TEXAS REGISTER

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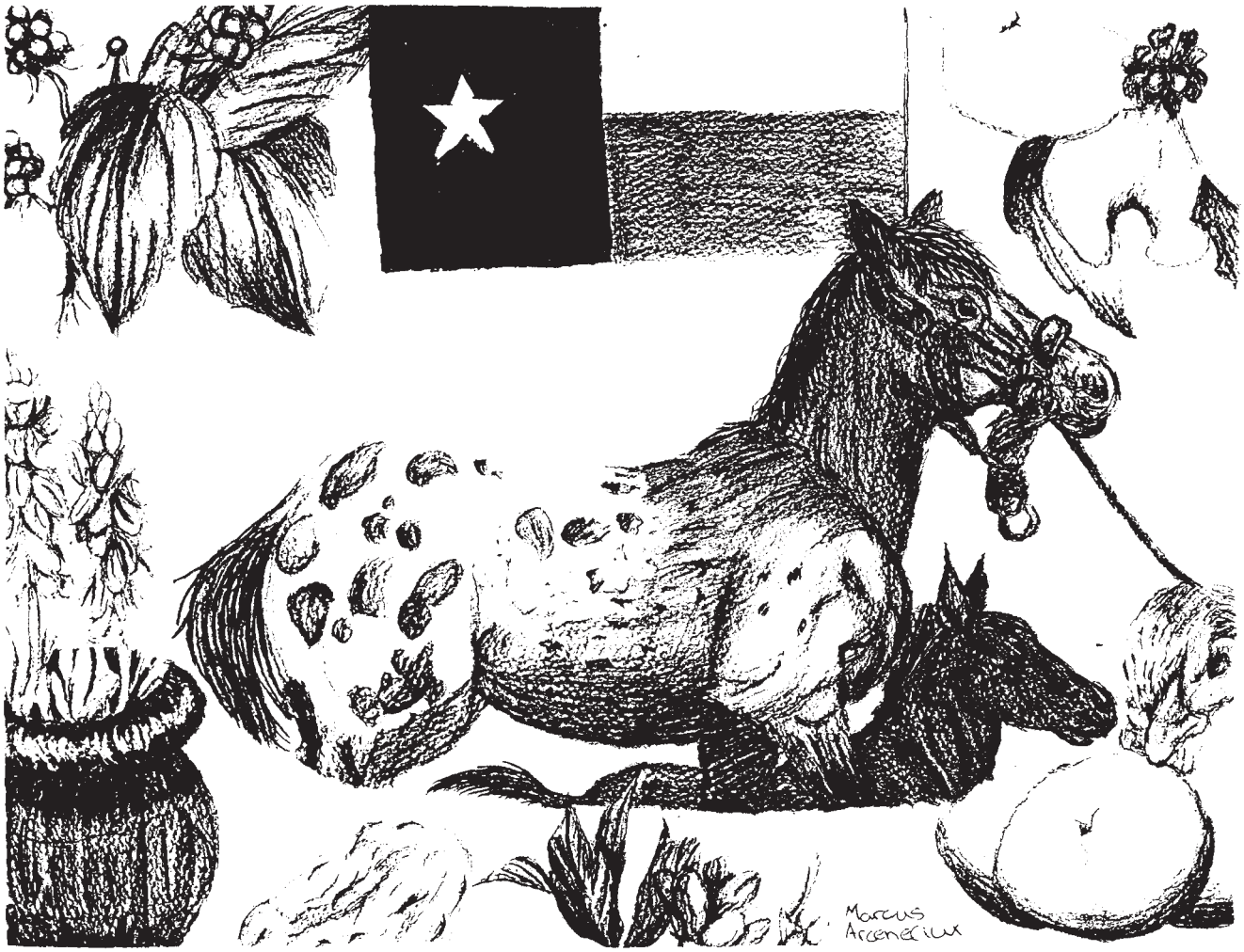

(a) Any registration subject to this chapter that is declared administratively complete on or after September 1, 1999 is subject to the current version of this chapter. Any registration that is declared administratively complete before September 1, 1999 is subject to the December 24, 1998 version of this chapter, and that version of this chapter is continued in effect for this purpose.

(b) Facilities constructed under this chapter that consist of permanently or temporarily located concrete plants that accomplish wet batching, dry batching, or central mixing, or specialty wet batch, concrete, mortar, grout mixing, or pre-cast concrete products, shall conduct public notice of the proposed construction unless exempted from public notice requirements by TCAA, §382.058(b). In all cases, public notice shall comply with the requirements under Chapter 39 of this title (relating to Public Notice) [~~include the information specified in paragraph (1)(A) and (B) of this section~~].

[~~(1) Public notification procedures.~~]

[~~(A) Publication in public notices section of a newspaper. At the applicant's expense, notice of intent to construct shall be published in the public notice section of two successive issues of a newspaper of general circulation in the municipality in which the facility is located or is proposed to be located or in the municipality nearest to the location or proposed location of the facility. The notice shall contain the following information:~~]

[~~*(i)* application number;~~]

[~~*(ii)* company name;~~]

[~~*(iii)* type of facility;~~]

[~~*(iv)* description of the location of facility or proposed location of the facility;~~]

[~~*(v)* contaminants to be emitted;~~]

[~~*(vi)* location and availability of copies of the completed application;~~]

[~~*(vii)* public comment period;~~]

[~~*(viii)* procedure for submission of public comments concerning the proposed construction;~~]

[~~*(ix)* notification that a person residing within 1/4 mile of the proposed plant is an affected person who is entitled to request a hearing in accordance with commission rules; and~~]

[~~*(x)* name, address, and phone number of the regional commission office to be contacted for further information.~~]

[~~(B) Publication elsewhere in the newspaper. Another notice with a size of at least 96.8 square centimeters (15 square inches) and whose shortest dimension is at least 7.6 centimeters (three inches) shall be published in a prominent location elsewhere in the same issues of the newspaper and shall contain the information specified in paragraph (1)(A)(I)-(iv) of this section and note that additional information is contained in the notice published under paragraph (1)(A) of this section in the public notice section of the same issue.~~]

[~~(2) Comment procedures.~~]

[~~(A) Comment period. Interested persons may submit written comments to the executive director, including requests for public hearings under TCAA, §382.056, on the executive director's preliminary decision to issue or not to issue the standard exemption. All such comments and hearing requests must be received in writing within 15 days of the last publication date of the notices specified in paragraph (1)(A) and (B) of this section. Any requests for a contested case hearing shall include a brief, but specific, written statement of interest and basis for challenging the application. Such statement shall convey in plain language the requestor's location relative to the proposed facility, why the requestor believes he or she will be affected by emissions from the proposed facility, what the requestor's concerns are about the emissions from the proposed facility, and how the requestor believes emissions from the facility will affect him or her if permitted. This statement shall not be used as the basis for denial of party status in any contested case hearing. Party status determinations will be made based on evidence developed at the initial prehearing conferences.~~]

[~~(B) Consideration of comments. All written comments received by the executive director during the period specified in subparagraph (A) of this paragraph shall be considered in determining whether to issue or not to issue the standard exemption. The executive director shall make record of all comments received together with the agency analysis of such comments available for public inspection during normal business hours at the Austin office of the commission and appropriate regional office~~].

§106.13. Permits By Rule.

Exemptions from permitting in this chapter are also permits by rule.

This agency hereby certifies that the proposal has been reviewed by legal counsel and found to be within the agency's legal authority to adopt.

Filed with the Office of the Secretary of State on July 5, 1999.

TRD-9903981
Margaret Hoffman
Director, Environmental Law Division
Texas Natural Resource Conservation Commission
Proposed date of adoption: September 2, 1999
For further information, please call: (512) 239-1932

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Chapter 115. Control of Air Pollution from Volatile Organic Compounds

Subchapter B. General Volatile Organic Compound Sources

The Texas Natural Resource Conservation Commission (TNRCC or commission) proposes amendments to §§115.140, 115.142-115.149, concerning Industrial Wastewater, and new §§115.160-115.167 and 115.169, concerning Batch Processes. The commission proposes these revisions to Chapter 115, concerning Control of Air Pollution from Volatile Organic Compounds, and to the state implementation plan (SIP) in order to conform with the United States Environmental Protection Agency's (EPA's) revised ozone transport policy and allow the Beaumont/Port Arthur (BPA) ozone nonattainment area's attainment date to be extended. The revisions to the existing Chapter 115 industrial wastewater (IWW) rules also incorporate a variety of corrections to ensure the implementation of reasonably available control technology (RACT) in the Houston/Galveston (HGA) ozone nonattainment area. Finally, in an effort to improve implementation of the existing Chapter 115 IWW rules which apply in the Dallas/Fort Worth, El Paso, and HGA ozone nonattainment areas, the commission proposes to clarify a variety of requirements and rule references.

BACKGROUND

Under §183 of the 1990 Amendments to the Federal Clean Air Act (FCAA), the EPA is required to issue Control Techniques Guideline (CTG) guidance documents for the purpose of assisting states in developing RACT controls for sources of volatile organic compound (VOC) emissions. In turn, each state is required to submit a revision to its SIP which implements RACT regulations for VOC sources in moderate or above ozone nonattainment areas. Specifically, §182(b)(2) of the FCAA requires states to submit RACT regulations for VOC sources that are covered by a CTG issued after November 15, 1990 (the enactment date of the 1990 FCAA), but prior to the time of attainment. Limits in state rules must be at least as stringent as the CTG limits or otherwise must be determined to meet RACT.

Each CTG contains a "presumptive norm" for RACT for a specific source category, based on the EPA's evaluation of the capabilities and problems general to that category. Where applicable, the EPA recommends that states adopt requirements consistent with the presumptive norm. However, the presumptive norm is only a recommendation. States may choose to develop their own RACT requirements on a case-by-case basis, considering the emission reductions needed to obtain achievement of the national ambient air quality standards and the economic and technical circumstances of the individual source.

