

The Texas Commission on Environmental Quality (commission) proposes amendments to Subchapter A, Definitions, §115.10; Subchapter C, Volatile Organic Compound Transfer Operations, §115.216 and §115.217; Subchapter D, Petroleum Refining, Natural Gas Processing, and Petrochemical Processes, §§115.352, 115.354, 115.357, and 115.359; and Subchapter H, Highly-Reactive Volatile Organic Compounds, §§115.722, 115.725 - 115.727, 115.729, 115.764, 115.767, 115.781, 115.783, 115.785, 115.787, and 115.789. These amended sections and corresponding revisions to the state implementation plan (SIP) will be submitted to the United States Environmental Protection Agency (EPA).

#### BACKGROUND AND SUMMARY OF THE FACTUAL BASIS FOR THE PROPOSED RULES

The commission proposes these amendments to Chapter 115, Control of Air Pollution from Volatile Organic Compounds, and revisions to the SIP in order to make a variety of changes which correct typographical errors, update cross-references, add flexibility, and amend requirements to achieve the intended volatile organic compound (VOC) emission reductions of the program.

#### SECTION BY SECTION DISCUSSION

##### *Subchapter A, Definitions*

The proposed amendments to §115.10, Definitions, revise the definition of “Highly-reactive volatile organic compound (HRVOC)” to specify that isobutene (2-methylpropene or isobutylene) is one of the isomers of butene. This revision is necessary to eliminate the possibility of confusion about which compounds are included as isomers of butene and because owners and operators might otherwise design their monitoring and testing plans to exclude isobutene, thereby increasing costs due to the additional

speciation which would be necessary to exclude isobutene. The proposed revision is consistent with the intended scope of the definition of HRVOC, the modeling which was the basis for this definition, and the associated Chapter 115, Subchapter H, HRVOC rules which were adopted on December 13, 2002 and published in the January 3, 2003 issue of the *Texas Register* (28 TexReg 113).

*Subchapter C, Volatile Organic Compound Transfer Operations*

*Division 1, Loading and Unloading of Volatile Organic Compounds*

The proposed amendments to §115.216, Monitoring and Recordkeeping Requirements, revise §115.216(3)(B) to specify that vapor pressure records are not required if the total volume of VOC loaded into transport vessels is less than 20,000 gallons per day (averaged over each consecutive 30-day period). This revision is proposed because vapor pressure records are not necessary to establish compliance with the 20,000 gallon per day exemption threshold at loading operations for which the total volume of VOC loaded into transport vessels is less than 20,000 gallons per day. In addition, the proposed amendments spell out and acronym "pounds per square inch, absolute (psia)" in §115.216(3)(C).

The proposed amendments to §115.217, Exemptions, revise §115.217(a)(1) and (b)(1) by adding "to or from transport vessels" to indicate that VOC transfer includes both loading and unloading operations to or from transport vessels. The proposed amendments to §115.217 also revise §115.217(a)(2)(A) and (b)(3)(A) by replacing "any plant" with "loading operations at any plant" because these exemptions are more appropriately associated with loading operations at the plant, rather than the plant itself. In

addition, the proposed amendments to §115.217 revise §115.217(a)(2)(A) and (B), (3), (4), and (5)(A); and (b)(1), (2), (3)(A) and (B), and (4) - (6), by deleting unnecessary division title references.

*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*

The proposed amendments to §115.352, Control Requirements, revise §115.352(2) by replacing the word "monitored" with "inspected." This revision is necessary to ensure that §115.352(2) is not incorrectly interpreted to require the use of monitoring (with a hydrocarbon gas analyzer) to determine whether a successful repair was made to a component in heavy liquid service. Section 115.357(1) allows owners and operators to implement audio/visual/olfactory inspections on components in heavy liquid service in lieu of monitoring (with a hydrocarbon gas analyzer). Logically, the same methodology should be used after a component repair attempt as during the routinely scheduled monitoring or inspection on that component.

The proposed amendments to §115.352(2)(A)(ii) correct cross-references to subclause (IV).

The proposed amendments to §115.352 also revise §115.352(2)(D) by adding the phrase "without use of extraordinary efforts." This revision is necessary to ensure that §115.352(2)(D) is not incorrectly interpreted to require the use of extraordinary efforts, such as sealant injection, before placing a valve on the shutdown list under Subchapter D, Division 3.

In addition, the proposed amendments to §115.352 revise §115.352(2)(E) by adding language to correct an existing requirement which inadvertently requires monitoring (with a hydrocarbon gas analyzer) of components in heavy liquid service for which a repair attempt was made during a shutdown. This revision is necessary because §115.357(1) allows owners and operators to implement audio/visual/olfactory inspections on components in heavy liquid service in lieu of monitoring (with a hydrocarbon gas analyzer).

Finally, the proposed amendments to §115.352 revise §115.352(2)(E) to specify that components for which a repair attempt was made during a shutdown must be monitored (with a hydrocarbon gas analyzer) and inspected for leaks within 30 days after startup is completed following the shutdown. Currently, such monitoring and inspection is required within 30 days or at the next monitoring period, whichever occurs first, after startup is completed following the shutdown. The proposed revision will address the scenario in which a unit has a start-up with only a few days left in the monitoring period, but will continue to ensure that components for which a repair attempt was made during a shutdown are monitored shortly after startup.

The proposed amendments to §115.354, Inspection Requirements, revise §115.354(10)(A) by replacing "the time of monitoring (beginning and end)" with "the time of monitoring (i.e., the time that the organic vapor analyzer trigger is pulled to record the concentration of each component)." This revision is necessary because recording of a single time for each component, rather than the start and stop times, is available with current software. The intent of the proposed language is to require a recording of the

time that the organic vapor analyzer trigger is pulled to record the concentration of each component, thereby allowing auditors to determine pace anomalies.

The proposed amendments to §115.354 also revise §115.354(10)(C) by adding language which specifies that notations of database changes include changes to the monitored concentration, addition or deletion of components, or monitoring schedule. This revision is necessary because the current §115.354(10)(C) could be interpreted to require a notation of changes which are not needed to demonstrate compliance (for example, a more accurate description of a component's location).

The proposed amendment to §115.357, Exemptions, revises §115.357(7) by replacing the incorrect term "facilities" with "plant sites covered by a single account number." This is consistent with the intended scope of this exemption as previously identified in the January 3, 2003 issue of the *Texas Register* (28 TexReg 153) and documentation for the 1993 rulemaking in which this exemption was added. The acronym "HRVOC" in §114.357(10) is also spelled out as highly-reactive volatile organic compound because it is only used once in the section.

The proposed amendments to §115.359, Counties and Compliance Schedules, revise the compliance date in §115.359(2) and (3) from December 31, 2003 to March 31, 2004 in order to provide more time for the regulated community to comply and also revise a reference in §115.359(3) from "appropriate regional office" to "executive director."

*Subchapter H, Highly-Reactive Volatile Organic Compounds*

*Division 1, Vent Gas Control*

The proposed amendments to §115.722, Site-wide Cap and Control Requirements, revise §115.722(b) by replacing the phrase “comply with” with the phrase “meet the requirements of” because the current language may be interpreted as requiring direct compliance with selected provisions of 40 Code of Federal Regulations (CFR) §60.18. This amendment is intended to update the language that incorporates the requirements of that section without implying that the rule establishes an independent requirement to comply with that federal rule. The acronyms “VOC” and “DERC” are deleted because the terms volatile organic compound and discrete emission reduction credit are used only once in the section.

The proposed amendments to §115.725, Monitoring and Testing Requirements, revise §115.725(a) by replacing the term “actual and expected” with the term “maximum potential.” This correction is also made in §115.725(c). Additionally, new language is added to the end of §115.725(a) to allow the use of facility process knowledge to supplement actual testing when necessary.

The proposed amendments to §115.725(c) expand the acceptable period to develop test data by referencing testing which was conducted before “approval of the test plan” and removing the existing language that specifies a deadline of “December 31, 2002.” Supplemental language is added to further define the acceptability and validity of the test data by requiring that the owner or operator notify the appropriate regional office at least 45 days prior to testing to provide the appropriate regional office

with an opportunity to observe the testing. In addition, a reference to submit the data to the “Engineering Services Team” has been changed to “executive director.”

