TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

AGENDA ITEM REQUEST

for Adoption of a State Implementation Plan Revision

AGENDA REQUESTED: March 10, 2010

DATE OF REQUEST: February 19, 2010

NAME & NUMBER OF PERSON TO CONTACT REGARDING CHANGES TO THIS REQUEST, IF NEEDED: Kerry Howard, 239-0556

CAPTION: Docket No. 2009-1127-SIP. Consideration for adoption of a revision to the State Implementation Plan (SIP) for the Control of Ozone Air Pollution applicable to the Dallas-Fort Worth (DFW) 1997 Eight-Hour Ozone Nonattainment Area (Collin, Dallas, Denton, Ellis, Johnson, Kaufman, Parker, Rockwall, and Tarrant Counties): The DFW Reasonably Available Control Technology (RACT) Update, 30 Texas Administrative Code (TAC) Chapter 117 Rule Revision Noninterference Demonstration, and Modified Failure-to-Attain Contingency Plan SIP Revision.

This SIP revision contains elements and actions required by the Federal Clean Air Act (FCAA), including a DFW Volatile Organic Compounds (VOC) RACT Update, the incorporation of revisions to 30 TAC Chapters 115 and 117 into the Texas SIP, a demonstration of noninterference with the SIP for the Chapter 117 rule revision, and a modified failure-to-attain contingency plan.
(Mary Ann P. Cook, Terry Salem) (Rule Project No. 2009-021-SIP-NR)

Susana M. Hildebrand
Chief Engineer

Division Director

Joyce Spencer for
Agenda Coordinator Kerry Howard

Copy to CCC Secretary? NO_X_ YES

Texas Commission on Environmental Quality

INTEROFFICE MEMORANDUM

To: Commissioners **Date:** February 19, 2010

Thru: LaDonna Castañuela, Chief Clerk
Mark R. Vickery, P.G., Executive Director

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

Docket No.: 2009-1127-SIP

Subject: Commission Approval for Adoption of Revisions to the State of Texas Air Quality Implementation Plan for the Control of Ozone Air Pollution:

The Dallas-Fort Worth (DFW) Reasonably Available Control Technology (RACT) Update, 30 Texas Administrative Code (TAC) Chapter 117 Rule Revision Noninterference Demonstration, and Modified Failure-to-Attain Contingency Plan State Implementation Plan (SIP) Revision (DFW RACT, Rule, and Contingency SIP Revision)

Rule Project No. 2009-021-SIP-NR

Background and reason(s) for the SIP revision:
This DFW RACT, Rule, and Contingency SIP Revision integrates several actions required by the United States Environmental Protection Agency (EPA) into the State of Texas Air Quality Implementation Plan for the Control of Ozone Air Pollution applicable to the DFW 1997 eight-hour ozone standard nonattainment area (Collin, Dallas, Denton, Ellis, Kaufman, Johnson, Parker, Rockwall, and Tarrant Counties). It supplements and revises the DFW 1997 eight-hour ozone attainment demonstration.

The DFW RACT, Rule, and Contingency SIP Revision includes RACT determinations for certain volatile organic compounds (VOC) emission sources in the DFW area, as required by the 1990 Federal Clean Air Act (FCAA) Amendments under §172(c)(1) and §182(b)(2) and (f). Development of the VOC RACT update was required to address the EPA's issuance of 11 control techniques guidelines (CTG) documents between 2006 and 2008.

Two state rule revisions are incorporated in this SIP revision. One is a 30 TAC Chapter 115 rule revision governing offset lithographic printing emission sources to be adopted concurrently with the SIP revision. That rule revision resulted from the state's analysis of an applicable CTG document and the subsequent RACT determination for offset lithographic printing emission sources. Also incorporated into the SIP revision is a Chapter 117 rule revision adopted by the commission on January 13, 2010. That rule revision resulted from the commission's approval of a rulemaking petition filed by the Elk Corporation. The revision exempts from Chapter 117 regulation low temperature drying and curing ovens used in mineral wool-type fiberglass manufacturing and wet-laid, non-woven fiber mat manufacturing where nitrogen-containing resins or other additives are used. Because that rule revision leads to a small potential emission reductions loss, this SIP revision allocates surplus nitrogen oxides (NO_X) emission reductions from vehicle fleet turnover to occur between 2009 and 2010 to substitute for any control strategy reductions that may be lost from the rule revision. Replacing the control strategy reductions serves to maintain integrity of the attainment demonstration and shows that the revised Chapter 117 rule does not interfere with attainment of the 1997 eight-hour ozone standard in the DFW area. This demonstration of noninterference, or §110(l) demonstration, is required by the FCAA to address backsliding issues.