Source categories for which the EPA was to issue CTGs under §182(b)(2)(A) include IWW and batch processes. Instead of issuing CTGs for these source categories, the EPA issued guidance documents known as Alternative Control Techniques (ACT) documents. The ACTs do not establish the presumptive norm for RACT but merely contain information on emissions, controls, control options, and costs. The EPA itself has consistently noted in the ACTs that each ACT "presents options only, and does not contain a recommendation on RACT." Nevertheless, §182(b)(2)(C) of the 1990 FCAA Amendments still requires states to insure that RACT is in place for all major VOC sources in moderate and above ozone nonattainment areas.

The EPA's "5% rule" provides a mechanism for states to justify exemptions or cutpoints which are more lenient than the EPA's RACT baseline. It is applied by determining the total emissions allowed by the EPA's RACT baseline (including exemptions) and comparing this to the emissions allowed (including exemptions) by a state regulation. If the difference is less than 5.0%, the EPA considers that there is no substantive difference between the EPA and state requirements.

The commission's position has been that the existing general vent gas rule in Chapter 115, Subchapter B: Division 2 is adequate to ensure RACT for batch processes; however, this is difficult to demonstrate because the necessary information for such a demonstration is not in the emissions inventory (EI). Staff is continuing to work with BPA industries in an attempt to demonstrate equivalency between the existing general vent gas rule and the batch processes ACT using the EPA's 5.0% rule. If the BPA industries provide information which demonstrates to the EPA's satisfaction that existing rules represent RACT for batch processes in BPA in a timely fashion, then it will not be necessary to adopt and implement Chapter 115 rules for batch processes in BPA.

EPA's draft IWW CTG was modeled after the then-proposed 40 CFR 63, Subpart G (Hazardous Organic National Emission Standards for Hazardous Air Pollutants (NESHAPS) for synthetic organic chemical manufacturing industry (SOCMI) facilities (better known as "SOCMI Hazardous Organics NESHAPS (HON)"). All major sources of IWW emissions in BPA are at SOCMI facilities or petroleum refineries. Four refineries, which account for 90% of the IWW emissions in BPA, are subject to 40 CFR 61, Subpart FF (Benzene NESHAPS), and 40 CFR 63, Subpart CC (Petroleum Refinery maximum available control technology (MACT)). Two SOCMI facilities (both owned by the same company) must comply with the SOCMI HON. Initially, this company was expected to submit HON implementation plans because it planned to use emissions averaging for compliance. However, the company instead decided not to opt into averaging, and has not had to submit a Title V application yet. As a result, it is impossible to evaluate their status without more information.

Staff contacted the company directly to see what information they could supply. On March 8, 1999, staff received a letter dated March 2, 1999 from the company. Of the 160 VOC process wastewater streams, approximately 90 are controlled due to SOCMI HON or benzene NESHAPS, with the remaining 70 or so being uncontrolled. The EPA reviewed the company's letter and stated that it did not include sufficient detail to demonstrate that RACT is in place. The EPA asked for the VOC concentration and flow rate of all uncontrolled streams. Staff notified the company of the EPA's concerns and asked the company to provide the information and level of detail that the EPA requested. On April 19, 1999, staff received a follow-up letter dated April 16, 1999 from the company. Staff and the EPA are currently reviewing the information submitted in this follow-up letter. If the BPA industries provide information which demonstrates to the EPA's satisfaction that existing rules represent RACT for IWW in BPA in a timely fashion, then it will not be necessary to adopt and implement Chapter 115 rules for IWW in BPA.

The BPA ozone nonattainment area is currently designated moderate under the FCAA and, thus, was required to attain the one-hour ozone standard by November 15, 1996. BPA did not attain the standard by that date, and also will not attain the standard by November 15, 1999, the attainment date for serious areas. The EPA is authorized to redesignate an area to the next higher classification ("bump up") if it fails to attain by the required date.

However, in determining the appropriate attainment date for an area, EPA may consider the effect of transport of ozone or its precursors from an upwind area. The HGA ozone nonattainment area is upwind of BPA and influences BPA's air quality to such an extent that without reductions from HGA, BPA may not be able to attain the standard solely from its own local reductions. EPA's revised transport policy allows a downwind area such as BPA to have its attainment date extended to no later than the attainment date for the upwind area, without being bumped up.

On April 16, 1999, the EPA published notice in the *Federal Register* (64 FR 18864) that in order for BPA to take advantage of this policy, the commission must submit to the EPA an acceptable SIP revision by November 15, 1999 which includes implementation of VOC RACT in BPA for IWW and batch processes. As noted earlier, staff and a group of BPA industries have had numerous discussions regarding this required SIP element. These BPA industries have agreed to provide information necessary to determine whether current requirements for IWW and batch processes in BPA meet the EPA's RACT requirements. However, the commission believes that it is necessary

to propose the Chapter 115 rules to ensure that all required elements of the BPA Transport SIP can be submitted to the EPA by the November 15, 1999 deadline.

EXPLANATION OF PROPOSED RULES

The rule changes propose extension of the existing Chapter 115 IWW requirements (§§115.140 and 115.142-115.149) to the three-county BPA ozone nonattainment area. These counties are: Hardin, Jefferson, and Orange. Concurrently, the commission is proposing revisions to the existing IWW rules to ensure the implementation of RACT in the HGA ozone nonattainment area in order to satisfy FCAA requirements and enable these rules to be federally approvable. The commission is also proposing revisions which reorganize and clarify the IWW rules. These clarifying/reorganizing revisions include, where possible, consolidation or elimination of redundant language or requirements, the use of the active (rather than passive) voice, and relocation of rule language to more logical locations. In general, the commission's goal is to make the rules easier to read and more explicit concerning which requirements apply.

In addition, rule changes propose to add new Chapter 115 batch process requirements (§§115.160-115.167 and 115.169) to the three-county BPA ozone nonattainment area. The rule language is based upon EPA's *Control of Volatile Organic Compound Emissions from Batch Processes-Alternative Control Techniques Information Document* (EPA-453/R-93-017, February 1994).

The proposed changes to §115.140, concerning Definitions, revise the title of this section to "Industrial Wastewater Definitions" and revise the term "undesignated head" to "division" in response to revised *Texas Register* rules (23 TexReg 1289, February 13, 1998). For the convenience of the reader, the revisions to §115.140 also add a reference to other sections where definitions of the terms used in the Chapter 115 IWW rules may be found.

The proposed changes to §115.142, concerning Control Requirements, extend the IWW control requirements to BPA; revise the term "undesignated head" to "division" in response to revised *Texas Register* rules (23 TexReg 1289, February 13, 1998); clarify that automatic bleeder vents are also called vacuum breaker vents; clarify that emergency roof drains refer to drains that empty into the stored liquid; clarify that the secondary seal gap limitation applies to external floating roof tanks; update a reference to §115.140 due to a title change; and revise a reference to TNRCC and the executive director for consistency with the commission's style guidelines.

In separate rulemaking (24 TexReg 61, January 1, 1999), the commission proposed to add a definition of vapor control system to §115.10 which is identical to the existing definition of vapor recovery system. This will facilitate a transition in the Chapter 115 rules to this term from the misleading term "vapor recovery system," which is defined to include both recovery and combustion control devices. Consequently, the proposed changes to §115.142 change a reference from "vapor recovery system" to "vapor control system" for clarification.

The proposed revisions to §115.142 also implement several requirements in order to satisfy EPA's RACT requirements in BPA and HGA. First, the proposed revisions specify that in BPA and HGA, the control requirements apply from the point of generation of an affected VOC wastewater stream until the affected VOC wastewater stream is either returned to a process unit, or is treated to reduce the VOC content of the wastewater stream by 90% by weight and also reduce the VOC content of the same VOC wastewater stream to less than 1,000 parts per million by weight. Second, the proposed revisions require that a junction box with a pump be controlled with either a vapor control system which maintains a minimum control efficiency of 90%, or with a closed system which prevents the flow of VOC vapors from the vent during normal operation. Most junction boxes do not have pumps, and most of the ones which do are already controlled under the SOCMI HON rules. Control of junction boxes equipped with pumps, but not controlled under the SOCMI HON rules, would be achieved most economically by piping to an existing control device. Third, the proposed revisions require the VOC content of wastewater in biotreatment units and wet weather retention basins to be reduced by 90%.

In addition, the proposed changes to §115.142 revise the "once-in, always-in" (OIAI) rule (§115.142(3)(A)) to include a reference to Chapter 106, as well as Chapter 116, because exemptions from permitting were relocated from Chapter 116 to Chapter 106, effective March 14, 1997. The updating of this reference will provide continued flexibility to the regulated community. The revisions also correct the terms "subsection" and "section" to "division," and update the term "standard exemption" to "exemption from permitting."

The proposed changes to §115.143, concerning Alternate Control Requirements, revise the term "undesignated head" to "division" in response to revised *Texas Register* rules (23 TexReg 1289, February 13, 1998); and relocate the 90% overall control option in the existing §115.147(5) to the proposed §115.143(b), where this option more logically belongs.

The proposed changes to §115.144, concerning Inspection and Monitoring Requirements, extend the inspection and monitoring requirements to BPA; correct the term "subsection" to "section;" correct the term "metallic type shoe seal" to "mechanical shoe seal" for consistency with this definition in §101.1; add a requirement for monitoring and recording of appropriate operating parameters for types of vapor control systems not specifically listed in §115.144(3); and add specific monitoring requirements for flares and vapor combustors. Specifically, the proposed changes to §115.144 add a requirement that flares must meet the requirements of 40 Code of Federal Regulations (CFR) 60.18(b) and Chapter 111. The proposed new §115.144(3)(G) specifies exhaust gas temperature monitoring of vapor combustors, with an option that the owner/operator of an existing vapor combustor may consider it to be a flare and monitor the unit under the flare requirements specified in 40 CFR 60.18(b) and Chapter 111.

These revisions are necessary to ensure that control devices are functioning properly and to clarify how vapor combustors are to be monitored. Based upon information from the New Source Review Permits Division, most existing flares meet the design and operating criteria of 40 CFR 60.18(b). The commission solicits information regarding flares which are used to control emissions from IWW, but do not meet the requirements of 40 CFR 60.18(b).