The term “pre-approved” is replaced with the term “approved” in §115.725(d)(8) to provide the executive director with more latitude in accepting modified monitoring methods. In addition, the commission solicits comments on what degree of flexibility may be needed in §115.725(d).

Specifically, the commission solicits comments on the testing necessary for vent gas streams controlled by flares, the specific constituents other than HRVOC for which monitoring is required, direct measurement of British thermal units (Btu) in lieu of Btu calculations from component properties, and adjustments to the accuracy requirements for meters.

The rule language in §115.725(e)(2)(C) is corrected to better define that the material loaded immediately previous to the current loading operation refers to the material in the transport vessel by adding the phrase “into the vessel.”

The proposed amendments to §115.726, Recordkeeping and Reporting Requirements, revise §115.726(a) by specifying where test plans and quality assurance plans must be submitted. In addition, new §115.726(a)(1)(C) and (2)(C) define the turnaround time for quality assurance plans and test plans submitted to the commission. This language is aimed at encouraging the timely submittal of quality assurance plans and test plans. Specifically, the new §115.726(a)(1)(C) is being proposed at industry's request so that the affected owners and operators will have the assurance that they can send in their quality assurance plans early (allowing time for the agency to review the plans) and have sufficient time

to purchase and begin monitoring by December 31, 2004 after the agency's review. However, if an owner or operator elects to wait to submit a plan until April 30, 2004 and is issued a deficiency letter on day 180, there will be no relief for failure to implement the required monitoring by December 31, 2004. In addition, the owner or operator must submit a corrected quality assurance plan within 60 days of the date of any deficiency and/or additional requirements letter. If an approval or detailed deficiency and/or directed additional requirements letter is not issued within 180 days of receipt by the executive director, then the quality assurance plan is approved by default.

Similarly, the new §115.726(a)(2)(C) is being proposed so that the affected owners and operators will have the assurance that they can send in their test plans early (allowing time for the agency to review the plans) and have sufficient time to conduct testing by December 31, 2004 after the agency's review. However, if an owner or operator elects to wait to submit a plan until April 30, 2004 and is issued a deficiency letter on day 45, there will be no relief for failure to implement the required testing by December 31, 2004. In addition, the owner or operator must submit a corrected test plan within 15 days of the date of any deficiency and/or additional requirements letter. If an approved or detailed deficiency and/or additional requirements letter is not issued within 45 days of receipt by the executive director, then the test plan is approved by default, provided the testing is to be conducted in accordance with the appropriate reference methods and procedures specified in §115.125 (Testing Requirements) without deviation.

Also, §115.726(c) is amended to specify that an owner or operator does not necessarily need to be subject to both §115.722 and §115.725(d) or (e) in order to comply with the recordkeeping requirements of this section. Therefore, the word “and” is being replaced by “or.”

The recordkeeping requirements in §115.726(c)(5) are already addressed in §115.726(f), so this duplicative language is proposed for deletion. In addition, §115.726(f) is being revised with a phrase added to specify that the owner or operator is to maintain not only records required in this section, but also other records as necessary to demonstrate continuous compliance.

Finally, the proposed amendments to §115.726 add a new §115.726(d)(3), which requires the owners or operators of vent gas streams and flares that have no potential to emit HRVOC to maintain records demonstrating that they have no potential to emit HRVOC.

The proposed amendments to §115.727, Exemptions, revise §115.727(a) by acronyming the term parts per million by volume as “ppmv” and deleting inadvertent references to §115.726(d) and (f). The recordkeeping specified in §115.726(d) and (f) is necessary in order to demonstrate compliance with §115.727(a).

The proposed amendments to §115.727 also revise §115.727(b) by adding a section title which is necessary due to the proposed revisions to §115.727(a) described in the previous paragraph.

In addition, the proposed amendments to §115.727 add new §115.727(e)(1) and (f) for vent gas streams and flares, respectively, that have no potential to emit HRVOC. The proposed amendments to §115.727 also add new §115.727(e)(2) for a vent gas stream that has an HRVOC concentration less than 100 parts per million by volume at all times, provided that the total maximum potential HRVOC emissions for all vent gas streams exempted under §115.727(e)(2) is less than 5.0% of the HRVOC cap for the account specified in §115.722(a). In addition, the proposed amendments to §115.727 add new §115.727(3), which exempts pressure tanks, laboratory vent hoods, instrumentation air systems, and a variety of combustion sources. The proposed new exemptions are appropriate in order to exclude sources for which monitoring and testing for HRVOC would be impractical due to the owner's or operator's certainty that HRVOCs would be present in low concentrations or would not be present at any time. Vent gas streams and the streams to flares must have no detectable amount of any HRVOCs by any currently available methods of detection for the HRVOCs to be considered exempt under §115.727(e)(1) or (f). Extremely low concentrations of HRVOCs can be detected, so the commission is specifically seeking detailed comments on setting an appropriate level for allowing exemption from testing or monitoring.

The proposed amendments to §115.729, Counties and Compliance Schedules, revise the compliance date in §115.729(1)(A) from June 30, 2004 to December 31, 2004 in order to provide more time for the regulated community to comply with the testing requirements of §115.725. In addition, the proposed amendments to §115.729(1)(A) revise "executive director" to "appropriate regional office and any local air pollution control agency with jurisdiction" to specify where within the agency the testing results are to be submitted.

*Subchapter H, Highly-Reactive Volatile Organic Compounds*

*Division 2, Cooling Tower Heat Exchange Systems*

The proposed amendments to §115.764, Monitoring Requirements, revise §115.764(a)(5) and (b)(5) to specify where to sample for total strippable VOC by adding the phrase, “in the cooling tower water.”

In addition, the commission solicits comments on what degree of flexibility may be needed in §115.764(a) - (c). Specifically, the commission solicits comments on the specific constituents that must be determined from samples, the appropriate time allowed to determine sample content, the frequency of alternate sampling when continuous monitors are out of operation, and the executive director’s approval of modifications to the monitoring requirements on a case-by-case basis.

In addition, a new §115.764(d)(3) defines the turnaround time for quality assurance plans submitted to the commission. This language is aimed at encouraging the timely submittal of quality assurance plans. Specifically, the new §115.764(d)(3) is being proposed at industry's request so that affected owners and operators will have the assurance that they can send in their plans early (allowing time for the agency to review the plans) and have sufficient time to purchase and begin monitoring by December 31, 2004 after the agency's review. However, if an owner or operator elects to wait to submit a plan until April 30, 2004 and is issued a deficiency letter on day 180, there will be no relief for failure to implement the required monitoring by December 31, 2004. In addition, the owner or operator must submit a corrected quality assurance plan within 60 days of the date of any deficiency and/or additional requirements letter. If an approval or detailed deficiency and/or directed additional requirements letter is not issued within 180 days of receipt by the executive director, then the quality assurance plan is approved by default.

The proposed amendments to §115.764 also add new §115.764(e) which establishes an alternative to the monitoring requirements of §115.764(a)(2) - (5) and (b)(2) - (5). Specifically, in lieu of §115.764(a)(2) - (5) and (b)(2) - (5), the owner or operator of cooling tower heat exchange systems in which no individual heat exchanger has 5.0% or greater HRVOC in the process-side fluid shall determine total strippable VOC and the HRVOC concentration in the cooling tower water at least once per month, with an interval of not less than 20 days between samples, using the appropriate methods in §115.766. If the total HRVOC concentration in the cooling tower water is ten parts per billion by weight or greater, the owner or operator shall determine total strippable VOC at least daily.

Finally, the proposed amendments to §115.764 add new §115.764(f) which establishes an alternative to the continuous flow monitor requirements of §115.764(a)(1) and (b)(1). Specifically, in lieu of §115.764(a)(1) and (b)(1), the owner or operator of cooling tower heat exchange systems may use the maximum potential flow rate based on manufacturer's pump performance data, assuming no back pressure.

The proposed amendments to §115.767, Recordkeeping Requirements, add a new §115.767(d) and (e), which establish recordkeeping requirements necessary to document compliance with new §115.764(e) and (f), respectively, described in the preceding two paragraphs.