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This SIP revision also modifies the DFW 1997 eight-hour ozone attainment demonstration contingency plan. An earlier version of the offset lithographic printing rule identified as a contingency measure for the DFW area has become unavailable for use in the contingency plan. That rule is no longer available for contingency use because it has been revised in accordance with the RACT determination made for those sources, and the revised rule is now considered RACT. Therefore, the offset lithographic printing rule can no longer be included in the failure-to-attain contingency plan for the DFW area. To replace the emissions reductions from offset lithographic printing sources, this SIP revision allocates a portion of surplus emission reductions to result from vehicle fleet turnover to the contingency plan. This action serves to maintain a viable failure-to-attain contingency plan for the DFW area. The modified contingency plan retains two previously identified state rules (applicable in Collin, Dallas, Denton, and Tarrant Counties) for degassing or cleaning processes of stationary, marine, and transport vessels; and for petroleum-based dry cleaning, as contingency measures as well as vehicle fleet turnover emission reductions previously committed for contingency, along with the additional fleet turnover reductions allotted in this SIP revision. The plan provides emission reductions sufficient to meet the FCAA requirement for a 3 percent contingency for the attainment demonstration.

Scope of the SIP revision:
This DFW RACT, Rule, and Contingency SIP Revision integrates several actions required by the EPA into the State of Texas Air Quality Implementation Plan for the Control of Ozone Air Pollution applicable to the DFW 1997 eight-hour ozone standard nonattainment area (Collin, Dallas, Denton, Ellis, Kaufman, Johnson, Parker, Rockwall, and Tarrant Counties).

A) Summary of what the SIP revision will do:
This SIP revision supplements and revises the DFW 1997 eight-hour ozone attainment demonstration and fulfills EPA requirements for several actions to be incorporated into the Texas Air Quality Plan for the Control of Ozone Air Pollution. The revision supplements and revises the DFW 1997 eight-hour ozone standard attainment demonstration to incorporate recent Chapter 115 and Chapter 117 rule revisions, updated VOC RACT determinations, a §110(l) demonstration of noninterference, and a modified failure-to-attain contingency plan.

B) Scope required by federal regulations or state statutes:
Under the 1997 eight-hour ozone standard, the DFW nine-county nonattainment area is required to meet the mandates of the FCAA under §172(c)(1) and §182(b)(2) and (f). According to the EPA's Final Rule to Implement the Eight-Hour Ozone National Ambient Air Quality Standards (NAAQS) (40 Code of Federal Regulations (CFR) §51.912, November 29, 2005), the area must submit, as a revision to the SIP, a demonstration that current rules fulfill the 1997 eight-hour RACT requirements for all CTG categories. The 11 CTG documents addressed in this SIP revision were issued between 2006 and 2008 by the EPA and have not been addressed in a previous SIP revision.

The FCAA (42 USC §7502(c)(9) and §7511a(c)(9)) and the EPA final Phase 2 1997 eight-hour ozone implementation rule (70 FR 71612) require that state SIPs for all 1997 eight-hour ozone nonattainment areas include contingency measures as additional controls to further reduce emissions in the event an area fails to attain by its attainment date. The contingency measures identified for implementation must provide for emissions reductions equivalent to 3 percent of the base-year emissions inventory used in development of the applicable attainment demonstration. The FCAA requires replacement of any reductions removed from a contingency plan to maintain the 3 percent reduction contingency requirement.

The FCAA requires a §110(l) demonstration of noninterference in the form of a SIP submittal for potential backsliding issues. Because the Chapter 117 rule revision creates a small potential emission reduction loss to

the DFW ozone control strategy, emission reductions to offset the potential reduction loss are replaced via this SIP revision, demonstrating that the rule revision will not interfere with the area's attainment status.

C) Additional staff recommendations that are not required by federal rule or state statute:
None

Statutory authority:
The authority to adopt this SIP revision is derived from Texas Health and Safety Code, 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; TCAA, §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; and Texas Water Code, §5.102, General Powers, and §5.013, General Jurisdiction of Commission.

The FCAA, 42 United States Code (USC), §§7401, et seq., requires states to submit SIP revisions that specify the manner in which the NAAQS will be attained and maintained within each air quality control region of the state. Phase 1 of the EPA's implementation rule for the 1997 eight-hour ozone standard, published in the April 30, 2004, issue of the Federal Register (69 FR 23951), outlines classifications, attainment dates, and anti-backsliding principles. Phase 2 of the EPA's implementation rule for the 1997 eight-hour standard, published in the November 29, 2005, issue of the Federal Register (70 FR 71612), outlines the requirements for state plans.

Effect on the:

A) Regulated community:
None.

B) Public:
There are no anticipated direct impacts on the public, other than benefits from emission reductions from revised rules.

C) Agency programs:
There are no anticipated impacts on agency programs from this SIP revision.

Stakeholder meetings:
None.

Public comment:
The commission held two public hearings to receive oral comments on the proposed version of this SIP revision and the Chapter 115 rule revision. The public comment period for the proposed SIP revision and Chapter 115 rulemaking opened on October 9, 2009, and closed on November 9, 2009. The October 29, 2009, hearing in Austin was not officially opened because no party indicated a desire to provide comment. Comments were received at the November 2, 2009, hearing in Fort Worth. Written comments were accepted via mail, fax, and through the eComments system.

For the Chapter 117 rule revision, a public hearing was scheduled on September 17, 2009, in Ennis. The hearing was not officially opened because no party indicated a desire to provide comment. The public comment period for the proposed rule revision opened August 28, 2009, and closed September 28, 2009.

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The commission received one written comment, from the EPA, which indicated that the EPA would comment on the §110(l) demonstration in a letter pertaining to the proposed DFW SIP revision.

