

Texas Commission on Environmental Quality

Interoffice Memorandum

To: Commissioners

Date: November 18, 2011

Thru: Bridget Bohac, Chief Clerk
Mark R. Vickery, P.G., Executive Director

From: Susana M. Hildebrand, P.E.
Chief Engineer

Docket No.: 2011-0083-SIP

Subject: Commission Approval for Adoption of the Houston-Galveston-Brazoria (HGB) Reasonably Available Control Technology (RACT) Analysis Update State Implementation Plan (SIP) Revision for the 1997 Eight-Hour Ozone Standard Project No. 2010-028-SIP-NR

Background and reason(s) for the SIP revision:

The purpose of this HGB RACT Analysis Update SIP Revision for the 1997 Eight-Hour Ozone Standard (HGB RACT Update SIP revision) is to provide the United States Environmental Protection Agency (EPA) a RACT analysis update to include Control Techniques Guidelines (CTG) that were not addressed in the HGB Attainment Demonstration SIP Revision for the 1997 Eight-Hour Ozone Standard (HGB AD SIP revision) and to incorporate concurrent 30 Texas Administrative Code Chapter 115 CTG-related rulemaking for the HGB area (Rule Project No. 2010-016-115-EN).

The eight-county HGB nonattainment area (Brazoria, Chambers, Fort Bend, Galveston, Harris, Liberty, Montgomery, and Waller Counties) is classified as severe under the 1997 eight-hour ozone National Ambient Air Quality Standard (NAAQS). For nonattainment areas classified as moderate and above, Federal Clean Air Act (FCAA), §182(b)(2) requires the state to submit a SIP revision that implements RACT for volatile organic compounds (VOC) emission sources addressed in a CTG document issued from November 15, 1990, through the area's attainment date. For the HGB area, the attainment date is June 15, 2019. CTG documents provide information to assist states in determining RACT for specific emission sources and provide the EPA's RACT recommendations. FCAA, §183(e)(3) requires the EPA to regulate VOC emissions from consumer and commercial products by issuing national regulations or by issuing CTG documents in lieu of national regulations. The EPA issued 11 CTG documents from 2006 through 2008 with RACT recommendations for controlling VOC emissions from a variety of consumer and commercial products.

Of the 11 CTG documents, the commission has previously acted on four. On March 10, 2010, with the adoption of the HGB AD SIP revision, the commission adopted portions of the Offset Lithographic and Letterpress Printing CTG recommendation and provided a negative declaration for the Flat Wood Paneling Coatings CTG, Fiberglass Boat Manufacturing Materials CTG, and Automobile and Light-Duty Truck Assembly Coatings

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CTG source categories. The commission determined that no sources meeting the applicability criteria recommended in these CTG documents were located in the HGB area. Additionally, due to the EPA's concerns regarding federal enforceability, staff recommended withdrawing the two RACT recommendations for the Flexible Package Printing and the Paper, Film, and Foil Coatings CTG categories that were proposed on September 23, 2009. RACT determinations were not made for the following five CTG emission source categories at that time because additional research was necessary to determine the number of sources affected by the CTG recommendations and the EPA had not formally responded to the state's December 8, 2008, request for clarification regarding the CTG recommendations: Industrial Cleaning Solvents; Large Appliance Coatings; Metal Furniture Coatings; Miscellaneous Industrial Adhesives; and Miscellaneous Metal and Plastic Parts Coatings. On March 17, 2011, the EPA issued a guidance memorandum entitled *Approving SIP Revisions Addressing VOC RACT Requirements for Certain Coatings Categories* regarding the following three CTG categories: Large Appliance Coatings; Metal Furniture Coatings; and Miscellaneous Metal and Plastic Parts Coatings. Additional discussion regarding the EPA's guidance on these three CTG categories is provided in Appendix A: *Reasonably Available Control Technology Analysis*.

Seven CTG categories for the HGB area have pending RACT determinations to be submitted to the EPA. This HGB RACT Update SIP revision includes the analyses and RACT determinations for these seven CTG source categories to determine if additional VOC controls are necessary to fulfill RACT requirements. This SIP revision provides a detailed RACT analysis update and incorporates concurrent Chapter 115 CTG-related rulemaking for the HGB area into the Texas SIP. The concurrent rulemaking revises Chapter 115, Subchapter E to implement RACT for the CTG emission source categories in the HGB area as required by FCAA, §172(c)(1) and §182(b)(2).

Scope of the SIP revision:

Because this HGB RACT Update SIP revision focuses specifically on the seven CTG documents issued by the EPA from 2006 through 2008 that have not been addressed in the HGB AD SIP revision adopted March 10, 2010, the RACT analysis only provides an update to the HGB VOC RACT demonstration.