*Subchapter H, Highly-Reactive Volatile Organic Compounds*

*Division 3, Fugitive Emissions*

The proposed amendments to §115.781, General Monitoring and Inspection Requirements, revise §115.781(a) to specify that individual identification of components is not required. The acceptable methods for identifying the components of each process unit in HRVOC service are given in the existing §115.781(a)(1) - (6). The proposed revision to §115.781(a) is necessary due to the inherent difficulties associated with individually tagging all components.

The proposed amendments to §115.781 also revise §115.781(b)(4) to specify that components for which a repair attempt was made during a shutdown must be monitored (with a hydrocarbon gas analyzer) and inspected for leaks within 30 days after startup is completed following the shutdown. Currently, such monitoring and inspection is required within 30 days or at the next monitoring period, whichever occurs first, after startup is completed following the shutdown. The proposed revision will address the scenario in which a unit has a start-up with only a few days left in the monitoring period, but will continue to ensure that components for which a repair attempt was made during a shutdown are monitored shortly after startup.

In addition, the proposed amendments to §115.781 revise §115.781(b)(7) to specify that if an unsafe-to-monitor valve is not considered safe to monitor within a calendar year, it must be monitored as soon as possible during safe-to-monitor times. This revision is necessary to ensure that monitoring personnel are not unnecessarily exposed to unsafe conditions.

Finally, the proposed amendments to §115.781 revise the leak-skip option available under §115.781(f) by adding blind flanges, caps, or plugs at the end of a pipe or line containing HRVOC to the list of components eligible for the leak-skip option because these components are functionally similar to the components (i.e., connectors, bolted manways, heat exchanger heads, hatches, and sump covers), which are currently allowed to use this leak-skip option.

The proposed amendment to §115.783, Equipment Standards, revises §115.783 by adding a new §115.783(6), which specifies that except for pressure relief valves, no valves shall be installed or operated at the end of a pipe or line containing HRVOC 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 shall be closed first. This new paragraph is consistent with the existing §115.352(4) and is necessary to prevent excess fugitive emissions resulting from the opening of an open-ended valve. In addition, the proposed amendments spell out and acronym "highly-reactive volatile organic compound (HRVOC)" in §115.783(3).

The proposed amendments to §115.785, Testing Requirements, revise §115.785(3) by replacing a reference to the Engineering Services Team and the regional office with a reference to the executive director. The proposed amendments to §115.785 also revise §115.785(5) for consistency with the revisions to §115.725(c) described earlier in this preamble.

The proposed amendments to §115.787, Exemptions, revise §115.787(c)(6) to include a reference to the definition of sampling connection system in 40 CFR §63.161, and add the *Federal Register* publication date of federal regulations.

The proposed amendments to §115.789, Counties and Compliance Schedules, revise §115.789(1) to specify that the schedule in the leak-skip option of §115.781(f) applies to connectors, blind flanges, caps, or plugs at the end of a pipe or line containing HRVOC, bolted manways, heat exchanger heads, hatches, and sump covers for which the owner or operator has notified the appropriate regional office and local air pollution control program that §115.781(f) will be used to establish the monitoring schedule for these components. This revision is necessary because the monitoring schedule under the leak-skip option of §115.781(f) extends beyond the compliance schedule in §115.789(1).

In addition, the proposed amendments to §115.789 revise the compliance dates in §115.789(1), (2), (5), and (6) from December 31, 2003 to March 31, 2004 in order to provide more time for the regulated community to comply. Finally, the proposed amendments to §115.789 revise the compliance date in §115.789(4) from December 31, 2003 to December 31, 2004 in order to provide more time for the regulated community to conduct testing and for consistency with the revisions to §115.729(1) described earlier in this preamble.

FISCAL NOTE: COSTS TO STATE AND LOCAL GOVERNMENT

John Davis, Analyst with Strategic Planning and Appropriations, determined that for each year of the first five-year period the proposed rules are in effect, there will be no fiscal implications to the agency or any other unit of state or local government due to administration or enforcement of the proposed rules. The commission anticipates no fiscal implications for any other unit of state or local government to comply with the proposed rules because none of the sources required to comply with the proposed Chapter 115 requirements are owned or operated by units of state or local government.

PUBLIC BENEFITS AND COSTS

Mr. Davis also determined that for each year of the first five years the proposed rules are in effect, the public benefit anticipated from enforcement of and compliance with the proposed rules would be increased compliance with air emission standards due to rules that are more understandable.

The commission estimates that approximately 140 privately-owned and operated facilities in Brazoria, Chambers, Collin, El Paso, Dallas, Denton, Fort Bend, Galveston, Hardin, Harris, Jefferson, Liberty, Montgomery, Orange, Tarrant, and Waller Counties would be subject to the proposed rules.

The proposed amendments are intended to make a variety of changes which correct typographical errors, update cross-references, add flexibility, and amend requirements to achieve the intended emission reductions of the program. No fiscal implications resulting from the implementation of the proposed rules are expected.

#### SMALL BUSINESS AND MICRO-BUSINESS ASSESSMENT

The commission has been unable to identify any small or micro-businesses which would be affected by the proposed rules. The majority of sites affected by the proposed rules are large petrochemical and industrial businesses. If there are affected small or micro-businesses, however, no adverse fiscal implications are anticipated for small or micro-businesses as a result of implementation of the proposed rules.

#### LOCAL EMPLOYMENT IMPACT STATEMENT

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

#### DRAFT REGULATORY IMPACT ANALYSIS DETERMINATION

The commission reviewed the proposed rulemaking in light of the regulatory analysis requirements of Texas Government Code, §2001.0225, and determined that this proposal is not subject to §2001.0025 because it does not meet the definition of a “major environmental rule” as defined in that statute.

“Major environmental rule” means a rule the specific intent of which is to protect the environment or reduce risks to human health from environmental exposure and that may adversely affect in a material way the economy, productivity, competition, jobs, the environment, or the public health and safety of the state or a sector of the state.

This proposal is not a major environmental rule because its primary purpose is to make a variety of changes which correct typographical errors, update cross-references, add flexibility, and amend requirements to achieve the intended emission reductions of the program.

In addition, a draft regulatory impact analysis is not required because the rules do not meet any of the four applicability criteria for requiring a regulatory analysis of a “major environmental rule” as defined in the Texas Government Code. Section 2001.0225 applies only to a major environmental rule the result of which is to: 1) exceed a standard set by federal law, unless the rule is specifically required by state law; 2) exceed an express requirement of state law, unless the rule is specifically required by federal law; 3) exceed a requirement of a delegation agreement or contract between the state and an agency or representative of the federal government to implement a state and federal program; or 4) adopt a rule solely under the general powers of the agency instead of under a specific state law. This proposal does not exceed a standard set by federal law, and the proposed technical requirements are consistent with applicable federal standards. In addition, this proposal does not exceed an express requirement of state law and is not proposed solely under the general powers of the agency, but is specifically authorized by the provisions cited in the STATUTORY AUTHORITY section of this preamble. Finally, this proposal does not exceed a requirement of a delegation agreement or contract to implement a state and federal program. The commission invites public comment on the draft regulatory impact analysis determination.

#### TAKINGS IMPACT ASSESSMENT

The commission evaluated this rulemaking action and performed an analysis of whether the proposed rules are subject to Texas Government Code, Chapter 2007. The primary purpose of the rulemaking is to make a variety of changes which correct typographical errors, update cross-references, add flexibility, and amend requirements to achieve the intended emission reductions of the program. Promulgation and enforcement of these proposed rules would be neither a statutory nor a constitutional taking because they do not affect private real property. Specifically, the proposed rules do not affect a landowner's rights in private real property because this proposal does not burden (constitutionally), nor restrict or limit the owner's right to property and reduce its value by 25% or more beyond that which would otherwise exist in the absence of the rules. Therefore, these rules will not constitute a takings under the Texas Government Code, Chapter 2007.

#### CONSISTENCY WITH THE COASTAL MANAGEMENT PROGRAM

The commission reviewed the proposed rulemaking and found that the proposal is a rulemaking identified in Coastal Coordination Act Implementation Rules, 31 TAC §505.11, or will affect an action/authorization identified in Coastal Coordination Act Implementation Rules, 31 TAC §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 the proposed 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. 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 rulemaking action is consistent with CMP goals and policies. Interested persons may submit comments on the consistency of the proposed rules with the CMP during the public comment period.

#### 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 permit to include the revised Chapter 115 requirements for each emission unit at their sites affected by the revisions to Chapter 115.