Comments received applicable to the Chapter 115 and Chapter 117 rule revisions are addressed in the preambles for those rules. No changes were made to this SIP revision in response to comments received on the Chapter 115 or Chapter 117 rule revisions.

The Response to Comments section of this SIP revision addresses only comments applicable to this DFW RACT, Rule, and Contingency SIP Revision. The EPA commented on the DFW VOC RACT update, the demonstration of noninterference (from the Chapter 117 rule revision), and the modified contingency plan elements of this SIP revision. The SIP revision was revised in response to comments received on the VOC RACT update. No changes were made to the SIP revision in response to comments received on the demonstration of noninterference and the modified contingency plan, since the only comments received on those were supportive comments from the EPA.

Significant changes from proposal:
Significant changes were made to the VOC RACT update element of this SIP revision in response to comments. Staff proposed that RACT for three CTG categories was fulfilled through current state rules and permitting requirements. These categories include Flexible Packaging Printing; Paper, Film, and Foil Coatings; and Auto and Light-Duty Truck Assembly Coatings. However, in response to comments from the EPA, the RACT determinations for these three categories were withdrawn so that staff may reevaluate the RACT analyses. The RACT determination for the Fiberglass Boat Manufacturing CTG category was proposed as not representing RACT for the DFW area due to the potential economic impact on small businesses; however, additional staff research indicates that no sources meeting the CTG applicability exist in the DFW area. Therefore, the RACT determination for Fiberglass Boat Manufacturing was changed to a negative declaration.

No significant changes were made to the other elements of this SIP revision as a result of comments received. In response to comments received applicable to the rules associated with this SIP revision, substantive changes were made to the 30 TAC Chapter 115 rule revision, which are addressed in the preamble for that rule, and no changes were made to the SIP in response to any comment on the Chapter 117 rule revision.

Potential controversial concerns and legislative interest remaining after proposal and public comment:
RACT determinations were not finalized for eight of the 11 CTGs issued by the EPA between 2006 and 2008, pending further information from the EPA. While not stated in formally submitted comments, the EPA has verbally indicated to staff that it may issue notices of failure to submit to states that have not yet addressed all of the CTGs. The EPA's issuance of such a notice would start an 18-month sanctions clock. The TCEQ will need to address the CTGs remaining in a future SIP revision.

Does this request 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 the request?
The VOC RACT determination update and associated Chapter 115 rule revisions would not be incorporated into the Texas Air Quality Plan for the DFW ozone nonattainment area. This could result in the EPA issuing a finding of incompleteness for the DFW 1997 eight-hour ozone standard attainment demonstration, which could further result in sanctions. The Chapter 117 rule revisions, the associated §110(l) demonstration, and

the modified contingency plan would also not be incorporated into the DFW 1997 eight-hour ozone standard attainment demonstration. This could result in EPA disapproval of these elements of the attainment demonstration, which could result in sanctions.

Key points in adoption request schedule:

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

Agency contacts:

Mary Ann P. Cook, SIP Project Manager, 239-6739, Air Quality Division
Terry Salem, Staff Attorney, 239-0469, Environmental Law Division

Attachments

cc: Chief Clerk, 5 copies
Executive Director's Office
Susana M. Hildebrand, P.E.
Kevin Patteson
Curtis Seaton
Daniel Womack
Office of General Counsel
Mary Ann P. Cook

STATE OF TEXAS AIR QUALITY IMPLEMENTATION PLAN
FOR THE CONTROL OF OZONE AIR POLLUTION

DALLAS/FORT WORTH
1997 EIGHT-HOUR OZONE STANDARD NONATTAINMENT AREA

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY
P.O. BOX 13087
AUSTIN, TEXAS 78711-3087

Dallas-Fort Worth Reasonably Available Control Technology Update, 30 Texas Administrative Code Chapter 117 Rule Revision Noninterference Demonstration, and Modified Failure-to-Attain Contingency Plan State Implementation Plan Revision

TCEQ PROJECT NO. 2009-021-SIP-NR

Adopted March 10, 2010

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EXECUTIVE SUMMARY

The Dallas-Fort Worth (DFW) Reasonably Available Control Technology (RACT) Update, 30 Texas Administrative Code (TAC) Chapter 117 Rule Revision Noninterference Demonstration, and Modified Failure-to-Attain Contingency Plan State Implementation Plan (SIP) Revision (DFW RACT, Rule, and Contingency SIP Revision) revises the State of Texas Air Quality Implementation Plan for the Control of Ozone Air Pollution. The SIP revision incorporates several actions adopted by the Texas Commission on Environmental Quality (TCEQ), and supplements the attainment demonstration for the 1997 eight-hour ozone standard for the DFW 1997 eight-hour ozone standard nonattainment area (Dallas, Denton, Tarrant, Collin, Parker, Johnson, Ellis, Kaufman, and Rockwall Counties).

The DFW RACT, Rule, and Contingency SIP Revision includes RACT determinations for certain volatile organic compounds (VOC) emission sources in the DFW area, as required by the 1990 Federal Clean Air Act (FCAA) Amendments under §172(c)(1) and §182(b)(2) and (f). The VOC RACT update was developed to address the United States Environmental Protection Agency (EPA) issuance of 11 control techniques guidelines (CTG) documents between 2006 and 2008.

