not specify that the hydrogen content must exceed 50% only during normal operations. However, the testing that would be required to demonstrate that a compressor is in hydrogen service would be conducted during "normal operation" and not during times of upsets, shutdowns, maintenance activities, or start-ups. Therefore, the correct interpretation of the existing provision is as the commenters suggest.

ExxonMobil, TxOGA, and Valero suggested that an exemption for reciprocating pumps and compressors should apply to all such equipment and not be limited to natural gas/gasoline processing. ExxonMobil, TxOGA, and Valero noted that reciprocating pumps and compressors in all processes have the same difficulty in meeting emission control requirements and stated that they are rarely used in processes, and only when specifically needed.

## RESPONSE

The commission made no change in response to these comments. RACT guidelines allow an exemption for reciprocating pumps and compressors in natural gas/gasoline processing. The exemption was included in Subchapter D, Division 3 when previous regulations for natural gas/gasoline were incorporated into this division.

Dow suggested that §115.357(8) be revised to eliminate the exemption from repair of components in ethylene and propylene service for leaks greater than 500 ppmv but less than 10,000 ppmv. Dow noted that the exemption is no longer usable for facilities in HRVOC service.

## RESPONSE

Dow is correct that the exemption may no longer be used for components in HRVOC service in the HGB area. However, the

provisions in Subchapter D also apply to facilities in the Beaumont/Port Arthur, Dallas/Fort Worth, and El Paso areas. These areas are not subject to the HRVOC provisions in Subchapter H and may still make use of the provision. Therefore, the commission made no change in response to this comment.

TCC and Dow requested that exemptions be added to §115.357 for sampling connection systems and instrumentation systems, because exemptions for these systems are allowed in the HRVOC fugitive rules.

#### RESPONSE

The commission revised the rule to extend the exemption in §115.357(10) to sampling connection systems and instrumentation systems that meet the hazardous organic national emissions standards for hazardous air pollutant requirements in 40 CFR §63.166 and §63.169. These systems were exempted from the requirements in Subchapter H, Division 3, because of the low emission potential for these small components. Exemption from the requirements in Subchapter D, Division 3 is warranted for the same reason.

ExxonMobil, TxOGA, and Valero requested that the additional requirement to meet 40 CFR §163.169 be dropped from §115.357(10) as a condition of the exemption.

#### RESPONSE

The commission declines to make the requested change. The provisions for instrumentation systems in 40 CFR §63.169 do not require scheduled visual, audible, or olfactory inspections, however, if a leak is indicated by these or other detection methods, it must be repaired. If the leak is repaired such that the indication of a possible leak is eliminated, monitoring is not required. This is a reasonable condition for the exemption.

EPA stated that the proposed exemption in §115.357(11) for components with a vapor pressure equal to or less than 0.002 pounds per square inch, absolute does not meet the guidelines of RACT. Because the components would be in heavy liquid service, EPA asserted that they must meet the more relaxed monitoring requirements for that service.

#### RESPONSE

The commission declines to make the suggested change. The maximum VOC concentration that could occur from such a component would be 136 ppmv, which would not reach the threshold of a "leak" with a leak definition of 500 ppmv. The maximum leak rate calculated from the EPA correlation equations would be 0.0024 pound per hour for pumps. For valves, the maximum leak rate would be 0.0007 pound per hour. For other component types, the maximum leak rate would be lower still. The record-keeping required for these components is not worthwhile given their low emission potential.

ExxonMobil, TxOGA, and Valero commented that the reference to dual applicability in §115.357(11) should not create additional applicability criteria for Subchapter H.

#### RESPONSE

The commission added the word "may" to the referenced provision to clarify the intent of the provision. The intent is to note that the exemptions in §115.357 do not exempt components in the HGB area from the requirements of Subchapter H. The current wording could be misconstrued to imply that certain components are subject to the Subchapter H requirements.

#### STATUTORY AUTHORITY

The amendments are adopted under Texas Water Code, §5.103, concerning Rules, and §5.105, concerning General Policy, which authorize the commission to adopt rules necessary to carry out its powers and duties under the Texas Water Code; and under Texas Health and Safety Code, §382.017, concerning Rules, which authorizes the commission to adopt rules consistent with the policy and purposes of the Texas Clean Air Act. The amendments are also adopted under Texas Health and Safety Code, §382.002, concerning Policy and Purpose, which establishes the commission's purpose to safeguard the state's air resources, consistent with the protection of public health, general welfare, and physical property; §382.011, concerning General Powers and Duties, which authorizes the commission to control the quality of the state's air; §382.012, concerning State Air Control Plan, which authorizes the commission to prepare and develop a general, comprehensive plan for the proper control of the state's air; §382.016, concerning Monitoring Requirements Examination of Records, which authorizes the commission to prescribe reasonable requirements for measuring and monitoring the emissions of air contaminants; and §382.021 concerning Sampling Methods and Procedures, which authorizes the commission to prescribe sampling methods and procedures.