#### ANNOUNCEMENT OF HEARING

Public hearings on this proposal will be held in Houston on June 2, 2003, at 2:00 p.m. at the City of Houston, City Hall Annex Public Level Conference Room, located at the City Hall Annex Building, 900 Bagby, Street Level, and at 7:00 p.m. at the City of Houston, City Council Chambers, located at 901 Bagby; and in Arlington on June 4, 2003, at 2:00 p.m. at North Central Texas Council of Governments, Third Floor, Transportation Board Room, located at 616 Six Flags Drive, Suite 200. The hearings will be structured for the receipt of oral or written comments by interested persons. Individuals may present oral statements when called upon in order of registration. There will be no

open discussion during the hearings; however, an agency staff member will be available to discuss the proposal 30 minutes prior to the hearings and will answer questions before and after the hearings.

Persons with disabilities who have special communication or other accommodation needs who are planning to attend the hearings should contact the Office of Environmental Policy, Analysis, and Assessment at (512) 239-4900. Requests should be made as far in advance as possible.

#### SUBMITTAL OF COMMENTS

Comments may be submitted to Angela Slupe, MC 205, Office of Environmental Policy, Analysis, and Assessment, Texas Commission on Environmental Quality, P.O. Box 13087, Austin, Texas 78711-3087, or faxed to (512) 239-4808. All comments should reference Rule Log Number 2003-027-115-AI. Comments must be received by 5:00 p.m., June 4, 2003. For further information, please contact Ashley Forbes of the Strategic Assessment Division at (512) 239-0493 or Eddie Mack, also of the Strategic Assessment Division, at (512) 239-1488.

## **SUBCHAPTER A: DEFINITIONS**

### **§115.10**

#### **STATUTORY AUTHORITY**

The amendment is proposed under Texas Water Code (TWC), §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 TWC; and under Texas Health and Safety Code (THSC), §382.017, concerning Rules, which authorizes the commission to adopt rules consistent with the policy and purposes of the Texas Clean Air Act (TCAA). The amendment is also proposed under THSC, §382.002, concerning Policy and Purpose, which establishes the commission's purpose to safeguard the state's air resources, consistent with the protection of public health, general welfare, and physical property; §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; and §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.

The proposed amendment implements THSC, §§382.002, 382.011, 382.012, 382.016, and 382.017.

**§115.10. Definitions.**

Unless specifically defined in the Texas Clean Air Act (TCAA) or in the rules of the commission, the terms used by the commission have the meanings commonly ascribed to them in the field of air pollution control. In addition to the terms which are defined by the TCAA, the following terms, when used in this chapter (relating to Control of Air Pollution from Volatile Organic Compounds), shall have the following meanings, unless the context clearly indicates otherwise. Additional definitions for terms used in this chapter are found in §3.2 and §101.1 of this title (relating to Definitions).

(1) - (16) (No change.)

(17) **Highly-reactive volatile organic compound (HRVOC)** - As follows.

(A) In Harris County, one or more of the following VOCs: 1,3-butadiene; all isomers of butene (e.g., isobutene (2-methylpropene or isobutylene), [i.e.,] alpha-butylene (ethylethylene)<sub>1</sub> and beta-butylene (dimethylethylene, including both cis- and trans- isomers)); ethylene; and propylene.

(B) (No change.)

(18) - (46) (No change.)

**SUBCHAPTER C: VOLATILE ORGANIC COMPOUND TRANSFER OPERATIONS**

**DIVISION 1: LOADING AND UNLOADING OF VOLATILE ORGANIC COMPOUNDS**

**§115.216, §115.217**

**STATUTORY AUTHORITY**

The amendments are proposed under TWC, §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 TWC; and under THSC, §382.017, concerning Rules, which authorizes the commission to adopt rules consistent with the policy and purposes of the TCAA. The amendments are also proposed under THSC, §382.002, concerning Policy and Purpose, which establishes the commission's purpose to safeguard the state's air resources, consistent with the protection of public health, general welfare, and physical property; §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; and §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.

The proposed amendments implement THSC, §§382.002, 382.011, 382.012, 382.016, and 382.017.

**§115.216. Monitoring and Recordkeeping Requirements.**

The owner or operator of each volatile organic compound (VOC) loading or unloading operation in the covered attainment counties or in the Beaumont/Port Arthur, Dallas/Fort Worth, El Paso, and Houston/Galveston areas shall maintain the following information for at least two years at the plant, as defined by its air quality account number. The owner or operator shall make the information available upon request to representatives of the executive director, EPA, or any local air pollution control agency having jurisdiction in the area.

(1) - (2) (No change.)

(3) Land-based VOC transfer to or from transport vessels.

(A) (No change.)

(B) A record of the type and vapor pressure of each VOC transferred (excluding gasoline). Vapor pressure records are not required if the total volume of VOC loaded into transport vessels is less than 20,000 gallons per day (averaged over each consecutive 30-day period).

(C) The owner or operator of any plant, as defined by its air quality account number, at which all VOC transferred has a true vapor pressure at actual storage conditions less than 0.5 pounds per square inch, absolute (psia) [psia] as specified in §115.217(a)(1) of this title (relating to

Exemptions) or 1.5 psia as specified in §115.217(b)(1) of this title, is not required to keep the records specified in subparagraph (A) of this paragraph.

(D) - (E) (No change.)

(4) (No change.)

**§115.217. Exemptions.**

(a) The following exemptions apply in the Beaumont/Port Arthur, Dallas/Fort Worth, El Paso, and Houston/Galveston areas.

(1) Vapor pressure (at land-based operations). All land-based loading and unloading (to or from transport vessels) of volatile organic compounds (VOC) with a true vapor pressure less than 0.5 pounds per square inch, absolute (psia) under actual storage conditions is exempt from the requirements of this division (relating to Loading and Unloading of Volatile Organic Compounds), except for:

(A) - (D) (No change.)

(2) Throughput.

(A) Loading operations at any [Any] plant, as defined by its air quality account number, excluding gasoline bulk plants, which loads less than 20,000 gallons of VOC into transport vessels per day (averaged over each consecutive 30-day period) with a true vapor pressure greater than or equal to 0.5 psia under actual storage conditions are [is] exempt from the requirements of this division [(relating to Loading and Unloading of Volatile Organic Compounds)], except for:

(i) - (iv) (No change.)

(B) Gasoline bulk plants which load less than 4,000 gallons of gasoline into transport vessels per day (averaged over each consecutive 30-day period) are exempt from the requirements of this division [(relating to Loading and Unloading of Volatile Organic Compounds)], except for:

(i) - (iii) (No change.)

(3) Liquefied petroleum gas. All loading and unloading of liquefied petroleum gas is exempt from the requirements of this division [(relating to Loading and Unloading of Volatile Organic Compounds)], except for:

(A) - (C) (No change.)

(4) Motor vehicle fuel dispensing facilities. Motor vehicle fuel dispensing facilities, as defined in §101.1 of this title (relating to Definitions), are exempt from the requirements of this division [(relating to Loading and Unloading of Volatile Organic Compounds)].

(5) Marine vessels. The following marine vessel transfer exemptions apply.

(A) The following marine vessel transfer operations are exempt from this division [(relating to Loading and Unloading of Volatile Organic Compounds)]:

(i) - (ii) (No change.)

(B) The following marine vessel transfer operations are exempt from the requirements of §§115.212(a), 115.214(a), and 115.216 of this title, except as noted:

(i) - (iv) (No change.)

(b) The following exemptions apply in the covered attainment counties.

(1) General VOCs (non-gasoline). Except in Aransas, Bexar, Calhoun, Gregg, Matagorda, Nueces, San Patricio, Travis, and Victoria Counties, all loading and unloading of VOC other than gasoline (to or from transport vessels) is exempt from the requirements of this division [(relating to Loading and Unloading of Volatile Organic Compounds)].

(2) Vapor pressure (at land-based operations). All land-based loading and unloading of VOC with a true vapor pressure less than 1.5 psia under actual storage conditions is exempt from the requirements of this division [(relating to Loading and Unloading of Volatile Organic Compounds)], except for:

(A) - (D) (No change.)

(3) Throughput.