The proposed changes to §115.145, concerning Approved Test Methods, extend the existing test methods to BPA; reorganize the section by grouping related test methods together; add test methods for determination of total suspended solids; add a procedure for determination of biotreatment unit efficiency; and add a new paragraph (10), which authorizes the use of

test methods other than those specifically listed in §115.145, provided that any new test method is validated using the procedures in 40 CFR 63, Appendix A, Test Method 301, with the executive director acting as the administrator. This revision is necessary because in some specific unique situations the listed test methods may be inappropriate. The new paragraph (10) increases flexibility by allowing the use of additional test methods which may be more cost-effective and more appropriate in certain unique situations.

Because it is not reasonably possible to measure the mass emission rate from an elevated flare (an elevated flare's flame is open to the atmosphere, such that the emissions cannot be routed through a stack), the test methods for flow rate and VOC concentration in §115.145(1)-(2) do not apply to flares. In order to specify performance requirements for flares, the proposed §115.145(3) establishes the test requirements of 40 CFR 60.18(b). Because flares cannot be stack-tested, the proposed §115.145(3) also specifies that compliance with the requirements of 40 CFR 60.18(b) represents a 98% control efficiency.

The proposed changes to §115.146, concerning Recordkeeping Requirements, extend the recordkeeping requirements to BPA; and propose to delete the existing §115.146(4), which concerns records associated with control device maintenance activities, because maintenance activities are already addressed in §101.7, Maintenance, Start-up and Shutdown Reporting, Recordkeeping, and Operational Requirements. The proposed changes to §115.146 also revise §115.146(1) to include a reference to §115.143 due to the relocation of the 90% overall control option described in the following paragraph.

The proposed changes to §115.147, concerning Exemptions, extend the availability of exemptions to BPA; revise the term "undesignated head" to "division" in response to revised *Texas Register* rules (23 TexReg 1289, February 13, 1998); and relocate the 90% overall control option in the existing §115.147(5) to the proposed §115.143(b).

The proposed changes to §115.148, concerning Determination of Wastewater Characteristics, revise the term "undesignated head" to "division" in response to revised *Texas Register* rules (23 TexReg 1289, February 13, 1998).

The proposed changes to §115.149, concerning Counties and Compliance Schedules, specify a December 31, 2001 compliance date for the newly affected counties (Jefferson, Hardin, and Orange); specify a December 31, 2000 compliance date for biotreatment units and wet weather retention basins and for control of junction boxes equipped with pumps in the HGA ozone nonattainment area; and delete language which is obsolete due to the passing of a November 15, 1996 compliance date.

The proposed new §115.160, concerning Batch Process Definitions, adds definitions for aggregated, annual mass emissions total, average flow rate, batch, batch cycle, batch process, batch process train, emissions before control, primary fuel, process vent, RACT, semi-continuous, unit operations, and volatility (including low, moderate, and high volatility).

The proposed new §115.161, concerning Applicability, specifies that the batch process requirements of §§115.162-115.167 apply to vent gas streams at batch process operations in the BPA area under the Standard Industrial Classification (SIC) codes 2821 (plastic resins and materials), 2833 (medicinals and botanicals), 2834 (pharmaceutical preparations), 2861 (gum and wood chemicals), 2865 (cyclic crudes and intermediates), 2869 (industrial organic chemicals, not elsewhere classified), and 2879 (agricultural chemicals, not elsewhere classified). The proposed new §115.161 also specifies that the existing requirements of Subchapter B, Division 2, concerning Vent Gas Control, will continue to apply to batch process operations which are exempt from §§115.162-115.166 because they are located at an account which has total VOC emissions, when uncontrolled, of less than 100 tons per year.

The proposed new §115.162, concerning Control Requirements, establishes the applicable RACT equations for low, moderate, and high volatility materials; establish a successive ranking scheme which determines which sources must be controlled and which are exempt; and specify that EPA's OIAI requirement applies. OIAI is an EPA concept which means that once emissions from a source exceed the applicability cutoff for a particular VOC regulation in the SIP, that source is always subject to the control requirements of the regulation.

The proposed new §115.163, concerning Alternate Control Requirements, establishes the availability of alternate means of control.

The proposed new §115.164, concerning Determination of Emissions and Flow Rates, establishes the procedures for determining the uncontrolled annual emission total and the average flow rate for process vents.

The proposed new §115.165, concerning Approved Test Methods and Testing Requirements, establishes the approved test methods and testing requirements for determining compliance with the control requirements and allows minor modifications to the test methods if approved by the executive director.

Because it is not reasonably possible to measure the mass emission rate from an elevated flare (an elevated flare's flame is open to the atmosphere, such that the emissions cannot be routed through a stack), the test methods for flow rate and VOC concentration do not apply to flares. In order to specify performance requirements for flares, the proposed new §115.165 establishes the test requirements of 40 CFR 60.18(b). Because flares cannot be stack-tested, the proposed new §115.165 also specifies that compliance with the requirements of 40 CFR 60.18(b) represents a 98% control efficiency. Based upon information from the New Source Review Permits Division, most existing flares meet the design and operating criteria of 40 CFR 60.18(b). The commission solicits information regarding flares which are used to control emissions from batch process operations, but do not meet the requirements of 40 CFR 60.18(b).

The proposed new §115.165 also includes authorization for the use of test methods other than those specifically listed in §115.165, provided that any new test method is validated using the procedures in 40 CFR 63, Appendix A, Test Method 301, with the executive director acting as the administrator. This revision is necessary because in some specific unique situations the listed test methods may be inappropriate. The new rule increases flexibility by allowing the use of additional test methods which may be more cost-effective and more appropriate in certain unique situations.

The proposed new §115.166, concerning Recordkeeping Requirements, establishes requirements for continuous monitoring and recording of control device operating parameters; estab-

lishes recordkeeping requirements for the annual mass emission total, average flow rate, and associated documentation for each process vent; and specifies the control device operating parameters to be measured and recorded during performance testing.

The proposed new §115.167, concerning Exemptions, establishes exemptions for batch process operations which are located at an account which has total VOC emissions, when uncontrolled, of less than 100 tons per year; single unit operations that have a mass annual emission (AE) of 500 pounds per year or less; and combined vents from a batch process train which have a mass AE total below specified levels which vary depending on the volatility of the VOCs. The proposed new §115.167 also specifies that the existing requirements of Subchapter B, Division 2, concerning Vent Gas Control, will continue to apply to batch process operations which qualify for exemption because they are located at an account which has total VOC emissions, when uncontrolled, of less than 100 tons per year.

The proposed new §115.169, concerning Counties and Compliance Schedules, specifies the affected counties (Jefferson, Hardin, and Orange) and a December 31, 2001 compliance date for the new requirements. The proposed new §115.169 also specifies that batch process operations which are subject to the new requirements of §§115.162-115.166 must continue to comply with the existing requirements of Subchapter B, Division 2, concerning Vent Gas Control, until these batch process operations are in compliance with the new requirements.

FISCAL NOTE

Bob Orozco, Strategic Planning and Appropriations Division, has determined that for the first five-year period the proposed amendments and new sections are in effect there will be no significant fiscal implications for state and local governments as a result of administration or enforcement of the proposed amendments. The BPA ozone nonattainment area is currently designated moderate under the FCAA. BPA will not attain the required one-hour ozone standard by the November 15, 1999 attainment date. The EPA is then authorized to redesignate the area as a "serious" nonattainment area. The purpose of the proposed amendments and new sections is to implement VOC RACT rules in BPA in conformance with the EPA's revised ozone transport policy in order to allow BPA's attainment date to be extended to as late as November 15, 2007; and to incorporate corrections to ensure the implementation of VOC RACT in the HGA ozone nonattainment area. In order for BPA to have its attainment date extended in accordance with EPA's transport ozone policy, the commission must submit to EPA an acceptable SIP revision which includes implementation of VOC RACT in BPA for IWW and batch processes. Most or all of the IWW and batch process sources which will have to comply with the proposed rules are currently subject to air permits and/or to similar requirements under 40 CFR 61, Subpart FF (Benzene NESHAPS); 40 CFR 63, Subparts F and G (SOCMI HON); and 40 CFR 63, Subpart CC (Petroleum Refinery MACT) and, therefore, are already being inspected for compliance. Consequently, only a limited number of facilities will need to be inspected for compliance with the proposed Chapter 115 rules. The commission anticipates that the Field Operations Division inspectors will inspect for compliance with the proposed requirements when conducting their routine inspections. The commission also anticipates that enforcement of these rules will not significantly increase the number of facilities currently inspected by the state and local governments. However, these rules will cause a minor increase in workload when inspecting the affected facilities.

For batch processes, the commission estimates the cost-effectiveness (the cost per ton of VOC emissions reduced), annualized total cost of control, annual operating costs, and total capital cost for flow rates of 500 and 5,000 standard cubic feet per minute (scfm) as follows, based on the cost- effectiveness data of Appendix F of EPA's *Control of Volatile Organic Compound Emissions from Batch Processes-Alternative Control Techniques Information Document* (EPA-453/R-93- 017, February 1994):

Figure 1: 30 TAC Chapter 115-preamble

For IWW, the commission estimates the cost-effectiveness (the cost per ton of VOC emissions reduced), annualized total cost of control, annual operating costs, and total capital cost for organic chemicals, plastics, and synthetic fibers (OCPSF) manufacturing, pesticides manufacturing, pharmaceutical manufacturing, and treatment, storage, and disposal facilities (TSDF) as follows, based on the cost-effectiveness data of EPA's *Revisions to Impacts of the Draft Industrial Wastewater Control Techniques Guideline* (November 1994):

Figure 2: 30 TAC Chapter 115-preamble

The commission estimates the cost-effectiveness, annualized total cost of control, annual operating costs, and total capital cost for petroleum refineries to be similar to that for OCPSF manufacturing.

For sources which route IWW emissions to flares that do not already meet the requirements of 40 CFR 60.18(b), the commission estimates the cost of testing to determine the exit velocity and the net heating value of the vapors being combusted to be approximately $6,000, based upon vendor estimates. For IWW sources in BPA, the commission estimates that installing a heat-sensing device, such as an ultraviolet beam sensor or thermocouple, at the pilot light to indicate the continuous presence of a flame would cost approximately $19,300 to $22,300, based upon vendor estimates. The commission estimates the cost of controling junction boxes equipped with pumps, but not controlled under the SOCMI HON rules, to be minimal since compliance would be achieved most economically by piping to an existing control device.