Two adopted state rule revisions are incorporated into the SIP, one of which is a 30 TAC Chapter 115 rule revision for offset lithographic printing emission sources that was adopted concurrently with the SIP revision. The revised Chapter 115 rule resulted from the state's analysis of the CTG document for that emission source category and a subsequent RACT determination for offset lithographic printing emission sources. Also incorporated into the SIP revision is a 30 TAC Chapter 117 rule revision adopted by the commission on January 13, 2010. That rule revision, which resulted from the commission's approval of a rulemaking petition filed by the Elk Corporation, exempts from Chapter 117 regulation low temperature drying and curing ovens used in mineral wool-type fiberglass manufacturing and wet-laid, non-woven fiber mat manufacturing where nitrogen-containing resins or other similar additives are used.

The DFW RACT, Rule, and Contingency SIP Revision demonstrates that the revised Chapter 117 rule does not interfere with the DFW area's attainment demonstration for the 1997 eight-hour ozone standard. This demonstration is accomplished by offsetting a small potential emission reduction loss to the Chapter 117 control strategy that could result from the rule revision. This SIP revision allocates surplus nitrogen oxides (NO_X) emission reductions from vehicle fleet turnover to occur between 2009 and 2010 to the control strategy to replace any loss of reductions resulting from the Chapter 117 rule revision. Replacing the control strategy emission reductions serves to maintain the integrity of the attainment demonstration and demonstrates that the revised Chapter 117 rule does not interfere with attainment of the 1997 eight-hour ozone standard in the DFW area.

As a final action, the DFW RACT, Rule, and Contingency SIP Revision modifies the contingency plan for the DFW 1997 eight-hour ozone standard attainment demonstration. An earlier version of the Chapter 115 rule for offset lithographic printing sources was identified as a measure in previous failure-to-attain contingency plans for the DFW area. However, the measure is not contained in the modified plan because the Chapter 115 offset lithographic printing source rule as revised is no longer eligible for contingency use. The modified plan allocates a portion of surplus emission reductions that will result from vehicle fleet turnover to offset removal of the offset lithographic measure from the contingency plan. The modified plan provides emission reductions sufficient to meet the Federal Clean Air Act (FCAA) contingency requirement for a 3 percent reduction to the 1999 base year emissions inventory used for development of the attainment

demonstration. A portion of surplus fleet turnover emissions reductions were previously allocated to the contingency plan; however, this revision allocates a greater portion of those reductions for contingency, to offset contingency reductions lost with removal of the offset lithographic printing rule measure. Because replacement reductions are identified, the contingency plan modification does not adversely affect the DFW area's demonstration of attainment for the 1997 eight-hour ozone standard. The modified contingency plan retains two previously identified state Chapter 115 VOC rules applicable in Collin, Dallas, Denton, and Tarrant Counties for degassing or cleaning processes of stationary, marine, and transport vessels, and petroleum-based dry cleaning as contingency measures in addition to the vehicle fleet turnover emission reductions committed for contingency.

SECTION V: LEGAL AUTHORITY

A. General

The Texas Commission on Environmental Quality (TCEQ) has the legal authority to implement, maintain, and enforce the National Ambient Air Quality Standards (NAAQS) and to control the quality of the state's air, including maintaining adequate visibility.

The first air pollution control act, known as the Clean Air Act of Texas, was passed by the Texas Legislature in 1965. In 1967, the Clean Air Act of Texas was superseded by a more comprehensive statute, the Texas Clean Air Act (TCAA), found in Article 4477-5, Vernon's Texas Civil Statutes. The legislature amended the TCAA in 1969, 1971, 1973, 1979, 1985, 1987, 1989, 1991, 1993, 1995, 1997, 1999, 2001, 2003, 2005, 2007, and 2009. In 1989, the TCAA was codified as Chapter 382 of the Texas Health & Safety Code.

Originally, the TCAA stated that the Texas Air Control Board (TACB) is the state air pollution control agency and is principal authority in the state on matters relating to the quality of air resources. In 1991, the legislature abolished the TACB effective September 1, 1993, and its powers, duties, responsibilities, and functions were transferred to the Texas Natural Resource Conservation Commission (TNRCC). With the creation of the TNRCC, the authority over air quality is found in both the Texas Water Code and the TCAA. Specifically, the authority of the TNRCC is found in Chapters 5 and 7. Chapter 5, Subchapters A - F, H - J, and L, include the general provisions, organization, and general powers and duties of the TNRCC, and the responsibilities and authority of the executive director. This chapter also authorizes the TNRCC to implement action when emergency conditions arise, and to conduct hearings. Chapter 7 gives the TNRCC enforcement authority. In 2001, the 77th Texas Legislature continued the existence of the TNRCC until September 1, 2013, and changed the name of the TNRCC to the Texas Commission on Environmental Quality (TCEQ). In 2009, the 81st Texas Legislature, during a special session, amended section 5.014 of the Texas Water Code, changing the expiration date of the TCEQ to September 1, 2011, unless continued in existence by the Texas Sunset Act.