(A) Loading operations at any [Any] plant, as defined by its air quality account number, excluding gasoline bulk plants, which loads less than 20,000 gallons of VOC into transport vessels per day (averaged over each consecutive 30-day period) with a true vapor pressure greater than or equal to 1.5 psia under actual storage conditions are [is] exempt from the requirements of this division [(relating to Loading and Unloading of Volatile Organic Compounds)], except for:

(i) - (iv) (No change.)

(B) Gasoline bulk plants which load less than 4,000 gallons of gasoline into transport vessels per day (averaged over each consecutive 30-day period) are exempt from the requirements of this division [(relating to Loading and Unloading of Volatile Organic Compounds)], except for:

(i) - (iii) (No change.)

(4) Crude oil, condensate, and liquefied petroleum gas. All loading and unloading of crude oil, condensate, and liquefied petroleum gas is exempt from the requirements of this division [(relating to Loading and Unloading of Volatile Organic Compounds)], except for:

(A) - (C) (No change.)

(5) Motor vehicle fuel dispensing facilities. Motor vehicle fuel dispensing facilities, as defined in §101.1 of this title, are exempt from the requirements of this division [(relating to Loading and Unloading of Volatile Organic Compounds)].

(6) Marine vessels. All loading and unloading of marine vessels is exempt from this division [(relating to Loading and Unloading of Volatile Organic Compounds)].

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

**DIVISION 3: FUGITIVE EMISSION CONTROL IN PETROLEUM REFINING, NATURAL  
GAS/GASOLINE PROCESSING, AND PETROCHEMICAL PROCESSES**

**IN OZONE NONATTAINMENT AREAS**

**§§115.352, 115.354, 115.357, 115.359**

**STATUTORY AUTHORITY**

The amendments are proposed under TWC, §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 TWC; and under THSC, §382.017, concerning Rules, which authorizes the commission to adopt rules consistent with the policy and purposes of TCAA. The amendments are also proposed under THSC, §382.002, concerning Policy and Purpose, which establishes the commission's purpose to safeguard the state's air resources, consistent with the protection of public health, general welfare, and physical property; §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; and §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.

The proposed amendments implement THSC, §§382.002, 382.011, 382.012, 382.016, and 382.017.

**§115.352. Control Requirements.**

For the Beaumont/Port Arthur, Dallas/Fort Worth, El Paso, and Houston/Galveston areas as defined in §115.10 of this title (relating to Definitions), 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) (No change.)

(2) A first attempt at repair shall be made no later than five calendar days after the leak is found and the component shall be repaired no later than 15 calendar days after the leak is found, except as provided in subparagraphs (A) - (C) of this paragraph. A component in gas/vapor or light liquid service is considered to be repaired when it is monitored with an instrument using Test Method 21 and shown to no longer have a leak after adjustments or alterations to the component. A component in heavy liquid service is considered to be repaired when it is inspected [monitored] by audio, visual, and olfactory means and shown to no longer have a leak after adjustments or alterations to the component.

(A) If the repair of a component would require a process unit shutdown, the repair may be delayed until the next scheduled process unit shutdown, provided that:

(i) (No change.)

(ii) the total cumulative mass emissions from leaking components in the process unit for which delay of repair is sought as determined in clause (i)(III) [subclause (IV)] of this subparagraph [clause] are less than the mass emissions resulting from shutdown of the unit as determined in clause (i)(IV) [subclause (IV)] of this subparagraph [clause]; and

(iii) (No change.)

(B) - (C) (No change.)

(D) Valves which can be safely repaired without a process unit shutdown, but without use of "extraordinary efforts" as described in subparagraph (A)(iii) of this paragraph, may not be placed on the shutdown list.

(E) All components in gas/vapor or light liquid service for which a repair attempt was made during a shutdown shall be monitored (with a hydrocarbon gas analyzer) and inspected for leaks within 30 days [or at the next monitoring period, whichever occurs first,] after startup is completed following the process unit shutdown. All components in heavy liquid service for which a repair attempt was made during a shutdown shall be inspected for leaks within 30 days after startup is completed following the process unit shutdown.

(3) - (10) (No change.)

**§115.354. Inspection Requirements.**

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

(1) - (9) (No change.)

(10) Except as provided in subparagraph (B) of this paragraph, the owner or operator shall use dataloggers and/or electronic data collection devices during all monitoring required by this section. The owner or operator shall use best efforts to transfer, on a daily basis, electronic data from electronic datalogging devices to the electronic database required by §115.356(2) of this title (relating to Monitoring and Recordkeeping Requirements).

(A) For all monitoring events in which an electronic data collection device is used, the collected monitoring data shall include the identification of each component and each calibration run, the maximum screening concentration detected, the time of monitoring (i.e., the time that the organic vapor analyzer trigger is pulled to record the concentration of each component [beginning and end]), a date stamp, an operator identification, an instrument identification, and calibration gas concentrations and certification dates. The acceptable rate for recording data shall be determined individually by each owner or operator considering such factors including, but not limited

to, the size of the equipment, the equipment type, the accessibility of the equipment, the number of leakers being found, and the skill of the monitoring technicians. Each owner or operator shall have a documented auditing process in place to assure proper calibration, identify response time failures, and assess pace anomalies.

(B) (No change.)

(C) Each change to the database regarding the monitored concentration, addition or deletion of components, or monitoring schedule shall be detailed in a log or inserted as a notation in the database. All such changes shall include the name of the person who made the change, the date of the change, and an explanation to support the change.

(11) - (12) (No change.)

**§115.357. Exemptions.**

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

(1) - (6) (No change.)

(7) Plant sites covered by a single account number [Facilities] with less than 250 components in VOC service are exempt from the requirements of this division.

(8) - (9) (No change.)

(10) In the Houston/Galveston area, the requirements of Subchapter H of this chapter (relating to Highly-Reactive Volatile Organic Compounds) apply to components which qualify for one or more of the exemptions in paragraphs (1) - (9) 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 [HRVOC], as defined in §115.10 of this title (relating to Definitions), is a raw material, intermediate, final product, or in a waste stream.

**§115.359. Counties and Compliance Schedules.**

The owner or operator of each affected source in Brazoria, Chambers, Collin, El Paso, Dallas, Denton, Fort Bend, Galveston, Hardin, Harris, Jefferson, Liberty, Montgomery, Orange, Tarrant, and Waller Counties shall:

(1) continue to comply with this division (relating to Fugitive Emission Control in Petroleum Refining, Natural Gas/Gasoline Processing, and Petrochemical Processes in Ozone Nonattainment Areas) as required by §115.930 of this title (relating to Compliance Dates); [and]

(2) comply with §115.356(2)(C) and (D) of this title (relating to Monitoring and Recordkeeping Requirements) as soon as practicable, but no later than March 31, 2004 [December 31, 2003]; and

(3) develop and make available upon request to the executive director [appropriate regional office], EPA, and any local air pollution control agency having jurisdiction the recordkeeping required by §115.356(1), (3), and (4) of this title as soon as practicable, but no later than March 31, 2004 [December 31, 2003].

**SUBCHAPTER H: HIGHLY-REACTIVE VOLATILE ORGANIC COMPOUNDS**

**DIVISION 1: VENT GAS CONTROL**

**§§115.722, 115.725 - 115.727, 115.729**

**STATUTORY AUTHORITY**

The amendments are proposed under TWC, §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 TWC; and under THSC, §382.017, concerning Rules, which authorizes the commission to adopt rules consistent with the policy and purposes of TCAA. The amendments are also proposed under THSC, §382.002, concerning Policy and Purpose, which establishes the commission's purpose to safeguard the state's air resources, consistent with the protection of public health, general welfare, and physical property; §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; and §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.

The proposed amendments implement THSC, §§382.002, 382.011, 382.012, 382.016, and 382.017.

**§115.722. Site-wide Cap and Control Requirements.**

(a) (No change.)

(b) All flares shall continuously meet the requirements of [comply with] 40 Code of Federal Regulations §60.18(c) - (f) as amended through October 17, 2000 (65 FR 61744) when vent gas containing volatile organic compounds [(VOC)] is being routed to the flare.

(c) An owner or operator may not use emission reduction credits or discrete emission reduction credits [DERC] in order to demonstrate compliance with this division.