A.) Summary of what the SIP revision will do:

Although the FCAA requires the state to implement RACT, EPA guidance on RACT indicates that states may choose to implement the CTG recommendations, implement an alternative approach, or demonstrate that additional control for the CTG emission source category is not technologically or economically feasible in the area. This SIP revision provides a detailed RACT analysis update for the HGB area and incorporates any necessary rule revisions. The following seven CTG documents have been evaluated as part of the concurrent Chapter 115 CTG-related rulemaking to determine if additional VOC controls are necessary to fulfill RACT requirements:

- Flexible Package Printing, Group II, issued in 2006;

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- Industrial Cleaning Solvents, Group II, issued in 2006;
- Large Appliance Coatings, Group III, issued in 2007;
- Metal Furniture Coatings, Group III, issued in 2007;
- Paper, Film, and Foil Coatings, Group III, issued in 2007;
- Miscellaneous Industrial Adhesives, Group IV, issued in 2008; and
- Miscellaneous Metal and Plastic Parts Coatings, Group IV, issued in 2008.

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

This HGB RACT Update SIP revision contains the FCAA requirement that states must revise their SIPs for ozone nonattainment areas with moderate and above classifications to include RACT, as applicable, for each category of VOC emission sources covered by a CTG document.

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

None

Statutory authority:

The authority to propose and adopt SIP revisions is derived from the following sections of Texas Health and Safety Code, Chapter 382, Texas Clean Air Act (TCAA), §382.002, which provides that the policy and purpose of the TCAA is to safeguard the state's air resources from pollution; §382.011, which authorizes the commission to control the quality of the state's air; and §382.012, which authorizes the commission to prepare and develop a general, comprehensive plan for the control of the state's air. This SIP revision is required by FCAA, §110(a)(1) and implementing rules in 40 Code of Federal Regulations Part 51.

Under the 1997 eight-hour ozone standard, the HGB area is required to meet the mandates of the FCAA, §172(c)(1) and §182(b)(2) and (f). Phase II of the EPA's implementation rule for the 1997 eight-hour ozone NAAQS published in the November 29, 2005, issue of the *Federal Register* (70 FR 71612), requires states containing areas classified as moderate nonattainment and above to submit a SIP revision demonstrating that their current rules fulfill the RACT requirements for all CTG emission source categories.

Effect on the:

A.) Regulated community:

The affected regulated community are those sources affected by the concurrent Chapter 115 CTG-related rulemaking that will be incorporated in this SIP revision. Affected sources may be required to install control technologies or use reformulated products to meet the emission specifications, implement new work practices, or comply with additional monitoring and recordkeeping requirements. See the executive summary memo for the Chapter 115 CTG-related rulemaking being adopted concurrently with this SIP revision (Rule Project No. 2010-016-115-EN) for further information.

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B.) Public:

The public could benefit from improved air quality due to lower ozone levels as a result of the concurrent Chapter 115 CTG-related rulemaking. However, there is a possibility that the economic impact to affected industries could be passed to consumers in the form of increased product costs. See the executive summary memo for the Chapter 115 CTG-related rulemaking being adopted concurrently with this SIP revision (Rule Project No. 2010-016-115-EN) for further information.

C.) Agency programs:

The CTG rules could increase the Office of Compliance and Enforcement workload when inspecting affected facilities to ensure that the additional requirements are met and could increase workloads for the Small Business and Environmental Assistance Division due to a likely impact on many small business owners. See the executive summary memo for the Chapter 115 CTG-related rulemaking being adopted concurrently with this SIP revision (Rule Project No. 2010-016-115-EN) for further information.

Stakeholder meetings:

A CTG Stakeholder Group meeting was held on December 1, 2010, and informal comments were accepted until January 12, 2011, for the concurrent Chapter 115 CTG-related rulemaking. See the executive summary memo for the Chapter 115 CTG-related rulemaking being adopted concurrently with this SIP revision (Rule Project No. 2010-016-115-EN) for further information.

Public comment:

Public hearings for the proposed SIP revision and concurrent Chapter 115 CTG-related rulemaking were held on July 18, 2011, at the Houston-Galveston Area Council office in Houston and on July 22, 2011, at the Texas Commission on Environmental Quality (TCEQ) headquarters in Austin. Question and answer sessions were held 30 minutes prior to the hearings. American Coatings Association (ACA) presented oral comments at the July 18, 2011, hearing applicable to this HGB RACT Update SIP revision and the concurrent Chapter 115 CTG-related rulemaking. The July 22, 2011, hearing in Austin was not officially opened because no party indicated a desire to provide comment.

The public comment period opened on June 24, 2011, and closed on August 8, 2011. Written comments were accepted via mail, fax, and through the [eComments system](http://www5.tceq.texas.gov/rules/ecomments/) (<http://www5.tceq.texas.gov/rules/ecomments/>). Written comments were received from the ACA, Flexographic Technical Association (FTA), National Aeronautics and Space Administration (NASA), Texas Chemical Council (TCC), EPA, United States Navy (US Navy), and one individual.

The EPA commented that in order for portions of the proposed rules for Large Appliance Coatings, Metal Furniture Coatings, and Miscellaneous Metal and Plastic Parts Coatings to be approved as RACT, the state must also demonstrate that the existing state limits for these CTG categories, which were based on the EPA's original CTG recommendations, are

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no longer technologically or economically feasible. The EPA also requested clarification of the alternate control requirement concerning miscellaneous metal parts and products coating.