PUBLIC BENEFIT

Mr. Orozco has also determined that for each year of the first five years the proposed amendments and new sections are in effect, the public benefit anticipated from the enforcement of and compliance with these sections will be satisfaction of requirements of the FCAA, and reductions of ground-level ozone in the BPA ozone nonattainment area. In addition, EPA's extension of the BPA attainment date will allow the commission to closely coordinate the HGA and BPA attainment schedules, thus making more efficient use of modeling and planning resources. On a broader scale, the economy of the entire BPA area should benefit from an extended attainment date without the threat of bump-up. In addition, the proposed revisions will ensure that the existing Chapter 115 IWW rules represent RACT in HGA, which will satisfy FCAA requirements and enable these rules to be federally approvable.

SMALL BUSINESS ANALYSIS

For batch processes, the commission has reviewed the 1996 emissions inventory and did not identify any small businesses among the sources potentially subject to the proposed rules. Likewise, for IWW the commission has reviewed the 1996 emissions inventory and did not identify any small businesses among the sources potentially subject to the proposed rules. Consequently, no adverse economic effects are anticipated to any small business as a result of implementing the provisions of the proposed amendments to the rules because there are no known small businesses which will be subject to the proposed amendments.

DRAFT REGULATORY IMPACT ANALYSIS

The commission has reviewed the proposed rulemaking in light of the regulatory analysis requirements of Texas Government Code, §2001.0225, and has determined that the rulemaking is not subject to §2001.0225 because, although it meets the definition of a "major environmental rule" as defined in the Texas Government Code, it does not meet any of the four applicability requirements listed in §2001.0225(a). Specifically, under §182(b)(2)(C) of the 1990 FCAA Amendments, states are required to ensure that RACT is in place for all major VOC sources in moderate and above ozone nonattainment areas. The purpose of the rulemaking is to ensure that RACT is in place for all major VOC sources in the BPA and HGA ozone nonattainment areas. This proposal is not an express requirement of state law, but was developed specifically in order to meet the RACT requirements established under federal law. This will also conform with the EPA's revised ozone transport policy and allow BPA's attainment date to be extended, and will also enable the IWW rules for HGA to be federally approvable. There is no contract or delegation agreement that covers the topic that is the subject of this rulemaking. Therefore, this proposal does not involve an agreement or contract between the state and an agency or representative of the federal government to implement a state and federal program, and was not developed solely under the general powers of the agency. The commission invites public comment on the draft regulatory impact analysis.

TAKINGS IMPACT ASSESSMENT

The commission has prepared a Takings Impact Assessment for these rules pursuant to Texas Government Code, §2007.043. The following is a summary of that assessment. The specific purpose of the rulemaking is to ensure that RACT is in place for all major VOC sources in the BPA and HGA ozone nonattainment areas. The purpose of the rulemaking is to conform with the EPA's revised ozone transport policy and allow the BPA ozone nonattainment area's attainment date to be extended, and to enable the IWW rules for HGA to be federally approvable. This rulemaking action may require the installation of control systems at industrial wastewater and batch process operations in BPA and possibly also in HGA in some cases. The commission has determined that the proposed rules may possibly burden private property because in some cases the permanent installation of control systems and associated piping is necessary in order to comply with the rules. Although the rule revisions do not directly prevent a nuisance, prevent an immediate threat to life or property, or prevent a real and substantial threat to public health and safety, the rule revisions fulfill a federal mandate under §182(b)(2) of the 1990 Amendments to the FCAA. Specifically, §182(b)(2)(C) of the 1990 FCAA Amendments requires states to ensure that RACT is in place for all major VOC sources in moderate and above ozone nonattainment areas. Consequently, the following exemption applies to these rules: an action reasonably taken to fulfill an obligation mandated by federal law.

COASTAL MANAGEMENT PROGRAM CONSISTENCY REVIEW

The commission has determined that this rulemaking action is subject to the Texas Coastal Management Program (CMP) in accordance with the Coastal Coordination Act of 1991, as amended (Texas Natural Resources Code, §§33.201 et seq.), the rules of the Coastal Coordination Council (31 TAC Chapters 501-506), and the commission's rules in 30 TAC Chapter 281, Subchapter B, concerning Consistency with the CMP. As required by 31 TAC §505.11(b)(2) and 30 TAC §281.45(a)(3) relating to actions and rules subject to the CMP, agency rules governing air pollutant emissions must be consistent with the applicable goals and policies of the CMP. The commission has reviewed this action for consistency and has determined that this rulemaking is consistent with the applicable CMP goals and policies. The primary CMP policy applicable to this rulemaking is the policy that commission rules comply with regulations at 40 CFR, to protect and enhance air quality in the coastal area. No new sources of air contaminants will be authorized by the rule revisions, and the revisions may result in a reduction in VOC emissions due to the new control requirements on IWW and batch process vent gas streams. Therefore, in compliance with 31 TAC §505.22(e), the commission affirms that the proposed rulemaking 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.

PUBLIC HEARING

A public hearing on this proposal will be held in Beaumont on August 9, 1999, at 5:30 p.m. in the John Gray Institute, located at 855 Florida Avenue. Individuals may present oral statements when called upon in order of registration. Open discussion will not occur during the hearing; however, agency staff members will be available to discuss the proposal 30 minutes before the hearing and will answer questions before and after the hearing.

Persons with disabilities who have special communication or other accommodation needs who are planning to attend the hearing 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 mailed to Lola Brown, Office of Environmental Policy, Analysis, and Assessment, MC 205, P.O. Box 13087, Austin, Texas 78711-3087 or faxed to (512) 239-4808. All comments should reference Rule Log Number 99019-115-AI. Comments must be received by 5:00 p.m., August 16, 1999. For further information, please contact Eddie Mack, Strategic Environmental Analysis and Assessment Division, at (512) 239-1488.

Division 4. Industrial Wastewater

30 TAC §§115.140, 115.142-115.149

STATUTORY AUTHORITY

The amendments are proposed under the Texas Health and Safety Code, the TCAA, §382.017, which provides the commission with the authority to adopt rules consistent with the policy and purposes of the TCAA; and TCAA, §382.012, which re-

quires the commission to develop plans for protection of the state's air.

The proposed amendments implement the Health and Safety Code, §382.017.

§115.140. Industrial Wastewater Definitions.

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

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

§115.142. Control Requirements.

The [~~For the Dallas/Fort Worth, El Paso, and Houston/Galveston areas, any person who is the~~] owner or operator of an affected source category within a plant in the Beaumont/Port Arthur, Dallas/Fort Worth, El Paso, and Houston/Galveston areas, as defined in §115.10 of this title (relating to Definitions), shall comply with the following control requirements. Any component of a wastewater storage, handling, transfer, or treatment facility, if the component contains an affected volatile organic compounds (VOC) wastewater stream, shall be controlled in accordance with either paragraph (1), [~~or~~] (2), or (3) of this section, except for a properly operated biotreatment unit and a wet weather retention basin. In the Dallas/Fort Worth, El Paso, and Houston/Galveston areas, the [~~The~~] control requirements [~~shall~~] apply from the point of generation of an affected VOC wastewater stream until the affected VOC wastewater stream is either returned to a process unit or is treated to remove VOC so that the wastewater stream no longer meets the definition of an affected VOC wastewater stream. In the Beaumont/Port Arthur area, and after December 31, 2001 in the Houston/Galveston area, the control requirements apply from the point of generation of an affected VOC wastewater stream until the affected VOC wastewater stream is either returned to a process unit, or is treated to reduce the VOC content of the wastewater stream by 90% by weight and also reduce the VOC content of the same VOC wastewater stream to less than 1,000 parts per million by weight. For wastewater streams which are combined and then treated to remove VOC, the amount of VOC to be removed from the combined wastewater stream shall be at least the total amount of VOC that would be removed to treat each individual affected VOC wastewater stream so that they no longer meet the definition of affected VOC wastewater stream. For this division [~~undesignated head~~], a component of a wastewater storage, handling, transfer, or treatment facility shall include, but is not limited to, wastewater storage tanks, surface impoundments, wastewater drains, junctions boxes, lift stations, weirs, and oil-water separators.

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

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

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

(i) In the Dallas/Fort Worth and El Paso areas, and until December 31, 2000 in the Houston/Galveston area, if [~~If~~] any cover, other than a junction box cover, is equipped with a vent, the vent shall be equipped with either a vapor control [~~recovery~~] system which maintains a minimum control efficiency of 90% or a closed system which prevents the flow of VOC vapors from the vent during normal operation. Any junction box vent shall be equipped with a vent pipe at least 90 centimeters (cm) (36 inches (in.)) in length and no more than 10.2 cm (4.0 in.) in diameter.

(ii) In the Beaumont/Port Arthur area, and after December 31, 2000 in the Houston/Galveston area, the following requirements apply.

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

(II) Any junction box that is filled and emptied by gravity flow (i.e., there is no pump) or is operated with no more than slight fluctuations in the liquid level may be vented to the atmosphere, provided it is equipped with a vent pipe at least 90 cm (36 in.) in length and no more than 10.2 cm (4.0 in.) in diameter.

(E)-(F) (No change.)

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

(H) (No change.)

(2) The wastewater component shall be equipped with a floating roof or internal floating cover which meets the following requirements.

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

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

(C) (No change.)

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

(E) (No change.)

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

(3) In the Beaumont/Port Arthur area, and after December 31, 2000 in the Houston/Galveston area, a properly operated biotreatment unit and wet weather retention basins shall meet the following requirements.

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

(B) The average concentration of suspended biomass maintained in the aeration basin of the biotreatment unit shall equal or exceed 1.0 kilogram per cubic meter (kg/m^3), measured as total suspended solids.

(4) [~~(3)~~] Any wastewater component that becomes subject to this division [~~section~~] by exceeding the provisions of §115.147 of this title (relating to Exemptions) or an affected VOC wastewater stream as defined in §115.140 of this title (relating to Industrial Wastewater Definitions) will remain subject to the requirements of this division [~~section~~], even if the component later falls below those provisions unless and until emissions are reduced to no more than [~~at or below~~] the controlled emissions level existing prior to the implementation of the project by which throughput or emission rate was reduced to [~~and~~] less than the applicable exemption levels in §115.147 of this title; and

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

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

§115.143. Alternate Control Requirements.