**§115.725. Monitoring and Testing Requirements.**

(a) Each vent gas stream at an account must be tested by applying the appropriate reference method tests and procedures specified in §115.125 of this title (relating to Testing Requirements) to establish maximum potential [actual and expected] highly-reactive volatile organic compound (HRVOC) emission data in accordance with the test plan required under §115.726 of this title (relating to Recordkeeping and Reporting Requirements) to demonstrate compliance with the control requirement of §115.722(a) of this title (relating to Site-wide Cap and Control Requirements). Process knowledge can be used to estimate emissions from pressure relief valves.

(b) (No change.)

(c) Testing using the appropriate reference method tests and procedures specified in §115.125 of this title which was conducted before approval of the test plan [December 31, 2002] and which establishes maximum potential [actual and expected] HRVOC emissions data may be used in lieu of conducting the testing specified in subsection (a) of this section, provided that the owner or operator of the affected source obtains approval for the testing report and data from the executive director [Engineering Services Team], and provided that the appropriate regional office was notified at least 45 days prior to testing and given an opportunity to observe the testing.

(d) Except as specified in subsection (e) of this section, the owner or operator of an affected flare shall conduct continuous monitoring, as follows:

(1) - (7) (No change.)

(8) submit for approval by the executive director [Engineering Services Team] any minor modifications to these monitoring methods. Monitoring methods other than those specified in paragraphs (1) and (2) of this subsection may be used if approved [pre-approved] by the executive director [Engineering Services Team] and validated by 40 CFR Part 63, Appendix A, Test Method 301 (December 29, 1992).

(e) Flares used solely for abatement of emissions from loading operations for transport vessels are not required to comply with the monitoring requirements of subsection (a) of this section, provided the following requirements are satisfied.

(1) (No change.)

(2) Records of each loading activity are maintained, including, but not limited to:

(A) - (B) (No change.)

(C) the compounds loaded, in addition to the compounds loaded into the vessel immediately previous to the current loading operation, if the vessel being loaded is not clean;

(D) - (G) (No change.)

(3) - (4) (No change.)

**§115.726. Recordkeeping and Reporting Requirements.**

(a) The owner or operator of each affected flare or vent gas stream shall submit to the executive director for review and approval [by the Engineering Services Team] a test plan and a quality assurance plan (QAP) for the testing requirements and for the monitoring requirements (including installation, calibration, operation, and maintenance of continuous emissions monitoring systems) of this division (relating to Vent Gas Control) as follows:

(1) for monitoring:

(A) [(1)] for flares and vent gas streams existing on or before June 30, 2004, no later than April 30, 2004; [or]

(B) [(2)] for flares/vent gas streams that become subject to the requirements of this division after June 30, 2004, at least 60 days prior to being placed in highly-reactive volatile organic compound (HRVOC) service; and [.]

(C) the executive director shall issue written approval of, or detail deficiencies and/or direct additional requirements to be added to, each QAP within 180 days of receipt of a complete QAP that details the owner or operator's plans for installation, calibration, operation, and maintenance of the flare/vent gas stream monitoring. The owner or operator shall submit a corrected QAP within 60 days of the date of the deficiency and/or additional requirements letter. If an approval or detailed deficiency and/or directed additional requirements letter is not issued within 180 days of receipt by the executive director, then the QAP is approved by default;

(2) for testing:

(A) for flares and vent gas streams existing on or before June 30, 2004, no later than April 30, 2004;

(B) for flares/vent gas streams that become subject to the requirements of this division after June 30, 2004, at least 60 days prior to being placed in HRVOC service; and

(C) the executive director shall issue written approval of, or detail deficiencies and/or direct additional requirements to be added to, each test plan within 45 days of receipt of a complete test plan for a vent gas stream to be tested as required by §115.725(a) of this title (relating to Monitoring and Testing Requirements). The owner or operator shall submit a corrected test plan within 15 days of the date of the deficiency and/or additional requirements letter. If an approval or detailed deficiency and/or directed additional requirements letter is not issued within 45 days of receipt by the executive director, then the test plan is approved by default provided the testing is to be conducted in accordance with the appropriate reference methods and procedures specified in §115.125 of this title (relating to Testing Requirements) without deviation.

(b) (No change.)

(c) The owner or operator of a flare at an account that is subject to §115.722 of this title (relating to Site-wide Cap and Control Requirements) or [and] the continuous monitoring requirements of §115.725(d) or (e) of this title shall comply with the following recordkeeping requirements:

(1) - (2) (No change.)

(3) maintain records on a weekly basis that detail all corrective actions, and any delay in corrective action, taken by documenting the dates, reasons, and durations of such occurrences and the estimated quantity of all HRVOC emissions during such activities; and

(4) maintain records of each calculated net heating value of the gas stream routed to the flare and each calculated exit velocity at the flare tip, determined in accordance with the provisions of §115.725 of this title\_ [; and]

[(5) maintain all records required in this subsection for five years and make available for review upon request by authorized representatives of the executive director, EPA, or any local air pollution control agency with jurisdiction.]

(d) Records for exemptions shall include the following.

(1) - (2) (No change.)

(3) The owner or operator of any vent gas stream or flare claiming exemption under §115.727 of this title shall comply with the following recordkeeping requirements:

(A) for vent gas streams, maintain records which demonstrate continuous compliance with the exemption criteria of §115.727(e) of this title; or

(B) for flares, maintain records which demonstrate continuous compliance with the exemption criteria of §115.727(f) of this title.

(e) (No change.)

(f) [Retention and availability of records.] The owner or operator shall maintain all records required in this division and other records as necessary to demonstrate continuous compliance and records of periodic measurements for at least five years and make them available for review upon request by authorized representatives of the executive director, EPA, or any local air pollution control agency with jurisdiction.

**§115.727. Exemptions.**

(a) Any account for which no gas stream that is routed to a flare contains 5.0% or greater by weight of highly-reactive volatile organic compounds (HRVOC) at any time and no vent gas stream that is not routed to a flare contains more than 100 parts per million by volume (ppmv) HRVOC at any time is exempt from the requirements of §115.722 of this title (relating to Site-wide Cap and Control Requirements) [, with the exception of the recordkeeping requirements of §115.726(d) and (f) of this title (relating to Recordkeeping and Reporting Requirements)].

(b) Flares that at no time receive a gas stream containing 5.0% or greater HRVOC are exempt from the continuous monitoring requirements of §115.725(d) and (e) of this title (relating to Monitoring and Testing Requirements) and §115.726(c) of this title (relating to Recordkeeping and Reporting Requirements). The gas stream directed to the flare shall be treated as a vent gas stream for purposes of determining compliance with the site-wide cap of §115.722(a) of this title.

(c) - (d) (No change.)

(e) The following vent gas streams are exempt.

(1) A vent gas stream that has no potential to emit HRVOC is exempt from the requirements of this division, with the exception of the recordkeeping requirements of §115.726(d)(3) of this title.

(2) A vent gas stream that has the potential to emit HRVOC, but that has an HRVOC concentration less than 100 ppmv at all times, is exempt from §115.725 of this title and §115.726(a) of this title provided that the maximum potential HRVOC emissions for the sum of all vent gas streams claiming this exemption is less than 5.0% of the HRVOC cap for the account specified in §115.722(a) of this title.

(3) Vent gas streams from the following sources are exempt from the requirements of this division with the exception of the recordkeeping requirements of §115.726(d)(3) of this title:

(A) boilers, furnaces, engines, turbines, and heaters fired with fuel containing less than 5% HRVOC;

(B) pressure tanks which maintain working pressure sufficient at all times to prevent any vapor or gas loss to the atmosphere;

(C) laboratory vent hoods; and

(D) instrumentation air systems.

(f) Any flare that has no potential to emit HRVOC is exempt from the requirements of this division, with the exception of the recordkeeping requirements of §115.726(d)(3) of this title.

**§115.729. Counties and Compliance Schedules.**

Each owner or operator in Brazoria, Chambers, Fort Bend, Galveston, Harris, Liberty, Montgomery, and Waller Counties shall demonstrate compliance with the requirements of this division (relating to Vent Gas Control) in accordance with the following schedule.

(1) Vent gas.

(A) The testing required by §115.725 of this title (relating to Monitoring and Testing Requirements) shall be completed and the results submitted to the appropriate regional office and any local air pollution control agency with jurisdiction [executive director] as soon as practicable, but no later than December 31, 2004 [June 30, 2004].

