

The Texas Commission on Environmental Quality (commission) proposes amendments to §§115.10, 115.720, 115.722, 115.725 - 115.727, 115.729, 115.760, 115.761, 115.764, 115.769, 115.780 - 115.783, and 115.786 - 115.789. The commission also proposes to repeal §§115.766 - 115.768 and 115.785, and proposes new §§115.766 **and** ; §115.767, ~~and 115.790 - 115.793~~. These amendments, repeals, and new sections are being proposed in Subchapter A, Definitions; Subchapter H, Highly-Reactive Volatile Organic Compounds, Division 1, Vent Gas Control; Subchapter H, Division 2, Cooling Tower Heat Exchange Systems; **and** Subchapter H, Division 3, Fugitive Emissions; ~~and Subchapter H, Division 4, Enforcement of Site-wide Caps.~~

The amended, repealed, and new sections are proposed to be submitted to the United States Environmental Protection Agency (EPA) as revisions to the state implementation plan (SIP).

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

The Houston/Galveston/Brazoria ozone nonattainment area (HGA) is classified as Severe-17 under the Federal Clean Air Act Amendments of 1990 (as codified in 42 United States Code (USC), §§7401 *et seq.*), and therefore, is required to attain the one-hour ozone standard of 0.12 parts per million (125 parts per billion) by November 15, 2007. The HGA consists of Brazoria, Chambers, Fort Bend, Galveston, Harris, Liberty, Montgomery, and Waller Counties, and the commission has been working to develop a demonstration of attainment in accordance with 42 USC, §7410. The most relevant HGA SIP revisions to date are the December 2000 one-hour ozone standard attainment demonstration, the September 2001 follow-up revision, and the December 2002 nitrogen oxides (NO<sub>x</sub>)/highly-reactive volatile organic compound (HRVOC) revision.

This process has proven to be extremely challenging due to the magnitude of reductions needed for attainment. The emission reduction requirements included as part of the December 2000 SIP revision represent substantial, intensive efforts on the part of stakeholder coalitions in the HGA, in partnership with the commission, to address ozone. These coalitions include local governmental entities, elected officials, environmental groups, industry, consultants, and the public, as well as EPA and the commission, and worked diligently to identify and quantify control strategy measures for the HGA attainment demonstration.

#### *December 2000*

The December 2000 SIP revision contained rules and photochemical modeling analyses in support of the HGA ozone attainment demonstration. The majority of the emissions reductions identified in this revision were from a 90% reduction in point source NO<sub>x</sub>. The modeling analysis also indicated a shortfall in necessary NO<sub>x</sub> emission reductions, such that an additional 91 tons per day (tpd) of NO<sub>x</sub> reductions were necessary for an approvable attainment demonstration. In addition, the revision contained post-1999 rate-of-progress (ROP) plans for the milestone years 2002 and 2005 and for the attainment year 2007, and transportation conformity motor vehicle emissions budgets (MVEB) for NO<sub>x</sub> and volatile organic compound (VOC) emissions. The SIP also contained enforceable commitments to implement further measures in support of the HGA attainment demonstration, as well as a commitment to perform and submit a midcourse review.

*September 2001*

The September 2001 SIP revision for the HGA included the following elements: 1) corrections to the ROP table/budget for the years 2002, 2005, and 2007 due to a mathematical inconsistency; 2) incorporation of a change to the idling restriction control strategy to clarify that the operator of a rented or leased vehicle is responsible for compliance with the requirements in situations where the operator of a leased or rented vehicle is not employed by the owner of the vehicle (the commission committed to making this change when the rule was adopted in December 2000); 3) incorporation of revisions to the clean diesel fuel rules to provide greater flexibility for compliance with the requirements of the rule while preserving the emission reductions necessary to demonstrate attainment in the HGA; 4) incorporation of a stationary diesel engine rule that was developed as a result of the state's analysis of EPA's reasonably available control measures; 5) incorporation of revisions to the point source NO<sub>x</sub> rules; 6) incorporation of revisions to the emissions cap and trade rules; 7) the removal of the construction equipment operating restriction and the accelerated purchase requirement for Tier 2/3 heavy-duty equipment; 8) the replacement of these rules with the Texas Emission Reduction Plan program; 9) the layout of the midcourse review process that details how the state will fulfill the commitment to obtain the additional emission reductions necessary to demonstrate attainment of the one-hour ozone standard in the HGA; and 10) replacement of the 2007 ROP MVEBs to be consistent with the attainment MVEBs.

As was discussed in the December 2000 revision, the modeling resulted in a 141 parts per billion peak ozone level that correlated to a shortfall calculation of 91 tpd NO<sub>x</sub> equivalent emissions. An additional five tpd was added to the shortfall, because the state could not take credit for the NO<sub>x</sub> reductions

associated with the diesel pull-ahead strategy. The excess emissions from this strategy were not included in the original emissions inventory. The gap control measures adopted in December 2000, along with the stationary diesel engine rules included in the September 2001 revision, resulted in NO<sub>x</sub> reductions of 40 tpd, which left a total remaining shortfall of 56 tpd. The state committed to address this shortfall through the midcourse review process.

#### *December 2002*

In January 2001, the Business Coalition for Clean Air - Appeal Group (BCCA-AG) and several regulated companies challenged the December 2000 HGA SIP and some of the associated rules. Specifically, the BCCA-AG challenged the 90% NO<sub>x</sub> reduction requirement from stationary sources in the HGA. In May 2001, the parties agreed to a stay in the case, and Judge Margaret Cooper, Travis County District Court, signed a consent order, effective June 8, 2001, requiring the commission to perform an independent, thorough analysis of the causes of rapid ozone formation events and identify potential mitigating measures not yet identified in the HGA attainment demonstration, according to the milestones and procedures in Exhibit C (Scientific Evaluation) of the order.

In compliance with the consent order, the commission conducted a scientific evaluation based in large part on aircraft data collected by the Texas 2000 Air Quality Study (TexAQS). The TexAQS, a comprehensive research project conducted in August and September 2000 involving more than 40 research organizations and over 200 scientists, studied ground-level ozone air pollution in the HGA and east Texas regions. The study revealed that while industrial source NO<sub>x</sub> emissions were generally correctly accounted for, industrial source VOC emissions were likely significantly understated in earlier

emissions inventories. The study also showed that surface monitors were insufficient to capture the phenomenon of ozone plumes downwind of industrial facilities. On four separate days, aircraft instruments recorded ozone levels exceeding 125 parts per billion that were missed by surface monitoring equipment. The findings from the study are constantly evolving and have raised questions about the formation of high ozone levels in the HGA.

To address these findings and to fulfill obligations in the consent order, the commission adopted a SIP revision in December 2002 that focused on replacing the most stringent 10% industrial NO<sub>x</sub> reductions with VOC controls. In light of the TexAQS study, the commission conducted further modeling analysis of ambient VOC data. The results of photochemical grid modeling and analysis indicated that the same level of air quality benefits achieved with a 90% industrial NO<sub>x</sub> emissions reduction could be achieved with an overall 80% industrial NO<sub>x</sub> emissions reduction when combined with an industrial VOC emissions reduction. This conclusion was based on results from several studies, including photochemical grid modeling of the August-September 2000 episode using a top-down emissions inventory adjustment to point source HRVOC emissions, and analyses of ambient HRVOC measurements made by commission automated gas chromatographs and airborne canisters using the maximum incremental reactivity and hydroxyl reactivity scales. Four HRVOCs (ethylene, propylene, 1,3-butadiene, and butenes) clearly play important roles in the HGA ozone formation, and these four seemed to be the best candidates for the first round of HRVOC controls.

In order to address these scientific findings, the commission adopted revisions to the industrial source control requirements, one of the control strategies within the existing federally approved SIP. The

December 2002 revision contains new rules to reduce HRVOC emissions from four key industrial sources: fugitives, flares, process vents, and cooling towers. The adopted rules target HRVOCs while maintaining the integrity of the SIP. Analysis showed that limiting emissions of ethylene, propylene, 1,3-butadiene, and butenes in conjunction with an 80% reduction in NO<sub>x</sub> is equivalent in terms of air quality benefit to that resulting from a 90% point source NO<sub>x</sub> reduction requirement. As such, the HRVOC rules are performance-based, emphasizing monitoring, recordkeeping, reporting, and enforcement, rather than establishing individual unit emission rates.

The technical support documentation accompanying the revision contains the supporting analysis for early results from ongoing analysis examining whether reductions in HRVOC emissions could replace the last 10% of industrial NO<sub>x</sub> controls with a reduction of approximately 64% in industrial HRVOC emissions, while ensuring that the air quality specified in the approved December 2000 HGA SIP is met.

#### *Current SIP Revision*

As mentioned previously, the commission committed to perform a midcourse review to ensure attainment of the one-hour ozone standard. The midcourse review process provides the ability to update emissions inventory data, utilize current modeling tools, such as MOBILE6, and enhance the photochemical grid modeling. The data gathered from the TexAQS continues to improve photochemical modeling of the HGA. The collection of these technical improvements give a more comprehensive understanding of the ozone challenge in the HGA that is necessary to develop an attainment plan. In the early part of 2003, the commission was preparing to move forward with the

midcourse review; however, during the same time period EPA announced its plans to begin implementation of the eight-hour ozone standard. The EPA published proposed rules for implementation of the eight-hour ozone standard in the June 2, 2003 issue of the *Federal Register* (68 FR 32802). In the same time frame, EPA also formalized its intentions to designate areas for the eight-hour ozone standard by April 15, 2004, meaning states would need to reassess their efforts and control strategies to address this new standard by 2007. Recognizing that existing one-hour nonattainment areas would soon be subject to the eight-hour ozone standard, and in an effort to efficiently manage the state's limited resources, the commission decided to develop an approach that addresses the outstanding obligations under the one-hour ozone standard while beginning to analyze eight-hour ozone issues.

The commission's one-hour ozone SIP commitments include: 1) completing a one-hour ozone midcourse review; 2) performing modeling; 3) adopting measures sufficient to fill the NO<sub>x</sub> shortfall; 4) adopting measures sufficient to demonstrate attainment; and 5) revising the MVEB using MOBILE6.

Results from the TexAQS and recent photochemical modeling indicate that additional HRVOC reductions will be the most beneficial measure to reduce ozone in the HGA. The commission is proposing to reduce HRVOC emissions to reach attainment of the one-hour ozone standard. The photochemical modeling of the August-September 2000 episode coupled with a weight-of-evidence argument demonstrates attainment of the one-hour ozone standard. To achieve the necessary HRVOC reductions, the commission is proposing a two-pronged approach that would address **variable** short-term **variable** emissions through a not-to-exceed limit, and would address steady-state and routine emissions

through an annual cap. The annual HRVOC cap in Harris County would be reduced from the existing HRVOC cap in order to support the attainment demonstration modeling. The annual HRVOC cap in the seven-county surrounding area is equivalent to the total emissions limits established in the December 2002 SIP revision, but represented on an annual basis instead of a 24-hour rolling average. The commission will continue to evaluate the necessity to require short-term and annual reductions from those sites subject to Chapter 115, Subchapter H, Divisions 1 and 2, that are located within the seven-county surrounding area. If the evaluation demonstrates that reductions from these counties have little impact on attainment of the one-hour ozone standard, the short-term and annual limits for those other seven counties may no longer be required. The commission also solicits comments on possible ways to mitigate violations of the short-term emissions cap.

The annual HRVOC cap emissions would be distributed and enforced through an HRVOC emissions cap and trade program under new 30 TAC Chapter 101, Subchapter H, Division 6 (Highly-Reactive Volatile Organic Compound Emissions Cap and Trade Program) being proposed in concurrent rulemaking. This program would establish a mandatory annual HRVOC emissions cap on all sites located in the HGA that emit or have the potential to emit more than ten tons per year of HRVOC, and that are subject to the HRVOC control requirements of Chapter 115, Subchapter H, Division 1 or Division 2. The cap would be enforced by the allocation, trading, and banking of allowances. An allowance is the equivalent of one ton of HRVOC emissions. This HRVOC cap would be established at levels demonstrated as necessary to allow the HGA to attain the one-hour ozone standard. The proposed cap would initially be implemented on April 1, 2006. The proposed HRVOC cap and trade program would also require all sites with new or modified HRVOC sources in the HGA to obtain unused allowances from other sites already participating under the cap to offset any increased HRVOC

emissions. For sites that have the potential to emit ten tons per year or less of HRVOCs from sources subject to the HRVOC control requirements of Subchapter H, Division 1 or 2, the total aggregate HRVOC emissions from those sources would be limited to ten tons per year. Sites that are exempt from the HRVOC emissions cap and trade program would be extended an opportunity to opt-in, receive an HRVOC allocation, and thereby not be restricted to the ten tons per year limit.

The HGA SIP no longer relies solely on NO<sub>x</sub>-based strategies. A combination of point source HRVOC controls and NO<sub>x</sub> reductions appear to be the most effective means of reducing ozone in the HGA and there is no longer a NO<sub>x</sub> shortfall in the HGA SIP. The commission also evaluated a number of the existing control strategies that were put in place in the December 2000 revision. The photochemical modeling shows that some of these strategies are no longer necessary to attain the one-hour ozone standard. This SIP revision is proposing the repeal of the commercial lawn and garden equipment restrictions, the repeal of the heavy-duty vehicle idling restrictions, and the removal of the motor vehicle inspection and maintenance program requirements from Chambers, Liberty, and Waller Counties. In addition, this SIP proposal includes revisions to the environmental speed limit strategy. In September 2002, the commission revised the existing speed limit strategy to suspend the 55 mile per hour (mph) speed limit until May 1, 2005, and, where posted speeds were 65 mph or higher before May 1, 2002, to increase ~~speeds~~ speed limits to five mph below what was posted. The 78th Legislature, 2003, removed the commission's authority to determine speed limits for environmental purposes; therefore, this proposal would remove the reinstatement of the 55 mph speed limit on May 1, 2005, and would maintain the currently posted speed limits at five mph below the posted limit before May 1, 2002. Also, as part of this SIP revision, the commission is proposing new statewide portable fuel container

rules. Historically, the commission has expressed a preference to implement technology-based strategies over behavior-altering strategies, and these proposed changes embody that philosophy.

Through this revision, the commission is fulfilling its outstanding one-hour ozone SIP obligations and beginning to plan for the upcoming eight-hour ozone standard. This proposal demonstrates attainment of the one-hour ozone standard in **the** HGA in 2007 and provides a preliminary analysis of the HGA in terms of the eight-hour ozone standard in 2007 and 2010. EPA's proposed eight-hour implementation rules provide flexibility to the states in transitioning from the one-hour to the eight-hour ozone standard, and the commission believes the steps taken in this proposal and the technical work performed to date will be invaluable through the transition period. Upon EPA's finalization of the eight-hour implementation and the transportation conformity rules, the commission expects to begin developing eight-hour ozone SIPs.

This is to put all interested parties on notice that, although the commission is proposing the following rules, including an annual cap and a short-term limit on HRVOC emissions, the commission may significantly amend these proposed rules at adoption, repropose a portion of these rules, or propose additional rules, as appropriate.

First, the commission continues to analyze the rules for implementation of the eight-hour ozone standard adopted by EPA on April 15, 2004. These rules and their preamble suggest that a demonstration of attainment of the one-hour ozone standard may not be required for the portion of the SIP pertaining to the HGA. This means that the commission will need to review the measures

contained in the current proposal to ensure that they are needed in this form in order to demonstrate noninterference. Additional analysis of the impact of the proposed rules on attainment of the eight-hour standard may indicate a need for new or more stringent control measures.

Second, the commission may determine that, if a one-hour attainment demonstration is necessary, additional, different, or more stringent control measures may be needed based on additional modeling. The commission staff continues to model scenarios under the one-hour standard, and the commission may determine that the results indicate a need for changes in control strategies. Moreover, the one-hour attainment demonstration includes a weight-of-evidence argument. Additional review of the issues relating to the weight-of-evidence argument could lead the commission to propose new strategies or to repropose the control strategies proposed today.

Finally, the commission is also ~~concurrently proposing evaluating~~ a cap and trade program ~~in 30 TAC Chapter 101, Subchapter H, new Division 6 (Highly-Reactive Volatile Organic Compound Emissions Cap and Trade Program)~~ as a refinement of the annual cap proposed for HRVOC emissions. ~~If the commission concludes that a cap and trade system is feasible and desirable, an additional proposal or reproposal likely will be needed.~~

## SECTION BY SECTION DISCUSSION

### *General Administrative Rule Language Changes*

The commission proposes to change the word “which” to “that” and the word “shall” to “must” in numerous locations in the rule language to conform to the drafting rules in the *Texas Legislative Council Drafting Manual*, October 2002.

The commission proposes to spell out acronyms the first time they are used in a section and to delete acronyms that are only used once in a section.

#### *SUBCHAPTER A, DEFINITIONS*

The proposed amendment to §115.10, concerning Definitions, would add a new definition of “Emergency flare” to differentiate flares that only receive emissions during upset events or unscheduled maintenance, startup, or shutdown activities from other flares. The remaining definitions in §115.10 are proposed to be renumbered accordingly.

The proposed amendment to the definition of “Strippable volatile organic compound” would remove the listing of test methods used to determine the concentration of strippable VOC because the test methods are not necessary to define the term and are already listed in the cooling tower rules.

#### *SUBCHAPTER H, HIGHLY-REACTIVE VOLATILE ORGANIC COMPOUNDS*

##### *Division 1, Vent Gas Control*

##### *Section 115.720, Applicability and Definitions*

The proposed amendment to §115.720(a) would add language to specify that the applicability of this rule includes both controlled and uncontrolled vent gas streams containing HRVOC. A new definition for “Degassing safety device” is proposed in §115.720(b) to address low-flow pilots that are typically permitted as flares, but used only at geologic storage facilities during emergency releases. The remaining definitions in §115.720 are proposed to be renumbered accordingly.

*Section 115.722, Site-wide Cap and Control Requirements*

The commission proposes to amend this section to allow sites the flexibility of compliance with the vent gas control requirements of this division through compliance with the HRVOC emissions cap and trade program. The proposed amendment to §115.722(a) would change the long-term site-wide cap strategy to a calendar year basis instead of the existing 24-hour rolling average basis, and would state that owners or operators of a site subject to the HRVOC vent gas rules shall comply with the HRVOC emissions cap and trade program in Chapter 101, Subchapter H, Division 6 ~~change the title of the SIP and the designations of the tables that specify the site-wide cap limits.~~ The proposed amendment to §115.722(a) would also remove the reference to the site-cap limits in the tables of the SIP.

Proposed new §115.722(b) would specify that all sites subject to this division or to Division 2 that are exempt from the HRVOC emissions cap and trade program in accordance with §101.392 (Exemptions) ~~not listed in the cap tables~~ are limited to ten tons of HRVOC emissions per calendar year.

Proposed new §115.722(c) would provide a short-term, not-to-exceed limit, in pounds of HRVOC per one-hour block, for all sites ~~accounts~~ subject to this division. The commission continues to evaluate the magnitude of the short-term limit, and the time period over which this short-term limit would be enforced. The commission solicits comment regarding the appropriate level for this short-term limit, and requests any supporting data regarding alternatives to the magnitude and time period. Proposed new §115.722(c)(3) would address how exceedances of the short-term limits should be calculated to determine compliance with the long-term cap. Existing §115.722(b) and (c) are proposed to be relettered to §115.722(d) and (e), respectively. The proposed amendment to relettered §115.722(d)

would correct a citation to 40 Code of Federal Regulations (CFR) §60.18 and add two new paragraphs to specify the methods to demonstrate compliance with the minimum net heating value requirements and the maximum exit velocity requirements. The commission does not propose to require continuous monitoring of potential visible emissions from flares.

*~~Section 115.725, Monitoring and Testing Requirements~~*

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The proposed amendment to §115.725(a) would specify that pressure relief valves are not subject to the requirements of §115.725(a). Proposed §115.725(a) would also specify that each vent gas that is not controlled by a flare must be tested. The proposed amendment to §115.725(a) would specify that HRVOC emissions are considered to be zero during non-operational periods for cyclic or batch processes. Additionally, the proposed amendment to §115.725(a) would add requirements in §115.725(a)(1) and (2) for owners or operators to select operational parameters for uncontrolled and controlled vents, monitor those parameters, and establish operating limits based on averages during the tests required by §115.725(a). The process parameter monitoring requirements are necessary to help assure compliance with the site-wide caps in §115.722(c). Proposed new §115.725(a)(3) would require that HRVOC emissions during emissions events and scheduled startup, shutdown, and maintenance activities be determined using either testing or process knowledge and engineering calculations. This requirement is necessary due to the inclusion of emissions from emissions events and scheduled startup, shutdown, and maintenance activities in the site-wide caps in §115.722 and to better assure compliance with the HGA attainment demonstration SIP. Proposed new §115.725(a)(4) would require the owner or operator to develop, implement, and follow written monitoring plans for the operational parameters required under §115.725(a)(1) and (2). Proposed new §115.725(a)(5) would specify that additional testing may be performed to update emission data after the initial HRVOC emission test has been performed, and that test plans for additional testing must be submitted to the executive director at least 45 days prior to testing. Proposed new §115.725(a)(6) would include the provisions currently under §115.725(c), regarding the use of testing performed prior to approval of the test plans, and proposed

new §115.725(a)(7) would include the language currently under §115.725(g), regarding test waivers for one-half of the vents that are identical in design and operation.

The proposed amendment to §115.725(b) would specify that the alternatives provided may not be applied to pressure relief valves and that the vent gas stream must comply with the process parameter monitoring requirements of §115.725(a). The proposed amendment to §115.725(b)(1)(B) would specify that cylinder gas audits must be performed at a minimum quarterly, after the initial cylinder gas audit. The proposed amendment in §115.725(b)(2) would specify that process data, “sufficient to demonstrate compliance status” may be used to determine maximum potential HRVOC hourly emissions, and would remove pressure relief valves from the types of processes for which process knowledge may be used. Finally, the proposed amendment to §115.725(b) would include the addition of degassing safety devices in §115.725(b)(2)(D) to the types of processes for which process knowledge may be used in lieu of testing.

Proposed new §115.725(c) would provide monitoring requirements for pressure relief valves, and the proposed new language in §115.725(c)(1) would specify the requirements of the pressure relief valve monitoring system. Proposed new §115.725(c)(2) would specify that the owner or operator may use process knowledge to determine the HRVOC emission rates during events when the pressure relief valves open. Proposed new §115.725(c)(3) would require written monitoring plans for the pressure relief valve monitoring systems, and would specify the requirements of the plans. Finally, the proposed new §115.725(c)(4) would specify that the written monitoring plans must be submitted within 30 days

upon written request by the executive director, and that the executive director may require additional or alternative monitoring requirements.

The proposed amendment to §115.725(d) would specify that except for subsections (e) - (i), the owner or operator shall perform continuous monitoring in accordance with the requirements of §115.725(d) to demonstrate compliance with §115.722(a) - (d). The proposed amendment to §115.725(d)(2) would revise the calibration requirements for the on-line analyzer. The proposed amendment to §115.725(d)(2)(A)(i) would specify that for HRVOC constituents, the owner or operator must follow the procedures and requirements of 40 CFR Part 60, Appendix B, Section 10 of Performance Specification 9, except as provided for in §115.725(d)(2)(A)(i). Proposed new §115.725(d)(2)(A)(ii) would specify that for the constituents monitoring to determine net heating value and molecular weight, the owner or operator may elect to follow the §115.725(d)(2)(A)(i) calibration requirements or the manufacturer recommended procedures. Proposed new §115.725(d)(2)(A)(ii)(I) would require that if the manufacturer recommended procedures are selected, those procedures must include, at a minimum, weekly calibration checks of the top two non-HRVOC constituents affecting molecular weight and net heating value to meet the performance criteria of Section 10.2 of Performance Specification 9. Proposed new §115.725(d)(2)(A)(ii)(II) would require that manufacturer information and data be submitted with a quality assurance plan (QAP) for those constituents for which routine calibration is not performed. Proposed new §115.725(d)(2)(A)(iii) would specify that the range of calibration standards required for calibration of the on-line analyzer may be based on the typical concentrations instead of the full potential range of concentrations. The language in §115.725(d)(2)(A)(iii) would also specify that data must be submitted with the QAP to demonstrate the accuracy of the analyzer at the maximum

concentrations outside the proposed calibration range. Proposed new §115.725(d)(2)(A)(iv) would state that the executive director may specify calibration requirements in the approval of the QAP. Finally, proposed new §115.725(d)(2)(B) would specify that the owner or operator may install an on-line calorimeter to determine net heating value instead of monitoring for individual constituents to determine net heating value. It has come to the commission's attention that a reference in Performance Specification 9, Section 10.1 correctly cites Section 13.3 of Performance Specification 9 with regard to the acceptance criteria for multipoint calibration requirements. Section 13.3 would require industry to comply with a five-minute sampling frequency for the on-line analyzers. The correct citation for the precision and linearity requirements should be Section 13.2 of Performance Specification 9. The commission has confirmed the appropriate citation with the EPA. Therefore, it is the commission's position that industry should comply with the multipoint calibration requirements in Section 13.2 of Performance Specification 9.