The TCAA specifically authorizes the TCEQ to establish the level of quality to be maintained in the state's air and to control the quality of the state's air by preparing and developing a general, comprehensive plan. The TCAA, Subchapters A - D, also authorize the TCEQ to collect information to enable the commission to develop an inventory of emissions; to conduct research and investigations; to enter property and examine records; to prescribe monitoring requirements; to institute enforcement proceedings; to enter into contracts and execute instruments; to formulate rules; to issue orders taking into consideration factors bearing upon health, welfare, social and economic factors, and practicability and reasonableness; to conduct hearings; to establish air quality control regions; to encourage cooperation with citizens' groups and other agencies and political subdivisions of the state as well as with industries and the federal government; and to establish and operate a system of permits for construction or modification of facilities.

Local government authority is found in Subchapter E of the TCAA. Local governments have the same power as the TCEQ to enter property and make inspections. They also may make recommendations to the commission concerning any action of the TCEQ that affects their territorial jurisdiction, may bring enforcement actions, and may execute cooperative agreements with the TCEQ or other local governments. In addition, a city or town may enact and enforce ordinances for the control and abatement of air pollution not inconsistent with the provisions of the TCAA and the rules or orders of the commission.

Subchapters G and H of the TCAA authorize the TCEQ to establish vehicle inspection and maintenance programs in certain areas of the state, consistent with the requirements of the Federal Clean Air Act; coordinate with federal, state, and local transportation planning agencies to develop and implement transportation programs and measures necessary to attain and maintain the NAAQS; establish gasoline volatility and low emission diesel standards; and fund and authorize participating counties to implement vehicle repair assistance, retrofit, and accelerated vehicle retirement programs.

B. Applicable Law

The following statutes and rules provide necessary authority to adopt and implement the state implementation plan (SIP). The rules listed below have previously been submitted as part of the SIP.

Statutes

All sections of each subchapter are included, unless otherwise noted.

TEXAS HEALTH & SAFETY CODE, Chapter 382	September 1, 2009
TEXAS WATER CODE	September 1, 2009

Chapter 5: Texas Natural Resource Conservation Commission

- Subchapter A: General Provisions
- Subchapter B: Organization of the Texas Natural Resource Conservation Commission
- Subchapter C: Texas Natural Resource Conservation Commission
- Subchapter D: General Powers and Duties of the Commission
- Subchapter E: Administrative Provisions for Commission
- Subchapter F: Executive Director (except §§ 5.225, 5.226, 5.227, 5.2275, 5.231, 5.232, and 5.236)
- Subchapter H: Delegation of Hearings
- Subchapter I: Judicial Review
- Subchapter J: Consolidated Permit Processing
- Subchapter L: Emergency and Temporary Orders (§§ 5.514, 5.5145, and 5.515 only)
- Subchapter M: Environmental Permitting Procedures (§ 5.558 only)

Chapter 7: Enforcement

- Subchapter A: General Provisions (§§ 7.001, 7.002, 7.0025, 7.004, and 7.005 only)
- Subchapter B: Corrective Action and Injunctive Relief (§ 7.032 only)
- Subchapter C: Administrative Penalties
- Subchapter D: Civil Penalties (except § 7.109)
- Subchapter E: Criminal Offenses and Penalties: §§ 7.177, 7.179-7.183

Rules

All of the following rules are found in 30, Texas Administrative Code, as of the following effective dates:

Chapter 7: Memoranda of Understanding, §§ 7.110 and 7.119	May 2, 2002
Chapter 19: Electronic Reporting	March 1, 2007

Chapter 35: Subchapters A-C, K: Emergency and Temporary Orders and Permits; Temporary Suspension or Amendment of Permit Conditions	July 20, 2006
Chapter 39: Public Notice, §§ 39.201; 39.401; 39.403(a) and (b)(8)-(10); 39.405(f)(1) and (g); 39.409; 39.411 (a), (b)(1)-(6), and (8)-(10) and (c)(1)-(6) and (d); 39.413(9), (11), (12), and (14); 39.418(a) and (b)(3) and (4); 39.419(a), (b), (d), and (e); 39.420(a), (b) and (c)(3) and (4); 39.423 (a) and (b); 39.601-39.605	March 29, 2006
Chapter 55: Requests for Reconsideration and Contested Case Hearings; Public Comment, §§ 55.1; 55.21(a) - (d), (e)(2), (3), and (12), (f) and (g); 55.101(a), (b), and (c)(6) - (8); 55.103; 55.150; 55.152(a)(1), (2), and (6) and (b); 55.154; 55.156; 55.200; 55.201(a) - (h); 55.203; 55.205; 55.209, and 55.211	March 29, 2006
Chapter 101: General Air Quality Rules	January 1, 2009
Chapter 106: Permits by Rule, Subchapter A	June 30, 2004
Chapter 111: Control of Air Pollution from Visible Emissions and Particulate Matter	July 19, 2006
Chapter 112: Control of Air Pollution from Sulfur Compounds	July 16, 1997
Chapter 113: Standards of Performance for Hazardous Air Pollutants and for Designated Facilities and Pollutants	May 14, 2009
Chapter 114: Control of Air Pollution from Motor Vehicles	June 26, 2008
Chapter 115: Control of Air Pollution from Volatile Organic Compounds	July 19, 2007
Chapter 116: Permits for New Construction or Modification	May 29, 2008
Chapter 117: Control of Air Pollution by Control of Air Pollution from Nitrogen Compounds	March 4, 2009
Chapter 118: Control of Air Pollution Episodes	March 5, 2000
Chapter 122: § 122.122: Potential to Emit	December 11, 2002
Chapter 122: § 122.215: Minor Permit Revisions	June 3, 2001
Chapter 122: § 122.216: Applications for Minor Permit Revisions	June 3, 2001
Chapter 122: § 122.217: Procedures for Minor Permit Revisions	December 11, 2002
Chapter 122: § 122.218 Minor Permit Revision Procedures for Permit Revisions Involving the Use of Economic Incentives, Marketable Permits, and Emissions Trading	June 3, 2001

