

Texas Commission on Environmental Quality

Interoffice Memorandum

To: Commissioners **Date:** November 30, 2016

Thru: Bridget C. Bohac, Chief Clerk
Richard A. Hyde, P.E., Executive Director

From: Steve Hagle, Deputy Director
Office of Air

Docket No.: 2016-0956-RUL

Subject: Commission Approval for Rulemaking Adoption
Chapter 115, Control of Air Pollution from Volatile Organic Compounds
VOC RACT Rules for the 2008 HGB Eight-Hour Ozone Nonattainment Area
Rule Project No. 2016-039-115-AI

Background and reason(s) for the rulemaking:

The 1990 Federal Clean Air Act (FCAA) Amendments (42 United States Code (USC), §§7401 *et seq.*) require the United States Environmental Protection Agency (EPA) to establish primary National Ambient Air Quality Standards (NAAQS) that protect public health and to designate areas exceeding the NAAQS as nonattainment areas. For each designated nonattainment area, the state is required to submit a state implementation plan (SIP) revision to the EPA that provides for attainment and maintenance of the NAAQS.

FCAA, §172(c)(1) requires that the SIP incorporate all reasonably available control measures, including reasonably available control technology (RACT), for sources of relevant pollutants. The EPA defines RACT as the lowest emission limitation that a particular source is capable of meeting by the application of control technology that is reasonably available considering technological and economic feasibility (44 FR 53761, September 17, 1979). For ozone nonattainment areas classified as moderate and above, FCAA, §182(b)(2) requires the state to submit a SIP revision that implements RACT for sources of volatile organic compounds (VOC) addressed in a control techniques guidelines (CTG) document and for all non-CTG major sources.

The Houston-Galveston-Brazoria (HGB) area's 2015 design value of 80 parts per billion exceeded the 2008 eight-hour ozone NAAQS and therefore the area did not attain the NAAQS by the July 20, 2016 attainment deadline. The EPA proposed a determination of nonattainment and reclassification of the HGB area from marginal to moderate on September 27, 2016 (81 FR 66240). The major source threshold for moderate nonattainment areas is a potential to emit (PTE) 100 tons per year (tpy) or more of VOC. However, in order to prevent backsliding, a PTE of 25 tpy is retained as the major source threshold for the HGB area for the purposes of the Chapter 115 RACT rules based on the area's previous severe classification under the 1997 eight-hour ozone standard.

As indicated in the EPA's 2008 ozone standard SIP requirements rule, the attainment deadline for moderate classification is July 20, 2018 with an attainment year of 2017 (80 FR 12264, March 6, 2015). These adopted rules will address updated RACT for the future required reclassification of the HGB ozone nonattainment area.

Re: Docket No. 2016-0956-RUL

The adopted Chapter 115, Subchapter B, Division 1 rule revisions are intended to update the RACT rules for storage tanks in the HGB area to mirror the changes incorporated during the December 2011 rulemaking for the Dallas-Fort Worth (DFW) 1997 eight-hour ozone nonattainment area and the June 2015 rulemaking for the DFW 2008 eight-hour ozone nonattainment area for the crude oil and condensate storage tanks. The adopted Chapter 115, Subchapter B, Division 1 rule revisions would address RACT for both CTG and non-CTG major source VOC storage tanks in the HGB area.

Scope of the rulemaking:

A.) Summary of what the rulemaking will do:

The adopted rulemaking would revise Chapter 115, Subchapter B, Division 1, to update the approved RACT requirements for fixed roof VOC storage tanks in the HGB area. The adopted updates mirror revisions incorporated during the December 2011 rulemaking for the DFW 1997 eight-hour ozone nonattainment area and the June 2015 rulemaking for the DFW 2008 eight-hour ozone nonattainment area for VOC storage tanks. The adopted rule changes include: updating the control efficiency requirement for control devices other than vapor recovery units or flares; expanding the applicability to include the aggregate of fixed roof storage tanks at a pipeline breakout station into the control requirements prescribing flashed gas controls; and adding inspection, repair, and recordkeeping requirements for consistency with existing requirements in the DFW area.

B.) Scope required by federal regulations or state statutes:

The adopted rules would implement RACT for VOC storage tanks, as mandated by FCAA requirements.

The control, inspection, and recordkeeping requirements adopted for storage tanks in the DFW area and recommended for implementation in the HGB area are:

- increasing the control efficiency for all control devices, other than vapor recovery units and flares, from 90% to 95%;
- expanding the applicability to include the aggregate of fixed roof storage tanks at a pipeline breakout station into the control requirements prescribing flashed gas controls;
- implementing control, inspection, and repair requirements after tank opening/loading and quarterly seal integrity inspections for fixed roof condensate and crude oil storage tanks;
- maintaining records of the new inspection requirements for fixed roof storage tanks; and
- increasing the record retention period from two to five years for all affected VOC storage tanks.