The proposed amendment to §115.725(d)(3) would specify the calculation methodology for determining the percent measurement data availability. The proposed amendment to §115.725(d)(4) would change the start of daily sampling from within 24 hours to within ten hours of initial on-line analyzer malfunction, and would specify that the samples collected during periods of monitor downtime shall be used to demonstrate "continuous compliance with the requirements of §115.722(a) - (d) of this title." The proposed amendment to §115.725(d)(5) would delete the move the language specifying that compliance with the minimum net heating value requirements is based on block one-hour average to §115.722(d)(1). The language currently in §115.725(d)(7) would be renumbered to §115.725(d)(6) and revised to move language to §115.722(d)(2) specifying that compliance with the exit velocity

requirements is based on a block one-hour average. Additionally, §115.725(d)(6) would be renumbered to §115.725(d)(7) and revised to specify that HRVOC emission rates shall be calculated from data gathered according to paragraphs (1) - (6), and to specify that the heating value requirement is based on net heating value. Finally, in order to better organize the monitoring and testing rules, §115.725(d)(8) regarding minor modifications to the methods and alternative monitoring methods, is proposed to be moved to a new §115.725(j) and the language revised to better specify the requirements.

Section 115.725(e) currently states that flares used solely for abatement of emissions from loading operations for transport vessels or temporary portable flares used solely for the abatement of emissions from scheduled maintenance or startup or shutdown activities are not required to comply with the monitoring requirement of §115.725(d) provided specific requirements are satisfied. The proposed amendment to §115.725(e) specifies that this subsection would only apply to flares used solely for abatement of HRVOC emissions, would apply to loading operations from marine vessels, and would not apply to temporary portable flares used solely for scheduled startup, shutdown, or maintenance activities. The proposed amendment to §115.725(e) would also move the recordkeeping requirements in §115.725(e)(1)(B) to §115.726(d)(5), and renumber §115.725(e)(1)(A) - (D) to §115.725(e)(1) - (3). The proposed amendment to §115.725(e)(1) - (3) would also specify the requirements to demonstrate compliance with the minimum net heating value requirements and the exit velocity requirements of §115.722(d), and compliance with the site-wide cap in §115.722. Proposed new §115.725(e)(4) would specify that the owner or operator may use process knowledge to determine net heating value and HRVOC emissions for flares that receive greater than 98% of an individual HRVOC at all times.

The proposed amendment would reletter §115.725(f) to §115.725(j) and specify that minor modifications to either test methods or monitoring methods may be approved by the executive director.

Proposed new §115.725(f) would specify monitoring requirements for flares used solely for abatement of emissions from scheduled startup, shutdown, and maintenance activities. Proposed new §115.725(f) would incorporate language removed from §115.725(e)(2), regarding temporary portable flares; however, but would also expand the applicability to any flare type used solely for scheduled startup, shutdown, and maintenance activities. Proposed new §115.725(f)(2) would limit the total number of days to 28 days in 12 consecutive months for which an account may temporarily send HRVOC to multiple flares under the provisions of §115.725(f). Proposed new §115.725(f)(6) would specify that the owner or operator may use process knowledge to determine net heating value and HRVOC emissions for flares that receive greater than 98% of an individual HRVOC at all times.

The proposed amendment to §115.725(g), regarding test waivers for one-half of the vents that are identical in design and operation, would move the language to §115.725(a)(8).

Proposed new §115.725(g) would specify monitoring requirements for emergency flares as proposed to be defined in §115.10. Proposed new §115.725(g)(1) and (2) would provide the option of complying with the monitoring requirements of §115.725(d) or using process knowledge and engineering calculations to determine compliance with §115.722(a) - (d). Proposed new §115.725(g)(2) would specify additional requirements for emergency flares for which process knowledge and engineering calculations are used. Proposed new §115.725(g)(2)(A) would specify parameter monitoring for

emergency flares with physical seals, such as water seals, to monitor the status of the physical seals, record the time and duration of each event when emissions are sent to the flare, and verifies that the seals have been restored after an event. Proposed new §115.725(g)(2)(B) would specify parameter monitoring for emergency flares without physical seals to monitor flow to the emergency flare with a flow monitor or flow indicator to determine the time and duration of each event when emissions are sent to the flare and to determine the minimum flow rate that indicates when emissions are sent to the flare. Proposed new §115.725(g)(2)(C) would specify that any owner or operator electing to use process knowledge for emergency flares, must develop, implement, and follow a written monitoring plan for the parameter monitoring under §115.725(g)(2)(A) or (B). Proposed new §115.725(g)(2)(D) would specify that the written monitoring plans must be submitted within 30 days upon written request by the executive director. Proposed new §115.725(g)(2)(E) would specify the calculation methods for the actual exit velocity and the HRVOC hourly average mass emission rate from the flare, and the destruction efficiencies for various situations.

Proposed new §115.725(h) would specify requirements for flares other than emergency flares that temporarily receive HRVOC emissions from activities other than scheduled startup, shutdown, and maintenance. Proposed new §115.725(h)(1) and (2) would limit the total number of days that HRVOC may be temporarily sent to an individual flare, or to multiple flares at an account under the provisions of §115.725(h). Proposed new §115.725(h)(3) would options to determine flow rate to the flare in lieu of monitoring in accordance with §115.725(d)(2), including process knowledge, actual measurement, or for flares that temporarily receive HRVOC emissions from flare systems that are monitored according to §115.725(d), data substitution. Proposed new §115.725(h)(4) would specify options to determine net

heating value and HRVOC constituents in lieu of monitoring in accordance with §115.725(d)(2), including daily sampling according to §115.725(d)(4) or, for flares that temporarily receive HRVOC emissions from flare systems that are monitored according §115.725(d), data substitution for time periods up to 72 consecutive hours. Finally, proposed new §115.725(h)(5) would specify that, if an emissions event occurs while HRVOC emissions are sent temporarily to a flare under §115.725(h), then process knowledge may be used to determine compliance with §115.722(a) - (d).

Proposed new §115.725(i) would specify that process knowledge may be used to determine compliance with §115.722(a) - (d) for flares that are specifically designed to receive and control liquid or dual phase streams. This amendment is necessary because the monitoring provisions in the §115.725 are not applicable to flares designed to control liquid streams, and the current state of monitoring technology is not sufficient to allow continuous monitoring of dual phase streams.

Proposed new §115.725(j) (that was relettered from §115.725(f)) would incorporate language previously in §115.725(f) to specify that minor modifications to either test methods or monitoring methods may be approved the executive director.

Finally, proposed new §115.725(k) would specify that when process information and engineering calculations are used to demonstrate compliance with §115.722(a) - (d), the process information and engineering calculations must be submitted within 30 days upon written request by the executive director. This addition to §115.725 is necessary to ensure the commission has adequate information to determine compliance with the site-wide caps.

*Section 115.726, Recordkeeping and Reporting Requirements*

The proposed amendment to §115.726(a) would remove the unnecessary language specifying review of test plans and QAPs, and would specify that the owner or operator of each affected flare or vent gas stream subject must subsequently comply with the approved testing plans and QAPs for monitoring.

The proposed amendment to §115.726(a)(1) would specify that the paragraph applies to the monitoring requirements in §115.725(d) and the proposed amendment to §115.726(a)(1)(A) would specify the latest date that the QAP must be submitted. The proposed amendment to §115.726(a)(1)(B) would change the requirement to submit QAP for flares that become subject to the requirements of the division after the compliance date. The proposed amendment to §115.726(a)(1)(B) would change the requirement to submit the QAP at least 60 days prior to the flare being placed in HRVOC service by removing the 60-day time period and only require that the QAP be submitted prior to the flare being placed in HRVOC service. The proposed amendment to §115.726(a)(2) would specify that the paragraph only applies to the testing requirements in §115.725(a). Additionally, the proposed new §115.726(a)(2)(D) would specify that the operation parameters required in proposed new provisions in §115.725(a)(1) and (2) must be identified in the test plan.

The proposed amendment to §115.726(b) would include more specific recordkeeping requirements of the vent testing and monitoring conducted as required by §115.725(a) and (b). Proposed new §115.726(b)(1) - (3) would include the addition of recordkeeping requirements for the process parameter monitoring and monitoring plans required under proposed new §115.725(a)(1), (2), and (4). Additionally, proposed new §115.726(b)(4) - (7) would provide more specific recordkeeping requirements for vent gas streams monitored using a continuous emission monitoring systems in

accordance with §115.725(b)(1), and for vent gas streams for which alternatives to testing have been allowed under §115.726(b)(2).

The proposed amendment would reletter §115.726(c), relating to recordkeeping requirements for flares monitored in accordance with §115.725, to §115.726(d). Proposed new §115.726(c) would include recordkeeping requirements for affected pressure relief valves monitored in accordance with the proposed new provisions in §115.725(c). The proposed additional recordkeeping requirements would include records of the date, time, duration, volumetric flow rate, and speciated and total HRVOC emissions for each pressure relief event. The proposed recordkeeping requirements for affected pressure relief valves would include records of the parameters monitored in accordance with §115.725(c)(1), all process information, data, and calculations used to determine flow and emission data as specified in §115.725(c)(2), and the monitoring plans required under §115.725(c)(3).

The proposed amendment to §115.726(d) (that was relettered from §115.726(c)) would specify that the recordkeeping requirements are for flares monitored in accordance with §115.725. The proposed amendment to §115.726(d)(4) (that was renumbered from §115.726(c)(4)) would specify that the records maintained for the calculated net heating values and exit velocities must be recorded on a 15-minute average basis rather than instantaneous values.

Proposed new §115.726(d)(5) would specify recordkeeping requirements specific to flares used solely for loading operations under §115.725(e), in addition to the general flare recordkeeping requirements in §115.726(d)(1) - (4). The proposed new language in §115.726(d)(5) would incorporate recordkeeping

requirements moved from §115.725(e)(1)(B) and the requirement in §115.726(d)(5)(A) would require the size of vessel being loading instead of the type of vessel.

Proposed new §115.726(d)(6) would specify recordkeeping requirements specific to flares used solely for scheduled startup, shutdown, and maintenance activities under §115.725(f), in addition to the general flare recordkeeping requirements in §115.726(d)(1) - (4). Similarly, proposed new §115.726(d)(7) would specify recordkeeping requirements specific to emergency flares subject to §115.725(g), in addition to the general flare recordkeeping requirements in §115.726(d)(1) - (4). Finally, proposed new §115.726(d)(8) would specify recordkeeping requirements specific to flares subject to the requirements of §115.725(h) or (i), in addition to the general flare recordkeeping requirements in §115.726(d)(1) - (4).

The proposed amendment would reletter §115.726(d), related to records for exemptions to §115.726(e), and would specify that the records correspond to the exemptions listed in §115.727(a) - (e). The proposed amendment to §115.726(e)(1) (that was renumbered from §115.726(d)(1)) would specify that the records applied to vent gas streams that are routed to flares and that contain less than 5.0% by weight HRVOC, and to vent gas streams that are not routed to flares that does not exceed 100 parts per million by volume HRVOC. The proposed amendment to §115.726(e)(3) would correct cross-references.

The proposed amendment would reletter §115.726(f) to §115.726(i) and add a new §115.726(f) that would specify that an owner or operator claiming exemption under §115.727(e) must submit written

notification at least 15 days prior to permanently removing a flare from service, but no later than December 31, 2005.

The proposed amendment would reletter §115.726(e) to §115.726(g). The proposed amendment to §115.726(g) would specify that daily records are required to demonstrate compliance with the tons per calendar year emissions limits in §115.722(a) and (b). Furthermore, the proposed amendment to §115.726(g)(2) would include pressure relief valves in addition to all flares and vents subject to §115.725. Finally, the proposed amendment would delete §115.726(g)(3) because this specific recordkeeping requirement would be moved to §115.726(g)(2).

Proposed new §115.726(h) would specify the recordkeeping requirements to demonstrate compliance with the one-hour block emission limits in §115.722(c).

The proposed amendment to §115.726(i) (relettered from §115.726(f)) would specify that records must be maintained on-site.

#### *Section 115.727, Exemptions*

The proposed amendment to §115.727(b)(1) and (2) would correct cross-references. Additionally, the proposed amendment to §115.727 would delete §115.727(c) that specified that emissions from scheduled maintenance, startup, and shutdown activities in compliance with 30 TAC §101.211 are exempt from the requirements of §115.722(a), and §115.727(d) that specifies that emissions from emissions events in compliance with §101.201 are exempt from the requirements of §115.722(a). The

proposal to remove the exemptions in §115.727(c) and (d) are necessary to better ensure an approvable SIP and the demonstration of attainment.

The proposed amendment would reletter §115.727(e) to §115.727(c) and include the addition of language to specify that the exemptions in §115.727(c) may apply to vent gas streams that are not routed to a flare. The proposed amendment to §115.727(c)(1) - (3) would correct cross-references. The proposed amendment to §115.727(c)(2) would also add language to provide exemption for vent gas streams with low volumetric rates equal to or less than 100 dry standard cubic feet per hour. This proposed revision provides flexibility for exempting vent gas streams that may exceed the 100 **parts per million by volume ppmv** exemption level already provided, but have minimal HRVOC emissions due to very low volumetric flow rate. An additional proposed amendment to §115.727(c)(2) would specify that the 5.0% limit for the total number of vents claimed exempt under §115.727(c)(2) is based on the long-term pound per hour cap limitation in §115.722(a) or (b). Finally, the proposed amendment to §115.727(c)(3)(A) would add incinerators to list of the sources for which an exemption may be claimed and would specify that the exemption for vent gas streams resulting from the combustion of less than 5.0% HRVOC is “by weight.”

The proposed amendment would reletter §115.727(f) to §115.727(d) and correct a cross-reference.

Proposed new §115.727(e) would specify that any flares that will be permanently out of service by April 1, 2006 are exempt from the requirements of the division except for the recordkeeping requirements of §115.726(f). The new proposed exemption will provide relief for owner or operators

with flares that will be permanently taken out of service after the December 31, 2005 compliance date to install continuous monitoring equipment, but prior to the April 1, 2006 compliance date for the site-wide caps in §115.722.

*Section 115.729, Counties and Compliance Schedules*

The proposed amendment to §115.729(1) would add pressure relief valves as applicable devices. Additionally, the proposed amendment to §115.729(1)(A) would specify that the compliance schedule applies to testing and monitoring of vent gas streams and pressure relief valves and that the results must be submitted to the Houston regional office. The proposed amendment to §115.729(1)(A) would also specify that for vent gas streams and pressure relief valves that become subject to the requirements of the division after December 31, 2005, testing and monitoring must be conducted as soon as practicable, but no later than 60 days after being brought into HRVOC service. The proposed amendment to §115.729(1)(B) would specify that the owner or operator shall demonstrate compliance with all other requirements of the division applicable to pressure relief valves in addition to vent gas streams as soon as practicable but no later than April 1, 2006.

The proposed amendment to §115.729(2) would correct a cross-reference, and would specify that for flares that become subject to the requirements of the division after December 31, 2005, testing and monitoring must be conducted as soon as practicable but no later than 60 days after being brought into HRVOC service.

*Division 2, Cooling Towers*

*Section 115.760, Applicability and Cooling Tower Heat Exchanger System Definitions*

The proposed amendment to §115.760 would include nonsubstantive language changes to §115.760(a) and (b).

*Section 115.761, Site-wide Cap*

The commission proposes to amend this section to allow sites the flexibility of compliance with the cooling tower heat exchange system control requirements of this division through compliance with the HRVOC emissions cap and trade program. The proposed amendment to §115.761(a) would change the long-term site-wide cap strategy to a calendar year basis instead of the existing 24-hour rolling average basis, and would state that owners or operators of a site subject to the HRVOC cooling tower heat exchange system rules shall comply with the HRVOC emissions cap and trade program in Chapter 101, Subchapter H, Division 6 ~~change the title of the SIP and the designations of the tables that specify the site-wide cap limits.~~ The proposed amendment to §115.761(a) would also remove the reference to the site-cap limits in the tables of the SIP. The proposed amendment would reletter §115.761(b) to §115.761(d). Proposed new §115.761(b) would specify that all sites accounts subject to this division or to Division 1 that are exempt from the HRVOC emissions cap and trade program in accordance with §101.392 ~~that are not listed in the cap table~~ are limited to ten tons of HRVOC emissions per calendar year ~~of HRVOC emissions.~~ Proposed new §115.761(c) would provide a short-term, not-to-exceed limit, in pounds of HRVOC per one-hour block, for all sites accounts subject to this division. —The commission continues to evaluate the magnitude of the short-term limit, and the time period over which this short-term limit would be enforced. The commission solicits comment regarding the appropriate

level for this short-term limit, and requests any supporting data regarding alternatives to the magnitude and time period. Proposed new §115.761(c)(3) would address how exceedances of the short-term limits should be calculated to determine compliance with the long-term cap.

*Section 115.764, Monitoring and Testing Requirements*

The proposed amendment to §115.764 would change the section title from “Monitoring Requirements” to “Monitoring and Testing Requirements” to reflect the proposed inclusion of the testing requirements formerly in §115.766. Merging the testing requirements of §115.766 with the monitoring requirements of §115.764 would provide more consistency with the rule structure of Subchapter H, Division 1.

The proposed amendment to §115.764(a) would remove the *de minimus* exemption for 100 parts per million, by weight (ppmw) of HRVOC in the process side fluid. The 100 ppmw *de minimus* exemption language is proposed to be incorporated into the appropriate exemptions in §115.767, Exemptions, formerly §115.768, to better facilitate interpretation of the rule.

The proposed amendment to §115.764(a)(2) would include the calibration requirements of the total strippable VOC monitoring system from §115.766(1). The proposed revisions to calibration requirements of the total strippable VOC monitor in §115.764(a)(2) would include changing the allowable monitor drift from 3.0% to 5.0%. Furthermore, the proposed amendment would remove the ten parts per billion, by weight detection limit requirement for the total strippable VOC monitor. Finally, the proposed amendment to §115.764(a)(2) would correct the citation to the air-stripping method in Appendix P.

The proposed amendment to §115.764(a)(3) would specify the calculation methodology to determine the percent measurement data availability, would provide consistency for the calculation of monitor uptime, and would specify that time needed for normal calibrations required by the rule is not counted as

downtime. The proposed amendment to §115.764(a)(4) and (5) would replace the references to §115.766 with the specific reference to the air-stripping method in Appendix P.

The proposed amendment to §115.764(a)(6) would replace the reference to “speciation of strippable VOC in paragraphs (4) and (5)” with “speciation of strippable HRVOC in paragraphs (4) and (5)” because the requirements of §115.764(a)(4) and (5) are for the speciation of HRVOC only.

Additionally, the proposed amendment would remove the requirement to comply with Section 8.2 of EPA Performance Specification 9. While the initial testing required under Section 8.2 of Performance Specification 9 is recommended to help establish proper setup and operation of the analyzer, the commission considers the calibration requirements specified in the proposed amendment to §115.764(a)(6) sufficient to quality assure the data generated by the analyzer, and that it is unnecessary to specifically require Section 8.2 in the rule. Furthermore, the proposed amendment to §115.764(a)(6) would change the frequency of the multipoint calibration check procedure in Section 10.1 of Performance Specification 9 from monthly to quarterly, because quarterly multipoint calibrations checks provide sufficient quality assurance of analyzer linearity and accuracy. The proposed amendment to §115.764(a)(6) would also include nonsubstantive language revisions to better facilitate interpretation of the monitoring requirements. Finally, the proposed amendment to §115.764(a)(6) would specify that periodic sampling during downtime of the continuous on-line analyzer will continue until the on-line analyzer is properly operating and within the required performance specifications.

The proposed amendment to §115.764(b) would remove the *de minimus* exemption for 100 ppmw of HRVOC in the process side fluid. The 100 ppmw *de minimus* exemption language is proposed to be

incorporated into the appropriate exemptions provided in §115.767, formerly §115.768, to better facilitate interpretation of the rule. The proposed amendment to §115.764(b)(2) would replace the reference to §115.766 with the specific reference to the air-stripping method in Appendix P.

~~The proposed amendment to §115.761 includes the addition.~~ The proposed amendment to §115.764(b)(3) would add language specifying the calculation methodology for determining the percent measurement data availability to provide consistency for the calculation of monitor uptime and specify that the time required for normal calibrations as required by the rule is not counted as downtime. The proposed amendment to §115.764(b)(4) and (5) would replace references to §115.766 specific references to the air-stripping method in Appendix P. The proposed amendment to §115.764(b)(5) would specify that additional sampling to determine total strippable VOC, speciated and total HRVOC must continue on a daily basis until the concentration of total strippable VOC drops below 50 ppbw.

The proposed amendment to §115.764(b)(6) would remove the reference to “speciation of strippable VOC” and replace with “speciation of strippable HRVOC” because the requirements of §115.764(b)(4) and (5) are for speciation of HRVOC only. Additionally, the proposed amendment would remove the requirement to comply with Section 8.2 of EPA Performance Specification 9. While the initial testing required under Section 8.2 of Performance Specification 9 is recommended to help established proper setup and operation of the analyzer, the commission considers the calibration requirements specified in the proposed revision to §115.764(b)(6) sufficient to quality assure the data generated by the analyzer. Furthermore, the proposed revisions to §115.764(b)(6) would change the frequency of the multipoint calibration check procedure in Section 10.1 of Performance Specification 9 from monthly to quarterly,

because quarterly multipoint calibrations checks will provide sufficient quality assurance of analyzer linearity and accuracy. An additional proposed amendment to §115.764(b)(6) would include nonsubstantive language revisions to better facilitate interpretation of the monitoring requirements. Finally, the proposed revisions to §115.764(b)(6) would specify that periodic sampling during downtime of the continuous on-line analyzer will continue until the on-line analyzer is properly operating and within the required performance specifications.

The proposed amendment to §115.764(c) would incorporate language from the testing requirements in §115.766 that are proposed for repeal. The proposed amendment would remove the ten ppbw minimum detection limit requirement for strippable VOC and HRVOC monitoring that currently exists in §115.766(1). Removing the requirement would provide more flexibility for affected owners or operators in the selection of on-line monitoring systems and laboratories for analysis of periodic samples. However, the requirements in proposed new §115.766(a)(3) and (4) to use one-half the detection limit for HRVOC emission calculation purposes and the full detection limit for total strippable VOC concentrations will encourage owners or operators to use a monitoring system or laboratory analysis with sufficient detection capability appropriate for the specific cooling tower size and the amount of site-wide caps for the account.

The proposed amendment would delete §115.764(d), regarding requirements to submit QAPs for the monitoring systems required by §115.764, and move the requirements for the QAPs to proposed new §115.766(i) in the recordkeeping and reporting requirements. Also, the proposed amendment would

reletter §115.764(e) to §115.764(d) and replace the reference to the testing requirements of §115.766 with the reference to the air-stripping method in Appendix P.

The proposed amendment would reletter §115.764(f), relating to alternatives to continuous flow monitoring, to §115.764(e), and would correct cross-references to account for other proposed amendments to the division.

The proposed amendment would reletter §115.764(g), relating to minor modifications and alternative monitoring, to §115.764(f), would correct cross-references, and would specify that the provisions for modifications or alternatives apply to testing as well as monitoring.

Proposed new §115.764(g) would specify that alternative monitoring locations may be used for cooling tower heat exchanger systems in which a single cooling tower services both HRVOC and non-HRVOC process units. The proposed new provisions would allow the owner or operator to monitor from locations that represent the flow and concentrations from HRVOC processes.

*Proposed Repeal of Section 115.766, Testing Requirements*

The commission proposes to repeal §115.766 and to incorporate specific testing requirements of §115.766 into the appropriate subsections in §115.764 to establish more consistency with Division 2 and to better facilitate interpretation of the rule requirements.