#### *§115.352. Control Requirements.*

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

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

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

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

(2) A first attempt at repair must be made no later than five calendar days after the leak is found and the component must be repaired no later than 15 calendar days after the leak is found, unless the repair of the component would require a unit shutdown that would create more emissions than the repair would eliminate. A component in gas/vapor or light liquid service is considered to be repaired when it is monitored with an instrument using United States Environmental Protection Agency Test Method 21 in 40 Code of Federal Regulations (CFR) Part 60, Appendix A (October 17, 2000) and shown to no longer have a leak after adjustments or alterations to the component. A component in heavy liquid service is considered to be repaired when it is inspected by audio, visual, and olfactory means and shown to no longer have a leak after adjustments or alterations to the component. If the repair of a component within 15 days after the leak is detected would require a process unit shutdown that would create more emissions than the repair would eliminate, the repair may be delayed until the next scheduled process unit shutdown.

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

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

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

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

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

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

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

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

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

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

(7) To the extent that good engineering practice will permit, new and reworked components must be so located to be reasonably accessible for leak-checking during plant operation. A difficult-to-monitor component is a component that cannot be inspected without elevating the monitoring personnel more than two meters above a permanent support surface or that requires a permit for confined space entry as defined in 29 CFR §1910.146 (December 1, 1998). Difficult-to-monitor components must be identified in a list to be made available upon request as specified in §115.356(4) of this title (relating to Recordkeeping Requirements).

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

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

§115.356(4) of this title and must have been approved by the methods required by §115.353 of this title (relating to Alternate Control Requirements).

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

#### *§115.354. Monitoring and Inspection Requirements.*

All affected persons in the Beaumont/Port Arthur, Dallas/Fort Worth, El Paso, and Houston/ Galveston/Brazoria areas must conduct a monitoring and inspection program consistent with the following provisions.

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

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

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

(C) unsafe-to-monitor components that would otherwise be subject to more frequent monitoring. An unsafe-to-monitor component is a component that the owner or operator determines is unsafe to monitor because monitoring personnel would be exposed to an immediate danger as a consequence of conducting the monitoring. Components that are unsafe to monitor must be identified in a list made available upon request as specified in §115.356(4) of this title (relating to Recordkeeping Requirements). If an unsafe-to-monitor component is not considered safe to monitor within a calendar year, then it must be monitored as soon as possible during times that are safe to monitor.

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

(A) compressor seals;

(B) pump seals;

(C) accessible valves; and

(D) pressure relief valves in gaseous service.

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

(4) Monitor (with a hydrocarbon gas analyzer) emissions from any relief valve that has vented to the atmosphere within 24 hours

of the release, excluding relief valves that are unsafe to monitor or difficult to monitor. Relief valves that are unsafe to monitor must be monitored as soon as possible after relieving during times that are safe to monitor. Relief valves that are difficult to monitor must be monitored within 15 days after a release.

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

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

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

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

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

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

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

(10) Monitored screening concentrations must be recorded for each component in gaseous or light liquid service. Notations such as "pegged," "off scale," "leaking," "not leaking," or "below leak definition" may not be substituted for hydrocarbon gas analyzer results. For readings that are higher than the upper end of the scale (i.e., pegged) even when using the highest scale setting or a dilution probe, record a default pegged value of 100,000 parts per million by volume.

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

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

#### *§115.355. Approved Test Methods.*

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

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

(2) determination of true vapor pressure using American Society for Testing and Materials Test Methods D323-89, D2879, D4953, D5190, or D5191 for the measurement of Reid vapor pressure, adjusted for 68 degrees Fahrenheit (20 degrees Celsius) in accordance with American Petroleum Institute Publication 2517, Third Edition, 1989;

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

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

#### *§115.356. Recordkeeping Requirements.*

All affected persons in the Beaumont/Port Arthur, Dallas/Fort Worth, El Paso, and Houston/Galveston/Brazoria areas shall maintain the following, either electronically or in hard copy form:

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

(A) the name of each process unit;

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

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

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

(i) the total emissions;

(ii) the calculations used; and

(iii) engineering assumptions applied;

(2) records on components and process areas that contain, at a minimum, the following data:

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

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

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

(D) the calibration of the monitoring instrument;

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

(i) the component identification and method of leak determination (Test Method 21 in 40 Code of Federal Regulations Part 60, Appendix A (October 17, 2000), sight/sound/smell, or inert gas or hydraulic testing);

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

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

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

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

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

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

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

(3) records by process unit identifying and justifying each :

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

(B) difficult-to-monitor component; and

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

(i) a plant site plan;

(ii) color coding;

(iii) a written or electronic database;

(iv) designation of process unit boundaries;

(v) some form of weatherproof identification; or

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

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

#### §115.357. Exemptions.

For all affected persons in the Beaumont/Port Arthur, Dallas/Fort Worth, El Paso, and Houston/Galveston/Brazoria areas, the following exemptions apply.