SECTION VI. CONTROL STRATEGY

A. Introduction (No revision)

B. Ozone

1. *Dallas-Fort Worth*
2. *Houston-Galveston-Brazoria* (No revision)
3. *Beaumont-Port Arthur* (No revision)
4. *El Paso* (No revision)
5. *Regional Strategies* (No revision)
6. *Northeast Texas* (No revision)
7. *Austin Area* (No revision)
8. *San Antonio Area* (No revision)
9. *Victoria Area* (No revision)

C. Particulate Matter (No revision)

D. Carbon Monoxide (No revision)

E. Lead (No revision)

F. Oxides of Nitrogen (No revision)

G. Sulfur Dioxide (No revision)

H. Conformity with the National Ambient Air Quality Standards (No revision)

I. Site Specific (No revision)

J. Mobile Sources Strategies (No revision)

K. Clean Air Interstate Rule (No revision)

L. Transport (No revision)

M. Regional Haze (No revision)

LIST OF ACRONYMS

ACT -- Alternative Control Techniques
AD -- Attainment Demonstration
AF -- Air-to-Fuel
APU -- Auxiliary Power Units
ARPDB -- Acid Rain Program Data Base
ATCM -- Airborne Toxic Control Measure
auto-GC -- Automated Gas Chromatograph
BACT -- Best Available Control Technology
BCCA-AG -- Business Coalition for Clean Air-Appeal Group
BMP -- Best Management Practices
BPA -- Beaumont-Port Arthur
Btu/hr -- British Thermal Units per Hour
Btu/scf -- British Thermal Units per Standard Cubic Feet
CAE -- Cetane Additive Enhanced Diesel Fuel
CAIR -- Clean Air Interstate Rule
CAMx -- Comprehensive Air Model with Extensions
CARB -- California Air Resources Board
CBD -- Houston's Central Business District
CFR -- Code of Federal Regulations
CMAQ -- Congestion Mitigation and Air Quality
CO -- Carbon Monoxide
CTG -- Control Techniques Guidelines
DECS -- Diesel Emission Control Strategy
DERC -- Discrete Emission Reduction Credits
DFW -- Dallas-Fort Worth
DFW AD SIP – DFW Attainment Demonstration SIP revision
DPM -- Diesel Particulate Matter
DRRP -- Diesel Risk Reduction Program
DV -- Design Value
DVc -- Current Design Value
DVf -- Future Design Value
EAC -- Early Action Compact
EDMS -- Emissions and Dispersion Modeling System
E-GRID-2007 -- Emissions and Generation Resource Integrated Database
EE/RE -- Energy Efficiency/Renewable Energy
EGAS -- Economic Growth Analysis System
EGF -- Electric Generating Facilities
EGU -- Electric Generating Units
EI -- Emissions Inventory
EPA -- United States Environmental Protection Agency
EPS3 -- Emissions Processing System, version 3
ERC -- Emission Reduction Credits
ERCOT -- Electric Reliability Council of Texas
ESAD -- Emission Specification for Attainment Demonstration
ESL -- Energy Systems Laboratory, the Texas A&M University System
F -- Fahrenheit
FAA -- Federal Aviation Administration
FCAA -- Federal Clean Air Act