*Proposed Repeal of Section 115.767, Recordkeeping Requirements*

The commission proposes to repeal §115.767 and to incorporate specific recordkeeping requirements of §115.767 into proposed new §115.766, Recordkeeping and Reporting Requirements, to establish more consistency with Division 1.

*Section 115.766, Recordkeeping and Reporting Requirement*

Proposed new §115.766 incorporates the recordkeeping and reporting requirements of §115.767 to establish more consistency with Division 1 and more accurately reflect the requirement of the §115.766. Proposed new §115.766(a)(2) would correct cross-references in existing §115.767(a)(2).

Proposed new §115.766(a)(3) would remove the requirement to maintain hourly records documenting the pound per hour mass emission rate for total strippable VOC in existing §115.767(a)(3). The testing and monitoring requirements in §115.764 for total strippable volatile organic compound, when applicable, do not require determining the mass emission rate of total strippable VOC. The recordkeeping requirements for total strippable VOC concentration are addressed in proposed new §115.766(a)(4). Proposed new §115.766(a)(3) would also correct cross-references and incorporate recordkeeping requirements for alternative monitoring provided for in §115.764(a)(6) or (b)(6).

Proposed new §115.766(a)(3) would require owners or operators to use one-half the minimum detection limits for HRVOC emission calculations when concentrations are below detection.

Proposed new §115.766(a)(4) would require owner or operators to use the full minimum detection limit for total strippable VOC when concentrations are below detection. Removing the ten parts per billion detection limit requirement would provide more flexibility for affected owner or operators in the

selection of on-line monitoring systems and laboratories for analysis of periodic samples. However, the requirements to use one-half the detection limit for HRVOC emission calculation purposes and the full detection limit for total strippable VOC concentrations will encourage owner or operators to use a monitoring system or laboratory analysis with sufficient detection capability appropriate for the specific size of cooling tower and the amount of the site-wide caps for the account.

Proposed new §115.766(a)(4) would specify recordkeeping requirements for the concentration of total strippable VOC in the cooling water for cooling tower heat exchanger systems monitored in accordance with §115.764(b)(2) or (d). Proposed new §115.766(a)(4) would further specify that if its concentration results for total strippable VOC are below the minimum detection limit, then the full detection limit will be used to calculate the average total strippable VOC concentration in the cooling water.

The proposed amendment to §115.766 would delete the requirements in existing §115.767(a)(5) regarding hourly recordkeeping requirements for the 24-hour rolling average HRVOC emissions in relation to the site-wide cap. Provisions for recordkeeping to demonstrate compliance with the site-wide caps specified in §115.761 are provided in proposed new §115.766(g) and (h). The proposed amendment also deletes the requirements in existing §115.766(a)(6) regarding recordkeeping requirements for alternative monitoring performed in accordance with §115.764(a)(6) or (b)(6). As previously noted, new §115.766(a)(3) is proposed to incorporate these recordkeeping requirements.

Proposed new §115.766(a)(5) specifies that the owner or operator must maintain hourly records of the cooling water flow rate. Finally, proposed new §115.766(a)(6) would remove the term “hourly” from

the existing language of §115.767(a)(4) to specify that owner or operators must maintain records on a weekly basis.

The proposed amendment to §115.766 includes revisions to §115.766(b) to correct cross-references in the existing language of §115.767(b). The proposed language in new §115.767(c) is the same as the language in existing §115.767(c). Proposed new §115.766(d) includes existing language from §115.767(d)(1) and (2) to reflect proposed new §115.766(a) incorporating the recordkeeping requirements for testing performed in accordance with §115.764(d) and to better facilitate interpretation of the recordkeeping requirements.

Proposed new §115.766(e) and (f) would correct cross-references in existing §116.767(e) and (f).

Proposed new §115.766(g) and (h) would specify recordkeeping requirements to demonstrate compliance with §115.761. Proposed new §115.766(g) would specify recordkeeping requirements to demonstrate compliance with tons per calendar year emission limits in §115.761(a) and (b). Proposed new §115.766(h) would recordkeeping requirements to demonstrate compliance with pound per hour emission limits in §115.761(c).

Finally, proposed new §115.766(i) would incorporate the requirements for submitting QAPs for monitoring performed in accordance with §115.764. The requirements for submitting QAPs is proposed to be moved from §115.764(d) to the recordkeeping and reporting requirements in §115.766 to more appropriately represent the requirement and to be more consistent with the rule structure of

Division 1. In addition, proposed new §115.766(i)(2) would change the requirement to submit the QAP at least 60 days prior to the cooling tower heat exchange system being placed into service to a requirement that the quality assurance plan must be submitted prior to the system being placed into HRVOC service. The proposed amendment would also remove the requirement in existing §115.764(d)(2) that specifies that the plan must be submitted prior to initiating a monitoring program to comply with the requirements of §115.764. The proposed amendment to move the quality assurance plan provisions to §115.766(i) would also remove the requirement in §115.764(d)(2) to define each compound that could potentially leak through the heat exchanger. Finally, proposed new §115.766(j) would specify that an owner or operator claiming exemption under §115.767(4) shall submit written notification at least 15 days prior to permanently removing a flare from service, but no later than December 31, 2005.

*Section 115.767, Exemptions*

The commission proposes to repeal §115.768 and to incorporate exemptions of §115.768 into the appropriate subsections in proposed new §115.767 to be consistent with the section numbering in Division 1. Proposed new §115.767(1) and (2) would specify that the exemptions apply to heat exchangers with greater than 100 ppmw HRVOC in the process side fluid. Also, the commission proposes to delete the exemption in existing §115.768(4), because emissions events are not exempt from §115.761 in this proposal. Proposed new §115.767(4) would specify that cooling tower heat exchange systems that will be permanently out of service by April 1, 2006, are exempt from the requirements of the division, except for the recordkeeping requirements of §115.766(j). The proposed new exemption will provide relief for owners or operators with cooling tower heat exchange systems that will be

permanently taken out of service after the December 31, 2005 compliance date for installation of continuous monitoring equipment, but prior to the April 1, 2006 compliance date for the site-wide caps in §115.761.

*Section 115.769, Counties and Compliance Schedules*

The proposed amendment to §115.769 would update cross-references and add new §115.769(b) to address the compliance date requirements for cooling tower heat exchange systems that become subject to the requirements of the division after December 31, 2005.

*Division 3, Fugitive Emissions*

*Section 115.780, Applicability*

The proposed amendment to §115.780 would designate the first paragraph as subsection (a) and would add new §115.780(b) to specify that emission reduction credits or discrete emission reduction credits may not be used in order to demonstrate compliance with the HRVOC fugitive emissions rules.

*Section 115.781, General Monitoring and Inspection Requirements*

The proposed amendment to §115.781(b)(1) would update a cross-reference to specify that the exemptions of §115.357(1) - (11) are not applicable to this division. The term “immediately” is proposed to be added to §115.781(b)(7)(A), to specify that if requested by staff of the Houston regional office or any air pollution control agency having jurisdiction, the owner or operator must provide the account’s unsafe-to-monitor list within that business day. The proposed amendment to §115.781(b)(7)(B) would specify that difficult-to-monitor components include components that are

located below flooring or deck grating that would require confined space entry as defined in 29 CFR §1910.146, concerning Permit-required confined spaces (December 1, 1998).

The proposed amendment to §115.781(b)(8) and (e) would specify that all pressure relief valves in gaseous service must be monitored with a hydrocarbon gas analyzer for fugitive leaks. The intent of the change is to specify that the body of the pressure relief valve should be monitored for fugitives on a quarterly basis and within 24 hours following actuation, and not to require the monitoring of the vent from the pressure relief valve. The emissions associated with the venting of the pressure relief valve due to a pressure exceedance in the process is addressed in the Subchapter H, Division 1 proposal. However, the quarterly monitoring or other required fugitive monitoring should include a check with a hydrocarbon gas analyzer to ensure that the relief mechanism has properly reseated.

Proposed new §115.781(g) would add language regarding data collection that is similar to data collection language in Subchapter D, §115.354(10). The language is proposed to be removed from §115.354(10) in concurrent rulemaking. These changes are being proposed at the request of industry. The commission seeks comment on these proposed changes.

*Section 115.782, Procedures and Schedule for Leak Repair and Follow-up*

The proposed amendment to §115.782(c) would specify that components on the delay of repair list that would require a shutdown to correct, must be repaired at the next scheduled process unit shutdown. The proposed amendment to §115.782(c)(1)(B)(i) would replace the current language with language requiring documentation of calculations in §115.782(c)(1)(B)(i) - (iii), and would renumber clause (ii)

as clause (iv). The proposed language in §115.782(c)(1)(B)(i) - (iii) is similar to language that is proposed to be removed from Subchapter D, §115.352(2)(A)(i) - (iii), in concurrent rulemaking, and the proposed amendment is at the request of industry. The commission seeks comment on these proposed changes.

The proposed amendment to §115.782(c)(2)(A)(i) would specify that extraordinary efforts must be taken within 14 or 30 calendar days after the leak is found (depending on the amount of the leak detected), instead of seven or 15 days of the valve being placed on the shutdown list. The proposed amendment does not allow any additional days nor reduce the number of days, but simply revises the language to a time frame that the owner or operator will more readily know from the information already in the databases.

*Section 115.783, Equipment Standards*

The proposed amendment to §115.783(2) would delete the language that recovery devices, flares, and other control devices that are used to control fugitive emissions must obtain a set control efficiency. This language is proposed to be deleted because the emissions from these types of sources are already being controlled or are proposed to be controlled by Subchapter B, Division 2 rules or by Subchapter H, Division 1 rules. The proposed amendment to §115.783(3) would delete the requirement that a pressure relief valve must be equipped with a pressure sensing device. This language is proposed to be deleted because the emissions from these types of sources would be controlled by Subchapter H, Division 1. The proposed amendment to §115.783 would renumber paragraphs (4) - (6) as paragraphs (3) - (5).

*Proposed Repeal of §115.785, Testing Requirements*

The commission proposes to repeal §115.785 because the section established a stack testing method for sources that control fugitive emissions. These sources are controlled or proposed to be controlled under Subchapter H, Division 1; therefore, these additional requirements are no longer necessary in the fugitive rules.

*Section 115.786, Recordkeeping Requirements*

The proposed amendment to §115.786(b)(3)(D) would specify that the flow through the bypass line is an estimated flow rate. The proposed amendment to §115.786(c) would specify the exact date that specific records must be submitted to the Houston regional office and any local air pollution control agency having jurisdiction.

The proposed amendment to §115.786(d) and (e) would specify that the type of records used to identify exempt components is the same as the type of records listed in §115.781. Proposed new §115.786(d)(1) and (2) would add similar language that is proposed to be removed from Subchapter D, §115.352(2)(F)(ix) and §115.356(3) in concurrent rulemaking. The proposed amendment to §115.786 would also reletter subsection (e) to subsection (f). The commission seeks comment on these proposed changes.

*Section 115.787, Exemptions*

The proposed amendment to §115.787(a) would correct a citation from §115.786(d) and (e) to §115.786(e) and (f), and the proposed amendment to §115.787(b) would correct a citation from §115.783(4) to §115.783(2).

The proposed amendment to §115.787(c)(4) would change the language “plant sites covered by a single account number” to “any account.” The proposed amendment to §115.787(c)(6) and (7) would replace the phrase “which are in compliance with” with the phrase “that meet the requirements of” because the current language may be incorrectly interpreted as requiring direct compliance with the selected provisions of 40 CFR §63.166 or §63.169.

The commission proposes to delete §115.787(e), because the control of vents of pressure relief valves is being proposed in the amendments to Subchapter H, Division 1 and is no longer needed in this division. The proposed amendment to §115.787 would also reletter subsection (f) to subsection (e).

Proposed new §115.787(f) would reletter the subsection to §115.787(e), and correct a citation from §115.352(4) to §115.783(5).

Proposed new §115.787(f) would exempt any process unit with less than 50 components in HRVOC service from the third-party audit requirements of §115.788.

*Section 115.788, Audit Provisions*

The proposed amendment to §115.788(a) would change the time frame and number of process units for which the independent third-party audits must be conducted. The proposed amendment would change the requirement to conduct an audit of all process units every two years to a requirement to conduct an audit of at least one process unit at least once per calendar year. In addition, the amendment would require that all process units at an account must be audited at least once every five calendar years. Accounts with less than five process units but more than one process unit, should not audit the same unit two years in a row.

The proposed amendment to §115.788(a)(1) would require the independent third-party organization to verify that all components are properly tagged in accordance with §115.782(a). The proposed amendment to §115.788(a)(1)(B) and (d)(2) would remove the requirement for the audit to include a list of components that should have been monitored but were not on the list to be monitored. The reasoning for the proposed amendment is that the existing language would require the company conducting the audit to completely inspect the entire process unit, including, but not limited to, steam lines, water lines, and waste lines. The commission considers this requirement to be cost prohibitive for the results that would be obtained.

The proposed amendment to §115.788(a)(2) would state that independent third-party organization must perform a field survey to determine the representative percentage of leaking components in the audited process unit. The proposed amendment to §115.788(a)(2)(A) would also specify that the field survey must be started after the usual monitoring service has completed its monitoring of the process unit and

that the field survey conducted by the auditing company must be completed by the end of the monitoring period (i.e., quarterly) in which the usual monitoring service conducted its monitoring. The proposed amendment to §115.788(a)(2)(B) would remove superfluous language.

The proposed amendment to §115.788(a)(2)(C) would replace the term, “audit” with the term, “field survey” and further specify that the field survey of a specific process unit must not include components from the most recent field survey of that process unit. Proposed new §115.788(a)(2)(D) specifies that the independent third-party organization must follow Test Method 21 in 40 CFR 60, Appendix A, while conducting the field survey.

The proposed amendment to §115.788(a)(3) would specify that the data generated by monitoring technicians must be reviewed by the independent third-party organization. The proposed amendment to §115.788 would also consolidate the language in §115.788(a)(3)(A) and(B), and would move the language in §115.788(d)(4) to §115.788(a)(3)(A). The proposed amendment to §115.788(a)(3)(B) would require that the independent third-party organization review the records to verify proper calibration in accordance with Test Method 21. The proposed amendment to §115.788(a)(3)(C) would delete the term, “abnormal” and specify that the requirement is to identify data patterns indicative of failure to properly implement Test Method 21. The proposed amendment would delete §115.788(a)(3)(D) because the retention of field data from a datalogger is not specifically required.

The proposed amendment to §115.788(b) would make a grammatical correction to remove the term “means” and replace it with the term “is.”

The proposed amendment to §115.788(c) would remove the requirement to provide the agency written notification that the audit has been completed. The requirement is unnecessary, because the owner or operator is already required to provide the results of the audit to the Houston regional office within 30 days after completion of the audit.

The proposed amendment to §115.788(d) would specify that the audit report should be submitted to the Houston regional office, instead of the more general description of the Office of Compliance and Enforcement or appropriate regional office. The proposed amendment to §115.788(d)(1) would specify that the list concerning the components that were not tagged but should have been, is based on the requirements of §115.782(a).

The proposed amendment to §115.788(d) would renumber paragraphs (3) and (4) to paragraphs (2) and (3), and the proposed amendment to renumbered §115.788(d)(2) would specify that the percentage of leaking components should be identified during the field survey.

The proposed amendment to renumbered §115.788(d)(3) would delete subparagraphs (A) - (C) and reference the categories specified in §115.788(a)(3)(A) - (C).

Proposed new §115.788(e) would require the owner or operator to submit a corrective action plan with the audit report if the results of the audit indicate deficiencies in the implementation of Test Method 21. Subsections (e) and (f) are also proposed to be relettered as subsections (f) and (g).

Finally, proposed new §115.788(h) would specify that the executive director may require additional corrective actions.

*Section 115.789, Counties and Compliance Schedules*

The proposed amendment to §115.789(3) would specify that the initial third-party audits required in §115.788 must be completed as soon as practicable, but no later than December 31, 2005. The proposed deletion of the current §115.789(4) would remove the compliance schedules for testing requirements, because the corresponding testing requirements in §115.785 are proposed to be repealed. The proposed amendment to §115.789 would renumber paragraphs (5) and (6) to paragraphs (4) and (5).

*Division 4, Enforcement of Site-wide Caps*

*Section 115.790, Applicability*

~~Proposed new §115.790 would state that new Division 4 would apply to any account in the HGA that is subject to Divisions 1 and 2 of Subchapter H.~~

*Section 115.791, Emission Limit Exceedances*

~~Proposed new §115.791 states that the commission would consider exceedances that are the result of emissions events or scheduled maintenance, startup, and shutdown activities during the month of March through the month of October in a calendar year to be a cause or a contribution to an exceedance of the ozone NAAQS. Therefore, owners and operators cannot meet the demonstration criteria in 30 TAC §101.222(b) and (c), Demonstrations. Section 101.222(b) allows that if the specific criteria are met,~~

~~the affirmative defense may be claimed to be exempt from penalties, but the affirmative defense does not apply to claims for administrative technical orders and actions for injunctive relief. For scheduled maintenance, startup, and shutdown activities covered by §101.222(c), those emissions would be subject to a violation for unauthorized emissions.~~

*Section 115.792, Actions to Reduce Exceedances*

~~New §115.792(a) proposes to add the requirement that owners or operators have a plan for contemporaneous mitigation of exceedances of the short term limits in §115.722(c)(1) or (2) or §115.761(c)(1) or (2).~~

~~New §115.792(b) proposes to list the minimum requirements for the emissions mitigation plan. The plan must identify the methods that would be implemented to reduce emissions at facilities at the site in order to minimize or avoid exceeding the one-hour limit at the site. For example, if facility A at a site experiences an upset event that will cause an exceedance of the one-hour standard for more than one hour, the operator must begin implementing the mitigation plan. The plan might require reduction in throughput at facilities B and C at the site to prevent an exceedance of the standard. The plan must also identify the amount of reductions that could be achieved, include a communications system for prompt implementation of the plan, and be activated when the cap limits have been exceeded for more than one hour.~~

~~Proposed new §115.792(c) would specify that for exceedances of the one-hour limits for which emissions are not fully offset by decreases in HRVOC emissions from facilities within the same~~

~~contiguous plant site, the owner or operator must submit a corrective action plan in accordance with §115.793.~~

~~Proposed new §115.792(d) would state that the emissions mitigation plan required by proposed new §115.792(a) must be created, maintained, and capable of being implemented as soon as practicable, but no later than April 1, 2006.~~

~~*Section 115.793, Corrective Action Plans*~~

~~Proposed new §115.793 would specify the details of a corrective action plan as required by §115.792(c) for the purpose of avoiding future exceedances. Proposed new §115.793(a) would require that the plan be submitted to the Houston regional office within 30 days of an exceedance of the one-hour limits in §115.722 or §115.761. Additionally, proposed new §115.793(a) specifies that the executive director may grant a one-time 15-day extension of the 30-day deadline to submit a corrective action plan.~~

~~Proposed new §115.793(b) would state the minimum elements of the corrective action plan to include identification of the causes of each exceedance, control measures and operational changes that can be used to prevent or minimize future exceedance events, and the time periods that the owner or operator will implement the components of the corrective action plan.~~

~~Proposed new §115.793(c) would establish the time frames to obtain commission approval of a corrective action plan. The time frame, or implementation schedule of the plan will be enforceable by the commission. To obtain closure of these actions, the commission is proposing a requirement that the~~

~~owner or operator must obtain commission approval within 120 days of initial filing of the plan. If an approval or detailed deficiency letter is not issued by the executive director within 45 days of initial filing of the plan, then the plan is approved by default. Within this 45-day period, if the executive director provides written notification of disapproval, the owner or operator will have 15 days to respond, unless another deadline is specified. Finally, if the commission determines that the plan is inadequate to prevent or minimize emissions and emissions events, the commission may revise the approved plan.~~

~~Proposed new §115.793(d) would state that this section does not limit the commission's ability to bring enforcement actions for violations of Texas Health and Safety Code, Chapter 382 (also known as the Texas Clean Air Act) or rules promulgated under Chapter 382, including actions to reduce emissions from exceedances of the limits in §115.722 or §115.761.~~

#### FISCAL NOTE: COSTS TO STATE AND LOCAL GOVERNMENT

Nina Chamness, Analyst, Strategic Planning and Appropriations Section, determined that, for the first five-year period the proposed rulemaking is in effect, there will not be significant fiscal implications for the agency or other units of state and local government as a result of administration or enforcement of the proposed rulemaking.

The proposed rulemaking affects regulated entities in the HGA that conduct activities that emit HRVOC. State and local governments do not engage in these activities, so they are not affected by the proposed rulemaking.

The proposed rulemaking only affects the petrochemical, chemical, loading, and refinery companies in the HGA. The major impacts of the proposed rulemaking are as follows: 1) caps on HRVOC allowances are lowered, thereby requiring some companies to emit less HRVOC; 2) adds parameter monitoring requirements for pressure relief valves and vent gas streams not routed to a flare.

Companies can decide which process parameters to monitor as long as the process parameters satisfy the proposed rule requirements; 3) includes alternative provisions for specific flare categories such as emergency flares, flares in temporary HRVOC service, and flares designed to receive and control liquid or dual phase streams. These provisions will reduce current monitoring costs; and 4) for companies with greater than two process units, reduces the number of independent, third-party audits of processes in HRVOC service that generate fugitive emissions.

#### PUBLIC BENEFITS AND COSTS

Ms. Chamness also determined that for each year of the first five years the proposed rulemaking is in effect, the public benefit anticipated from the changes seen in the proposed rulemaking will be the reduction of HRVOC emissions in the HGA. This will allow Texas to comply with the SIP required by 42 USC and reduce the ozone levels in this nonattainment area to levels determined by the EPA to be necessary for a healthy and safe environment.

The commission anticipates fiscal impacts for businesses and individuals in the petrochemical, chemical, loading, and refining industries in the HGA; however, the commission anticipates that the changes in monitoring requirements would not result in significant fiscal implications. Provisions that reduce the HRVOC emissions for compliance with the site-wide cap in Harris County may have

significant fiscal implications for these industries, depending upon the methodology used to reduce the HRVOC emissions.

#### *Revised Monitoring Requirements*

The proposed rulemaking reduces the requirements for independent, third-party audits of each process that generates fugitive emissions. The commission conservatively estimates that the current audit provision would require affected industries to pay for 400 to 500 audits every two years at a cost of approximately \$5,000 - \$10,000 per audit. The proposed rulemaking would require independent, third-party audits of a minimum of one process unit per year per account. Depending on the size of the account, the proposed rulemaking could present a significant cost savings to some accounts. For example, under the current rules an account with 40 process units would be required to perform all 40 audits within two years. The proposed rulemaking would require the 40 audits to be performed within a five-year period. The commission estimates that these audits would cost approximately \$200,000 - \$400,000 over a two-year period. In this example, the cost savings attributed to the proposed rulemaking would be approximately \$120,000 - \$240,000 during the two-year period. The commission anticipates that the cost savings from reducing the audit provisions would help mitigate any costs associated with additional monitoring that the proposed rulemaking would require.

The proposed rulemaking adds parameter monitoring requirements for pressure relief valves and vent gas streams that are not routed to a flare. The proposed rulemaking provides flexibility on the process parameters that can be monitored, ~~however~~, as long as the process parameters satisfy the proposed rule requirements. Thus, companies have some control over the cost of the new monitoring requirements.

The commission anticipates that in some cases, parameters that meet the proposed rule requirements may already be monitored. If a suitable parameter is already being monitored, but is not currently being recorded, companies may be able to make minor modifications to existing process monitoring to comply with the proposed monitoring requirements. Therefore, significant additional monitoring costs should not be incurred.

The proposed rulemaking adds alternatives to the continuous monitoring requirements for specific flare categories, such as emergency flares, flares in temporary HRVOC service, and flares designed to receive and control liquid or dual-phase streams. Under current rules, these flares are subject to the full continuous monitoring requirements including continuously measuring HRVOC. However, for these flare categories, such monitoring may be impractical due to the infrequent use or the nature of the streams sent to the flare. The proposed rulemaking would allow companies to use alternatives, such as process knowledge and engineering calculations, or process knowledge and engineering calculations combined with process parameter monitoring. These proposed alternatives will result in cost savings for owners or operators of the flare categories.

#### *Emissions Compliance*

The commission anticipates that HRVOC emissions reductions for compliance with the site-wide cap in Harris County will have a significant fiscal impact on the petrochemical, chemical, and refining industries. The proposed rulemaking would require an additional 57% reduction of HRVOC emissions in the site-wide cap for Harris County. Furthermore, the proposed rulemaking will include emissions in the cap from emission events and scheduled startup, shutdown, and maintenance activities.