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

(b) 90% overall control option. As an alternative to the control requirements of §115.142 of this title (relating to Control Requirements), the owner or operator of a wastewater storage, handling, transfer, or treatment facility may elect to ensure that the overall control of volatile organic compounds (VOC) emissions at the account from wastewater from affected source categories is at least 90% less than the 1990 baseline emissions inventory, provided that the following requirements are met.

(1) To qualify for the control option available under this subsection after December 31, 1996, the owner or operator of a wastewater component for which a control plan was not previously submitted shall submit a control plan to the executive director, the appropriate regional office, and any local air pollution control program with jurisdiction which demonstrates that the overall control of VOC emissions at the account from wastewater from affected source categories will be at least 90% less than the 1990 baseline emissions inventory. Any control plan submitted after December 31, 1996, must be approved by the executive director before the owner or operator may use the control option available under this subsection for compliance. At a minimum, the control plan shall include the applicable emission point number (EPN); the facility identification number (FIN); the calendar year 1990 emission rates of wastewater from affected source categories (consistent with the 1990 emissions inventory); a plot plan showing the location, EPN, and FIN associated with a wastewater storage, handling, transfer, or treatment facility; the VOC emission rates for the preceding calendar year; and an explanation of the recordkeeping procedure and calculations which will be used to demonstrate compliance. The VOC emission rates shall be calculated in a manner consistent with the 1990 emissions inventory.

(2) The owner or operator shall submit an annual report no later than March 31 of each year to the executive director, the appropriate regional office, and any local air pollution control program with jurisdiction, which demonstrates that the overall control of VOC emissions at the account from wastewater from affected source categories during the preceding calendar year is at least 90% less than the 1990 baseline emissions inventory. At a minimum, the report shall include the EPN; FIN; the throughput of wastewater from affected source categories; a plot plan showing the location, EPN, and FIN associated with a wastewater storage, handling, transfer, or treatment facility; and the VOC emission rates for the preceding calendar year. The emission rates for the preceding calendar year shall be calculated in a manner consistent with the 1990 emissions inventory.

(3) All representations in control plans and annual reports become enforceable conditions. It shall be unlawful for any person to vary from such representations if the variation will cause a change in the identity of the specific emission sources being controlled or the method of control of emissions unless the owner or operator submits a revised control plan to the executive director, the appropriate regional office, and any local air pollution control program with jurisdiction no later than 30 days after the change. All control plans and reports shall include documentation that the overall reduction of VOC emissions at the account from wastewater from affected source categories continues to be at least 90% less than the 1990 baseline emissions inventory. The emission rates shall be calculated in a manner consistent with the 1990 emissions inventory.

§115.144. Inspection and Monitoring Requirements.

The [~~For the Dallas/Fort Worth, El Paso, and Houston/Galveston areas, any person who is the~~] owner or operator of an affected source category within a plant in the Beaumont/Port Arthur, Dallas/Fort Worth, El Paso, and Houston/Galveston areas [~~a facility subject to the control requirements of §115.142 of this title (relating to Control Requirements)~~] shall comply with the following inspection and monitoring requirements.

(1) All seals and covers used to comply with §115.142(1) of this title (relating to Control Requirements) shall be inspected according to the following schedules to ensure compliance with §115.142(1)(G) and (H) of this title:

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

(2) Floating roofs and internal floating covers used to comply with §115.142(2) of this title shall be subject to the following requirements. All secondary seals shall be inspected according to the following schedules to ensure compliance with §115.142(2)(E) and (F) of this title.

(A) (No change.)

(B) If the tank is equipped with a mechanical [~~metallic type~~] shoe or liquid-mounted primary seal, compliance with §115.142(2)(F) of this title may be determined by visual inspection.

(C) (No change.)

(3) Monitors shall be installed and maintained as required by this section [~~subsection~~] to measure operational parameters of any emission control device or other device installed to comply with §115.142 of this title. Such monitoring and parameters shall be sufficient to demonstrate proper functioning of those devices to design

specifications, and include the monitoring and parameters listed in subparagraphs (A)-(H) [~~(F)~~] of this paragraph, as applicable. In lieu of the monitoring and parameters listed in subparagraphs (A)-(H) [~~(F)~~] of this paragraph, other monitoring and parameters may be approved or required by the executive director:

(A) for an enclosed non-catalytic combustion device (including, but not limited to, a thermal incinerator, boiler, or process heater), continuously monitor and record the temperature of the gas stream either in the combustion chamber or immediately downstream before any substantial heat exchange;

(B)-(D) (No change.)

(E) for a flare, meet the requirements specified in 40 Code of Federal Regulations 60.18(b) and Chapter 111 of this title (relating to Control of Air Pollution from Visible Emissions and Particulate Matter); [~~continuously monitor for the presence of a flare pilot light using a thermocouple or any other equivalent device to detect the presence of a flame; and~~]

(F) for a steam stripper, continuously monitor and record the steam flow rate, the wastewater feed mass flow rate, the wastewater feed temperature, and condenser vapor outlet temperature; [~~.~~]

(G) for a vapor combustor, continuously monitor and record the exhaust gas temperature either in the combustion chamber or immediately downstream before any substantial heat exchange. Alternatively, the owner or operator of a vapor combustor may consider the unit to be a flare and meet the requirements of subparagraph (E) of this paragraph; and

(H) for vapor control systems other than those specified in subparagraphs (A)-(G) of this paragraph, continuously monitor and record the appropriate operating parameters.

(4) In the Beaumont/Port Arthur and Houston/Galveston areas, units used to comply with §115.142(3) of this title shall:

(A) initially demonstrate a 90% reduction in VOCs by using the methods in §115.145 of this title (relating to Approved Test Methods); and

(B) measure on a weekly basis the total suspended solids in the aeration basin of the biotreatment unit.

§115.145. Approved Test Methods.

[~~For the Dallas/Fort Worth, El Paso, and Houston/Galveston areas, compliance with this undesignated head~~] Compliance with the emission specifications, vapor control system efficiency, and certain control requirements, inspection requirements, and exemption criteria of §§115.142-115.144 and 115.147 of this title (relating to Control Requirements; Alternate Control Requirements; Inspection and Monitoring Requirements; and Exemptions) shall be determined by applying one or more of the following test methods and procedures, as appropriate:

(1) Gas flow rate. [~~for determination of gas flow rate-~~] Test Methods 1-4 (40 Code of Federal Regulations (CFR) Part 60, Appendix A) are used for determining gas flow rates, as necessary. [~~;~~]

(2) Concentration of Volatile Organic Compounds (VOC).

(A) [~~for determination of gaseous organic compound emissions by gas chromatography-~~] Test Method 18 (40 CFR Part 60, Appendix A) is used for determining gaseous organic compound emissions by gas chromatography. [~~;~~]

(B) Test Method 25 (40 CFR 60, Appendix A) is used for determining total gaseous nonmethane organic emissions as carbon.

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

(3) Performance requirements for flares and vapor combustors.

(A) For flares, the performance test requirements of 40 CFR 60.18(b) shall apply.

(B) For vapor combustors, the owner or operator may consider the unit to be a flare and meet the performance test requirements of 40 CFR 60.18(b) rather than the procedures of paragraphs (1) and (2) of this section.

(C) Compliance with the requirements of 40 CFR 60.18(b) will be considered to represent 98% control of the VOC in the flare inlet.

(4) Vapor pressure. Use standard reference texts or American Society for Testing and Materials (ASTM) Test Methods D323-89, D2879, D4953, D5190, or D5191 for the measurement of vapor pressure, adjusted for actual storage temperature in accordance with American Petroleum Institute Publication 2517, Third Edition, 1989.

(5) [~~(3)~~] Leak determination by instrument method. Use Test Method 21 (40 CFR 60, Appendix A) for determining VOC [~~for determination of volatile organic compound (VOC)~~] leaks and for monitoring a carbon canister in accordance with §115.144(3)(D) of this title (relating to Inspection and Monitoring Requirements). [~~-Test Method 21 (40 CFR Part 60, Appendix A);~~]

[~~(4) for determination of total gaseous nonmethane organic emissions as carbon - Test Method 25 (40 CFR Part 60, Appendix A);~~]

[~~(5) for determination of total gaseous organic concentration using a flame ionization or a non dispersive infrared analyzer - Test Methods 25A or 25B (40 CFR Part 60, Appendix A);~~]

(6) Determination [~~for determination~~] of VOC concentration of wastewater samples. Use [~~-~~] Test Method 5030 (purge and trap) followed by Test Method 8015 with a DB-5 boiling point (or equivalent column), and flame ionization detector, with the detector calibrated with benzene (SW-846 and 40 CFR Part 261); Test Methods 3810, 5030 (followed by 8020), 8240, 8260, and 9060 (SW-846 and 40 CFR Part 261); Test Methods 602 and 624 (40 CFR Part 136); Test Method 5310(B) (Standard Methods 17th Edition); or Test Method 25D (40 CFR Part 60, Appendix A). [~~;~~]

[~~(7) for determination of true vapor pressure - American Society for Testing and Materials Test Methods D323-89, D2879, D4953, D5190, or D5191 for the measurement of Reid vapor pressure, adjusted for actual storage temperature in accordance with American Petroleum Institute Publication 2517, Third Edition, 1989; and~~]

(7) Determination of total suspended solids. Use Method 160.2 (Methods for Chemical Analysis of Water and Wastes, EPA-600/4-79-020) or Method 2540D (Standard Methods for the Examination of Water and Wastewater, 18th Edition, American Public Health Association).

(8) Determination of biotreatment unit efficiency. Use the methods found in 40 CFR 63 Appendix C or 40 CFR 63.145.