FCV -- Fuel Cell Vehicle
FGR -- Flue Gas Recirculation
FHWA -- Federal Highway Administration
FR -- Federal Register
FT -- Fischer-Tropsch Diesel Fuel
GIS -- Geographic Information System
GloBEIS -- Global Biosphere Emissions and Interactions System
gpm -- Gallons per Minute
GTM -- Gross Ton Mile
HAP -- Hazardous Air Pollutant
HARC -- Houston Advanced Research Center
HDT -- Heavy-Duty Truck
HECT -- Highly Reactive Volatile Organic Compound Emissions Cap and Trade Program
HGB -- Houston-Galveston-Brazoria
H-GAC -- Houston-Galveston Area Council
HOV -- High Occupancy Vehicle
hp -- Horsepower
HPMS -- Highway Performance Monitoring System
HRVOC – Highly Reactive Volatile Organic Compound
HSC -- Houston Ship Channel
IC -- Internal Combustion
ICI -- Industrial, Commercial, and Institutional
IECC -- International Energy Conservation Code
I/M -- Inspection and Maintenance
km -- Kilometer
K_Vs -- Vertical Exchange Coefficient
LAER -- Lowest Achievable Emission Rate
lb/MMBtu -- Pound per Million British Thermal Units
LDAR -- Leak Detection and Repair
LIDIR -- Light Detection and Ranging
LDEQ -- Louisiana Department of Environmental Quality
LDGV -- Light-Duty Gasoline Vehicle
LDT -- Light-Duty Truck
LDV -- Light-Duty Vehicle
LED -- Low Emission Diesel
LEV -- Low Emission Vehicle
LEV II -- California's Low Emission Vehicle II Program
LIRAP -- Low Income Repair and Assistance Program
LNB -- Low Nitrogen Oxides (NO_X) Burners
LNC -- Low Nitrogen Oxides (NO_X) Combustors
LNG -- Liquefied Natural Gas
LTO -- Landing and Take-Off
MACT -- Maximum Achievable Control Technology
Mcf -- Thousand Cubic Feet
MCR -- Mid-Course Review
MDPV -- Medium-Duty Passenger Vehicle
MECT -- Mass Emissions Cap and Trade Program
MM5 -- Fifth Generation Meteorological Model
MMBtu/hr -- Million British Thermal Units per Hour
MMcf -- Million Cubic Feet
MMS -- Minerals Management Service

MOA -- Memorandum of Agreement
MON -- Miscellaneous Organic National Emission Standards for Hazardous Air Pollutants (NESHAP)
mph -- miles per hour
MVEB -- Motor Vehicle Emissions Budget
MW -- Megawatts
MY -- Model Year
NAAQS -- National Ambient Air Quality Standard
NCTCOG – North Central Texas Council of Governments
NEGF -- Non-Electric Generating Facility
NEI -- National Emissions Inventory
NESHAP -- National Emission Standards for Hazardous Air Pollutants
ng/J -- Nanogram per Joule
NMIM -- National Mobile Inventory Model
NOAA -- National Oceanic and Atmospheric Administration
Non-EGU -- non-Electric Generating Unit
NO_X -- Nitrogen Oxides
NO_y -- Nitrogen Species
NSCR -- Non-Selective Catalytic Reduction
NTRD -- New Technology Research and Development Program
O_3 -- Ozone
OGV -- Ocean-Going Vessel
PAYD -- Pay As You Drive
PBL -- Planetary Boundary Layer
PEI -- Periodic Emissions Inventory
PERP -- Portable Engine Registration Program
PiG -- Plume-in-Grid
PM -- Particulate Matter
$PM_{2.5}$ -- Particulate Matter 2.5 microns and less
ppb -- Parts Per Billion
ppbC -- Parts Per Billion Carbon
ppbv -- Parts Per Billion by Volume
ppm -- Parts Per Million
PSCF -- Potential Source Contribution Factors
PSDB -- Point Source Database
psia -- Pounds per Square Inch Absolute
PUC -- Public Utility Commission
RACT -- Reasonably Available Control Technology
RACM -- Reasonably Available Control Measure
RFP -- Reasonable Further Progress
RMSE -- Root Mean Square Error
ROP -- Rate-of-Progress
RRF -- Relative Reduction Factor
SB -- Senate Bill
SCAQMD -- South Coast Air Quality Management District
scfm -- Standard Cubic Feet per Minute
SCR -- Selective Catalytic Reduction
SEP -- Supplemental Environmental Programs
SETPMTC -- Southeast Texas Photochemical Modeling Technical Committee
SIC -- Standard Industrial Classification
SIP -- State Implementation Plan

SNCR -- Selective Non-Catalytic Reduction
SOV -- Single Occupancy Vehicle
STP -- Surface Transportation Program
SWCV -- Solid Waste Collection Vehicle
TAC -- Texas Administrative Code
TACB -- Texas Air Control Board
TCAA -- Texas Clean Air Act
TCEQ -- Texas Commission on Environmental Quality (commission)
TCM -- Transportation Control Measure
TDM -- Travel Demand Model
TERP -- Texas Emission Reduction Plan
TexAQS 2000 -- Texas Air Quality Study 2000
TexAQS II -- Texas Air Quality Study 2006
TKE -- Turbulent Kinetic Energy
TNMHC -- Total Non-methane Hydrocarbon
TNRCC -- Texas Natural Resource Conservation Commission
tpd -- tons per day
tpy -- tons per year
TSE -- Truck Stop Electrification
TTI -- Texas Transportation Institute
TUC -- Texas Utility Code
TxDOT -- Texas Department of Transportation
TxLED -- Texas Low Emission Diesel
USC -- United States Code
VMEP -- Voluntary Mobile Source Emissions Reduction Program
VMT -- Vehicle Miles Traveled
VOC -- Volatile Organic Compound
VRU -- Vapor Recovery Unit
ZEB -- Zero Emission Bus
ZEV -- Zero Emissions Vehicle

IDENTIFICATION OF REFERENCED DOCUMENTS

This document references SIP revisions and SIP-related documents. The following list provides clarification and additional information for those references. Direct access links to the documents are also provided.