At least 93 Harris County sites may incur significant costs when complying with the proposed cap. Because companies are given flexibility in how to achieve cap compliance, the commission staff is unable to provide a total cost estimate per process or per site. Costs will vary widely depending on the methodology each company employs to reduce their HRVOC emissions. If the additional reductions require a company to install an additional control device for previously uncontrolled vent gas streams, the estimated capital and annual operating costs for a control device could be approximately \$600,000 and \$360,000 respectively, based on fiscal information provided in the 2002 HRVOC rule proposal.

#### 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 rulemaking. The majority of sites affected by the proposed rulemaking are large petrochemical and industrial businesses. If there are affected small or micro-businesses, the estimated capital and annualized cost in this fiscal note would be a reasonable cost estimate for small or micro-businesses.

#### LOCAL EMPLOYMENT IMPACT STATEMENT

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

#### DRAFT REGULATORY IMPACT ANALYSIS DETERMINATION

The commission reviewed the proposed rulemaking action in light of the regulatory analysis requirements of Texas Government Code, §2001.0225, and determined that the rulemaking action meets 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 proposed rulemaking action to Chapter 115 and revisions to the SIP would improve implementation of the existing Chapter 115 by adding requirements to achieve reductions in HRVOC emissions in the HGA. The rules are intended to protect the environment and reduce risks to human health and safety from environmental exposure and may have adverse effects on owners and operators of certain sources, in particular fugitives, flares, process vents, and cooling towers. 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 determination is based on the analysis provided elsewhere in this preamble, including the discussion in the PUBLIC BENEFITS AND COSTS section of this proposal. The remaining amendments in this rulemaking are intended to correct typographical errors, update cross-references, add flexibility and delete obsolete language, and these amendments are not 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.

This proposed rulemaking does 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 rulemaking implements requirements of 42 USC. Under 42 USC, §7410, states are required to adopt a SIP that provides for “implementation, maintenance, and enforcement” of the primary national ambient air quality standards (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 Chapter 85, Air Pollution Prevention and Control). It is true that 42 USC 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 42 USC. The provisions of 42 USC 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 to attain the NAAQS

for the specific regions in the state. Even though 42 USC 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 were amended by Senate Bill (SB) 633 during the 75th Legislature (1997). The intent of SB 633 was to require agencies to conduct an regulatory impact analysis (RIA) of extraordinary rules. These are identified in the statutory language as major environmental rules that will have a material adverse impact and will exceed a requirement of state law, federal law, or a delegated federal program, or are adopted solely under the general powers of the agency. With the understanding that this requirement would seldom apply, the commission provided a cost estimate for SB 633 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 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 RIA contemplated by SB 633. This conclusion is inconsistent with the conclusions reached by the commission in its cost estimate and by the Legislative Budget Board 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 RIA 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. 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 HGA. The proposed rules, that will reduce ambient HRVOC and ozone in the HGA, will be submitted to the EPA as one of several measures in the federally approved SIP. 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 HGA; these controls will result in reductions in ozone formation in the HGA and help bring the HGA into compliance with the air quality standards established under federal law as NAAQS for ozone. As discussed in Chapter 6 of the HGA SIP, this revision is another phase in the process of continued analysis and review of the science, and the data collected as a result of these revisions will further assist the commission as it develops its

full reassessment of the attainment demonstration at the midcourse review. Therefore, the proposed rulemaking is a necessary component of and consistent with the HGA ozone attainment demonstration SIP 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 action implements requirements of 42 USC. There is no contract or delegation agreement that covers the topic that is the subject of this action. Therefore, the proposed rulemaking does not exceed a standard set by federal law, exceed an express requirement of state law, exceed a requirement of a delegation agreement, nor adopted solely under the general powers of the agency. Finally, this rulemaking action was not developed solely under the general powers of the agency, but is authorized by specific sections of Texas Health and Safety Code,

Chapter 382 (also known as the Texas Clean Air Act), and Texas Water Code that are cited in the STATUTORY AUTHORITY section of this preamble, including Texas Health and Safety Code, §§382.011, 382.012, 382.014, 382.016, 382.017, 382.021, and 382.034. Therefore, this rulemaking action is not subject to the regulatory analysis provisions of Texas Government Code, §2001.0225(b), because the proposed rulemaking does not meet any of the four applicability requirements. The commission invites public comment on the draft RIA determination.

#### TAKINGS IMPACT ASSESSMENT

The commission completed a takings impact analysis for the proposed rulemaking action under Texas Government Code, §2007.043. The specific purposes of this rulemaking are to achieve reductions of HRVOC emissions and ozone formation in the HGA and help bring the HGA into compliance with the air quality standards established under federal law as NAAQS for ozone, as well as to improve implementation of the existing Chapter 115 by correcting typographical errors, updating cross-references, clarifying ambiguous language, adding flexibility, and deleting obsolete language. If adopted, certain sources located in the HGA will be required to install equipment to monitor emissions and achieve HRVOC emission reductions in the HGA, and implement new reporting and recordkeeping requirements. Installation of the necessary equipment could conceivably place a burden on private, real property.

Texas Government Code, §2007.003(b)(4), provides that Chapter 2007 does not apply to this proposed 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. Attainment of the ozone standard will eventually require reductions of HRVOC emissions, as well as substantial reductions in NO<sub>x</sub> emissions. Any VOC reductions resulting from the current rulemaking are no greater than what scientific research indicates is necessary to achieve the desired ozone levels. However, this rulemaking is only one step among many necessary for attaining the ozone standard.

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 rules 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 HGA exceeding the federal ozone NAAQS, that adversely affects public health, primarily through irritation of the lungs. The action significantly advances the health and safety purpose by reducing ozone levels in the HGA. Consequently, these proposed rules meet the exemption in §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 proposed rules do not constitute a takings under Chapter 2007.

#### CONSISTENCY WITH THE COASTAL MANAGEMENT PROGRAM

The commission reviewed the proposed rulemaking action and found that the proposal 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 Coastal Management Program (CMP) be considered during the rulemaking process.

The commission determined that under 31 TAC §505.22 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 and ozone levels will be reduced as a result of the proposed rulemaking. 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 permits to include the revised Chapter 115 requirements for each emission unit affected by the revisions to Chapter 115 at their sites.

#### ANNOUNCEMENT OF HEARINGS

Public hearings for this proposed rulemaking have been scheduled for the following times and locations: August 2, 2004, 1:30 p.m. and 5:30 p.m., City of Houston, City Council Chambers, 2nd Floor, 901 Bagby, Houston; August 3, 2004, 10:30 a.m., John Gray Institute, 855 Florida Avenue, Beaumont; and August 5, 2004, 9:30 a.m., Texas Commission on Environmental Quality, 12100 North I-35, Building F, Room 2210, Austin. The hearings will be structured for the receipt of oral or written comments by interested persons. Registration will begin 30 minutes prior to the hearings. Individuals may present oral statements when called upon in order of registration. A time limit may be established at the hearings to assure that enough time is allowed for every interested person to speak. There will be no open discussion during the hearings; however, commission staff members will be available to discuss the proposal 30 minutes before the hearings and will answer questions before and after the hearings.

Persons planning to attend the hearings who have special communication or other accommodation needs, 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

Written comments may be submitted to Patricia Durón, MC 205, Office of Environmental Policy, Analysis, and Assessment, Texas Commission on Environmental Quality, P.O. Box 13087, Austin, Texas 78711-3087, faxed to (512) 239-4808, or emailed to *siprules@tceq.state.tx.us*. All comments should reference Rule Project Number 2004-037-115-AI. Comments must be received by 5:00 p.m., August 9, 2004. For further information, please contact Ashley Forbes of the Environmental Planning and Implementation Division at (512) 239-0493 or Alan Henderson, of the Policy and Regulations Division, at (512) 239-1510.

## **SUBCHAPTER A: DEFINITIONS**

### **§115.10**

#### **STATUTORY AUTHORITY**

The amendments are proposed 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 amendments are also proposed 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.

The proposed amendments implement Texas Health and Safety Code, §§382.002, 382.011, 382.012, and 382.017.

**§115.10. Definitions.**

Unless specifically defined in Texas Health and Safety Code, Chapter 382, (also known as the Texas Clean Air Act) [the Texas Clean Air Act] or in the rules of the commission, the terms used by the commission have the meanings commonly ascribed to them in the field of air pollution control. In addition to the terms which are defined by the Texas Clean Air Act, the following terms, when used in this chapter (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) **Background** - The ambient concentration of volatile organic compounds [(VOC)] in the air, determined at least one meter upwind of the component to be monitored. Test Method 21 (40 Code of Federal Regulations Part [(CFR)] 60, Appendix A) shall be used to determine the background.

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

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

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

(5) **Closed-vent system** - A system that:

(A) is not open to the atmosphere;

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

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

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

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

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

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

(10) **Dallas/Fort Worth area** - Collin, Dallas, Denton, and Tarrant Counties.

(11) **El Paso area** - El Paso County.

(12) **Emergency flare** - A flare that only receives emissions during an upset event or unscheduled maintenance, startup, or shutdown activity.

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

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

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

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

(17) [(16)] **Heavy liquid** - Volatile organic compounds that [VOCs which] have a true vapor pressure equal to or less than 0.044 pounds per square inch absolute [(psia)] (0.3 kiloPascal [kPa]) at 68 degrees Fahrenheit (20 degrees Celsius).

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

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

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

(19) [(18)] **Houston/Galveston area** - Brazoria, Chambers, Fort Bend, Galveston, Harris, Liberty, Montgomery, and Waller Counties.

(20) [(19)] **Incinerator** - For the purposes of this chapter, an enclosed control device that combusts or oxidizes volatile organic compound [VOC] gases or vapors.

(21) [(20)] **Internal floating cover** - A cover or floating roof in a fixed roof tank that [which] rests upon or is floated upon the liquid being contained, and is equipped with a closure seal or

seals to close the space between the cover edge and tank shell. For the purposes of this chapter, an external floating roof storage tank that [which] is equipped with a self-supporting fixed roof (typically a bolted aluminum geodesic dome) shall be considered to be an internal floating roof storage tank.

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

(23) [(22)] **Light liquid** - Volatile organic compounds that [VOCs which] have a true vapor pressure greater than 0.044 pounds per square inch absolute [psia] (0.3 kiloPascal [kPa]) at 68 degrees Fahrenheit (20 degrees Celsius), and are a liquid at operating conditions.

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

(25) [(24)] **Low-density polyethylene** - A thermoplastic polymer or copolymer comprised of at least 50% ethylene by weight and having a density of 0.940 grams per cubic centimeter [(g/cm<sup>3</sup>)] or less.

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

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

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

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

(30) [(29)] **Natural gas/gasoline processing** - A process that extracts condensate from gases obtained from natural gas production and/or fractionates natural gas liquids into component products, such as ethane, propane, butane, and natural gasoline. The following facilities shall be included in this definition if, and only if, located on the same property as a natural gas/gasoline processing operation previously defined: compressor stations, dehydration units, sweetening units, field treatment, underground storage, liquified natural gas units, and field gas gathering systems.

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

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

(33) [(32)] **Pressure relief valve** - A safety device used to prevent operating pressures from exceeding the maximum allowable working pressure of the process equipment. A pressure relief valve is automatically actuated by the static pressure upstream of the valve, but does not include:

(A) a rupture disk; or

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

(34) [(33)] **Printing line** - An operation consisting of a series of one or more printing processes and including associated drying areas.

(35) [(34)] **Process drain** - Any opening (including a covered or controlled opening) that [which] is installed or used to receive or convey wastewater into the wastewater system.

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

(37) [(36)] **Rupture disk** - A diaphragm held between flanges for the purpose of isolating a volatile organic compound [VOC] from the atmosphere or from a downstream pressure relief valve.

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

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

(i) for less than 24 hours; or

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

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

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

(40) [(39)] **Strippable volatile organic compound (VOC)** - Any VOC in cooling tower heat exchange system water that [which] is emitted to the atmosphere when the water passes through the cooling tower. [An estimate of total and speciated strippable VOC is acceptable when measured by:]

[(A) the method in Appendix P of the Texas Commission on Environmental Quality (commission) Sampling Procedures Manual, January 2003;]

[(B) a method approved by the executive director that can produce equivalent results as compared to the method in Appendix P; or]

[(C) a method approved by the executive director that determines VOCs emitted from the cooling tower by VOC mass balance across the cooling tower.]

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

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

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

(44) [(43)] **True partial pressure** - The absolute aggregate partial pressure [(psia)] of all volatile organic compounds [VOC] in a gas stream.

(45) [(44)] **Vapor balance system** - A system that [which] provides for containment of hydrocarbon vapors by returning displaced vapors from the receiving vessel back to the originating vessel.

(46) [(45)] **Vapor control system or vapor recovery system** - Any control system that [which] utilizes vapor collection equipment to route volatile organic compounds (VOC) [VOC] to a control device that reduces VOC emissions.

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

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

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

**DIVISION 1: VENT GAS CONTROL**

**§§115.720, 115.722, 115.725 - 115.727, 115.729**

**STATUTORY AUTHORITY**

The amendments are proposed 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 amendments are also proposed 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.

The proposed amendments implement Texas Health and Safety Code, §§382.002, 382.011, 382.012, and 382.017.

**§115.720. Applicability and Definitions.**

(a) Applicability. In the Houston/Galveston area, as defined in §115.10 of this title (relating to Definitions), any account with a controlled or uncontrolled vent gas stream containing highly-reactive volatile organic compounds (HRVOC), as defined in §115.10 of this title, or a flare that emits or has the potential to emit HRVOC is subject to this division (relating to Vent Gas Control) in addition to the applicable requirements of Subchapter B, Divisions 2 and 6 of this chapter (relating to Vent Gas Control; and Batch Processes) and Subchapter D, Division 1 of this chapter (relating to Process Unit Turnaround and Vacuum-Producing Systems in Petroleum Refineries).

(b) Definitions. The following terms, when used in this division, [shall] have the following meanings, unless the context clearly indicates otherwise. Additional definitions for terms used in this division are found in §§3.2, 101.1, and 115.10 of this title (relating to Definitions).

(1) Degassing safety device - A device other than a flare used to prevent the release of unburned organic vapors from a geologic storage facility resulting from either equipment or containment failure.

(2) [(1)] Supplementary fuel - Natural gas or fuel gas added to the gas stream to increase the net heating value to the minimum required value.

(3) [(2)] Pilot gas - Gas that is used to ignite or continually ignite flare gas.

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

(a) The owner or operator of a site subject to this division shall additionally comply with the requirements of Chapter 101, Subchapter H, Division 6 of this title (relating to Highly-Reactive Volatile Organic Compound Emissions Cap and Trade Program). [~~Emissions of highly-reactive volatile organic compounds (HRVOC) at each account subject to this division (relating to Vent Gas Control) or Division 2 of this subchapter (relating to Cooling Tower Heat Exchange Systems) are limited on a calendar year basis [to a 24-hour rolling average] as specified in Table 5.2-1 X [6-2.1], Initial] HRVOC Site-Cap Allocations: Harris County, and Table 5.2-2 Y [6-2.2], Initial] HRVOC Site-Cap Allocations: Seven Surrounding Counties, of the Attainment Demonstration SIP for the Houston/Galveston/Brazoria 1-Hour Ozone Nonattainment Area adopted on Month Day, 2004. [~~Post-1999 Rate-of-Progress and Attainment Demonstration Follow-up SIP for the Houston/Galveston Ozone Nonattainment Area adopted on December 13, 2002.~~]~~

(b) All sites subject to this division or ~~subject to~~ Division 2 of this subchapter (relating to Cooling Tower Heat Exchange Systems) that are exempt from the highly-reactive volatile organic compound (HRVOC) emissions cap and trade program, in accordance with §101.392 of this title (relating to Exemptions), not listed in either Table 5.2-1 5-2.1 or Table 5.2-2 5-2.2 are limited to ten tons per calendar year of HRVOC emissions per calendar year.

(c) Each site account subject to this division is subject to the following emission limitations that are pollution control standards set by the commission:

(1) HRVOC emissions at each ~~site account~~ located in Harris County that is subject to this division or Division 2 of this subchapter ~~must shall~~ not exceed 1,200 pounds of HRVOC per one-hour block ~~period~~ from any flare, vent, pressure relief valve, cooling tower, or ~~any the~~ combination ~~thereof~~.

(2) HRVOC emissions at each ~~site account~~ located in the Houston/Galveston ozone nonattainment area as defined in §101.1 ~~§115.10~~ of this title (relating to Definitions), excluding Harris County, that is subject to this division or Division 2 of this subchapter ~~must shall~~ not exceed 1,200 pounds of HRVOC per one-hour block ~~period~~ from any flare, vent, pressure relief valve, cooling tower, or ~~any the~~ combination thereof.

(3) For any exceedance of the HRVOC emission limits specified in ~~paragraph paragraphs~~ (1) or (2) of this subsection, the emission limits specified in ~~paragraph paragraphs~~ (1) or (2) of this subsection must be used to determine compliance with ~~subsection subsections~~ (a) or (b) of this section instead of the total amount of actual emissions.

(d) [(b)] All flares ~~must shall~~ continuously meet the requirements of 40 Code of Federal Regulations §60.18(c)(2) - (6) and (d) [§60.18(c) - (f)] as amended through October 17, 2000 (65 FR 61744) when vent gas containing volatile organic compounds is being routed to the flare.

(1) Average net heating value over a one-hour block period will be used to demonstrate compliance with the minimum net heating value requirements.

(2) The exit velocity averaged over a one-hour block period ~~must shall~~ be used to demonstrate compliance with the maximum exit velocity requirements.

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

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

(a) Except for pressure relief valves as defined in §115.10 of this title (relating to Definitions), each [Each] vent gas stream that is not controlled by a flare 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 highly-reactive volatile organic compound (HRVOC) hourly emission data expected during any operation not defined as an emissions event or a scheduled maintenance, startup, or shutdown activity under §101.1 of this title (relating to Definitions). The data shall be used 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) - (c) [§115.722(a)] of this title (relating to Site-wide Cap and Control Requirements). For cyclic or batch processes, the HRVOC emissions shall be considered as zero during non-operational periods other than startup, shutdown, or maintenance activities.

(1) For each uncontrolled vent subject to the requirements of this subsection, the owner or operator shall:

(A) select an operational parameter or parameters that directly correlates to the HRVOC emissions from the vent;

(B) install, calibrate, maintain, and operate according to manufacturer's recommendations, a continuous monitoring system to monitor and record the parameter or parameters selected under subparagraph (A) of this paragraph; and

(C) establish operating limits for the selected parameter or parameters as the hourly average of the parameter or parameters during the HRVOC emission test required under this subsection.

(2) For each vent subject to the requirements of this subsection that is controlled by a control device other than a flare, the owner or operator shall:

(A) select an operational parameter or parameters that directly correlates to the HRVOC emissions directed to the control device;

(B) select an operational parameter or parameters of the control device that directly correlates to the control efficiency of the control device;

(C) install, calibrate, maintain, and operate according to manufacturer recommendations, continuous monitoring systems to monitor and record the parameters selected under subparagraphs (A) and (B) of this paragraph; and

(D) establish operating limits for the selected parameters required under subparagraphs (A) and (B) of this paragraph as the hourly averages of the parameters during the HRVOC emission test required under this subsection.

(3) To demonstrate compliance with the control requirements of §115.722(a) - (c) of this title during emission events and scheduled startup, shutdown, and maintenance activities, the owner or operator shall determine the HRVOC emissions from each vent using one of the following:

(A) Testing using the appropriate reference methods and procedures specified in this section; or

(B) Process knowledge and engineering calculations. If process knowledge and engineering calculations are used to determine HRVOC emissions during emission events and scheduled startup, shutdown, and maintenance activities, the monitoring plans required under paragraph (4) of this subsection must also include all process information and calculations used to calculate the HRVOC emissions.

(4) The owner or operator shall develop, implement, and follow a written monitoring plan for the continuous monitoring systems required in paragraphs (1) and (2) of this subsection prior to performing the monitoring and testing under this subsection. Upon written request by the executive director, the monitoring plans shall be submitted within 30 days for review. The executive director

may require additional or alternative monitoring requirements. At a minimum, monitoring plans shall include:

(A) specifications for all monitors used in the continuous monitoring systems;

(B) process and control device information supporting the selection of parameters;

(C) actual testing or manufacturer data documenting the control efficiency of the control device; and

(D) schedule of quarterly inspections of the continuous monitoring systems to insure proper operation;

(5) After the initial HRVOC emission test required under this subsection, the owner or operator may perform additional emission testing to update the data used to demonstrate compliance with the control requirements of §115.722(a) - (c) of this title. Test plans for additional testing must be submitted to the executive director at least 45 days prior to testing.

(6) Testing using the appropriate reference methods and procedures specified in §115.125 of this title that was conducted before approval of the test plan required under §115.726(a) of this title may be used in lieu of conducting the testing specified in this subsection, provided that:

(A) the owner or operator of the affected source obtains approval for the testing report and data from the executive director; and

(B) the testing establishes maximum potential HRVOC emissions data expected during any operation that is not defined as an emissions event or a scheduled maintenance, startup, or shutdown activity under §101.1 of this title.

(C) if the monitoring system required under paragraphs (1) or (2) of this subsection was not installed at the time of testing, the monitoring plan required under paragraph (a)(4) of this subsection must include sufficient documentation to demonstrate that the monitoring system accurately reflects the parameter operating limits established during testing. If the executive director approves the prior testing under this paragraph, then the owner or operator shall comply with the monitoring system and written monitoring plan requirements of this subsection by no later than the compliance schedule in §115.729 of this title (relating to Counties and Compliance Schedules) instead of the time required in paragraph (4) of this subsection.

(7) The executive director may waive testing for no more than one-half of the vents that are identical in design and operation if the owner or operator demonstrates that all the vents are identical in design and operation, and the emissions from all of the vents can be expected to be identical.

(A) The request for a waiver shall be submitted with the test plan required under §115.726(a) of this title. Information required to support the waiver request shall include, but is not limited to, the following:

(i) identification of each vent expected to be identical;

(ii) each specific vent to be tested;

(iii) a detailed technical explanation demonstrating that the measured emissions from the selected vents can be expected to be representative of emissions from all vents;

(iv) specific technical information for each vent and the process associated with each vent demonstrating that the vents and associated processes are identical in design and operation;

(v) maintenance records for each vent and associated process demonstrating the vents and associated processes have been maintained in a similar manner; and

(vi) any additional information or data requested by the executive director necessary to demonstrate that the emissions from the vents can be expected to be identical.

(B) The executive director shall review the request for waiver and may provide a temporary waiver authorizing testing of no more than one-half of the vents. The results of the tests must be submitted to the executive director no later than 45 days after the date of written authorization of the temporary waiver. The executive director will determine if any further testing is required based on the review of the test results.

(b) The following alternatives may be used in lieu of [Alternatives to] the testing requirements of subsection (a) of this section, for vent gas streams that are not controlled by a flare or are not pressure relief valves. The vent gas stream shall comply with the process parameter monitoring requirements of subsection (a) of this section:[, include the following.]

(1) The vent gas stream may be equipped with a continuous emissions monitoring system (CEMS), provided that:

(A) the CEMS meets the monitoring requirements of 40 Code of Federal Regulations (CFR) §60.13(b) and (d) - (f);

(B) the monitor shall initially and at a minimum quarterly [annually] thereafter be subjected to a cylinder gas audit per 40 CFR Part 60, Appendix B, Performance Specification 2, Section 16 to assess system bias and ensure accuracy; and

(C) the measured concentration shall be used in combination with process knowledge estimated flow rate to determine the hourly HRVOC emission rate.

(2) Process knowledge, including scientific calculations and other process monitoring data sufficient to demonstrate compliance status, may be used to determine maximum potential HRVOC hourly emission data. Types of processes that may use process knowledge in lieu of testing are:

(A) analyzer vents;

[(B) pressure relief valves]

(B) [(C)] steam system vents; [or]

(C) [(D)] vent gas streams where there is no HRVOC present except during emissions events; or [.]

(D) degassing safety devices, as defined in §115.720 of this title (relating to Applicability and Definitions).

(c) Affected pressure relief valves not controlled by a flare shall be monitored as follows:

(1) Install, calibrate, maintain, and operate according to manufacturer's recommendations, a continuous monitoring system on the pressure relief valve or in the associated process systems sufficient to determine;

(A) the time and duration of each pressure relief event;

(B) the status of the pressure relief valve as either:

(i) open or closed to the atmosphere; or

(ii) the percentage the valve is open to the atmosphere; and

(C) the volumetric flow rate during a pressure relief event.