A stream-specific list of VOCs shall be used and is determined as follows:

(A) compounds with concentrations below one part per million by weight (ppmw) or below the lower detection limit may be excluded;

(B) for the owner or operator that can identify at least 90% by weight of the VOCs in the wastewater stream, the individual VOCs that are 5.0% by weight or greater are required to be included on the list. If less than half of the total VOCs in the wastewater are represented by the compounds that are 5.0% by weight or greater, the owner or operator shall include those individual VOCs with the greatest mass on the stream-specific list of VOCs until 75 compounds or every compound, whichever is fewer, is included on the list, except as provided by subparagraph (A) of this paragraph. The owner or operator shall document that the site-specific list of VOCs is representative of the process wastewater stream; and

(C) for the owner or operator that can identify at least 50% by weight of the VOCs in the wastewater stream, the individual VOCs with the greatest mass on the stream-specific list of VOCs up to 75 compounds or every compound, whichever is fewer, shall be included on the list, except as provided by subparagraph (A) of this paragraph. The owner or operator shall document that the site- specific list of VOCs is representative of the process wastewater stream.

(9) [~~(8)~~] Minor modifications. Minor [~~minor~~] modifications to these test methods may be used, if approved by the executive director.

(10) Alternate test methods. Test methods other than those specified in paragraphs (1)-(8) of this section (concerning to Approved Test Methods) may be used if validated by 40 CFR 63, Appendix A, Test Method 301 (effective December 29, 1992). For the purposes of this paragraph, substitute "executive director" each place that Test Method 301 references "administrator."

§115.146. Recordkeeping Requirements.

The [~~For the Dallas/Fort Worth, El Paso, and Houston/Galveston areas, any person who is the~~] owner or operator of an affected source category within a plant in the Beaumont/Port Arthur, Dallas/Fort Worth, El Paso, and Houston/Galveston areas shall comply with the following recordkeeping requirements.

(1) Complete and up-to-date records shall be maintained as needed to demonstrate compliance with §115.142 and §115.143 of this title (relating to Control Requirements; and Alternate Control Requirements) which are sufficient to demonstrate the characteristics of wastewater streams and the qualification for any exemptions claimed under §115.147 of this title (relating to Exemptions).

(2) Records shall be maintained of the results of any inspection or monitoring conducted in accordance with [~~the provisions specified in~~] §115.144 of this title (relating to Inspection and Monitoring Requirements). Records shall be sufficient to demonstrate proper functioning of applicable control equipment to design specifications to ensure compliance with §115.142 and §115.143 of this title.

(3) Records shall be maintained of the results of any testing conducted in accordance with [~~the provisions specified in~~] §115.145 of this title (relating to Approved Test Methods).

~~[(4) Records shall be maintained of the dates and reasons for any maintenance and repair of the required control devices and the estimated quantity and duration of VOC emissions during such activities.]~~

(4) [~~(5)~~] All records shall be maintained at the plant for at least two years and be made available upon request to representatives of the executive director, EPA [~~United States Environmental Protection Agency~~], or any local air pollution control agency having jurisdiction in the area.

§115.147. Exemptions.

[~~For the Dallas/Fort Worth, El Paso, and Houston/Galveston areas, the~~] The following exemptions [~~shall~~] apply in the Beaumont/Port Arthur, Dallas/Fort Worth, El Paso, and Houston/Galveston areas.

(1) Any plant with an annual volatile organic compounds (VOC) loading in wastewater, as determined in accordance with §115.148 of this title (relating to Determination of Wastewater Characteristics), less than or equal to 10 megagrams (Mg) (11.03 tons) is [~~shall be~~] exempt from the control requirements of §115.142 of this title (relating to Control Requirements).

(2) (No change.)

(3) Unless specifically required by this division (relating to Industrial Wastewater) [~~undesignated head~~], any component of a wastewater storage, handling, transfer, or treatment facility to which the requirements of this division [~~undesignated head~~] apply is [~~shall be~~] exempt from the requirements of any other portion of this chapter.

(4) (No change.)

~~[(5) Wastewater components are exempt from the control requirements of §115.142 of this title if the overall control of VOC emissions at the account from wastewater from affected source categories is at least 90% less than the 1990 baseline emissions inventory, and the following requirements are met.]~~

~~[(A) To qualify for the exemption available under this paragraph after December 31, 1996, the owner or operator of a wastewater component for which a control plan was not previously submitted shall submit a control plan to the executive director, the appropriate regional office, and any local air pollution control program with jurisdiction which demonstrates that the overall control of VOC emissions at the account from wastewater from affected source categories will be at least 90% less than the 1990 baseline emissions inventory. Any control plan submitted after December 31, 1996, must be approved by the executive director before the owner or operator may use the exemption available under this paragraph for compliance. At a minimum, the control plan shall include the applicable emission point number (EPN); the facility identification number (FIN); the calendar year 1990 emission rates of wastewater from affected source categories (consistent with the 1990 emissions inventory); a plot plan showing the location, EPN, and FIN associated with a wastewater storage, handling, transfer, or treatment facility; the VOC emission rates for the preceding calendar year; and an explanation of the recordkeeping procedure and calculations which will be used to demonstrate compliance. The VOC emission rates shall be calculated in a manner consistent with the 1990 emissions inventory.]~~

~~[(B) In order to maintain exemption status under this paragraph, the owner or operator shall submit an annual report no later than March 31 of each year to the executive director, the appropriate regional office, and any local air pollution control program with jurisdiction, which demonstrates that the overall control of VOC emissions at the account from wastewater from affected source categories during the preceding calendar year is at least 90% less than the 1990 baseline emissions inventory. At a minimum, the report shall include the EPN; FIN; the throughput of wastewater from affected source categories; a plot plan showing the location, EPN, and FIN associated with a wastewater storage, handling, transfer, or treatment~~

~~facility; and the VOC emission rates for the preceding calendar year. The emission rates for the preceding calendar year shall be calculated in a manner consistent with the 1990 emissions inventory.]~~

~~[(C) All representations in control plans and annual reports become enforceable conditions. It shall be unlawful for any person to vary from such representations if the variation will cause a change in the identity of the specific emission sources being controlled or the method of control of emissions unless the owner or operator of the wastewater component submits a revised control plan to the executive director, the appropriate regional office, and any local air pollution control program with jurisdiction no later than 30 days after the change. All control plans and reports shall include documentation that the overall reduction of VOC emissions at the account from wastewater from affected source categories continues to be at least 90% less than the 1990 baseline emissions inventory. The emission rates shall be calculated in a manner consistent with the 1990 emissions inventory.]~~

§115.148. Determination of Wastewater Characteristics.

The determination of the characteristics of a wastewater stream for purposes of this division (relating to Industrial Wastewater) [~~undesignated head~~] shall be made as follows.

(1)-(5) (No change.)

§115.149. Counties and Compliance Schedules.

(a) The owner or operator of each affected source category within a plant in [~~For~~] Brazoria, Chambers, Collin, Dallas, Denton, El Paso, Fort Bend, Galveston, Harris, Liberty, Montgomery, Tarrant, and Waller Counties [~~, any person who is the owner or operator of an affected source category within a plant~~] shall continue to comply [~~be in compliance~~] with this division [~~undesignated head~~] (relating to Industrial Wastewater) as required by §115.930 of this title (relating to Compliance Dates) [~~soon as practicable, but no later than November 15, 1996~~].

(b) The owner or operator of each affected source category within a plant in Hardin, Jefferson, and Orange Counties shall be in compliance with this division as soon as practicable, but no later than December 31, 2001.

~~[(b) For Hardin, Jefferson, and Orange Counties, any person who is the owner or operator of an affected source category within a plant shall be in compliance with this undesignated head (relating to Industrial Wastewater) as soon as practicable, but no later than three years, after the commission publishes notification in the *Texas Register* of its determination that this contingency rule is necessary as a result of failure to attain the National Ambient Air Quality Standards for ozone by the attainment deadline or failure to demonstrate reasonable further progress as set forth in the 1990 Amendments to the Federal Clean Air Act, §172(c)(9).]~~

(c) The owner or operator of each affected source category within a plant in Brazoria, Chambers, Fort Bend, Galveston, Harris, Liberty, Montgomery, and Waller Counties shall control all junction boxes equipped with pumps in accordance with §115.142(1)(D)(ii)(II) of this title (relating to Control Requirements) as soon as practicable, but no later than December 31, 2000.

(d) The owner or operator of each affected source category within a plant in Brazoria, Chambers, Fort Bend, Galveston, Harris, Liberty, Montgomery, and Waller Counties shall control all biotreatment units and wet weather retention basins in accordance with §115.142(3) and §115.144(4)(A) of this title (relating to Control Requirements; and Inspection and Monitoring Requirements) as soon as practicable, but no later than December 31, 2000.

This agency hereby certifies that the proposal has been reviewed by legal counsel and found to be within the agency's legal authority to adopt.

Filed with the Office of the Secretary of State on July 1, 1999.

TRD-9903944
Margaret Hoffman
Director, Environmental Law Division
Texas Natural Resource Conservation Commission
Proposed date of adoption: November 10, 1999
For further information, please call: (512) 239-0348

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Division 6. Batch Processes

30 TAC §§115.160-115.167, 115.169

STATUTORY AUTHORITY

The new sections are proposed under the Texas Health and Safety Code, the TCAA, §382.017, which provides the commission with the authority to adopt rules consistent with the policy and purposes of the TCAA; and TCAA, §382.012, which requires the commission to develop plans for protection of the state's air.

The proposed new sections implement the Health and Safety Code, §382.017.

§115.160. Batch Process Definitions.

The following words and 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 §115.10 of this title (relating to Definitions), §101.1 of this title (relating to Definitions), and §3.2 of this title (relating to Definitions).

(1) Aggregated-The summation of all process vents containing volatile organic compounds (VOC) within a process.

(2) Annual mass emissions total-The sum of all VOC emissions (pounds per year), evaluated before control, from a vent. Annual mass emissions shall be calculated from an individual process vent or groups of process vents by using emission estimation equations contained in Chapter 3 of EPA's *Control of Volatile Organic Compound Emissions from Batch Processes-Alternative Control Techniques Information Document* (EPA-453/R-93-017, February 1994) and then multiplying by the historical duration and frequency of the emission or groups of emissions over the course of a year. For process vents that are included in a new source review air permit, the annual mass emissions total shall be based on the maximum allowable emission rate (MAER) levels in the permit (adjusted to represent the level before control), whether they correspond to the maximum design production potential or to the actual annual production estimate.