(B) (No change.)

(2) (No change.)

**SUBCHAPTER H: HIGHLY-REACTIVE VOLATILE ORGANIC COMPOUNDS**

**DIVISION 2: COOLING TOWER HEAT EXCHANGE SYSTEMS**

**§115.764, §115.767**

**STATUTORY AUTHORITY**

The amendments are proposed under TWC, §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 TWC; and under THSC, §382.017, concerning Rules, which authorizes the commission to adopt rules consistent with the policy and purposes of TCAA. The amendments are also proposed under THSC, §382.002, concerning Policy and Purpose, which establishes the commission's purpose to safeguard the state's air resources, consistent with the protection of public health, general welfare, and physical property; §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; and §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.

The proposed amendments implement THSC, §§382.002, 382.011, 382.012, 382.016, and 382.017.

**§115.764. Monitoring Requirements.**

(a) The owner or operator of a cooling tower heat exchange system with a design capacity to circulate 8,000 gallons per minute (gpm) or greater of cooling water shall:

(1) - (4) (No change.)

(5) if the concentration of total strippable VOC is equal to or greater than 50 parts per billion by weight (ppbw) in the cooling tower water, collect an additional sample for strippable VOC speciation in accordance with §115.766 of this title from each inlet of the affected cooling tower at least once daily. The additional sampling for speciated strippable VOC shall continue on a daily basis until the concentration of total strippable VOC drops below 50 ppbw.

(b) The owner or operator of a cooling tower heat exchange system with a design capacity to circulate less than 8,000 gpm of cooling water shall:

(1) - (4) (No change.)

(5) if the calculated total strippable VOC concentration is equal to or greater than 50 ppbw in the cooling tower water, collect additional samples for strippable VOC analysis, in accordance with §115.766 of this title from each inlet of the affected cooling tower at least once daily. The

additional speciated strippable VOC sampling shall continue until the concentration of total strippable VOC drops below 50 ppbw.

(c) (No change.)

(d) The owner or operator of an affected cooling tower heat exchange system shall submit for review and approval by the executive director [Engineering Services Team] a quality assurance plan (QAP) for the installation, calibration, operation, and maintenance for the monitoring requirements of this division as follows:

(1) for cooling towers existing on or before June 30, 2004, no later than April 30, 2004; [or]

(2) for cooling tower heat exchange systems that become subject to the requirements of this division after June 30, 2004, at least 60 days prior to being placed in HRVOC service. This plan shall be submitted prior to initiating a monitoring program to comply with the requirements of subsections (a) and (b) of this section. Additionally, the plan must define each compound which could potentially leak through the heat exchanger and therefore directly impact the emissions of the cooling water system; and [.]

(3) the executive director shall issue written approval of, or detail deficiencies and/or direct additional requirements to be added to, each QAP within 180 days of receipt of a complete QAP

that details the owner or operator's plans for installation, calibration, operation, and maintenance of the cooling tower heat exchange system monitoring. The owner or operator shall submit a corrected QAP within 60 days of the date of the deficiency and/or additional requirements letter. If an approval or detailed deficiency and/or directed additional requirements letter is not issued within 180 days of receipt by the executive director, then the QAP is approved by default.

(e) In lieu of subsections (a)(2) - (5) and (b)(2) - (5) of this section, the owner or operator of cooling tower heat exchange systems in which no individual heat exchanger has 5.0% or greater HRVOC in the process-side fluid, shall determine total strippable VOC and the HRVOC concentration in the cooling tower water at least once per month, with an interval of not less than 20 days between samples, in accordance with appropriate methods in §115.766 of this title. If the total HRVOC concentration in the cooling tower water is ten ppbw or greater, the owner or operator shall determine total strippable VOC at least daily.

(f) In lieu of using a continuous flow monitor as described in subsections (a)(1) and (b)(1) of this section, the owner or operator of cooling tower heat exchange systems may use the maximum potential flow rate based on manufacturer's pump performance data, assuming no back pressure.

**§115.767. Recordkeeping Requirements.**

(a) - (c) (No change.)

(d) The owner or operator of any cooling tower heat exchange system using the alternate periodic monitoring available under §115.764(e) of this title shall comply with the following recordkeeping requirements:

(1) maintain records sufficient to demonstrate that no individual heat exchanger has 5.0% or greater HRVOC in the process-side fluid; and

(2) maintain records of the sampling and calculations used to determine the total strippable VOC and the HRVOC concentration in the cooling tower water;

(e) The owner or operator of any cooling tower heat exchange system using manufacturer's pump performance data to determine the maximum potential flow rate, as specified in §115.764(f) of this title, shall comply with the following recordkeeping requirements:

(1) maintain records of all changes to any pump or pumping system; and

(2) maintain records of the effect those changes have on the maximum potential flow rate.

**SUBCHAPTER H: HIGHLY-REACTIVE VOLATILE ORGANIC COMPOUNDS**

**DIVISION 3: FUGITIVE EMISSIONS**

**§§115.781, 115.783, 115.785, 115.787, 115.789**

**STATUTORY AUTHORITY**

The amendments are proposed under TWC, §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 TWC; and under THSC, §382.017, concerning Rules, which authorizes the commission to adopt rules consistent with the policy and purposes of TCAA. The amendments are also proposed under THSC, §382.002, concerning Policy and Purpose, which establishes the commission's purpose to safeguard the state's air resources, consistent with the protection of public health, general welfare, and physical property; §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; and §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.

The proposed amendments implement THSC, §§382.002, 382.011, 382.012, 382.016, and 382.017.

**§115.781. General Monitoring and Inspection Requirements.**

(a) The owner or operator shall identify the components of each process unit in highly-reactive volatile organic compound (HRVOC) service which is subject to this division (relating to Fugitive Emissions). Such identification must allow for ready identification of the components, and distinction from any components which are not subject to this division. [Except for connectors, each component shall be labeled with a unique component identification code. Connectors are not required to be individually labeled if they are clearly identified individually in the master components log.] The components [also] must be identified by one or more of the following methods:

(1) - (6) (No change.)

(b) Each component in the process unit must be monitored according to the requirements of Subchapter D, Division 3 of this chapter (relating to Fugitive Emission Control in Petroleum Refining, Natural Gas/Gasoline Processing, and Petrochemical Processes in Ozone Nonattainment Areas), except that the following additional requirements apply.

(1) - (3) (No change.)

(4) All components for which a repair attempt was made during a shutdown shall be monitored (with a hydrocarbon gas analyzer) and inspected for leaks within 30 days [or at the next monitoring period, whichever occurs first,] after startup is completed following the shutdown.

(5) - (6) (No change.)

(7) An unsafe-to-monitor or difficult-to-monitor component for which quarterly monitoring is specified may instead be monitored as follows [annually].

(A) 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 quarterly monitoring. Components which are unsafe to monitor shall be identified in a list made available upon request. If an unsafe-to-monitor valve is not considered safe to monitor within a calendar year, then it shall be monitored as soon as possible during safe-to-monitor times. For components in light liquid or heavy liquid service, inert gas or hydraulic testing shall be conducted at normal operating temperature and pressure to assure in-place leak-free performance before each startup of the process unit where the unsafe-to-monitor component is located. Inert gas or hydraulic testing is not required more than four times per year or more than once a month if the unsafe-to-monitor component has not been found to leak in the 12 consecutive months preceding startup. Leak-free performance shall be evaluated by audio and visual inspections in concert with ability to hold operating pressure for hydraulic testing and soap bubble screening for gas testing.

(B) 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. A difficult-to-monitor component for which quarterly monitoring is specified may instead be monitored annually.

(8) - (10) (No change.)

(c) - (e) (No change.)