(i) If volumetric flow rate is not monitored directly, the owner or operator must determine through engineering calculations, manufacturer's information, or actual testing the correlation between the monitored parameter and the percentage the pressure relief valve is open to the atmosphere to the volumetric flow rate.

(ii) If the monitoring system only indicates an open or closed status as specified in subparagraph (B)(i) of this paragraph, the owner or operator must assume the pressure

relief valve is 100 percent open during a pressure relief event for purposes of calculating volumetric flow rate.

(2) For purposes of determining compliance with the control requirement of §115.722(a) - (c) of this title during pressure relief events, the owner or operator may use process knowledge, including scientific calculations and other process monitoring data, to determine HRVOC emission rates. The volumetric flow rate determined in accordance with paragraph (1)(C) of this subsection shall be used in combination with the process knowledge to determine HRVOC emission rates.

(3) The owner or operator shall develop, implement, and follow a written monitoring plan to satisfy the requirements of paragraphs (1) and (2) of this subsection. The monitoring plan must include:

(A) specifications for all monitors used to satisfy the requirements of paragraphs (1) and (2) of this subsection;

(B) all engineering calculations, manufacturer's information, or actual testing supporting the correlation of the monitored parameters to actual volumetric flow rate specified in paragraph (1)(C)(i) of this subsection;

(C) supporting documentation of the actual testing or process knowledge used to determine HRVOC emissions as provided in paragraph (2) of this subsection;

(D) at a minimum, quarterly inspections of all pressure relief valves and associated monitors to insure proper operation per the manufacturer's specifications; and

(E) a list identifying all pressure relief valves in HRVOC service subject to the requirements of this subsection);

(4) Upon written request by the executive director, the monitoring plan required under paragraph (3) of this subsection must be submitted within 30 days for review. The executive director may require additional or alternative monitoring requirements.

[(c) Testing using the appropriate reference methods and procedures specified in §115.125 of this title which was conducted before approval of the test plan required under §115.726(a) of this title may be used in lieu of conducting the testing specified in subsection (a) of this section, provided that:]

[(1) the owner or operator of the affected source obtains approval for the testing report and data from the executive director; and]

[(2) the testing establishes maximum potential HRVOC emissions data expected during any operation that is not defined as an emissions event or a scheduled maintenance, startup, or shutdown activity under §101.1 of this title.]

(d) Except as specified in subsections (e) - (i) [subsection (e)] of this section, the owner or operator of an affected flare must [shall] conduct continuous monitoring, to demonstrate compliance with §115.722(a) - (d) of this title as follows:

(1) install, calibrate, maintain, and operate a continuous flow monitoring system capable of measuring the flow rate over the full potential range of operation. The executive director may approve alternative means of determining the flare flow rate for a period of time not to exceed 1.0% of the annual operating time of the flare. The monitoring system must [shall] be capable of measuring the entire gas stream flow to the flare (i.e., all vent gas and supplemental fuel sources) and may consist of one or more flow measurements at one or more header locations. For correcting flow rate to standard conditions (defined as 68 degrees Fahrenheit and 760 millimeters of mercury (mm Hg)), temperature and pressure in the main flare header must [shall] be monitored continuously. The monitors must [shall] be calibrated to meet accuracy specifications as follows:

(A) the temperature monitor must [shall] be calibrated annually to within  $\pm 2.0\%$  at absolute temperature;

(B) the pressure monitor must [shall] be calibrated annually to within  $\pm 5.0$  mm Hg; and

(C) the flow monitor, or velocity monitor used to determine flow rate, must [shall] be initially calibrated, prior to installation, to demonstrate accuracy to within 5.0% at flow rates equivalent to 30%, 60%, and 90% of monitor full scale. After installation, the flow monitor or velocity monitor must [shall] be calibrated annually according to manufacturer's specifications;

(2) install, calibrate, maintain, and operate an on-line analyzer system capable of determining HRVOC at least once every 15 minutes. The on-line analyzer system must [shall] also be capable of measuring, at least once every 15 minutes, other potential constituents (e.g., hydrogen, nitrogen, methane, and carbon dioxide, and volatile organic compounds (VOC) other than HRVOCs) sufficient to determine the molecular weight and net heating value of the gas combusted in the flare to within 5.0%. Samples must [shall] be collected from a location on the main flare header such that the measured constituents, including any supplementary fuel, is representative of the combined gas combusted in the flare system. Net heating value of the gas combusted in the flare must be calculated according to the equation given in 40 CFR §60.18(f)(3) as amended through October 17, 2000 (65 FR 61744). The samples must be used to demonstrate continuous compliance with the requirements of §115.722(a) - (d) of this title. Pilot gas may not be included in the determination of the net heating value.

(A) Calibration of the on-line analyzer shall be as follows:

(i) for the HRVOC constituents, follow the procedures and requirements of Section 10.0 of 40 CFR Part 60, Appendix B, Performance Specification 9, as amended through October 17, 2000 (65 FR 61744), except that the multi-point calibration procedure in Section 10.1 of Performance Specification 9 must [shall] be performed at least once every calendar quarter instead of once every month, and the mid-level calibration check procedure in Section 10.2 of Performance Specification 9 must [shall] be performed at least once every calendar week instead of once every 24 hours. The calibration gases used for calibration procedures must [shall] be in accordance with Section 7.1 of Performance Specification 9;[. Net heating value of the gas combusted in the flare shall be calculated according to the equation given in 40 CFR §60.18(f)(3) as amended through October 17, 2000 (65 FR 61744). The samples shall be used to continuously meet the minimum net heating value requirements of 40 CFR §60.18 and the site-wide cap of §115.722 of this title. Pilot gas shall not be included in the determination of the net heating value;]

(ii) for the constituents monitored to determine of net heating value and molecular weight, the owner or operator may elect to follow either the calibration procedures specified for HRVOC constituents in clause (i) of this subparagraph or the calibration procedures recommended by the analyzer manufacturer. If the owner or operator elects to follow manufacturer's recommended procedures;

(I) those calibration procedures must include, at a minimum, single point calibration checks at least once every calendar week to meet the acceptance criteria

specified in Section 10.2 of Performance Specification 9 with certified standards of the top two non-HRVOC constituents affecting molecular weight and net heating value, and,

(II) the owner or operator shall submit with the quality assurance plan (QAP) required under §115.726(a) of this title, manufacturer's information and data to demonstrate the accuracy and reliability of the analyzer for those monitored constituents for which routine calibration checks are not performed.

(iii) the range of calibration standards for the HRVOCs and other constituents may be based on the typical concentrations observed rather than the full potential range of concentrations. Data must be submitted with the QAP required under §115.726(a) of this title to demonstrate the accuracy of the analyzer at maximum potential concentrations outside of the proposed calibration range; and

(iv) the executive director may specify additional calibration requirements during approval of the QAP under §115.726(a)(1)(C) of this title.

(B) In lieu of monitoring constituents for net heating value in accordance with this paragraph, the owner or operator may install an online calorimeter to determine the net heating value. The calorimeter must be calibrated, installed, operated, and maintained, in accordance with manufacturer recommendations, to continuously measure and record the net heating value of the gas sent to the flare, in British thermal units/standard cubic foot of the gas.

(3) continuously operate each monitoring system as required by this section at least 95% of the time when the flare is operational, averaged over a calendar year. The percent measurement data availability must be calculated as the total flare operating hours for which valid quality-assured data was recorded divided by the total flare operating hours. Time required for normal calibration checks required under paragraphs (1) and (2) of this subsection is not considered downtime for purposes of this calculation.[:]

(4) during any period of monitor downtime of the on-line analyzer specified in paragraph (2) of this subsection exceeding eight consecutive hours, take a sample daily, starting within ten [24] hours of the initial on-line analyzer malfunction. The sampling location must be such that the measured constituents, including any supplementary fuel, is representative of all of the major constituents going to the flare system. For determining the HRVOC concentrations in the flare header gas, the samples must [shall] be analyzed for the concentrations of HRVOC according to the procedures in 40 CFR Part 60, Appendix A, Method 18 as amended through October 17, 2000 (65 FR 61744). Samples must [shall] also be analyzed by American Standard of Testing Materials Standard D1946-77 to determine other potential constituents (e.g., hydrogen, nitrogen, methane, and carbon dioxide, and VOCs other than HRVOCs) sufficient to determine the molecular weight and net heating value of the gas combusted in the flare to within 5.0%. Net heating value of the gas combusted in the flare must [shall] be calculated according to the equation given in 40 CFR §60.18(f)(3). During periods of monitor downtime, these samples must [shall] be used to demonstrate continuous compliance with the requirements of §115.722(a) - (d) of this title [that the minimum net heating value requirements of 40 CFR §60.18 and the site-wide cap of §115.722 of this title] are met;

(5) every 15 minutes, calculate the net heating value of the gas combusted in the flare according to the equation given in 40 CFR §60.18(f)(3). Pilot gas must [shall] not be included in the determination of the net heating value. [Average net heating value over an one-hour block period will be used to demonstrate compliance with the minimum net heating value requirements of §115.722(b) of this title;]

(6) calculate the actual exit velocity of the flare every 15 minutes based on continuous flow rate, temperature, and pressure monitor data, according to 40 CFR §60.18(f)(4); and

(7) [(6)] calculate the HRVOC hourly average mass emission rates from the flare using the data gathered according to paragraphs (1) - (6) [(1) - (4)] of this subsection, assuming a 99% destruction efficiency for ethylene and propylene and a 98% destruction efficiency for all other HRVOCs when the flare meets the heating value and exit velocity requirements of 40 CFR §60.18. During each 15-minute period when the flare is not in compliance with the net heating value or exit velocity requirements of 40 CFR §60.18, a destruction efficiency of 93% shall be assumed to calculate HRVOC mass emission rates.[:]

[(7) calculate the actual exit velocity of the flare every 15 minutes based on continuous flow rate, temperature, and pressure monitor data, according to 40 CFR §60.18(f)(4). Average exit velocity over an one-hour block period shall be used to demonstrate compliance with the maximum exit velocity requirements of §115.722 (b) of this title; and]

[(8) submit for approval by the executive director 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 by the executive director and validated by 40 CFR Part 63, Appendix A, Test Method 301 (December 29, 1992). For the purposes of this paragraph, substitute “executive director” in each place that Test Method 301 references “administrator.”]

(e) Flares used solely for abatement of HRVOC emissions from loading operations for marine vessels or transport vessels [or temporary portable flares used solely for the abatement of emissions from scheduled maintenance or startup or shutdown activities] are not required to comply with the monitoring requirements of subsection (d) of this section, provided the following specific requirements are satisfied.

[(1) Flares used solely for abatement of emissions from loading operations for transport vessels shall satisfy all of the following requirements.]

(1) [(A)] To demonstrate compliance with the minimum net heating value requirements of §115.722(d) of this title, a [A] calorimeter must [shall] be calibrated, installed, operated, and maintained, in accordance with manufacturer recommendations, to continuously measure and record the net heating value of the gas sent to the flare, in British thermal units/standard cubic foot of the gas.

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

[(i) the type of vessel being loaded;]

[(ii) the start time and the end time for each vessel loaded;]

[(iii) 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;]

[(iv) the quantity of material loaded;]

[(v) the loading rate in gallons per minute;]

[(vi) the method of loading, such as submerged fill, bottom fill, or splash loading; and]

[(vii) additional parameters as needed for emissions calculations.]

(2) [(C)] The flare's actual exit velocity for each loading activity must [shall] be calculated every 15 minutes, based on the maximum loading rate and the supplemental fuel rate

corrected to standard temperature and pressure and the unobstructed (free) cross-sectional area of the flare tip, according to 40 CFR §60.18(f)(4) to demonstrate compliance with the exit velocity requirements of §115.722(d) of this title.

(3) [(D)] The HRVOC hourly average mass emission rates from the flare must [shall] be calculated to demonstrate compliance with the site-wide cap in §115.722 of this title, using total HRVOC sent to the flare calculated based on loading emission calculations [approved by the commission], and the speciated composition of the material being sent to the flare, assuming a 99% destruction efficiency for ethylene and propylene and a 98% destruction efficiency for all other HRVOCs when the flare meets the net heating value and exit velocity requirements of 40 CFR §60.18 [60.18]. During each 15-minute period when the flare does not meet the net heating value or exit velocity requirements of 40 CFR §60.18, a destruction efficiency of 93% must [shall] be assumed to calculate HRVOC mass emission rates.

(4) For flares that receive greater than 98% of an individual HRVOC at all times, the owner or operator may use process knowledge to determine net heating value and HRVOC concentration for demonstrating compliance with §115.722(a) - (d) of this title.

[(2) Temporary portable flares used solely for abatement of emissions from scheduled maintenance or startup or shutdown activities shall satisfy all of the following requirements.]

[(A) The flare is designed to be and capable of being carried or moved from one location to another by means including, but not limited to, wheels, skids, dolly, trailer, or platform.]

[(B) The flare shall be located and operated for no more than 14 days at the plant site in any 12 consecutive months.]

[(C) A calorimeter shall be calibrated, installed, operated, and maintained, in accordance with manufacturer recommendations, to continuously measure and record the net heating value of the gas sent to the flare, in British thermal units per standard cubic foot of the gas.]

[(D) Records shall be maintained, including, but not limited to:]

[(i) the date, start time, and end time for each flaring event;]

[(ii) the flow rate of the gas routed to the flare, in standard cubic feet per minute, calculated based on process knowledge or actual measurement; and]

[(iii) all supporting supplemental information on which the flow rate calculation was based.]

[E] The flare's actual exit velocity for each activity shall be calculated every 15 minutes, based on the calculated flow rate and the supplemental fuel rate corrected to standard temperature and pressure and the unobstructed (free) cross-sectional area of the flare tip, according to 40 CFR §60.18(f)(4).]

(f) Flares used solely for abatement of emissions from scheduled maintenance, startup, or shutdown activities must comply with the continuous monitoring requirements in subsection (d) of this section, or satisfy all of the following requirements:

(1) A single flare must not be operated in HRVOC service for more than 14 days at an account in any 12 consecutive months.

(2) The total number of days for which an account may send HRVOCs temporarily to multiple flares as described in this subsection must not exceed 28 days in 12 consecutive months.

(3) To demonstrate compliance with the minimum net heating value requirements of §115.722(d) of this title, a calorimeter must be calibrated, installed, operated, and maintained, in accordance with manufacturer recommendations, to continuously measure and record the net heating value of the gas sent to the flare, in British thermal units per standard cubic foot of the gas.

(4) The flow rate of the gas routed to the flare, in standard cubic feet per minute must be determined by either:

(A) complying with the monitoring requirements of §115.725(d)(1), or

(B) using process knowledge and engineering calculations.

(5) The flare's actual exit velocity for each activity must be calculated on a block 15-minute average basis, corrected to standard temperature and pressure and the unobstructed (free) cross-sectional area of the flare tip, according to 40 CFR §60.18(f)(4). The HRVOC hourly average mass emission rates from the flare must be calculated to demonstrate compliance with §115.722 (a) - (c) of this title, using total HRVOC sent to the flare calculated based on process knowledge or actual measurement, assuming a 99% destruction efficiency for ethylene and propylene and a 98% destruction efficiency for all other HRVOCs when the flare meets the net heating value and exit velocity requirements of 40 CFR §60.18. During each 15-minute period when the flare does not meet the net heating value or exit velocity requirements of 40 CFR §60.18, a destruction efficiency of 93% must be assumed to calculate HRVOC mass emission rates.

(6) For flares that at all times receive greater than 98% of an individual HRVOC, the owner or operator may use process knowledge to determine net heating value and HRVOC concentration for demonstrating compliance with §115.722(a) - (d) of this title.

(g) For an emergency flare, as defined in §115.10 of this title, subject to the requirements of this division, the owner or operator shall:

(1) comply with the continuous monitoring requirements in subsection (d) of this section, or;

(2) use process knowledge and engineering calculations to determine compliance with the requirements of §115.722(a) - (d) of this title during an upset event or unscheduled maintenance, startup, or shutdown activity. If this option is selected the owner or operator shall comply with the following:

(A) for emergency flares equipped with physical seal (e.g., a water seal) that prevents emissions from being sent to the flare except during an upset event or unscheduled maintenance, startup, or shutdown activity, the owner or operator shall install, calibrate, operate, and maintain, according to manufacturer's specifications, a continuous monitoring system that:

(i) monitors the status of the physical seal to ensure that emissions are not directed to the flare except during an upset event or unscheduled maintenance, startup, or shutdown activity;

(ii) automatically records the time and duration of each event when emissions are sent to the flare; and

(iii) verifies that the physical seal has been restored after each event;

(B) for emergency flares not equipped with a physical seal that prevents emissions from being sent to the flare except during an upset event or unscheduled maintenance, startup, or shutdown activity, the owner or operator shall;

(i) install, calibrate, operate, and maintain, according to manufacturers' specifications, a flow monitoring or indicating system to determine and record the time and duration of each event when emissions are sent to the flare; and

(ii) determine through process knowledge, engineering calculations, or actual testing, the baseline flow rate from any purge/sweep gas and the minimum flow rate indicative of an upset event or unscheduled maintenance, startup, or shutdown activity;

(C) the owner or operator shall develop, implement, and follow a written monitoring plan to satisfy the requirements of subparagraphs (A) or (B) of this paragraph. The monitoring plan must include:

(i) specifications for all monitors used to satisfy the requirements of subparagraphs (A) or (B) of this paragraph;

(ii) the engineering calculations and process information used to determine volumetric flow rate, flare tip exit velocity, net heating value, HRVOC emissions for compliance with §115.722(a) - (d) of this title; and

(iii) at a minimum, quarterly inspections of the continuous monitoring system to ensure proper operation.

(D) Upon written request by the executive director, the monitoring plans required in accordance with subparagraph (C) of this paragraph shall be submitted within 30 days for review. The executive director may require additional or alternative monitoring requirements.

(E) The flare's actual exit velocity for each activity must be calculated on a block 15-minute average basis, corrected to standard temperature and pressure and the unobstructed (free) cross-sectional area of the flare tip, according to 40 CFR §60.18(f)(4). The HRVOC hourly average mass emission rates from the flare must be calculated, using total HRVOC sent to the flare calculated based on process knowledge or actual measurement, assuming a 99% destruction efficiency for ethylene and propylene and a 98% destruction efficiency for all other HRVOCs when the flare meets the net heating value and exit velocity requirements of 40 CFR §60.18. During each 15-minute period when the flare does not meet the net heating value or exit velocity requirements of 40 CFR §60.18, a destruction efficiency of 93% must be assumed to calculate HRVOC mass emission rates.

(h) Flares other than emergency flares that temporarily receive HRVOC emissions during any operation that is not a scheduled maintenance, startup, or shutdown activity as defined in §101.1 of this title must satisfy the following requirements:

(1) The flare must not be operated in HRVOC service for more than 14 days at the plant site in any 12 consecutive months.

(2) The total number of days for which an account may send HRVOCs temporarily to multiple flares as described in this subsection must not exceed 28 days in 12 consecutive months.

(3) In lieu of the flow monitoring requirements of subsection (d)(1) of this section, the owner or operator may use one of the following to demonstrate compliance with §115.722(a) - (d) of this title:

(A) process knowledge;

(B) actual measurement; or

(C) for flares that temporarily receive HRVOC emissions from flare systems that are monitored in accordance with subsection (d) of this section, the flow monitoring data from the monitored flare system may be used as data substitution. Maximum flow rate, excluding data from startups, shutdowns, maintenance, or emissions events, from the previous 30 operational days must be used to determine compliance with §115.722(a) - (d) of this title.

(4) In lieu of implementing the continuous monitoring requirements specified in subsection (d)(2) of this section, the owner operator may use one of the following to demonstrate compliance with §115.722(a) - (d) of this title:

(A) for all flares in temporary HRVOC service, daily sampling in accordance with subsection (d)(4) of this section to determine net heating value and HRVOC concentrations; or

(B) for flares that temporarily receive HRVOC emissions for less than 72 consecutive hours from flare systems that are monitored in accordance with subsection (d) of this section, the monitoring data from the monitored flare system may be used as data substitution to satisfy compliance with §115.722(a) - (d) of this title. Maximum HRVOC concentrations and minimum net heating value, excluding data from scheduled startups, shutdowns, maintenance, or emissions events, from the previous 30 operational days shall be used to determine compliance with §115.722(a) - (d) of this section.

(5) If an emissions event as defined in §101.1 of this title occurs while HRVOC emissions are being routed to a flare temporarily under this subsection, the owner or operator shall demonstrate compliance with the requirements of §115.722(a) - (d) of this title using process knowledge and engineering calculations in accordance with subsection (g)(2)(E) of this section.

(i) For flares specifically designed to receive and control liquid or dual phase streams containing HRVOCs, process knowledge and engineering calculations must be used to determine

compliance with the requirements of §115.722(a) - (d) of this title in accordance with subsection (g)(2)(E) of this section.

(j) [(f)] Minor modifications [Modifications] to either test methods or monitoring [alternative test] methods may be approved by the executive director. Test methods other than those specified in [subsections (a) - (c) and (e) of] this section may be used if approved by the executive director and validated by 40 CFR Part 63, Appendix A, Test Method 301 (December 29, 1992). For the purposes of this subsection, substitute “executive director” in each place that Test Method 301 references “administrator.”

(k) Upon written request by the executive director, the owner or operator shall submit the engineering calculations and process information used to determine volumetric flow rate, flare tip exit velocity, net heating value, and HRVOC emissions for compliance with the requirements of §115.722(a) - (d) of this title where applicable under the requirements of this section. The information must be submitted within 30 days for review.

[(g) The executive director may waive testing for no more than one-half of the vents that are identical in design and operation if the owner or operator demonstrates that all the vents are identical in design and operation, and the emissions from all of the vents can be expected to be identical.]

[(1) The request for a waiver shall be submitted with the test plan required under §115.726(a)(2) of this title. Information required to support the waiver request shall include, but is not limited to, the following:]

[(A) identification of each vent expected to be identical;]

[(B) each specific vent to be tested;]

[(C) a detailed technical explanation demonstrating that the measured emissions from the selected vents can be expected to be representative of emissions from all vents;]

[(D) specific technical information for each vent and the process associated with each vent demonstrating that the vents and associated processes are identical in design and operation;]

[(E) maintenance records for each vent and associated process demonstrating the vents and associated processes have been maintained in a similar manner; and]

[(F) any additional information or data requested by the executive director necessary to demonstrate that the emissions from the vents can be expected to be identical.]

[(2) The executive director shall review the request for waiver and may provide a temporary waiver authorizing testing of no more than one-half of the vents. The results of the tests shall be submitted to the executive director no later than 45 days after the date of written authorization of the temporary waiver. The executive director will determine if any further testing is required based on the review of the test results.]

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

(a) To satisfy the requirements of §115.725 of this title (relating to Monitoring and Testing Requirements), the owner or operator of each affected flare or vent gas stream shall submit to the executive director for [review and] approval a test plan for testing and a quality assurance plan (QAP) for the monitoring requirements (including installation, calibration, operation, and maintenance of continuous emissions monitoring systems) of this division (relating to Vent Gas Control) and subsequently comply with the conditions outlined in the approved test plan or QAP as follows:

(1) for the monitoring requirements of §115.725(d) of this title:

(A) for flares and vent gas streams existing on or before December 31, 2005, the QAP must be submitted no later than April 30, 2005;

(B) for flares/vent gas streams that become subject to the requirements of this division after December 31, 2005, the QAP must be submitted prior to the flares or vent gas streams

being placed in a highly-reactive organic compound (HRVOC) service [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 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 the testing requirements of §115.725(a) of this title:

(A) for flares and vent gas streams existing on or before December 31, 2005, the test plan must be submitted no later than April 30, 2005;

(B) for flares and vent gas streams that become subject to the requirements of this division after December 31, 2005, the test plan must be submitted 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 test

plan for a vent gas stream to be tested as required by §115.725(a) of this title. The owner or operator shall submit a corrected test plan within 45 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; and [.]

(D) The operational parameters selected in accordance with §115.725(a)(1)(A) and (2)(A) and (B) of this title must be identified in the test plan.

(b) The owner or operator of a vent gas stream subject to the requirements of §115.725(a) of this title shall comply with the following recordkeeping requirements as applicable: [maintain a record of the results of all testing conducted in accordance with §115.725 of this title.]