(3) Average flow rate-The flow rate in standard cubic feet per minute (scfm) averaged over the amount of time that VOCs are emitted during an emission event. For the evaluation of average flow rate from an aggregate of sources, the average flow rate is the weighted average of the average flow rates of the emission events and their annual venting time, or:
Figure: 30 TAC §115.160(3)

(4) Batch-A noncontinuous process involving the bulk movement of material through sequential manufacturing steps. Mass, temperature, concentration, and other properties of a system vary with time. Batch processes are not characterized by steady-state

conditions. Reactants are not added and products are not removed simultaneously.

(5) Batch cycle-A manufacturing event of an intermediate or product from start to finish in a batch process.

(6) Batch process (for the purpose of determining RACT applicability)-The batch equipment assembled and connected by pipes, or otherwise operated in a sequence of steps, to manufacture a product in a batch fashion.

(7) Batch process train-An equipment train that is used to produce a product or intermediates in batch fashion. A typical equipment train consists of equipment used for the synthesis, mixing, and purification of a material.

(8) Emissions before control-The emissions total prior to the application of a control device, or the emissions total if no control device is used. The emissions total may not be reduced to account for discharge of VOC into wastewater if the wastewater is further handled or processed with the potential for VOC emissions to the atmosphere.

(9) Primary fuel-The fuel that provides the principal heat input to a device. To be considered a primary fuel, the fuel must be able to sustain operation without the addition of other fuels.

(10) Process vent-A vent gas stream containing greater than 500 parts per million by volume (ppmv) total VOC that is discharged from a batch process. Process vents include gas streams that are discharged directly to the atmosphere or are discharged to the atmosphere after diversion through a recovery device. Process vents exclude relief valve discharges, leaks from equipment, vents from storage tanks, vents from transfer/loading operations, and vents from wastewater. Process gaseous streams that are used as primary fuels are also excluded. The lines that transfer such fuels to a plant fuel gas system are not considered to be vents.

(11) RACT-Reasonably available control technology.

(12) Semi-continuous-Conduction of operations on a steady-state mode but only for finite durations (in excess of eight hours minimum) during the course of a year. For example, a steady-state distillation operation that functions for one month would be considered semi-continuous.

(13) Unit operations-Those discrete processing steps that occur within distinct equipment that are used to prepare reactants, facilitate reactions, separate and purify products, and recycle materials.

(14) Volatility-As follows.

(A) Low volatility VOCs are those which have a vapor pressure less than or equal to 75 millimeters of mercury (mmHg) at 20 degrees Celsius.

(B) Moderate volatility VOCs are those which have a vapor pressure greater than 75 and less than or equal to 150 mmHg at 20 degrees Celsius.

(C) High volatility VOCs are those which have a vapor pressure greater than 150 mmHg at 20 degrees Celsius.

(D) To evaluate VOC volatility for single unit operations that service numerous VOCs or for processes handling multiple VOCs, the weighted average volatility can be calculated from the total amount of each VOC emitted in a year and the individual component vapor pressure, as follows:
Figure: 30 TAC §115.160(14)(D)

§115.161. Applicability.

(a) The provisions of §§115.162-115.167 of this title (relating to Control Requirements; Alternate Control Requirements; Determination of Emissions and Flow Rates; Approved Test Methods and Testing Requirements; Monitoring and Recordkeeping Requirements; and Exemptions) apply to vent gas streams at batch process operations in the Beaumont/Port Arthur area, as defined in §115.10 of this title (relating to Definitions), under the following Standard Industrial Classification (SIC) codes:

(1) 2821 (plastic resins and materials);

(2) 2833 (medicinals and botanicals);

(3) 2834 (pharmaceutical preparations);

(4) 2861 (gum and wood chemicals);

(5) 2865 (cyclic crudes and intermediates);

(6) 2869 (industrial organic chemicals, not elsewhere classified); and

(7) 2879 (agricultural chemicals, not elsewhere classified).

(b) Any batch process operation that is exempt under §115.167(1) of this title (relating to Exemptions) is subject to the requirements of Division 2 of this subchapter (relating to Vent Gas Control).

§115.162. Control Requirements.

The owner or operator of each batch process operation in the Beaumont/Port Arthur area shall comply with the following control requirements.

(1) Reasonable available control technology (RACT) equations. The volatile organic compounds (VOC) mass emission rate from individual process vents or for process vent streams in aggregate within a batch process shall be reduced by 90% if the actual average flow rate value (in standard cubic feet per minute (scfm)) is below the flow rate (FR) value calculated using the applicable RACT equation for the volatility range (low, moderate, or high) of the material being emitted when the annual mass emission total (in pounds per year) are input. The RACT equations, specific to volatility, are as follows:

(A) Low volatility: FR = 0.07(AE) - 1821;

(B) Moderate volatility: FR = 0.031(AE) - 494;

(C) High volatility: FR = 0.013(AE) - 301.

(2) Successive ranking scheme. For aggregate streams within a process, the control requirements must be evaluated with the following successive ranking scheme until control of a segment of unit operations is required or until all unit operations have been eliminated from the process pool.

(A) If, for the process vent streams in aggregate, the value of FR calculated using the applicable RACT equation in paragraph (1) of this section is negative (i.e., less than zero), then the process is exempt from the 90% control requirements, and the successive ranking scheme of subparagraph (F) of this paragraph does not apply. This would occur if the mass annual emission rates are below the lower limits specified in §115.167(2)(A) of this title (relating to Exemptions).

(B) If, for the process vent streams in aggregate, the actual average flow rate value (in scfm) is below the value of FR calculated using the applicable RACT equation in paragraph (1) of this section, then the overall emissions from the batch process must be reduced by 90%, and the successive ranking scheme of subparagraph (F) of this paragraph does not apply. The owner or operator has the

option of selecting which unit operations are to be controlled and to what levels, provided that the overall control meets the specified level of 90%. Single units that qualify for exemption under §115.167(2)(B) of this title do not have to be controlled even if all units should qualify for this exemption.

(C) If, for the process vent streams in aggregate, the actual average flow rate value (in scfm) is greater than the value of FR calculated using the applicable RACT equation in paragraph (1) of this section (and the calculated value of FR is a positive number), then the control requirements must be evaluated with the successive ranking scheme of subparagraph (F) of this paragraph until control of a segment of unit operations is required or until all unit operations have been eliminated from the process pool. Single units that qualify for exemption under §115.167(2)(B) of this title do not have to be included in the rankings and do not have to be controlled even if all units should qualify for this exemption.

(D) Sources that are required to be controlled to the level specified by RACT (i.e., 90%) will have an average FR that is below the flow rate specified by the applicable RACT equation in paragraph (1) of this section (when the source's annual emission total is input). The applicability criterion is implemented on a two-tier basis. First, single pieces of batch equipment corresponding to distinct unit operations shall be evaluated over the course of an entire year, regardless of what materials are handled or what products are manufactured in them. Second, equipment shall be evaluated as an aggregate if it can be linked together based on the definition of a process.

(E) To determine applicability of a RACT option in the aggregation scenario, all the VOC emissions from a single process shall be summed to obtain the annual mass emission total, and the weighted average FRs from each process vent in the aggregation shall be used as the average FR.

(F) All unit operations in the batch process, as defined for the purpose of determining RACT applicability, shall be ranked in ascending order according to their ratio of annual emissions (pounds per year) divided by average FR (in scfm). Sources with the smallest ratios shall be listed first. This list of sources constitutes the "pool" of sources within a batch process. The annual emission total and average FR of the pool of sources shall then be compared against the RACT equations in paragraph (1) of this section to determine whether control of the pool is required.

(i) If control is not required after the initial ranking, unit operations having the lowest annual emissions/average FRs ratio shall then be eliminated one by one, and the characteristics of annual emission and average FR for the remaining pool of equipment must be evaluated with each successive elimination of a source from the pool.

(ii) Control of the unit operations remaining in the pool to the specified level (i.e., 90%) shall be required once the aggregated characteristics of annual emissions and average FRs have met the specified RACT. The owner or operator has the option of selecting which unit operations are to be controlled and to what levels, provided that the overall control meets the specified level of 90%.

(3) Once-in, always-in. Any batch process operation that becomes subject to the provisions of this division by exceeding provisions of §115.167 of this title will remain subject to the provision of this division, even if throughput or emissions later fall below exemption limits unless and until emissions are reduced to no more than the controlled emissions level existing before implementation of the project by which throughput or emission rate was reduced to less than the applicable exemption limits in §115.167 of this title; and

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

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

§115.163. Alternate Control Requirements.

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

§115.164. Determination of Emissions and Flow Rates.

The owner or operator of each batch process operation in the Beaumont/Port Arthur area shall determine the mass emissions and flow rates as follows.

(1) Determination of Uncontrolled Annual Emission Total. The owner or operator shall determine the annual mass emissions total by using engineering estimates of the uncontrolled emissions from a process vent or group of process vents within a batch process train and multiplying by the potential or permitted number of batch cycles per year. Engineering estimates must follow the guidance contained in EPA's *Control of Volatile Organic Compound Emissions from Batch Processes-Alternative Control Techniques Information Document* (EPA-453/R-93-017, February 1994). Alternatively, if an emissions measurement is used to measure vent emissions, the measurement must conform with the requirements of measuring incoming mass flow rate of volatile organic compounds as specified in §115.165 of this title (relating to Approved Test Methods and Testing Requirements).

(2) Determination of Average Flow Rate. To obtain a value for average flow rate, the owner or operator may choose to measure the flow rates or to estimate the flow rates using the estimation methods contained in EPA's *Control of Volatile Organic Compound Emissions from Batch Processes-Alternative Control Techniques Information Document* (EPA-453/R-93-017, February 1994). For existing manifolds, the average flow rate may be the flow rate that was assumed in the design.

§115.165. Approved Test Methods and Testing Requirements.

The owner or operator of each batch process operation in the Beaumont/Port Arthur area shall comply with the following.

(1) Performance testing conditions. For the purpose of determining compliance with the control requirements of this division (relating to Batch Processes), the process unit shall be run at full operating conditions and flow rates during any performance test.

(2) Test methods. The owner or operator of each batch process operation shall use the following methods to determine compliance with the percent reduction efficiency requirement of §115.162 of this title (relating to Control Requirements).