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

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

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

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

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

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

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

(8) Components in ethylene, propane, or propylene service, not to exceed 5.0% of the total components, may be classified as non-repairable beyond the second repair attempt at 500 parts per million by volume (ppmv). These components will remain in the fugitive monitoring program and be repaired no later than 15 calendar days after the concentration of VOC detected via United States Environmental Protection Agency Test Method 21 in 40 Code of Federal Regulations (CFR) Part 60, Appendix A (October 17, 2000) exceeds 10,000 ppmv. For the purposes of this division, components that contact a process fluid with greater than 85% ethylene, propane, or propylene by weight are considered in ethylene, propane, or propylene service, respectively.

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

(A) pressure relief valves;

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

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

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

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

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

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

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

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

This agency hereby certifies that the adoption has been reviewed by legal counsel and found to be a valid exercise of the agency's legal authority.

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CHAPTER 117. CONTROL OF AIR  
POLLUTION FROM NITROGEN COMPOUNDS  
SUBCHAPTER D. SMALL COMBUSTION  
SOURCES

DIVISION 1. WATER HEATERS, SMALL  
BOILERS, AND PROCESS HEATERS

**30 TAC §117.460, §117.465**

The Texas Commission on Environmental Quality (commission) adopts the amendments to §117.460 and §117.465, and corresponding revisions to the state implementation plan (SIP). Sections 117.460 and 117.465 are adopted with changes to the proposed text as published in the August 27, 2004, issue of the *Texas Register* (29 TexReg 8249).

The amended sections will be submitted to the United States Environmental Protection Agency (EPA) as revisions to the SIP.

BACKGROUND AND SUMMARY OF THE FACTUAL BASIS  
FOR THE ADOPTED RULES

On April 19, 2000, the commission adopted rules, published in the May 5, 2000, issue of the *Texas Register* (25 TexReg 4101), that require new water heaters, small boilers, and process heaters statewide to meet specific nitrogen oxides (NO<sub>x</sub>) emission limits. These rules were part of a SIP control strategy for attainment with the ozone national ambient air quality standard.

Under the adopted rules, manufacturers, distributors, retailers, and installers of natural gas-fired water heaters with a maximum rated capacity of no more than 75,000 British thermal units per hour (Btu/hr), designated as a "Type 0 unit" in the adopted rules, are required to meet the emission specifications in §117.465. Specifically, Type 0 units manufactured, distributed, sold, or installed on or after January 1, 2005, are required to meet a 10 nanogram per joule (ng/J) heat output limit for NO<sub>x</sub>.

Type 0 water heaters can be classified as conventional, power-vent, and direct-vent units. The commission's proposed definitions stated that a power-vent unit is a unit that has a mechanically induced draft to vent flue gas to a side wall, and that a direct-vent unit is a unit that has a sealed combustion venting system that both draws combustion air from and vents combustion products to the outside air. The commission revised these definitions in response to comments, and the changes are addressed in the RESPONSE TO COMMENTS section of this preamble.

Since the adoption of the current rule, two American National Standards Institute (ANSI) standards (the flammable vapor ignition resistance standard and the lint, dirt, and oil standard); the United States Department of Energy (DOE) energy efficiency standard; and the EPA insulation foam ban have been implemented. The ANSI lint, dirt, and oil standard and the flammable vapor ignition resistance standard were effective on July 1, 2003, and were established for gas-fired water heater safety reasons. The DOE energy efficiency standard was effective on January 20, 2004. The EPA foam ban was effective on January 1, 2003, and affects gas-fired water heaters, as water heater manufacturers have historically used hydrochlorofluorocarbon as a blowing agent for creating foam insulation. The implementation of these standards has delayed the progression of the water heater technology and design for the commission's currently adopted rule's 10 ng/J emission limit that requires a low-NO<sub>x</sub> burner. Therefore, a design will not be available for sale on the market by the January 1, 2005, compliance date that meets both the 10 ng/J NO<sub>x</sub> emission limit and maintains the current level of safety, efficiency, and reliability as required in the ANSI, DOE, and EPA standards. The incorporation of the low-NO<sub>x</sub> design development and subsequent ANSI, DOE, and EPA testing will require a delay in the commission's adopted rule effective date.