(1) maintain records of all testing conducted in accordance with §115.725(a) of this title to determine HRVOC emission rates on a pounds-per-hour basis for each affected vent gas stream;

(2) maintain hourly records of the parameter monitoring in accordance with §115.725(a)(1) or (2) of this title;

(3) maintain records of the monitoring plans required under §115.725(a)(4) of this title;

(4) maintain hourly records of HRVOC emission rates on a pound-per-hour basis for each affected vent gas stream monitored in accordance with §115.725(b)(1) of this title;

(5) maintain records of all continuous emissions monitoring system calibrations and cylinder gas audits performed in accordance with §115.725(b)(1)(A) and (B) of this title;

(6) maintain records of all process information and calculations used to determine vent gas flow rate as specified in §115.725(b)(1)(C) of this title; and

(7) maintain records of all process information, actual testing, process monitoring data, and calculations used to comply with §115.725(a) of this title under the alternatives to the testing requirements in §115.725(b)(2) of this title;

(c) The owner or operator of a pressure relief valve subject to the requirements of §115.725(c) of this title shall comply with the following recordkeeping requirements:

(1) maintain records of the date, time, duration, volumetric flow rate, and speciated and total HRVOC emission rates on a pounds-per-hour basis for each pressure relief event;

(2) maintain hourly records of the parameter monitoring in accordance with §115.725(c)(1) of this title;

(3) maintain records of all process information, monitored data, and calculations used to determine volumetric flow rate and HRVOC hourly emission data as specified in §115.725(c)(2) of this title; and

(4) maintain records of the monitoring plans required under §115.725(c)(3) of this title.

(d) [(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 the continuous monitoring requirements of §115.725 [§115.725(d) or (e)] of this title shall comply with the following recordkeeping requirements:

(1) maintain hourly records of the speciated and total HRVOC emission rates on a pounds-per-hour basis for each affected flare in order to demonstrate compliance with §115.722 of this title;

(2) maintain records of all monitoring, testing, and calibrations performed in accordance with the provisions of §115.725 of this title;

(3) maintain records on a weekly basis that detail all corrective actions made to the continuous monitoring systems during monitor downtimes, and any delay in corrective action[,] taken by documenting the dates, reasons, and durations of such occurrences; [and]

(4) maintain records of each 15-minute average calculated net heating value of the gas stream routed to the flare and each 15-minute average calculated exit velocity at the flare tip, determined in accordance with the provisions of §115.725 of this title; and [.]

(5) for flares subject to the monitoring requirements of §115.725(e) of this title, maintain records of each loading activity including, but not limited to:

(A) the size of vessel being loaded;

(B) the start time and the end time for each vessel loaded;

(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) the quantity of material loaded;

(E) the loading rate in gallons per minute;

(F) the method of loading, such as submerged fill, bottom fill, or splash loading; and

(G) all process information, monitored data, and calculations used to determine volumetric flow rate and HRVOC hourly emission data.

(6) for flares used solely for the abatement of emissions from scheduled maintenance, startup, or shutdown activities in §115.725(f) of this title, the owner or operator shall maintain records, including, but not limited to:

(A) the date, time, and duration for each flaring event;

(B) the flow rate of the gas routed to the flare, in standard cubic feet per minute; and

(C) all process information, monitored data, and calculations used to determine volumetric flow rate and HRVOC hourly emission data.

(7) for emergency flares subject to the requirements of §115.725(g) of this title, maintain records including, but not limited to:

(A) the date, time, and duration for each flaring event;

(B) the volumetric flow rate of the gas routed to the flare, in standard cubic feet per minute;

(C) all process information, monitored data, and calculations used to determine net heating value, volumetric flow rate, and HRVOC hourly emission data.

(D) hourly records of the parameter monitoring in accordance with §115.725(g)(2)(A) or (B) of this title; and

(E) records of the monitoring plans required under §115.725(g)(2)(C) of this title;

(8) for flares subject to the requirements of §115.725(h) or (i) of this title, maintain records including, but not limited to:

(A) the date, time, and duration for each flaring event;

(B) the volumetric flow rate of the gas routed to the flare, in standard cubic feet per minute; and

(C) all process information, monitored data, and calculations used to determine net heating value, volumetric flow rate, and HRVOC hourly emission data.

(e) [(d)] Records for exemptions in §115.727(a) - (e) of this title (relating to Exemptions) shall include the following.

(1) The owner or operator of any account claiming exemption under §115.727(a) of this title [(relating to Exemptions)] shall maintain records to document that each vent gas stream that is routed to a flare contains less than 5.0% by weight HRVOC at all times and each vent gas stream not routed to a flare does not exceed 100 parts per million by volume HRVOC at any time.

(2) The owner or operator of any flare claiming exemption under §115.727(b) of this title shall maintain records that [which] document that the HRVOC content of the gas stream that is routed to the flare does not exceed 5.0% by weight at any time.

(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 that [which] demonstrate continuous compliance with the exemption criteria of §115.727(c) [§115.727(e)] of this title; or

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

(f) The owner or operator claiming an exemption under §115.727(e) of this title shall submit written notification to the executive director at least 15 days prior to permanently removing a flare from service, but no later than December 31, 2005.

(g) [(e)] The owner or operator of each account subject to §115.722 of this title shall maintain daily records to demonstrate compliance with the tons per calendar year emissions limits specified in §115.722(a) and (b) of this title, including [that update hourly the 24-hour rolling average HRVOC emissions which include]:

(1) cooling tower emissions from cooling towers that [which] are subject to Division 2 of this subchapter (relating to Cooling Tower Heat Exchange Systems); and

(2) all emissions from flares, vents, and pressure relief valves subject to the requirements of §115.725 of this title. [continuously monitored vent gas and flare emissions; and]

[ (3) the maximum potential emission rate from vent gas streams and flares which are not continuously monitored.]

(h) The owner or operator of each account subject to §115.722 of this title shall maintain hourly records to demonstrate compliance with the one-hour block emissions limits specified in §115.722(c) of this title, including:

(1) cooling tower emissions from cooling towers that are subject to Division 2 of this subchapter (relating to Cooling Tower Heat Exchange Systems); and

(2) all emissions from flares, vents, and pressure relief valves subject to the requirements of §115.725 of this title.

(i) [(f)] The owner or operator shall maintain on-site, 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, United States Environmental Protection Agency [EPA], or any local air pollution control agency with jurisdiction.

**§115.727. Exemptions.**

(a) Any account for which all individual gas streams routed to a flare contain less than 5.0% by weight of highly-reactive volatile organic compounds HRVOCs [(HRVOC)] at all times and all individual vent gas streams not routed to a flare contain less than 100 parts per million by volume (ppmv) HRVOCs [HRVOC] at all times is exempt from the requirements of §115.722(a) of this title (relating to Site-wide Cap and Control Requirements).

(b) For a flare that at no time receives a gas stream containing 5.0% or greater HRVOCs [HRVOC]:

(1) the gas stream directed to the flare shall be treated as a vent gas stream for purposes of determining compliance with §115.722(a) - (c) [the site-wide cap of §115.722(a)] of this title; and

(2) the flare is exempt from the continuous monitoring requirements of §115.726(d) [§115.725(d) and (e)] of this title (relating to Monitoring and Testing Requirements) and §115.726(d) [§115.726(c)] of this title (relating to Recordkeeping and Reporting Requirements) and is therefore not required to submit a quality assurance plan under §115.726(a) of this title.

[(c) Emissions from scheduled maintenance, startup, or shutdown activities in compliance with §101.211 of this title (relating to Scheduled Maintenance, Startup, and Shutdown Reporting and Recordkeeping Requirements) are exempt from the requirements of §115.722(a) of this title.]

[(d) Emissions from emissions events in compliance with §101.201 of this title (relating to Emissions Event Reporting and Recordkeeping Requirements) are exempt from the requirements of §115.722(a) of this title.]

(c) [(e)] For [The following] vent gas streams that are not routed to a flare, the following [stream] exemptions may apply: [.]

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

(2) A vent gas stream that has the potential to emit HRVOCs [HRVOC], but that has an HRVOC concentration less than 100 ppmv at all times[, excluding emissions events,] or has a maximum potential flow rate equal to or less than 100 dry standard cubic feet per hour is exempt from this division with the exception of the recordkeeping requirements of §115.726 (e)(3)(A) [§115.726(d)(3)] of this title.[, provided that the] The maximum potential HRVOC emissions for the sum of all vent gas streams claimed under this exemption, in pounds per hour, must be [is] less than 5.0% of the HRVOC cap for the account specified in §115.722(a) or (b) [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(e)(3)(A) [§115.726(d)(3)] of this title:

(A) vent gas streams resulting from the combustion of less than 5.0% by weight HRVOC in boilers, furnaces, engines, turbines, incinerators, and heaters;

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

(C) laboratory vent hoods;

(D) instrumentation air systems;

(E) atmospheric storage tanks;

(F) wastewater system vents;

(G) cooling towers; and

(H) equipment leak fugitive components, except for vents from pressure relief valves occurring when the process pressure is sufficient to overcome the preset pressure relief point of the pressure relief valve and emissions are either released directly to the atmosphere or routed to a control device.

(d) [(f)] Any flare that at no time receives a total gas stream with greater than 100 ppmv HRVOC is exempt from the requirements of this division, with the exception of the recordkeeping requirements of §115.726(c)(3)(B) [§115.726(d)(3)] of this title.

(e) Any flare that will be permanently out of service by April 1, 2006 is exempt from the requirements of this division, with the exception of the recordkeeping requirements in §115.726(f) 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 and pressure relief valves.

(A) The testing and monitoring required by §115.725 of this title (relating to Monitoring and Testing Requirements) must [shall] be completed and the results submitted to the Houston [appropriate] regional office and any local air pollution control agency with jurisdiction as soon as practicable, but no later than December 31, 2005 for existing vent gas streams and pressure relief valves. For vent gas streams and pressure relief valves that become subject to the requirements of this division after December 31, 2005, testing and monitoring must be conducted as soon as practicable, but no later than 60 days after being brought into highly-reactive volatile organic compound service.

(B) The owner or operator shall demonstrate compliance with all other requirements of this division applicable to vent gas streams and pressure relief valves as soon as practicable, but no later than April 1, 2006.

(2) Flares. The owner or operator of each flare shall demonstrate compliance with all sections of this division as soon as practicable, but no later than December 31, 2005, with the exception of §115.722(a) - (c) [the site-wide cap in §115.722] of this title (relating to Site-wide Cap and Control Requirements) for which the owner or operator shall demonstrate compliance as soon as practicable, but no later than April 1, 2006. For flares that become subject to the requirements of this division after December 31, 2005, testing and monitoring must be conducted as soon as practicable, but no later than 60 days after being brought into highly-reactive volatile organic compound service.

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

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

**§§115.760, 115.761, 115.764, 115.766, 115.767, 115.769**

**STATUTORY AUTHORITY**

The amendments and new sections are proposed 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 amendments and new sections are also proposed 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.

The proposed amendments and new sections implement Texas Health and Safety Code, §§382.002, 382.011, 382.012, and 382.017.

**§115.760. Applicability and Cooling Tower Heat Exchange System Definitions.**

(a) Applicability. Any account with a cooling tower heat exchange system in the Houston/Galveston area, as defined in §115.10 of this title (relating to Definitions), that [which] emits or has the potential to emit a highly-reactive volatile organic compound, as defined in §115.10 of this title, is subject to the requirements of this division (relating to Cooling Tower Heat Exchange Systems) in addition to the applicable requirements of any other division in this subchapter or any other subchapter in this chapter.

(b) Definitions. The following term, when used in this division, [shall] have the following meaning, unless the context clearly indicates otherwise. Additional definitions for terms used in this division are found in §§3.2, 101.1, and 115.10 of this title (relating to Definitions). **Cooling tower heat exchange system** - Cooling towers, associated heat exchangers, pumps, and ancillary equipment where water is used as a cooling medium and the heat from process fluids is transferred to cooling water. This does not include fin-fan coolers. This also does not include comfort cooling tower heat exchange systems (i.e., those [which are] used exclusively in cooling, heating, ventilation, and air conditioning systems).

**§115.761. Site-wide Cap.**

(a) The owner or operator of a site subject to this division shall additionally comply with the requirements of Chapter 101, Subchapter H, Division 6 of this title (relating to Highly-Reactive

Volatile Organic Compound Emissions Cap and Trade Program). [~~Emissions of highly-reactive volatile organic compounds (HRVOC) at each account subject to this division (relating to Cooling Tower Heat Exchange Systems) and Division 1 of this subchapter~~

(relating to Vent Gas Control) are limited on a calendar year basis [to a 24-hour rolling average] as specified in Table 5.2-1 X [6-2.1], Initial] HRVOC Site-Cap Allocations: Harris County, and Table 5.2-2 Y [6-2.2], Initial] HRVOC Site-Cap Allocations: Seven Surrounding Counties, of the Attainment Demonstration SIP for the Houston/Galveston/Brazoria 1-Hour Ozone Nonattainment Area adopted on Month Day, 2004. [*Post-1999 Rate-of-Progress and Attainment Demonstration Follow-up SIP for the Houston/Galveston Ozone Nonattainment Area adopted on December 13, 2002.*]

(b) All sites accounts subject to this division or Division 1 of this subchapter (relating to Vent Gas Control) that are exempt from the highly-reactive volatile organic compound (HRVOC) emissions cap and trade program, in accordance with §101.392 of this title (relating to Exemptions), not listed in either Table 5.2-1 X or Table 5.2-2 Y are limited to ten tons per year of HRVOC emissions per calendar year.

(c) Each site account subject to this division is subject to the following emission limitations that are pollution control standards set by the commission.:

(1) HRVOC emissions at each site account located in Harris County that is subject to this division or Division 1 of this subchapter must not exceed 1,200 “XX” pounds of HRVOCs per one-hour block hour period from any flare, vent, pressure relief valve, cooling tower, or any the combination thereof.

(2) HRVOC emissions at each ~~site account~~ located in the Houston/Galveston ozone nonattainment area as defined in §101.1 ~~§115.10~~ of this title (relating to Definitions), excluding Harris County, that is subject to this division or Division 1 of this subchapter must not exceed 1,200 ~~“XX”~~ pounds of HRVOCs per one-hour block ~~hour~~ period from any flare, vent, pressure relief valve, cooling tower, or any ~~the~~ combination thereof.

(3) For any exceedance of the ~~HRVOC~~ HRVOCs emission limits specified in paragraph (1) or (2) of this subsection §115.761(c)(1) or (2) of this title (relating to Site-Wide Cap), the emission limits specified in paragraph (1) or (2) of this subsection §115.761(a) or (b) of this title must be used to determine compliance with subsection (a) or (b) of this section §115.761(a) or (b) of this title instead of the total amount of actual emissions.

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

**§115.764. Monitoring and Testing Requirements.**

(a) The owner or operator of a cooling tower heat exchange system with [greater than 100 parts per million by weight (ppmw) of highly-reactive volatile organic compounds (HRVOC) in the process side fluid and] a design capacity to circulate 8,000 gallons per minute (gpm) or greater of cooling water shall:

(1) install, calibrate, operate, and maintain a continuous flow monitor on each inlet of each cooling tower. Each monitor shall be calibrated on an annual basis to within  $\pm 5.0\%$  accuracy. When the cooling tower flow monitor is down, flow measurements shall be used for the most recent 24-hour period in which the flow measurements are representative of cooling tower operations during monitor downtime;

(2) install, calibrate, operate, and maintain a system to continuously determine the total strippable volatile organic compound (VOC) concentration at each inlet of each cooling tower. The continuous monitor must be calibrated with methane or a VOC that best represents potential leakage into the cooling tower system and the emissions from the system. Calibration must be checked weekly or more frequently, as necessary, to maintain a monitor drift of less than 5.0%. During out-of-order periods of the VOC monitor(s), a sample must [shall] be collected for total VOC analysis according to the air-stripping method in Appendix P of the Texas Commission on Environmental Quality Sampling Procedures Manual (January 2003) [Texas Commission on Environmental Quality (commission) air-stripping method (Appendix P, Sampling Procedures Manual, January 2003)]. This sample must [shall] be collected at least three times per calendar week, with an interval of no less than 36 hours between samples;

(3) continuously operate each monitoring system as required by this section at least 95% of the time when the cooling tower is operational, averaged over a calendar year. The percent measurement data availability must be calculated as the total operating hours of the cooling tower heat exchange system for which valid quality-assured data was recorded divided by the total operating hours of the cooling tower heat exchange system. Time required for normal calibration checks required under this subsection is not considered downtime for purposes of this calculation;

(4) determine the speciated strippable highly-reactive volatile organic compound (HRVOC) [HRVOC] concentration by collecting samples from each inlet of each cooling tower at least

once per month in accordance with the air-stripping method in Appendix P [appropriate methods in §115.766 of this title (relating to Testing Requirements)];

(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 for more than a one-hour block of time, collect an additional sample to determine speciated and total HRVOC in accordance with the air-stripping method in Appendix P [§115.766 of this title] from each inlet of the affected cooling tower at least once daily. The additional sampling to determine speciated and total HRVOC shall continue on a daily basis until the concentration of total strippable VOC drops below 50 ppbw; and

(6) in lieu of the monitoring in paragraph (2) of this subsection and the sampling for speciation of strippable HRVOC [VOC] in paragraphs (4) and (5) of this subsection, a continuous on-line monitor capable of providing total HRVOC and speciated HRVOCs in ppbw may be installed. The continuous on-line monitor system must satisfy the requirements of Sections 8.3, 10, 13.1, and 13.2 [Subsections 8.2 and 8.3, Section 10, and Subsections 13.1 and 13.2] of 40 Code of Federal Regulations (CFR) Part 60, Appendix B, Performance Specification 9, as amended through October 17, 2000 (65 FR 61744). The multi-point calibration procedure in Section 10.1 of Performance Specification 9 must be performed at least once every calendar quarter instead of once every month. During out-of-order periods of the on-line HRVOC monitor(s), sampling must be performed [a sample shall be collected] for total and speciated HRVOC analysis according to the air-stripping method in [the commission's Sampling Procedures Manual,] Appendix P. [This sample] Sampling must [shall] be performed [collected] at least three times per calendar week, with an interval of no less than 36 hours

between sampling times, until the continuous on-line monitor is properly operating and within the required performance specifications [samples].

(b) The owner or operator of a cooling tower heat exchange system with [greater than 100 ppmw of HRVOC in the process side fluid and] a design capacity to circulate less than 8,000 gpm of cooling water shall:

(1) install, calibrate, operate, and maintain a continuous flow monitor on each inlet of each cooling tower. Each monitor must [shall] be calibrated on an annual basis to within  $\pm 5.0\%$  accuracy. When the cooling tower flow monitor is down, flow measurements must [shall] be used for the most recent 24-hour period in which the flow measurements are representative of cooling tower operations during monitor downtime;

(2) determine the total strippable VOC concentration by collecting samples from each inlet of each cooling tower at least twice per week in accordance with the air-stripping method in Appendix P [appropriate methods in §115.766 of this title,] with an interval of not less than 48 hours between samples;

(3) operate each monitoring system [shall be operated] as required by this section at least 95% of the time when the cooling tower is operational, averaged over a calendar year. The percent measurement data availability must be calculated as the total operating hours of the cooling tower heat exchange system for which valid quality-assured data was recorded divided by the total

operating hours of the cooling tower heat exchange system. Time required for normal calibration checks required under §115.764(b) of this title is not considered downtime for purposes of this calculation;

(4) determine the speciated strippable HRVOC concentration by collecting samples from each inlet of each cooling tower at least once per month in accordance with the air-stripping method in Appendix P [appropriate methods in §115.766 of this title];

(5) if the concentration of [calculated] total strippable VOC [concentration] is equal to or greater than 50 ppbw in the cooling tower water, collect an additional sample [samples] to determine total strippable VOC, speciated HRVOC, and total HRVOC[, in accordance with §115.766 of this title] from each inlet of the affected cooling tower at least once daily in accordance with the air-stripping method in Appendix P. The additional sampling to determine total strippable VOC, speciated [HRVOC,] and total HRVOC must [shall] continue on a daily basis until the concentration of total strippable VOC drops below 50 ppbw; and

(6) in lieu of the monitoring in paragraph (2) of this subsection and the sampling for speciation of strippable HRVOC [VOC] in paragraphs (4) and (5) of this subsection, a continuous on-line monitor capable of providing total HRVOC and speciated HRVOCs in ppbw may be installed. The continuous on-line monitor system must satisfy the requirements of Sections 8.3,10,13.1, and 13.2 [Subsections 8.2 and 8.3, Section 10, and Subsections 13.1 and 13.2] of 40 CFR Part 60, Appendix B, Performance Specification 9. The multi-point calibration procedure in Section 10.1 of Performance

Specification 9 must be performed at least once every calendar quarter instead of once every month.

During out-of-order periods of the on-line HRVOC monitor(s), sampling must be performed [a sample shall be collected] for total and speciated HRVOC analysis according to the air-stripping method in [the commission's Sampling Procedures Manual,] Appendix P. [This sample] Sampling must [shall] be performed [collected] at least twice per calendar week, with an interval of no less than 72 hours between sampling times, until the continuous on-line monitor is properly operating and within the required performance specifications [samples].

(c) When periodic sampling is required, the [The] owner or operator of the cooling tower heat exchange system shall determine the speciated HRVOC concentration as soon as this information is available, but no later than seven days after the sample(s) have been collected. Samples collected in a Tedlar™ bag must be analyzed no later than 72 hours after the samples have been collected. The samples must be analyzed according to the procedures in Test Method 18, 40 CFR Part 60, Appendix A, and/or Method TO-14A, published in "U.S. EPA Compendium for Determination of Toxic Organic Compounds in Ambient Air (1996)," United States Environmental Protection Agency Document Number 625/R96/010B.

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

[(1) for cooling towers existing on or before December 31, 2005, no later than April 30, 2005;]

[(2) for cooling tower heat exchange systems that become subject to the requirements of this division after December 31, 2005, at least 60 days prior to being placed in 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.]

(d) [(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, according to the air-stripping method in Appendix P [in accordance with appropriate methods in §115.766 of this title]. If the total strippable VOC concentration in the cooling tower water is 50 ppbw or greater, the owner or operator shall determine the total strippable VOC weekly and the HRVOC concentration weekly. The additional sampling for the total strippable VOC concentration and HRVOC concentration [shall] continue until the total strippable VOC concentration drops below 50 ppbw.

(e) [(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 a cooling tower heat exchange system [systems] may:

(1) use the maximum potential flow rate based on manufacturer's pump performance data, assuming no back pressure; or

(2) install, calibrate, operate, and maintain, in accordance with the manufacturer's recommendations, a monitor to continuously measure and record each cooling water pump discharge pressure to establish the total dynamic head of the cooling water system. The owner or operator of the cooling water system must establish, use, and demonstrate in the QAP required in §115.766(i) of this title (relating to Recordkeeping and Reporting Requirements [subsection (d) of this section], a calculation methodology that [which] will provide, on a continuous basis, the cooling water circulation flow rate (in gpm) based on the following: cooling water discharge pressure for each pump; the manufacturer's certified pump performance data; and the number of pumps in operation. This

calculated flow rate will then be used to determine the hourly emission rate in pounds per hour, as required by §115.766(a)(3) [§115.767(a)(3)] of this title [(relating to Recordkeeping Requirements)].

(f) [(g)] Minor modifications to the [these] monitoring and testing methods in this section may be approved by the executive director. Monitoring and testing methods other than those specified in subsections (a) - (e) [(a), (b), (e), and (f)] of this section may be used if approved by the executive director and validated by 40 CFR Part 63, Appendix A, Test Method 301 (December 29, 1992). For the purposes of this subsection, substitute “executive director” in each place that Test Method 301 references “administrator.”

(g) In lieu of using the monitor location described in subsections (a) and (b) of this section, the owner or operator of cooling tower heat exchange systems in which a single cooling tower services both HRVOC and non-HRVOC process units may:

(1) install a flow monitor, meeting the requirements of subsection (a)(1) and (b)(1) of this section at a point that represents the flow of cooling water from only the HRVOC-containing process units; and

(2) monitor the total strippable VOC or HRVOC concentration, in accordance with subsection (a), (b), or (d) of this section at a point leaving the HRVOC-containing process unit and prior to mixing with cooling tower water from other units.