(f) As an alternative to the requirements of subsection (b)(3) of this section for blind flanges, caps, or plugs at the end of a pipe or line containing HRVOC, connectors, bolted manways, heat exchanger heads, hatches, and sump covers, the owner or operator may elect to monitor all of these components in a process unit by April 1, 2006 and then conduct subsequent monitoring at the following frequencies:

(1) once per year (i.e., 12-month period), if the percent leaking blind flanges, caps, or plugs at the end of a pipe or line containing HRVOC, connectors, bolted manways, heat exchanger heads, hatches, and sump covers in the process unit was 0.5% or greater during the last required annual or biennial monitoring period;

(2) once every two years, if the percent leaking blind flanges, caps, or plugs at the end of a pipe or line containing HRVOC, connectors, bolted manways, heat exchanger heads, hatches, and sump covers was less than 0.5% during the last required monitoring period. An owner or operator may comply with this paragraph by monitoring at least 40% of the components in the first year and the remainder of the components in the second year. The percent leaking connectors, bolted manways, heat exchanger heads, hatches, and sump covers will be calculated for the total of all monitoring performed during the two-year period;

(3) if the owner or operator of a process unit in a biennial leak detection and repair program calculates less than 0.5% leaking blind flanges, caps, or plugs at the end of a pipe or line containing HRVOC, connectors, bolted manways, heat exchanger heads, hatches, and sump covers from the two-year monitoring period, the owner or operator may monitor the components one time every four years. An owner or operator may comply with the requirements of this paragraph by monitoring at least 20% of the components each year until all connectors, bolted manways, heat exchanger heads, hatches, and sump covers have been monitored within four years;

(4) if a process unit complying with the requirements of paragraph (3) of this subsection using a four-year monitoring interval program has greater than or equal to 0.5% but less than 1.0% leaking blind flanges, caps, or plugs at the end of a pipe or line containing HRVOC, connectors, bolted manways, heat exchanger heads, hatches, and sump covers, the owner or operator shall increase the monitoring frequency to one time every two years. An owner or operator may comply with the requirements of this paragraph by monitoring at least 40% of the components in the first year and the remainder of the components in the second year. The owner or operator may again elect to use the provisions of paragraph (3) of this subsection when the percent leaking components decreases to less than 0.5%;

(5) if a process unit complying with requirements of paragraph (3) of this subsection using a four-year monitoring interval program has greater than or equal to 1.0% but less than 2.0% leaking blind flanges, caps, or plugs at the end of a pipe or line containing HRVOC, connectors, bolted manways, heat exchanger heads, hatches, and sump covers, the owner or operator shall increase the

monitoring frequency to one time per year. The owner or operator may again elect to use the provisions of paragraph (3) of this subsection when the percent leaking components decreases to less than 0.5%; and

(6) if a process unit complying with requirements of paragraph (3) of this subsection using a four-year monitoring interval program has 2.0% or greater leaking blind flanges, caps, or plugs at the end of a pipe or line containing HRVOC, connectors, bolted manways, heat exchanger heads, hatches, and sump covers, the owner or operator shall increase the monitoring frequency to quarterly. The owner or operator may again elect to use the provisions of paragraph (3) of this subsection when the percent leaking components decreases to less than 0.5%.

**§115.783. Equipment Standards.**

The following equipment standards shall apply.

(1) - (2) (No change.)

(3) Each pressure relief valve in gaseous highly-reactive volatile organic compound (HRVOC) [HRVOC] service that vents to atmosphere which is installed in series with a rupture disk, pin, second relief valve, or other similar leak-tight pressure relief component, shall be equipped with a pressure sensing device or an equivalent device or system between the pressure 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 shall be repaired or replaced as soon as practicable, but no later than 30 calendar days after the failure is detected.

(4) Pumps, compressors, and agitators installed on or after July 1, 2003 shall be equipped with a shaft sealing system that prevents or detects emissions of VOC from the seal.

(A) (No change.)

(B) The executive director may approve shaft sealing systems different from those specified in subparagraph (A) of this paragraph. The executive director:

(i) shall consider on a case-by-case basis the technological circumstances of the individual pump, compressor, or agitator; and

(ii) must determine that the alternative shaft sealing system will result in the lowest emissions level that the pump, compressor, or agitator is capable of meeting after the application of best available control technology before approving the alternative shaft sealing system. [; and]

[(iii) is the Engineering Services Team, Office of Compliance and Enforcement, for purposes of this section.]

(C) (No change.)

(5) (No change.)

(6) Except for pressure relief valves, no valves shall be installed or operated at the end of a pipe or line containing HRVOC 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 shall be closed first.

**§115.785. Testing Requirements.**

The owner or operator shall perform testing to demonstrate compliance with §115.783(2) of this title (relating to Equipment Standards) using the test methods specified in §115.125 of this title (relating to Testing Requirements). The owner or operator is responsible for providing testing facilities and conducting the sampling and testing operations at its expense.

(1) - (2) (No change.)

(3) A written proposed description of any minor test method modifications allowed under §115.125(4) of this title shall be made available to the regional office before the pretest meeting. The executive director [regional director or the manager of the Engineering Services Team, Office of

Compliance and Enforcement,] will approve or disapprove of any deviation from specified sampling procedures.

(4) (No change.)

(5) Testing using the appropriate reference test methods and procedures specified in §115.125 of this title which was [Early testing] conducted before approval of the test plan required under §115.726 of this title (relating to Recordkeeping and Reporting Requirements) and which establishes maximum potential highly-reactive volatile organic compound emissions data [December 31, 2002] may be used to demonstrate compliance with the standards specified in this division (relating to Fugitive Emissions), provided that the owner or operator of the affected source obtains approval for the testing report and data from the executive director, and provided that the appropriate regional office was notified at least 45 days prior to testing and given an opportunity to observe the testing [if the owner or operator of an affected source demonstrates to the satisfaction of the executive director that the prior compliance testing meets the requirements of paragraphs (1) - (4) of this section]. For [early] testing conducted before approval of the test plan, the compliance stack test report required by paragraph (6) of this section shall be as complete as necessary to demonstrate to the executive director that the stack test was valid and the source has complied with the rule. The executive director reserves the right to request compliance testing or monitoring system performance evaluation at any time.

(6) (No change.)

**§115.787. Exemptions.**

(a) - (b) (No change.)

(c) The following components are exempt from the requirements of this division:

(1) 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<sub>g</sub> gauge (psig);

(2) - (5) (No change.)

(6) sampling connection systems, as defined in 40 Code of Federal Regulations (CFR) §63.161 (January 17, 1997), which are in compliance with 40 CFR [Code of Federal Regulations] §63.166(a) and (b) (June 20, 1996).

(d) - (f) (No change.)

**§115.789. Counties and Compliance Schedules.**

The owner or operator of each petroleum refinery; synthetic organic chemical, polymer, resin, or methyl tert-butyl ether manufacturing process; or natural gas/gasoline processing operation in Brazoria, Chambers, Fort Bend, Galveston, Harris, Liberty, Montgomery, and Waller Counties shall

demonstrate compliance with the requirements of this division (relating to Fugitive Emissions) in accordance with the following schedule.

(1) The initial monitoring of all components for which monitoring is required under this division, but which are not required to be monitored under Subchapter D, Division 3 of this chapter (relating to Fugitive Emission Control in Petroleum Refining, Natural Gas/Gasoline Processing, and Petrochemical Processes in Ozone Nonattainment Areas), shall occur as soon as practicable, but no later than March 31, 2004. However, the schedule in §115.781(f) of this title (relating to General Monitoring and Inspection Requirements) shall apply to blind flanges, caps, or plugs at the end of a pipe or line containing highly-reactive volatile organic compounds, connectors, bolted manways, heat exchanger heads, hatches, and sump covers for which the owner or operator has notified the appropriate regional office and any local air pollution control program with jurisdiction that §115.781(f) of this title will be used to establish the monitoring schedule for these components [December 31, 2003].

(2) All equipment upgrades required by §115.783 of this title (relating to Equipment Standards) must be made as soon as practicable, but no later than March 31, 2004 [December 31, 2003].

(3) (No change.)

(4) The testing required by §115.785 of this title (relating to Testing Requirements) shall be conducted as soon as practicable, but no later than December 31, 2004 [December 31, 2003].

(5) Compliance with the recordkeeping required by §115.786 of this title (relating to Recordkeeping Requirements) shall be implemented and made available upon request to authorized representatives of the executive director, EPA, or any local air pollution control agency having jurisdiction as soon as practicable, but no later than March 31, 2004 [December 31, 2003].

(6) The initial monitoring of pump seals and compressor seals using a leak definition of 500 parts per million by volume, as required by §115.781(b)(9) of this title [(relating to General Monitoring and Inspection Requirements)], shall begin as soon as practicable, but no later than March 31, 2004 [December 31, 2003].