The ACA commented that the pleasure craft industry was not provided the opportunity to comment on the EPA's CTG RACT recommendations because the draft Miscellaneous Metal and Plastic Parts Coatings CTG did not mention pleasure craft surface coating operations and that EPA's final CTG-recommended pleasure craft coating limits do not represent RACT for the pleasure craft industry. The ACA requested several revisions to the proposed rules to establish appropriate RACT requirements for the pleasure craft coating operations.

TCC suggested an exemption for solvent cleaning operations associated with processes or operations that are subject to the control requirements or emission specification in another division in Chapter 115 and clarification of certain definitions in the proposed rules.

Comments received more directly related to the Chapter 115 CTG-related rulemaking being adopted concurrently with this SIP revision (Rule Project No. 2010-016-115-EN) are addressed in the preamble to those rules and a summary of the comments is included in the executive summary memo for those rules.

Significant changes from proposal:

This SIP revision was revised in response to comments received on the RACT update for the following CTG categories: Industrial Cleaning Solvents; Large Appliance Coatings; Metal Furniture Coatings; Miscellaneous Industrial Adhesives; and Miscellaneous Metal and Plastic Parts Coatings.

In response to comments, the TCEQ revised the industrial cleaning solvents rules to exempt from these requirements operations that are subject to the control requirements or emission specifications in another division in Chapter 115. The exemption provides flexibility and reduces the compliance burden for affected sources. The exemption is consistent with the EPA's CTG recommendations and at least as effective as complying with the industrial cleaning solvents rules.

The commission proposed to implement the CTG-recommended RACT limits for the large appliance, metal furniture, and miscellaneous metal and parts coatings categories and provided a demonstration that implementing the CTG-recommended approach for these three categories would not interfere with attainment of the 1997 ozone standard. However, the EPA commented that in order for the proposed rules to be approved as RACT, the state must also demonstrate that the existing state limits for these CTG categories, which were based on the EPA's original CTG recommendations, are no longer technologically or economically feasible. Staff contends that by promulgating higher CTG-recommended RACT limits for these source categories, the EPA has established that the original CTG-recommended limits, and thus the existing state limits, are no longer technologically or

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economically feasible. However, in the absence of any specific information indicating that the state's existing limits for these source categories are no longer technologically or economically feasible and considering the EPA's intent to disapprove the rules as proposed without such a demonstration of infeasibility, the TCEQ is obligated under the FCAA to revise the proposed rules to only include the CTG-recommended VOC limits that are equivalent to or lower than the state's existing limits. Where the EPA's new CTG-recommended emission limits are less stringent than the original CTG-recommended limits, the TCEQ is retaining the original emission limit in the current rules, except for the high performance architectural coatings limit for the miscellaneous metal parts and products category.

In response to comments, the TCEQ determined that some of the pleasure craft coating VOC emission limits included in the EPA's 2008 Miscellaneous Metal and Plastic Parts Coatings CTG recommendations are not technologically feasible at this time and therefore do not constitute RACT for Texas. The adopted rules include higher VOC limits for extreme high-gloss coating, finish primer/surfacer coating, and other substrate antifoulant coating. Additionally, VOC limits have been introduced for antifoulant sealer/tie coating, a new coating category.

Additional details regarding these changes are provided in the Response to Comments section and Appendix A of this HGB RACT Analysis Update SIP revision and also in the executive summary memo and preamble for the Chapter 115 CTG-related rulemaking being adopted concurrently with this SIP revision.

Potential controversial concerns and legislative interest:

Due to the broad applicability recommended in the Industrial Cleaning Solvents and Miscellaneous Industrial Adhesive CTG documents, the concurrent Chapter 115 CTG-related rulemaking impacts many small businesses.

In response to comments, the TCEQ determined that some of the pleasure craft coating VOC limits included in the EPA's 2008 Miscellaneous Metal and Plastic Parts Coatings CTG recommendations are not technologically feasible at this time and therefore do not constitute RACT for Texas. The EPA may not agree with this conclusion.

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

No

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

There are no practical alternatives to this HGB RACT Update SIP revision.

The FCAA and the EPA require sources of VOC emissions in ozone nonattainment areas classified as moderate and above to implement RACT measures and require states to

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submit revisions to the SIP in response to any CTG document issued from 1990 through the area's date of attainment. States can adopt and implement the recommendations contained within the CTG documents if they are determined to be RACT, or they can adopt alternative approaches, but in either circumstance, the RACT analysis and any rule revisions must be submitted to the EPA for review and approval as part of the SIP. If a finding of failure to submit is issued by the EPA, states that do not submit RACT determinations within 18 months after such a finding could be subject to federal sanctions.

EPA Region 6 has verbally indicated that the EPA is considering issuing a finding of failure to submit for states that have not submitted RACT determinations for the 11 consumer and commercial products CTG documents issued from 2006 through 2008. Additionally, failure to update the RACT analysis could jeopardize the approvability of the HGB AD SIP revision submitted to the EPA on April 6, 2010.

Key points in the adoption SIP revision schedule:

Texas Register proposal publication date: NA
Anticipated *Texas Register* publication date: NA
Anticipated effective date: NA
Six-month *Texas Register* filing deadline: NA

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