**§115.766. Recordkeeping and Reporting Requirements.**

(a) The owner or operator of any cooling tower heat exchange system subject to §115.761 of this title (relating to Site-wide Cap) shall comply with the following recordkeeping requirements:

(1) establish and maintain a process diagram of the cooling tower heat exchange system, including the locations at which the system will be monitored and sampled such that the cooling water is not exposed to the atmosphere prior to sampling;

(2) maintain records of all monitoring, testing, and calibrations performed in accordance with the provisions of §115.764 of this title (relating to Monitoring and Testing Requirements);

(3) maintain hourly records that document the emission rate in pounds per hour (lb/hr) for each hour for speciated highly-reactive volatile organic compounds (HRVOC) and total HRVOC from the cooling water for each cooling tower heat exchange system as required by §115.764(a), (b), or (d) of this title. The flow rate of the cooling water in conjunction with the most recently monitored concentration of the speciated HRVOC or total HRVOC in the cooling tower water, shall be used to calculate the respective emission rate in lb/hr. If the concentration results of the speciated HRVOC or total HRVOC analyses are below the minimum detection limit (i.e., non-detected), then half the detection limit(s) must be used to calculate HRVOC emissions;

(4) maintain hourly records of the total strippable VOC concentration in the cooling water for cooling tower heat exchanger systems monitored in accordance with §115.764(a)(2) of this title, and maintain records of each test for total strippable VOC concentration performed in accordance with §115.764(b)(2) or (d) of this title. If the concentrations results of the total strippable VOC testing or monitoring are below the minimum detection limit, then the full detection limit must be used to calculate average total strippable VOC concentration;

(5) maintain hourly records of the cooling water flow rate; and

(6) 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;

(b) The owner or operator of any cooling tower heat exchange system claiming an exemption under §115.767 of this title (relating to Exemptions) shall comply with the following recordkeeping requirements:

(1) maintain records of the heat exchanger pressure differential to document continuous compliance with the exemption criteria of §115.767(1) of this title; or

(2) maintain records of the content of the process side fluid in each heat exchanger to demonstrate continuous compliance with the exemption criteria of §115.767(2) of this title.

(c) The owner or operator shall maintain all records 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, United States Environmental Protection Agency, or any local air pollution control agency with jurisdiction.

(d) The owner or operator of any cooling tower heat exchange system using the alternate periodic monitoring available under §115.764(d) of this title shall maintain sufficient records to demonstrate that no individual heat exchanger has 5.0% or greater HRVOC in the process-side fluid.

(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(e)(1) of this title, shall maintain the following records for each pump:

(1) the manufacturer's certified pump performance test;

(2) the operating status of each pump;

(3) the motor manufacturer, model number, and rated brake horsepower;

(4) the impeller manufacturer, model number, size, and design;

(5) any change to a cooling tower heat exchange system pump or pumping system in which the change would modify the basis for design pumping capacity; and

(6) the effect of any change on the maximum potential flow rate.

(f) The owner or operator of any cooling tower heat exchange system using a system to monitor cooling water pump discharge pressure to determine the continuous flow rate for each cooling tower, as specified in §115.764(e)(2) of this title, shall maintain the following records for each pump:

(1) the continuous measurement of cooling water pump discharge pressure;

(2) the manufacturer's certified pump performance test;

(3) the operating status of each pump;

(4) the motor manufacturer, model number, and rated brake horsepower;

(5) the impeller manufacturer, model number, size, and design;

(6) any change to a cooling tower heat exchange system pump or pumping system in which the change would modify the basis for design pumping capacity; and

(7) the effect of any change on the maximum potential flow rate.

(g) The owner or operator of each account subject to §115.761 of this title shall maintain daily records to demonstrate compliance with the tons per calendar year emissions limits specified in §115.761(a) and (b) of this title, including:

(1) flare, vent gas, and pressure relief valve emissions that are subject to Division 1 of this subchapter (relating to Vent Gas Control); and

(2) all cooling towers subject to the requirements of §115.764 of this title.

(h) The owner or operator of each account subject to §115.761 of this title shall maintain hourly records to demonstrate compliance with the one-hour block emissions limits specified in §115.761(c) of this title, including:

(1) flare, vent gas, and pressure relief valve emissions that are subject to Division 1 of this subchapter; and

(2) all cooling towers subject to the requirements of §115.764 of this title.

(i) The owner or operator of an affected cooling tower heat exchange system shall submit for review and approval by the executive director a quality assurance plan (QAP) for the installation,

calibration, operation, and maintenance for the monitoring equipment required by this division as follows:

(1) for cooling towers existing on or before December 31, 2005, the QAP must be submitted no later than April 30, 2005;

(2) for cooling tower heat exchange systems that become subject to the requirements of this division after December 31, 2005, the QAP must be submitted prior to being placed in HRVOC service; 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.

(j) The owner or operator claiming an exemption under §115.767(4) of this title shall submit written notification to the executive director at least 15 days prior to permanently removing a cooling tower heat exchange system from service, but not later than December 31, 2005.

**§115.767 Exemptions.**

The following exemptions apply.

(1) Any cooling tower heat exchange system in which each individual heat exchanger with greater than 100 parts per million by weight (ppmw) highly-reactive volatile organic compounds (HRVOC) in the process side fluid is operated with the minimum pressure on the cooling water side at least five pounds per square inch, gauge (psig) greater than the maximum pressure on the process side, as demonstrated by continuous pressure monitoring and recording at all heat exchangers with greater than 100 ppmw HRVOC in the process side fluid, is exempt from the requirements of this division (relating to Cooling Tower Heat Exchange Systems), with the exception of the recordkeeping requirements of §115.766(b) and (c) of this title (relating to Recordkeeping and Reporting Requirements).

(2) Any cooling tower heat exchange system in which no individual heat exchanger has greater than 100 ppmw HRVOCs in the process side fluid is exempt from the requirements of this division, with the exception of the recordkeeping requirements of §115.766(b) and (c) of this title.

(3) Any account for which no stream directed to a cooling tower heat exchange system contains 5.0% or greater by weight HRVOC is exempt from the requirements of §115.761 of this title (relating to Site-wide Cap).

(4) Any cooling tower heat exchange system that will be permanently out of service by April 1, 2006 is exempt from the requirements of this division, with the exception of the recordkeeping requirements in §115.766(j) of this title.

**§115.769. Counties and Compliance Schedules.**

(a) The owner or operator of each cooling tower heat exchange system in Brazoria, Chambers, Fort Bend, Galveston, Harris, Liberty, Montgomery, and Waller Counties shall demonstrate compliance with this division (relating to Cooling Tower Heat Exchange Systems) as soon as practicable, but no later than December 31, 2005, with the exception of [the site-wide cap in] §115.761(a) - (c) [§115.761] of this title (relating to Site-wide Cap) for which the owner or operator shall demonstrate compliance as soon as practicable, but no later than April 1, 2006.

(b) For cooling tower heat exchange systems that become subject to the requirements of this division after December 31, 2005, testing and monitoring must be conducted as soon as practicable, but no later than 60 days after being brought into highly-reactive volatile organic compound service.

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

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

**[§§115.766 - 115.768]**

**STATUTORY AUTHORITY**

The repeals are proposed 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 repeals are also proposed 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.

The proposed repeals implement Texas Health and Safety Code, §§382.002, 382.011, 382.012, and 382.017.

**§115.766. Testing Requirements.]**

[Compliance with this division (relating to Cooling Tower Heat Exchange Systems) shall be determined by applying the following test methods.]

(1) For determining the total strippable volatile organic compound (VOC) concentration in cooling tower water where a continuous monitoring system is required, the minimum detection limit of the continuous monitoring system shall be no more than ten parts per billion by weight (ppbw) in the cooling tower water. The continuous monitor shall be calibrated with methane or a VOC which best represents potential leakage into the cooling tower system and the emissions from the system. Calibration shall be checked weekly or more frequently, as necessary, to maintain a monitor drift of less than 3.0%.]

(2) For determining the speciated strippable VOC in cooling water, the samples shall be obtained using the air-stripping method in Appendix P of the Texas Commission on Environmental Quality (TCEQ) Sampling Procedures Manual (January 2003). The samples shall be analyzed according to the procedures in Test Method 18, 40 Code of Federal Regulations (CFR) Part 60, Appendix A, and/or Method TO-14A, published in "U.S. EPA Compendium for Determination of Toxic Organic Compounds in Ambient Air (1996)," EPA Document Number 625/R96/010B. The minimum detection limit of the testing system shall be no more than ten ppbw in the cooling tower water.]

[(3) Modifications to these test methods or alternative test methods may be approved by the Engineering Services Team. Test methods other than those specified in paragraphs (1) and (2) of this section may be used if validated by 40 CFR Part 63, Appendix A, Test Method 301 (December 29, 1992).]

**§115.767. Recordkeeping Requirements.]**

[(a) The owner or operator of any cooling tower heat exchange system subject to §115.761 of this title (relating to Site-wide Cap) shall comply with the following recordkeeping requirements:]

[(1) establish and maintain a process diagram of the cooling tower heat exchange system, including the locations at which the system will be monitored and sampled such that the cooling water is not exposed to the atmosphere prior to sampling;]

[(2) maintain records of all monitoring, testing, and calibrations performed in accordance with the provisions of §115.764 and §115.766 of this title (relating to Monitoring Requirements; and Testing Requirements);]

[(3) maintain hourly records that document the emission rate in pounds per hour (lb/hr) for each hour for total strippable volatile organic compounds (VOC), speciated highly-reactive volatile organic compounds (HRVOC), and total HRVOC from the cooling water for each cooling tower heat exchange system as required by §115.764(a) and (b) of this title. The flow rate of the cooling water in

conjunction with the most recently monitored concentration of the total strippable VOC, speciated HRVOC, or total HRVOC in the cooling tower water, shall be used to calculate the respective emission rate in lb/hr. If the results of the total strippable VOC, speciated HRVOC, or total HRVOC analyses are below the minimum detection limit (i.e., non-detected), then the full detection limit(s) shall be used to calculate total strippable VOC and HRVOC emissions.]

[(4) maintain hourly 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;]

[(5) update hourly the 24-hour rolling average HRVOC emissions, including:]

[(A) vent gas and flare emissions which are subject to Division 1 of this subchapter (relating to Vent Gas Control); and]

[(B) the hourly emissions determined in paragraph (3) of this subsection; and]

[(6) in lieu of the recordkeeping requirements in paragraph (3) of this subsection, maintain hourly records that document the emission rate in lb/hr for speciated HRVOC and total HRVOC from the cooling water for each cooling tower heat exchange system as required by §115.764(a)(6) and (b)(6) of this title. The flow rate of the cooling water in conjunction with the monitored concentration of the speciated HRVOC or total HRVOC shall be used to calculate the

respective emission rate in pounds per hour. If the results of the speciated or total HRVOC analyses are below the minimum detection limit (i.e., non-detected), then the full detection limit(s) shall be used to calculate HRVOC emissions.]

[(b) The owner or operator of any cooling tower heat exchange system claiming exemption under §115.768 of this title (relating to Exemptions) shall comply with the following recordkeeping requirements:]

[(1) maintain records of the heat exchanger pressure differential to document continuous compliance with the exemption criteria of §115.768(1) of this title; or]

[(2) maintain records of the content of the process side fluid in each heat exchanger to demonstrate continuous compliance with the exemption criteria of §115.768(2) of this title.]

[(c) The owner or operator shall maintain all records 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.]

[(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 maintain the following records for each pump:]

[(1) the manufacturer's certified pump performance test;]

[(2) the operating status of each pump;]

[(3) the motor manufacturer, model number, and rated brake horsepower;]

[(4) the impeller manufacturer, model number, size, and design;]

[(5) any change to a cooling tower heat exchange system pump or pumping system in which the change would modify the basis for design pumping capacity; and]

[(6) the effect of any change on the maximum potential flow rate.]

[(f) The owner or operator of any cooling tower heat exchange system using a system to monitor cooling water pump discharge pressure to determine the continuous flow rate for each cooling tower, as specified in §115.764(f)(2) of this title, shall maintain the following records for each pump:]

[(1) the continuous measurement of cooling water pump discharge pressure;]

[(2) the manufacturer's certified pump performance test;]

[(3) the operating status of each pump;]

[(4) the motor manufacturer, model number, and rated brake horsepower;]

[(5) the impeller manufacturer, model number, size, and design;]

[(6) any change to a cooling tower heat exchange system pump or pumping system in which the change would modify the basis for design pumping capacity; and]

[(7) the effect of any change on the maximum potential flow rate.]

**[\$115.768. Exemptions.]**

[The following exemptions shall apply.]

[(1) Any cooling tower heat exchange system in which each individual heat exchanger is operated with the minimum pressure on the cooling water side at least five pounds per square inch gauge (psig) greater than the maximum pressure on the process side, as demonstrated by continuous pressure monitoring and recording at all heat exchangers, is exempt from the requirements of this division (relating to Cooling Tower Heat Exchange Systems), with the exception of the recordkeeping requirements of §115.767(b) and (c) of this title (relating to Recordkeeping Requirements).]

[(2) Any cooling tower heat exchange system in which no individual heat exchanger has highly-reactive volatile organic compounds (HRVOC) in the process side fluid is exempt from the requirements of this division, with the exception of the recordkeeping requirements of §115.767(b) and (c) of this title.]

[(3) Any account for which no stream directed to a cooling tower heat exchange system contains 5.0% or greater by weight HRVOC is exempt from the requirements of §115.761 of this title (relating to Site-wide Cap).]

[(4) Emissions from emissions events in compliance with §101.201 of this title (relating to Emissions Event Reporting and Recordkeeping Requirements) are exempt from the requirements of §115.761 of this title.]

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

**DIVISION 3: FUGITIVE EMISSIONS**

**§§115.780 - 115.783, 115.786 - 115.789**

**STATUTORY AUTHORITY**

The amendments are proposed 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 amendments are also proposed 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.

The proposed amendments implement Texas Health and Safety Code, §§382.002, 382.011, 382.012, and 382.017.

**§115.780. Applicability.**

(a) Any process unit or process within a petroleum refinery; synthetic organic chemical, polymer, resin, or methyl tert-butyl ether manufacturing process; or natural gas/gasoline processing operation in the Houston/Galveston area, as defined in §115.10 of this title (relating to Definitions), in which a highly-reactive volatile organic compound [(VOC)], 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 this division (relating to Fugitive Emissions) in addition to the applicable 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).

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

**§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 that [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 that [which] are not subject to this division. The components must be identified by one or more of the following methods:

(1) a plant site plan;

(2) color coding;

(3) a written or electronic database;

(4) designation of process unit boundaries;

(5) some form of weatherproof identification; or

(6) 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.

(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) The exemptions of §115.357(1) - (11) [§115.357(1) - (9)] of this title (relating to Exemptions) do not apply.

(2) The leak-skip provisions of §115.354(7) and (8) of this title (relating to Inspection Requirements) do not apply.

(3) The emissions from blind flanges, caps, or plugs at the end of a pipe or line containing HRVOC; connectors; heat exchanger heads; sight glasses; meters; gauges; sampling connections; bolted manways; hatches; agitators; sump covers; junction box vents; covers and seals on volatile organic compound [(VOC)] water separators; and process drains shall be monitored each calendar quarter (with a hydrocarbon gas analyzer).

(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 after startup is completed following the shutdown.

(5) All process drains equipped with water seal controls, as defined in §115.140 of this title (relating to Industrial Wastewater Definitions), shall be inspected weekly to ensure that the water seal controls are effective in preventing ventilation, except that daily inspections are required for those seals that have failed three or more inspections in any 12-month period. Upon request by the executive director, United States Environmental Protection Agency [EPA], or any local program with jurisdiction, the owner or operator shall demonstrate (e.g., by visual inspection or smoke test) that the water seal controls are properly designed and restrict ventilation.

(6) All process drains not equipped with water seal controls shall be inspected monthly to ensure that all gaskets, caps, and/or plugs are in place and that there are no gaps, cracks, or other holes in the gaskets, caps, and/or plugs. In addition, all caps and plugs shall be inspected monthly to ensure that they are tightly fitting [tightly-fitting].

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

(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 that [which] are unsafe to monitor shall be identified in a list made immediately available upon request. If an unsafe-to-monitor component is not considered safe to monitor within a calendar year, then it shall be monitored as soon as possible during safe-to-monitor times.

(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 or that is below floors or deck gratings requiring confined space entry as defined in 29 Code of Federal Regulations §1910.146. A difficult-to-monitor component for which quarterly monitoring is specified may instead be monitored annually.

(8) All pressure relief valves in gaseous service [which are not vented to a closed-vent system] shall be monitored for fugitive leaks each calendar quarter (with a hydrocarbon gas analyzer).

(9) A leak is defined as a screening concentration greater than 500 parts per million by volume above background as methane for all components.

(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.

(c) Pumps, compressors, and agitators must be:

(1) inspected visually each calendar week for liquid dripping from the seals; or

(2) equipped with an alarm that alerts the operator of a leak.

(d) If securing the bypass line valve in the closed position to comply with §115.783(1)(B) of this title (relating to Equipment Standards), the seal or closure mechanism must be visually inspected to ensure the valve is maintained in the closed position and the vent stream is not diverted through the bypass line:

(1) on a monthly basis; and

(2) after any maintenance activity that requires the seal to be broken.

(e) Any pressure relief device that [which] has vented to the atmosphere shall be monitored for fugitive leaks (with a hydrocarbon gas analyzer) and inspected within 24 hours after actuation and the results reported in accordance with §115.786 of this title (relating to Recordkeeping Requirements).

(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, sight glasses, meters, gauges, 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, sight glasses, meters, gauges, connectors, bolted manways, heat exchanger heads, hatches, and sump covers in the process unit was 0.5% or greater, but less than 2.0%, 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, sight glasses, meters, gauges, 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, sight glasses, meters, gauges, 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, sight glasses, meters, gauges, 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, sight glasses, meters, gauges, 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, sight glasses, meters, gauges, 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%.

(g) Except as provided in paragraph (2) of this subsection, 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 database required by §115.356 of this title (relating to Monitoring and Recordkeeping Requirements).

(1) For all monitoring events in which an electronic data collection device is used, the collected monitoring data must 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 concentration is read or recorded for each component), a date stamp, an operator identification, an instrument identification, and calibration gas concentrations and certification dates. The acceptable rate for recording data must 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.

(2) The owner or operator may use paper logs where necessary or more feasible (e.g., small rounds (less than 100 components), re-monitoring following component repair, or when dataloggers are broken or not available), and shall record, at a minimum, the information required in paragraph (1) of this subsection. For audio, visual, and olfactory inspections, the owner or operator shall record, at a minimum, the identification of the person conducting the inspection, the date, and the area that was inspected. The owner or operator shall transfer any manually recorded monitoring data to the database required by §115.356 of this title within seven days of monitoring.

(3) Each change to the database regarding the monitored concentration, date and time read, repair information, addition or deletion of components, or monitoring schedule must be

detailed in a log or inserted as a notation in the database. All such changes must include the name of the person who made the change, the date of the change, and an explanation to support the change.

**§115.782. Procedures and Schedule for Leak Repair and Follow-up.**

(a) Tagging. Upon the detection or designation of a leaking component, a weatherproof and readily visible tag, bearing the component identification and the date the leak was detected, must be affixed to the leaking component. The tag must remain in place until the leaking component is repaired.

(b) General rule - time to repair.

(1) For leaks detected over 10,000 parts per million by volume (ppmv), a first attempt at repairing the leaking component shall be made no later than one business day after the leak is detected, and the component shall be repaired no later than seven calendar days after the leak is detected.

(2) For all other leaks, a first attempt at repairing the leaking component shall be made no later than five calendar days after the leak is detected, and the component shall be repaired no later than 15 calendar days after the leak is detected.

(c) Delay of repair.

(1) For all components (except valves [which are] specified in paragraph (2) of this subsection), repair may be delayed beyond the period designated in subsection (b) of this section for any of the following reasons:

(A) the component is isolated from the process and does not remain in highly-reactive volatile organic compound (HRVOC) service;

(B) if the repair of a component within seven or 15 days (as specified in subsection (b) of this section) after the leak is detected would require a process unit shutdown that [which] would create more emissions than the repair would eliminate, the repair may be delayed until the next scheduled process unit shutdown, provided that:

(i) [the owner or operator complies with the requirements of §115.352(2)(A) of this title (relating to Control Requirements); and] the owner or operator maintains, and makes available upon request, documentation to authorized representatives of the United States Environmental Protection Agency (EPA), the executive director, and any local air pollution control agency having jurisdiction which includes a calculation of:

(I) the expected mass emissions resulting from the next scheduled process unit shutdown, clearing, and subsequent startup of the unit, including the basis for the calculation and all assumptions made;

(II) the mass emission rates from each leaking component in the process unit for which delay of repair is sought as determined by using the methods in the EPA correlation approach in Section 2.3.3 of the EPA guidance document “Protocol for Equipment Leak Emission Estimates,” (EPA-453/R-95-017, November, 1995) alone or in combination with the mass emission sampling approach in Chapter 4 of the guidance document (EPA-453/R-95-017, November, 1995). To use the EPA correlation approach, the estimated hourly mass emission rate for each component shall be based on the average of the component’s current screening concentration and the previous screening concentration using Test Method 21 for the days between the two monitoring efforts, and the last screening concentration shall be used for the days following that last monitoring through the date of the planned process unit shutdown. Where the monitoring instrument is not calibrated to read past the leak definition or 100,000 ppmv, the pegged emission rate values in Tables 2-13 and 2-14 in Section 2.3.3 of the EPA guidance document “Protocol for Equipment Leak Emission Estimates” shall be used as appropriate. Leaking components in heavy liquid service shall be assigned the appropriate screening range leak rate for greater than 10,000 ppmv as defined in Section 2.3.2 of the guidance document. As an alternative, the heavy liquid component may be monitored using Test Method 21, and the actual screening concentration may be used to calculate the mass emission rate using the correlations in Section 2.3.3 of the guidance document. If the mass emission sampling approach is used, it replaces the estimated emissions rate of the EPA correlation approach in the calculation;

(III) the cumulative mass emissions from each leaking component in HRVOC service in the process unit for which delay of repair is sought, from the date the leak is found through the date of the next planned process unit shutdown; and

(IV) the total cumulative mass emissions in the process unit from the calculations made in subclause (III) of this clause for leaking components in HRVOC service in the unit for which delay of repair is sought; and

(ii) the total cumulative mass emissions from leaking components in HRVOC service in the process unit for which delay of repair is sought as determined in clause (i)(IV) of this subparagraph, assessed from the time that each additional leaking component is identified or at the time of any other changes to the emissions estimates, from the date of the change forward, will be less than the mass emissions resulting from shutdown, clearing, and subsequent startup of the unit as determined in clause (i)(I) of this subparagraph; or

(iii) as an alternative to the requirements of clause (i) and (ii) of this subparagraph, delay of repair is allowed for each leaking component for which the owner or operator has chosen to undertake “extraordinary efforts” to repair the leak. For purposes of this subparagraph, “extraordinary efforts” is defined as nonroutine repair methods (e.g., sealant injection) or utilization of a closed-vent system to capture and control the leaks by at least 90%. For leaks detected over 10,000 ppmv, extraordinary efforts shall be undertaken within 22 calendar days after the leak is found; however, the owner or operator may keep the leaking valve on the shutdown list only after two

unsuccessful attempts to repair a leaking valve through extraordinary efforts, provided that the second extraordinary effort attempt is made within 37 calendar days after the leak is found. For all other leaks, extraordinary efforts shall be undertaken within 30 calendar days after the leak is found, and a second extraordinary effort attempt is not required.

(iv) [(ii)] repair or replacement of the component occurs at the next shutdown. The executive director, at his discretion, may require an early process unit shutdown, or other appropriate action, based on the number and severity of leaks awaiting a shutdown; or

(C) the components are pumps, compressors, or agitators, and:

(i) 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 §115.783 of this title (relating to Equipment Standards); and

(ii) repair is completed as soon as practicable, but not later than six months after the leak was detected.

(2) For valves that [which] are not pressure relief valves or automatic control valves, repair may only be delayed beyond the period designated in subsection (b) of this section if:

(A) repair or replacement of these valves occurs at the next scheduled process unit shutdown; and

(i) the owner or operator has undertaken “extraordinary efforts” to repair the leaking valve. For purposes of this subparagraph, “extraordinary efforts” is defined as nonroutine repair methods (e.g., sealant injection) or utilization of a closed-vent system to capture and control the leaks by at least 90%. For leaks detected over 10,000 ppmv, extraordinary efforts shall be undertaken within 14 calendar days after the leak is found [seven days of the valve being placed on the shutdown list]; however, the owner or operator may keep the leaking valve on the shutdown list only after two unsuccessful attempts to repair a leaking valve through extraordinary efforts, provided that the second extraordinary effort attempt is made within 15 days of the first extraordinary effort attempt. For all other leaks, extraordinary efforts shall be undertaken within 30 calendar [15] days after the leak is found [of the valve being placed on the shutdown list], and a second extraordinary effort attempt is not required; or

(ii) the owner or operator maintains, and makes available upon request, documentation to authorized representatives of EPA, the executive director, and any local air pollution control agency having jurisdiction that [which] demonstrates that there is a safety, mechanical, or major environmental concern posed by repairing the leak by using “extraordinary efforts”; or

(B) the valve is isolated from the process and does not remain in HRVOC service.