(A) Flow rate.

(i) Test Methods 1 or 1A (40 Code of Federal Regulations (CFR) 60, Appendix A) as appropriate, shall be used for selection of the sampling sites if the flow rate measuring device is a rotameter. No traverse is necessary when the flow measuring device is an ultrasonic probe. The control device inlet sampling sites for determination of vent stream volatile organic compounds (VOC) composition reduction efficiency shall be before the control device and after the control device.

(ii) Test Methods 2, 2A, 2C, or 2D (40 CFR 60, Appendix A) as appropriate, shall be used for determination of gas stream volumetric flow rate. Flow rate measurements shall be made continuously.

(B) Concentration of VOC. Test Method 18 (40 CFR 60, Appendix A) (gas chromatography) or Test Method 25A (40 CFR 60, Appendix A) (flame ionization) shall be used to determine the concentration of VOC in the control device inlet and outlet.

(i) The sampling time for each run shall be the entire length of the batch cycle, during which readings shall be taken:

(I) continuously if Method 25A is used; or

(II) as often as is possible using Method 18, with a maximum of one-minute intervals between measurements throughout the batch cycle.

(ii) The emission rate of the process vent or inlet to the control device shall be determined by combining continuous concentration and flow rate measurements at simultaneous points throughout the batch cycle.

(iii) The mass flow rate of the control device outlet shall be determined by combining continuous concentration and flow rate measurements at simultaneous points throughout the batch cycle.

(iv) The efficiency of the control device shall be determined by integrating the mass flow rates obtained in clauses (ii) and (iii) of this subparagraph over the time of the batch cycle, and dividing the difference in inlet and outlet mass flow totals by the inlet mass flow total.

(C) Performance requirements for flares and vapor combustors.

(i) For flares, the performance test requirements of 40 CFR 60.18(b) shall apply.

(ii) For vapor combustors, the owner or operator may consider the unit to be a flare and meet the performance test requirements of 40 CFR 60.18(b).

(iii) Compliance with the requirements of 40 CFR 60.18(b) will be considered to represent 98% control of the VOC in the flare inlet.

(D) Minor modifications. Minor modifications to these test methods may be used, if approved by the executive director.

(E) Alternate test methods. Test methods other than those specified in subparagraphs (B) and (C) of this paragraph may be used if validated by 40 CFR 63, Appendix A, Test Method 301 (effective December 29, 1992). For the purposes of this paragraph, substitute "executive director" each place that Test Method 301 references "administrator."

§115.166. Monitoring and Recordkeeping Requirements.

The owner or operator of each batch process operation in the Beaumont/Port Arthur area shall maintain the following information for at least two years at the plant, as defined by its air quality account number. The owner or operator shall make the information available upon request to representatives of the executive director, EPA, or any local air pollution control agency having jurisdiction in the area:

(1) Vapor control systems. For vapor control systems used to control emissions from volatile organic compounds (VOC) transfer operations, records of appropriate parameters to demonstrate compliance, including:

(A) continuous monitoring and recording of:

(i) for a direct-flame incinerator, the exhaust gas temperature in the firebox or in the ductwork immediately downstream of the firebox before any substantial heat exchange. The temperature monitoring device shall have an accuracy of ±0.5 degrees Celsius, or alternatively, ±1.0%;

(ii) for a catalytic incinerator, the exhaust gas temperature immediately before and after the catalyst bed. The temperature monitoring device shall have an accuracy of ±0.5 degrees Celsius, or alternatively, ±1.0%;

(iii) for an absorber, either:

(I) the scrubbing liquid temperature. The temperature monitoring device shall have an accuracy of ±1.0% of the temperature being monitored in degrees Celsius, or alternatively, ±0.02 specific gravity unit; or

(II) the concentration level of VOC exiting the recovery device based on a detection principle such as infrared photoionization or thermal conductivity;

(iv) for a condenser or refrigeration system, either:

(I) the condenser exit temperature. The temperature monitoring device shall have an accuracy of ±1.0% of the temperature being monitored in degrees Celsius, or alternatively, ±0.5 degrees Celsius; or

(II) the concentration level of VOC exiting the recovery device based on a detection principle such as infrared photoionization or thermal conductivity;

(v) for a carbon adsorption system, as defined in §101.1 of this title (relating to Definitions), either:

(I) steam flow (using an integrating steam flow monitoring device) and the carbon bed temperature. The steam flow monitor shall have an accuracy of ±10%. The temperature monitor shall have an accuracy of ±1.0% of the temperature being monitored in degrees Celsius, or ±0.5 degrees Celsius, whichever is greater; or

(II) the concentration level of VOC exiting the recovery device based on a detection principle such as infrared photoionization or thermal conductivity;

(vi) for a pressure swing adsorption unit that is the final recovery device, the temperature of the bed near the inlet and near the outlet. The temperature monitoring device shall have an accuracy of ±1.0% of the temperature being monitored in degrees Celsius, or ±0.5 degrees Celsius. Proper operation shall be evidenced by a uniform pattern of temperature increases and decreases near the inlet and a fairly constant temperature near the outlet; and

(vii) for a vapor combustor, the exhaust gas temperature in the firebox or in the ductwork immediately downstream of the firebox before any substantial heat exchange. The temperature monitoring device shall have an accuracy of ±0.5 degrees Celsius, or alternatively, ±1.0%. Alternatively, the owner or operator of a vapor

combustor may consider the unit to be a flare and meet the requirements of subparagraph (B) of this paragraph.

(B) for flares, the requirements specified in 40 Code of Federal Regulations 60.18(b) and Chapter 111 of this title (relating to Control of Air Pollution from Visible Emissions and Particulate Matter); and

(C) for vapor control systems other than those specified in subparagraphs (A) and (B) of this paragraph, records of appropriate operating parameters.

(2) Process vents. A record of the following emission stream parameters for each process vent contained in the batch process:

(A) the annual mass emission total and documentation verifying these values. If emission estimate equations are used, the documentation shall be the calculations coupled with the expected or permitted (if available) number of emission events per year; and

(B) the average flow rate in standard cubic feet per minute and documentation verifying these values.

(3) Performance test monitoring parameters. Records of the following parameters required to be measured during a performance test required under §115.165 of this title (relating to Approved Test Methods and Testing Requirements) and required to be monitored under paragraph (1) of this section:

(A) where an owner or operator seeks to demonstrate compliance with §115.162 of this title (relating to Control Requirements) through use of either a direct-flame or catalytic incinerator, the average firebox temperature of the incinerator (or the average temperature upstream and downstream of the catalyst bed for a catalytic incinerator), measured continuously and averaged over the same time period as the performance test;

(B) where an owner or operator seeks to demonstrate compliance with §115.162 of this title through use of a smokeless flare, the flare design (i.e., steam-assisted, air-assisted, or nonassisted), all visible emissions readings, heat content determinations, flow rate measurements, and exit velocity determinations made during the performance test; continuous flare pilot flame monitoring; and all periods of operations during which the pilot flame is absent; and

(C) where an owner or operator seeks to demonstrate compliance with §115.162 of this title:

(i) with an absorber as the final control device, the exit specific gravity (or alternative parameter which is a measure of the degree of absorbing liquid saturation, if approved by the executive director) and average exit temperature of the absorbing liquid measured continuously and averaged over the same time period as the performance test (both measured while the vent stream is routed normally);

(ii) with a condenser as the control device, the average exit (product side) temperature measured continuously and averaged over the same time period as the performance test while the vent stream is routed normally;

(iii) with a carbon adsorption system as the control device, the total steam mass flow measured continuously and averaged over the same time period as the performance test (full carbon bed cycle), temperature of the carbon bed after regeneration (and within 15 minutes of completion of any cooling cycle(s)), and duration of the carbon bed steaming cycle (all measured while the vent stream is routed normally);

(iv) the concentration level or reading indicated by an organic monitoring device at the outlet of the absorber, condenser, or carbon adsorption system, measured continuously and averaged over the same time period as the performance test while the vent stream is routed normally;

(v) with a pressure swing adsorption unit as the final recovery device, the temperature of the bed near the inlet and near the outlet. The temperature monitoring device shall have an accuracy of ±1.0% of the temperature being monitored in degrees Celsius, or ±0.5 degrees Celsius. Proper operation shall be evidenced by a uniform pattern of temperature increases and decreases near the inlet and a fairly constant temperature near the outlet.

§115.167. Exemptions.

The following exemptions apply in the Beaumont/Port Arthur area.

(1) Batch process operations at an account which has total volatile organic compound (VOC) emissions, when uncontrolled, of less than 100 tons per year from all stationary emission sources included in the account are exempt from the requirements of this division (relating to Batch Processes), except for §115.161(b) of this title (relating to Applicability).

(2) The following are exempt from the requirements of this division, except for §115.166(2) and

(3) of this title (relating to Monitoring and Recordkeeping Requirements):

(A) Combined vents from a batch process train which have an annual mass emissions total as follows:
Figure: 30 TAC §115.167(2)(A)

(B) Single unit operations that have an annual mass emissions total of 500 lb/yr or less.

§115.169. Counties and Compliance Schedules.

The owner or operator of each batch process operation in Hardin, Jefferson, and Orange Counties shall be in compliance with this division (relating to Batch Processes) as soon as practicable, but no later than December 31, 2001. All batch process operations subject to this division in Hardin, Jefferson, and Orange Counties shall continue to comply with the requirements of Division 2 of this subchapter (relating to Vent Gas Control) until these batch process operations are in compliance with the requirements of this division.

This agency hereby certifies that the proposal has been reviewed by legal counsel and found to be within the agency's legal authority to adopt.

Filed with the Office of the Secretary of State on July 1, 1999.

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Margaret Hoffman
Director, Environmental Law Division
Texas Natural Resource Conservation Commission
Proposed date of adoption: November 10, 1999
For further information, please call: (512) 239-0348

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Chapter 116. Control of Air Pollution by Permits for New Construction or Modification

The Texas Natural Resource Conservation Commission (TNRCC or commission) proposes amendments to §§116.111, 116.114, 116.116, 116.183, 116.312, and 116.740; and the repeal of §§116.124, 116.130, 116.131, 116.132, 116.133, 116.134, 116.136, and 116.137.