The 95% control efficiency adopted for storage tanks in the DFW area was approved by the EPA as RACT in 2014. The control, inspection, and recordkeeping requirements for openings, and the 95% control efficiency, are also consistent with the New Source Performance Standards for new condensate and crude oil tanks (40 Code of Federal Regulations Subpart OOOO).

Re: Docket No. 2016-0956-RUL

C.) Additional staff recommendations that are not required by federal rule or state statute:

The adopted rulemaking would revise Chapter 115, Subchapter B, Division 1, Storage of Volatile Organic Compounds, to update approved RACT requirements for VOC storage tanks in the HGB area. These adopted requirements would establish more stringent requirements consistent with the level of RACT established for this emission source category in the DFW 2008 eight hour ozone nonattainment area.

The rulemaking would include other non-substantive revisions to update rule citations and to conform to *Texas Register* style and formatting requirements.

Statutory authority:

The rule changes would be adopted under Texas Water Code (TWC), §5.102, concerning General Powers, which provides the commission with the general powers to carry out its duties under the TWC; TWC, §5.103, concerning Rules, which authorizes the commission to adopt rules necessary to carry out its powers and duties under the TWC; TWC, §5.105, concerning General Policy, which authorizes the commission by rule to establish and approve all general policy of the commission. The rule changes would also be adopted under Texas Health and Safety Code (THSC), §382.017, concerning Rules, which authorizes the commission to adopt rules consistent with the policy and purposes of the Texas Clean Air Act; THSC, §382.002, concerning Policy and Purpose, which establishes the commission's purpose to safeguard the state's air resources, consistent with the protection of public health, general welfare, and physical property; THSC, §382.011, concerning General Powers and Duties, which authorizes the commission to control the quality of the state's air; THSC, §382.012, concerning State Air Control Plan, which authorizes the commission to prepare and develop a general, comprehensive plan for the proper control of the state's air; and THSC, §382.016, concerning Monitoring Requirements; Examination of Records, which authorizes the commission to prescribe reasonable requirements for the measuring and monitoring of air contaminant emissions. The amended sections are also adopted under FCAA, 42 USC, §§7401, *et seq.*, which requires states to submit SIP revisions that specify the manner in which the NAAQS will be achieved and maintained within each air quality control region of the state. The EPA published the final rule establishing the 2008 eight-hour NAAQS for ozone in the *Federal Register* on March 27, 2008 (73 FR 16436).

Effect on the:

A.) Regulated community:

The regulated community would be obligated to comply with the new inspection and recordkeeping requirements and may incur costs associated with those requirements, although costs are not expected to be significant. Agency staff estimates that there would be 47 entities with 118 facilities that operate fixed roof crude oil or condensate storage tanks in the HGB area that have uncontrolled emissions of at least 25 tpy of VOC. Agency staff anticipates all of these entities and facilities are already maintaining the new 95% control requirement with their current practices. Because they are anticipated to already

Re: Docket No. 2016-0956-RUL

meet the adopted control requirement, no additional costs are expected for these facilities from increasing the control requirement from 90% to 95%.

The adopted rules also expand the applicability requirements to include the aggregate of fixed roof crude oil and condensate tanks at a pipeline breakout station in the HGB area. At proposal, the commission estimated six sites that could potentially be affected by the proposed applicability for pipeline breakout stations in the HGB area. However, the commission has re-evaluated its original analysis and determined that there are no sites that currently meet the requirements for the newly expanded rule applicability in the HGB area based on 2014 emissions inventory data.

Agency staff did identify one entity that may be a small business, but for the most part all affected entities were large businesses.

B.) Public:

The EPA asserts that the general public in the HGB ozone nonattainment area may benefit from improved air quality as a result of lower ozone levels.

C.) Agency programs:

The rulemaking may increase the workload for the Office of Compliance and Enforcement staff when inspecting affected facilities to verify compliance with any new or revised requirements.

Stakeholder meetings:

No stakeholder meetings were held for the adopted rulemaking; however, a public hearing was held in Houston on October 24, 2016.

Public comment:

The commission held a public hearing on October 24, 2016 at 2:00 p.m. at the Houston office of the Texas Department of Transportation. The comment period closed on October 24, 2016. The commission received written comments from Texas Industry Project (TIP) and Texas Oil and Gas Association (TXOGA) regarding this rulemaking. Significant public comments are summarized as follows.