**§115.783. Equipment Standards.**

The following equipment standards [shall] apply.

(1) Closed-vent systems containing bypass lines (excluding low-leg drains, high-point bleeds, analyzer vents, open-ended valves or lines, and pressure relief valves needed for safety purposes) that could divert a vent stream away from the control device and to the atmosphere, must have either:

(A) a flow indicator that determines whether vent stream flow is present in the bypass line at least once every 15 minutes; or

(B) the bypass line valve secured in the closed position with a car-seal or a lock-and-key type configuration.

(2) Whenever highly-reactive volatile organic compound [(HRVOC)] emissions are vented to a closed-vent system, control device, or recovery device used to comply with the provisions of this chapter, such system or control device are subject to the requirements of Division 1 of this subchapter (relating to Vent Gas Control) [must be operating properly].

[(A) Recovery devices (e.g., condensers and absorbers) used to comply with this paragraph must be designed and operated to recover the HRVOC emissions vented to them with an efficiency of 95% or greater.]

[(B) Flares used to comply with this paragraph must meet the requirements of:]

[(i) Division 1 of this subchapter (relating to Vent Gas Control); and]

[(ii) 40 Code of Federal Regulations §60.18 (b) or §63.11(b).]

[(C) All other control devices used to comply with this paragraph must reduce HRVOC emissions with a control efficiency of at least 98% or to an HRVOC concentration of no more than 20 parts per million by volume (on a dry basis corrected to 3.0% oxygen for combustion devices).]

[(3) Each pressure relief valve in gaseous 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. As an alternative, the owner or operator may repair or replace that component at the next planned process unit shutdown, but the emissions are considered to be vent gas emissions and are subject to the site-wide cap in §115.722 of this title (relating to Site-wide Cap and Control Requirements).]

(3) [(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 volatile organic compounds [VOC] from the seal.

(A) Acceptable shaft sealing systems include:

(i) seals equipped with piping capable of transporting any leakage from the seal(s) back to the process;

(ii) seals with a closed-vent system capable of transporting to a control device any leakage from the seal or seals;

(iii) dual seals with a heavy liquid or non-volatile organic compounds [non-VOC] barrier fluid or gas at higher pressure than process pressure; and

(iv) seals with an automatic seal failure detection and alarm system.

(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.

(C) Any owner or operator affected by the executive director's decision to deny a request for approval of an alternative shaft sealing system may file a motion to overturn the executive director's decision. The requirements of §50.139 of this title (relating to Motion to Overturn Executive Director's Decision) apply. Executive director approval does not necessarily constitute satisfaction of all federal requirements nor eliminate the need for approval by the United States Environmental Protection Agency [EPA] in cases where specified criteria for determining equivalency have not been clearly identified in this section.

(4) [(5)] The following equipment standards shall apply to process drains.

(A) If water seal controls, as defined in §115.140 of this title (relating to Industrial Wastewater Definitions), are used:

(i) the only acceptable alternative to water as the sealing liquid in a water seal is the use of ethylene glycol, propylene glycol, or other low vapor pressure antifreeze, that [which] may be used only during the period of November through February; and

(ii) as an alternative to the weekly water seal inspections of §115.781(b)(5) of this title (relating to General Monitoring and Inspection Requirements), the owner or operator may choose to equip the process drain with:

(I) an alarm that alerts the operator if the water level in the vertical leg of the drain falls below 50% of the maximum level, and a device that continuously records the status of the water level alarm, including the time period for which the alarm has been activated; or

(II) a flow-monitoring device indicating either positive flow from a main to a branch water line supplying a trap or water being continuously dripped into the trap; and a device that continuously records the status of water flow into the trap.

(B) For process drains not equipped with water seal controls, the process drain shall be equipped with:

(i) a gasketed seal; or

(ii) a tightly-fitting cap or plug.

~~(5)~~ [(6)] No valves shall be installed or operated at the end of a pipe or line containing highly-reactive volatile organic compounds [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.

**§115.786. Recordkeeping Requirements.**

(a) If using a flow indicator to comply with §115.783(1)(A) of this title (relating to Equipment Standards), the owner or operator shall:

(1) maintain hourly records of whether the flow indicator was operating and whether a diversion was detected at any time during the hour; and

(2) record all periods when:

(A) the vent stream is diverted from the control stream; or

(B) the flow indicator is not operating.

(b) If securing the bypass line valve in the closed position to comply with §115.783(1)(B) of this title, the owner or operator shall:

(1) maintain a record of the dates that the monthly visual inspection of the seal or closure mechanism has been performed;

(2) record the date and time of all periods when:

(A) the seal mechanism is broken;

(B) the bypass line valve position has changed; or

(C) the key for a lock-and-key type lock has been checked out; and

(3) maintain a record of each time the bypass line valve was opened, including:

(A) the date and time the valve was opened;

(B) the date and time the valve was closed;

(C) the reason(s) the valve was opened;

(D) the estimated flow rate through the valve; and

(E) the resulting [speciated] emissions, including the basis for the emissions estimate.

(c) Records of all non-repairable components subject to §115.782(c) [§115.782(e)] of this title (relating to Procedures and Schedule for Leak Repair and Follow-up) must [shall] be maintained. [and] Reports must be submitted [semiannually] by January 31st and July 31st of each year to [the Office of Compliance and Enforcement,] the Houston [appropriate] regional office[,], and any local air pollution control agency having jurisdiction. The report shall contain:

(1) the component identification code;

(2) the component type;

(3) the leak concentration measurement and date;

(4) the date of the last process unit turnaround; and

(5) the total number of non-repairable components awaiting repair or replacement.

(d) The owner or operator shall maintain records in accordance with §115.356 of this title (relating to Monitoring and Recordkeeping Requirements), including records identifying, by one or more of the methods specified in §115.781(a)(1) - (6) of this title (relating to General Monitoring and Inspection Requirements), and justifying each exemption claimed exempt under §115.787 of this title (relating to Exemptions). Except that the following additional requirements also apply:

(1) the calculation showing the estimated volatile organic compound (VOC) emission rates of the component as required by §115.782(c)(1)(B)(i)(II) of this title if extraordinary efforts are not going to be initiated; and

(2) records for each process unit with leaking components, updated each day after a leaking component is determined to require a process unit shutdown to repair and where extraordinary efforts to repair the component will not be pursued, including the following:

(A) the date, calculations, and estimated VOC emissions as required by §115.782(c)(1)(B)(i)(III) of this title;

(B) the date, calculations, and comparison of VOC emissions as required by §115.782(c)(1)(B)(i)(IV) of this title; and

(C) the date of each process unit shutdown required due to VOC emissions of leaking components exceeding the expected VOC emissions from the shutdown.

(e) The owner or operator shall maintain a record of the results of all monitoring and inspections conducted in accordance with §115.781 of this title.

(f) [(e)] The owner or operator shall maintain all 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.

**§115.787. Exemptions.**

(a) Components that contact a process fluid containing [that contains] less than 5.0% highly-reactive volatile organic compounds by weight on an annual average basis are exempt from the requirements of this division (relating to Fugitive Emissions), except for §115.786(d) and (f) [§115.786(d) and (e)] of this title (relating to Recordkeeping Requirements).

(b) The following are exempt from the shaft sealing system requirements of §115.783(2) [§115.783(4)] of this title (relating to Equipment Standards):

(1) submerged pumps or sealless pumps (e.g., diaphragm, canned, or magnetic-driven pumps); and

(2) pumps, compressors, and agitators installed before July 1, 2003.

(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[,] gauge (psig);

(2) components in continuous vacuum service;

(3) valves that are not externally regulated (such as in-line check valves);

(4) any account [plant sites covered by a single account number] with less than 250 components in volatile organic compound [compounds] (VOC) service;

(5) components that [which] are insulated, making them inaccessible to monitoring with a [an] hydrocarbon gas analyzer;

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

(7) instrumentation systems, as defined in 40 CFR §63.161 (January 17, 1997), that meet the requirements of [which are in compliance with] 40 CFR §63.169 (June 20, 1996).

(d) All pumps, compressors, and agitators 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 §115.781(b) and (c) of this title (relating to General Monitoring and Inspection Requirements). These seal systems may include, but are not limited to, dual 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 subsection.

[(e) Each pressure relief valve equipped with a rupture disk is exempt from the requirements of §115.781(b)(8) of this title, provided that the pressure relief valve complies with §115.783(3) of this title.]

(e) [(f)] The following valves are exempt from the requirements of §115.783(5) [§115.352(4)] of this title:

(1) pressure relief valves;

(2) open-ended valves or lines in an emergency shutdown system that [which] are designed to open automatically in the event of an emissions event;

(3) open-ended valves or lines containing materials that [which] 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

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

(f) Any process unit with less than 50 components in highly-reactive volatile organic compound service is exempt from §115.788 of this title (relating to the Audit Provision).

**§115.788. Audit Provisions.**

(a) At least once every [two] calendar year [years], the owner or operator of the petroleum refinery; synthetic organic chemical, polymer, resin, or methyl tert-butyl ether manufacturing process; or natural gas/gasoline processing operation shall retain the services of an independent third-party organization to conduct an audit of at least one [each] process unit subject to highly-reactive volatile organic compound (HRVOC) monitoring in this division. For accounts with greater than five process units in HRVOC service, all process units in HRVOC service must be audited at least once every five calendar years. [(relating to Fugitive Emissions), including] The independent third-party organization must:

(1) verify that all components [which:] are properly tagged in accordance with §115.782(a) of this title (relating to Procedures and Schedule for Leak Repair and Follow-up);

[(A) were not tagged, but which should have been tagged; or]

[(B) were not included in the list of components to be monitored (with a hydrocarbon gas analyzer) or visually inspected, but [which] should have been included on that list;]

(2) perform a field survey to determine the representative percentage of leaking components in the audited process unit [leak/no-leak status and measured volatile organic compound (VOC) concentration for all components for which monitoring (with a hydrocarbon gas analyzer) or visual inspection is required that monitoring period,] as follows.[:]

(A) The [the] field survey [monitoring/inspection audit shall] must begin after [when] the owner or operator's contracted or usual monitoring service has completed [begins] monitoring components for that monitoring period. The audit must be completed by the end of the monitoring period.[:]

(B) The [the] following graph must [shall] be used to determine the number of components required to be monitored in the field survey [audit out of the total number of components in each process unit which are required to be monitored by §115.781 of this title (relating to General Monitoring and Inspection Requirements), based on an average of the most recent four quarters; and].

**Figure: 30 TAC §115.788(a)(2)(B) (No change.)**

(C) The [the] field survey of a specific process unit must [audit shall] not include components that [which] were included in the most recent field survey of that process unit. [either of the most recent two audits, unless unavoidable due to the shutdown of process units not included in either of the most recent two audits, or for other reasons agreed upon in advance by the appropriate regional office and any local air pollution control agency having jurisdiction; and]

(D) the independent third-party organization shall perform the field survey in accordance with Test Method 21 (40 Code of Federal Regulations Part 60, Appendix A).

(3) conduct a review of all data generated by monitoring technicians in the previous quarter. This review must [shall] include:

(A) a review of the number of components monitored per technician and the time between monitoring events to validate the sampling procedures accurately reflect the requirements of Test Method 21 including identification of specific instances that a monitoring technician recorded data faster than was physically possible due to the hydrocarbon gas analyzer response time and/or the time required for the technician to move to the next component; [and]

(B) a review of records to verify that the calibration requirements of Test Method 21 have been properly implemented [a review of the time between monitoring events];and

(C) identification of [abnormal] data patterns indicative of failure to properly implement Test Method 21; and

[(D) identification of any discrepancies between the data in the electronic database required by §115.356(2) of this title (relating to Monitoring and Recordkeeping Requirements) and the data in the datalogger and/or field notes of §115.354(10)(A) and (B) of this title (relating to Inspection Requirements), respectively.]

(b) For purposes of this section, an independent third-party organization is [means] an organization in which the owner or operator (including any subsidiary, parent company, sister company, or joint venture) of the petroleum refinery; synthetic organic chemical, polymer, resin, or methyl tert-butyl ether manufacturing process; or natural gas/gasoline processing operation has no ownership or other financial interest. If the owner or operator's routine monitoring is done by a contractor rather than by in-house monitoring, then the independent third-party organization must be a different contractor from that ordinarily used for those services.

(c) The owner or operator shall submit a verbal notification to the Houston [appropriate] regional office and any local air pollution control agency having jurisdiction [as follows:] that provides the date that the independent third-party organization is scheduled to begin the audit. The notification must be submitted at least 30 days prior to the start date of the audit.

[(1) verbal notification of the date that the independent third-party organization is scheduled to begin the audit at least 30 days prior to such date; and]

[(2) written notification within 15 days after the audit is completed.]

(d) The owner or operator shall furnish the [Office of Compliance and Enforcement,] the Houston [appropriate] regional office[,], and any local air pollution control agency having jurisdiction a copy of the results of each audit authored by the independent third-party organization within 30 days after completion of the audit. [, including] The report must include:

(1) the number of components that [which] were not tagged, but [which] should have been tagged in accordance with §115.782(a) of this title;

[(2) the number of components which were not included in the list of components to be monitored (with a hydrocarbon gas analyzer) or visually inspected, but [which] should have been included on that list;]

(2) [(3)] the number of components monitored, the number of leaking components, and the percentage of leaking components identified by the independent third-party organization during the field survey and by the owner or operator's contracted or usual monitoring service in each of the following categories:

(A) valves (excluding pressure relief valves);

(B) pressure relief valves;

(C) pumps;

(D) compressors; and

(E) connectors; [and]

(3) [(4)] a summary of the independent third-party organization's review of all data generated by monitoring technicians in the previous quarter by the owner or operator's contracted or usual monitoring service for each of the [following] categories[:] specified in subsection (a)(3)(A) - (C) of this section.

[(A) the number of components monitored per technician;]

[(B) the time between monitoring events, including identification of specific instances in which a monitoring technician recorded data faster than was physically possible due to the hydrocarbon gas analyzer response time and/or the time required for the technician to move to the next component; and]

[(C) identification of abnormal data patterns].

(e) If the results of the independent third-party audit indicate deficiencies in the implementation of Test Method 21, the owner or operator shall submit a corrective action plan with the audit report to the Houston regional office or any local air pollution control agency having jurisdiction.

(f) [(e)] Authorized representatives of the executive director, United States Environmental Protection Agency [EPA], or any local air pollution control agency with jurisdiction may conduct an audit of the owner or operator's leak detection and repair program.

(g) [(f)] In lieu of complying with subsections (a) - (d) of this section, an owner or operator may request approval from the executive director of an alternative method that [which] demonstrates equivalency with the independent third-party audit, provided that the request:

(1) includes a detailed explanation of how the equivalency will be demonstrated, including the appropriate recordkeeping and reporting requirements that will be implemented that [which] are sufficient to demonstrate compliance with the alternative method; and

(2) demonstrates that it is a replicable procedure and details how the equivalency will be demonstrated.

(h) Upon review of the audit results, the executive director may specify additional corrective actions beyond any potential corrective actions submitted in the documentation required under subsection (e) of this section.

**§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), must [shall] occur as soon as practicable, but no later than March 31, 2004, except that:

(A) the schedule in §115.781(f) of this title (relating to General Monitoring and Inspection Requirements) applies [shall apply] to blind flanges, caps, or plugs at the end of a pipe or line containing highly-reactive volatile organic compounds, sight glasses, meters, gauges, 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; and

(B) on or before March 31, 2004, the owner or operator shall notify 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 blind flanges, caps, or plugs at the end of a pipe or line containing highly-reactive volatile organic compounds, sight glasses, meters, gauges, connectors, bolted manways, heat exchanger heads, hatches, and sump covers. The owner or operator shall monitor all of these components at least one time in each process unit by April 1, 2006, and then conduct subsequent monitoring at the frequencies noted in §115.781(f) of this title. For those process units with an initial start-up date after March 31, 2004, the notification of the intent to use §115.781(f) of this title shall be made within 60 days after the initial start-up date. In this case, the owner or operator shall monitor all of these components at least one time in each process unit within one year of the initial start-up date, and then conduct subsequent monitoring at the frequencies noted in §115.781(f) of this title.

(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, except that flares used to comply with the requirements of §115.783(2)(B) of this title must [shall] be in compliance in accordance with §115.729(2) of this title (relating to Counties and Compliance Schedules).

(3) The initial independent third-party audit required by §115.788 of this title (relating to Audit Provisions) shall be completed and the results of the audit submitted to the executive director [for at least 50% of the process units or processes at an account as soon as practicable, but no later than December 31, 2004. The remainder of the process units or processes at the account that are subject to §115.788 of this title shall be audited] as soon as practicable, but no later than December 31, 2005.

[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, 2005.]

~~(4)~~ [(5)] Compliance with the recordkeeping required by §115.786 of this title (relating to Recordkeeping Requirements) must [shall] be implemented and made available upon request to authorized representatives of the executive director, United States Environmental Protection Agency [EPA], or any local air pollution control agency having jurisdiction as soon as practicable, but no later than March 31, 2004.

~~(5)~~ [(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, must [shall] begin as soon as practicable, but no later than March 31, 2004.

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

**DIVISION 3: FUGITIVE EMISSIONS**

**§115.785**

**STATUTORY AUTHORITY**

The repeal is proposed 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 proposed 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.

The proposed repeal implements Texas Health and Safety Code, §§382.002, 382.011, 382.012, and 382.017.

**§115.785. Testing Requirements.] Repealed.**

[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. Flares which are in compliance with §115.722(b) and §115.725 of this title (relating to Site-wide Cap and Control Requirements; and Monitoring and Testing Requirements) are exempt from the testing requirements of this division. Boilers or process heaters either with a design heat input capacity equal to or greater than 150 million British thermal units per hour (44 megawatts), or where the highly-reactive volatile organic compound (HRVOC) emission stream is introduced into the boiler or process heater with the primary fuel or as the primary fuel are exempt from the testing requirements of this division.]

[(1) The appropriate regional office shall be contacted as soon as testing is scheduled, but not less than 45 days prior to testing to schedule a pretest meeting. The notice shall include:]

[(A) the date for pretest meeting;]

[(B) the date the testing will occur;]

[(C) the name of the firm conducting testing;]

[(D) the type of testing equipment to be used; and]

[(E) the method or procedure to be used in testing.]

[(2) The purpose of the pretest meeting is to review the necessary sampling and testing procedures, to provide the proper data forms for recording pertinent data, and to review the format procedures for submitting the test reports.]

[(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 will approve or disapprove of any deviation from specified sampling procedures.]

[(4) Performance tests shall be conducted under such conditions as the executive director specifies to the owner or operator which establish maximum potential HRVOC hourly emissions data expected during any operation not defined as an emissions event or a scheduled maintenance, startup, or shutdown activity under §101.1 of this title (relating to Definitions).]

[(5) Testing using the appropriate reference methods and procedures specified in §115.125 of this title which] was 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 HRVOC hourly emissions data expected during any operation not defined as an emissions

event or a scheduled maintenance, startup, or shutdown activity under §101.1 of this title 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. For 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) The owner or operator shall furnish the Office of Compliance and Enforcement, the appropriate regional office, and any local air pollution control agency having jurisdiction a copy of the final sampling report within 60 days after sampling is completed.]

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

~~DIVISION 4: ENFORCEMENT OF SITE-WIDE CAPS~~

~~§§115.790 - 115.793~~

~~STATUTORY AUTHORITY~~

~~The new sections are proposed 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 new sections are also proposed 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.~~

~~The proposed new sections implement Texas Health and Safety Code, §§382.002, 382.011, 382.012, and 382.017.~~

**§115.790. Applicability:**

Any account in the Houston/Galveston area, as defined in §115.10 of this title (relating to Definitions), that is subject to the requirements of Division 1 or Division 2 of this subchapter (relating to Vent Gas Control, and Cooling Tower Heat Exchange Systems) is subject to this division.

**§115.791. Emission Limit Exceedances:**

An exceedance of the emission limitations in §115.722 or in §115.761 of this title (relating to Site-wide Cap and Control Requirements, and Site-wide Cap) that is caused by an emissions event or scheduled maintenance, startup, or shutdown activity as defined in §101.1 of this title (relating to Definitions) and that occurs during March through October of a calendar year is considered to cause or contribute to an exceedance of the national ambient air quality standard for ozone.

**§115.792. Actions to Reduce Exceedances:**

(a) The owner or operator of the facility subject to this subchapter with the capability of exceeding the emission limits specified in §115.722(c)(1) or (2) or in §115.761(c)(1) or (2) of this title (relating to Site-wide Cap and Control Requirements, and Site-wide Cap) shall create, maintain, and comply with an emission mitigation plan for highly-reactive volatile organic compound (HRVOC) emissions.

~~(b) The mitigation plan must:~~

~~(1) include any measures to reduce or postpone HIRVOC emissions from facilities within the same contiguous plant site;~~

~~(2) identify the amount of reductions that could be achieved through each control measure;~~

~~(3) include a communications system for implementing the plan within 15 minutes of activating the emissions mitigation plan; and~~

~~(4) be activated when the emission limits in §115.722(c)(1) or (2) or §115.761(c)(1) or (2) of this title have been exceeded for more than one hour.~~

~~(c) After any exceedance of the emission limits in §115.722(c)(1) or (2) or §115.761(c)(1) or (2) of this title for which the emissions are not fully offset by decreases in HIRVOC emission from facilities within the same contiguous plant site, the owner or operator shall submit a corrective action plan in accordance with §115.793 of this title (relating to Corrective Action Plans).~~

~~(d) Any owner or operator or facility subject to this division shall demonstrate compliance with this division as soon as practicable, but no later than April 1, 2006.~~

~~§115.793. Corrective Action Plans.~~

~~(a) When required by §115.792 of this title (relating to Actions to Reduce Exceedances), the owner or operator shall submit a corrective action plan to the Houston Regional Office within 30 days after an exceedance of the limits in §115.722 or §115.761 of this title (relating to Site-wide Cap and Control Requirements, and Site-wide Cap). The executive director may grant a one-time 15-day extension beyond the 30-day period.~~

~~(b) The corrective action plan must, at a minimum:~~

~~(1) identify the cause or causes of each exceedance including all contributing factors that led to each exceedance event;~~

~~(2) specify the control devices or other measures that can be used that are reasonably designed to prevent or minimize similar exceedance events in the future;~~

~~(3) identify operational changes the owner or operator will take to prevent or minimize similar exceedance events in the future; and~~

~~(4) specify time periods within which the owner or operator will implement the components of the corrective action plan.~~

~~(c) An owner or operator must obtain executive director approval of a corrective action plan no later than 120 days after the executive director receives the first plan submission from an owner or operator. If the plan is not disapproved or a detailed deficiency letter is not issued by the executive director within 45 days after initial filing, the plan shall be considered approved. The owner or operator of a facility shall respond completely and adequately, as determined by the executive director, to all written requests for information concerning the plan within 15 days after the date of such requests, or by any other deadline specified in writing. Once approved, the owner or operator shall implement the plan in accordance with the approved schedule. The implementation schedule is enforceable by the commission. The executive director may require the owner or operator to revise a plan after implementation begins if the executive director finds the plan to be inadequate to prevent or minimize emissions or emissions events. If the plan is disapproved, or determined to be inadequate to prevent or minimize exceedances, the executive director shall identify deficiencies in the plan and state the reasons for disapproval in a letter to the owner or operator. If the executive director finds that a plan is inadequate to prevent or minimize exceedance events, an owner or operator shall submit an amended plan within 60 days after written notification by the executive director.~~

~~(d) Nothing in this section limits the executive director's ability to bring enforcement actions for violations of Texas Health and Safety Code, Chapter 382 (also known as the Texas Clean Air Act) or rules promulgated under Texas Health and Safety Code, Chapter 382, including the ability to require actions to reduce emissions from exceedances of the limits in §115.722 or §115.761 of this title.~~