- TIP and TXOGA requested that the adopted changes to §115.112(e) be clarified as being applicable to fixed roof tanks. *Language in §115.112(e)(4) - (7) was changed to make clear that the rule applies to fixed roof storage tanks and fixed roof storage tank batteries but not other forms of storage tanks.*
- TXOGA requested that low throughput crude oil and condensate tanks be exempt from the submerged fill control requirements. *No changes were made in response to this comment. This change is beyond the scope of the proposed rule and interested parties would not have the opportunity to comment on the change.*
- TXOGA requested clarification on how to confirm that carbon beds used as a control device meet the current 90% and proposed 95% efficiency requirements. *No changes were made in response to this comment. Carbon adsorption is an existing control technology that has been accepted as compliant with the storage tank rules.*

Re: Docket No. 2016-0956-RUL

Significant changes from proposal:

Language in §115.112(e)(4) - (7) was changed to make clear that the rule applies to fixed roof storage tanks and fixed roof storage tank batteries but not other forms of storage tanks.

Potential controversial concerns and legislative interest:

In order to ensure that there will be enough time to finish the rulemaking, the planning to meet the RACT obligations for the reclassification of the 2008 eight-hour ozone HGB nonattainment area from marginal to moderate began prior to the EPA's finalized reclassification. Owners and operators in the HGB area who would be required to achieve the 95% control efficiency on VOC storage tanks and comply with the new inspection requirements for crude oil and condensate fixed roof tanks may object to the rule changes. Industry may object to the short time frame to implement controls. However, any source meeting the existing 90% control requirements is likely to already be meeting the adopted 95% requirement as well.

The TCEQ submitted a redesignation substitute report to the EPA demonstrating the HGB area attained and would continue to attain the one-hour ozone NAAQS on July 22, 2014, which was approved by the EPA on October 20, 2015 (80 FR 63429). On August 18, 2015, the TCEQ submitted a redesignation substitute report to the EPA demonstrating the HGB area has attained and will continue to attain the 1997 eight-hour ozone NAAQS. On November 8, 2016, the EPA published its final approval of the HGB area redesignation substitute and a finding of attainment for the 1997 eight-hour ozone NAAQS (81 FR 78691) with an effective date of December 8, 2016. On this effective date, the HGB area's major source threshold will be based on the marginal classification for the 2008 eight-hour ozone NAAQS. Upon the effective date of the EPA's expected reclassification for the HGB area, the major source threshold would then be based on the area's moderate classification for the 2008 eight-hour ozone NAAQS. However, such a reclassification would not apply retroactively, i.e., sources in the HGB area currently subject to the rule based on the major source threshold for a severe classification would not become exempt from the rule. The commission solicited comment on the expected redesignation; however, none were received. The expanded applicability for the aggregate of fixed roof storage tanks at a pipeline breakout station will be based on the 25 tpy threshold. Retaining the 25 tpy threshold for these tanks is consistent with the 2007 HGB rulemaking (Rule Project Number 2006-038-115-EN), which based the applicability threshold on uncontrolled VOC emissions from all similar VOC storage tanks at a site, including floating roof tank landings, storage tanks at an upstream tank battery, and all fixed roof tanks at a pipeline breakout station. The adopted change ensures storage tanks in the HGB area that are intended to be included in the applicability are subject to the RACT control specifications consistent with the DFW area.

In its proposed determination of nonattainment and reclassification of the HGB area (81 FR 66420, September 27, 2016), the EPA proposed a RACT compliance date of January 1, 2017. However, the adopted rule retains the proposed July 20, 2018 compliance deadline since this remains consistent with the SIP requirements rule and because the EPA provided no objection to the July 20, 2018 compliance deadline in the proposed rule.

Re: Docket No. 2016-0956-RUL

Does this rulemaking affect any current policies or require development of new policies?

No.

What are the consequences if this rulemaking does not go forward? Are there alternatives to rulemaking?

FCAA, §172(c)(1) and §182(b)(2) requires the state to submit a SIP revision implementing RACT for all CTG emission source categories and all non-CTG major sources in the HGB area. Failure to submit a SIP revision could result in sanctions or promulgation of a federal implementation plan. One alternative would be to submit a certification that existing provisions fulfill RACT requirements for storage vessels in the HGB area. However, this would necessitate a demonstration showing that the existing RACT requirements for storage vessels in the DFW area are not RACT for the same types of storage vessels in the HGB area, which may be difficult to support.

Key points in the adoption rulemaking schedule:

***Texas Register* proposal publication date:** October 7, 2016

Anticipated *Texas Register* adoption publication date: December 30, 2016

Anticipated effective date: January 5, 2017

Six-month Texas Register filing deadline: April 7, 2017

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Attachments:

None.

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