May 2007 DFW AD SIP Revision, and **DFW 1997 Eight-Hour Ozone AD SIP Revision**, both refer to the Dallas-Fort Worth (DFW) Ozone Nonattainment Area Attainment Demonstration (AD) State Implementation Plan (SIP) Revision for the 1997 Eight-Hour Ozone Standard, (TCEQ Project No. 2006-013-SIP-NR, adopted May 2007).

April 2008 supplement to the DFW 1997 Eight-Hour Ozone AD SIP Revision refers to a TCEQ letter to the EPA of April 23, 2008, that provides clarification and supplemental information regarding the May 2007 DFW AD SIP Revision.

Related document: A March 7, 2008, letter from the EPA to the TCEQ requesting supplemental information for clarification of the May 2007 DFW AD SIP Revision.

DFW AD SIP Contingency Plan Revision refers to the DFW AD SIP Revision for the 1997 Eight-Hour Ozone Standard (Contingency Measures Plan), (TCEQ Project No. 2008-016-SIP-NR, adopted November 2008).

DFW AD SIP DERC Program Revision refers to the DFW AD SIP Revision for the 1997 Eight-Hour Ozone Standard (Discrete Emission Reduction Credits (DERC) Program), (TCEQ Project No. 2008-016-SIP-NR, adopted December 2008).

DFW RACT, Rule, and Contingency SIP Revision refers to this DFW Reasonably Available Control Technology (RACT) Update, 30 Texas Administrative Code (TAC) Chapter 117 Rule Revision Noninterference Demonstration, and Modified Failure-to-Attain Contingency Plan SIP Revision, (TCEQ Project No. 2009-021-SIP-NR, adopted March 10, 2010).

DFW 1997 eight-hour ozone standard attainment demonstration and **attainment demonstration** both refer to Texas SIP revisions applicable to the DFW nine-county nonattainment area (Collin, Dallas, Denton, Ellis, Johnson, Kaufman, Parker, Rockwall, and Tarrant Counties) demonstration of attainment for the 1997 eight-hour ozone NAAQS, comprised (to date) of the following documents: the DFW 1997 Eight-Hour Ozone AD SIP Revision; the April 2008 supplement to the DFW 1997 Eight-Hour Ozone AD SIP Revision; the DFW AD SIP Contingency Plan Revision; the DFW AD SIP DERC Program Revision; and this DFW RACT, Rule, and Contingency SIP.

The Texas SIP (in this document) refers to SIP revisions that make up the State of Texas Air Quality Implementation Plan for the Control of Ozone Air Pollution.

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CHAPTER 1. BACKGROUND AND INTRODUCTION

1.1. GENERAL

The "History of the Texas State Implementation Plan (SIP)," a comprehensive overview of SIP revisions submitted to the United States Environmental Protection Agency (EPA) by the State of Texas, is accessible from the Texas Commission on Environmental Quality's (TCEQ) Web Site, at http://www.tceq.state.tx.us/assets/public/implementation/air/sip/miscdocs/SIPHistory_updated.pdf.

The Dallas-Fort Worth (DFW) Ozone Nonattainment Area Attainment Demonstration (AD) SIP Revision for the 1997 Eight-Hour Ozone Standard, also called the DFW 1997 Eight-Hour Ozone AD SIP or May 2007 DFW AD SIP, was adopted by the TCEQ and submitted to the EPA in May 2007. The DFW 1997 eight-hour ozone nonattainment area includes Collin, Dallas, Denton, Ellis, Johnson, Kaufman, Parker, Rockwall, and Tarrant Counties.

1.1.1. Background

During the EPA's review of the DFW 1997 Eight-Hour Ozone AD SIP Revision submittal, a March 7, 2008, letter from the EPA to the TCEQ requested clarification and additional information applicable to the DFW 1997 Eight-Hour Ozone AD SIP Revision. A TCEQ letter to the EPA of April 23, 2008, (referred to as the April 2008 Supplement to the DFW 1997 Eight-Hour Ozone AD SIP Revision) provided the EPA with additional information to clarify and support the submittal.

Upon review of the April 2008 Supplement to the DFW 1997 Eight-Hour Ozone AD SIP Revision, the EPA requested that the TCEQ implement an enforceable mechanism to limit the use of Discrete Emission Reduction Credits (DERCs) in the nine-county DFW eight-hour ozone nonattainment area, consistent with attainment and maintenance of the 1997 eight-hour ozone National Ambient Air Quality Standard (NAAQS). The EPA asked the state to revise the DFW 1997 Eight-Hour Ozone AD SIP Revision to provide additional emissions reductions sufficient to meet contingency plan mandates of the Federal Clean Air Act (FCAA) and to implement a rule limiting DERC use in the DFW area.

In June 2008, the TCEQ informed the EPA of its intention to propose a revised contingency plan as well as DERC SIP and rule revisions to satisfy the EPA requests. The following month (July 2008) the EPA proposed a conditional approval of the DFW 1997 Eight-Hour Ozone AD SIP Revision. The DFW AD SIP Contingency Plan Revision, adopted by the commission and submitted to the EPA in November 2008, revised the contingency plan for the DFW 1997 eight-hour ozone standard attainment demonstration. The revised plan identified four measures to provide reductions in the event of failure to meet the June 15, 2010, deadline for attainment of the 1997 eight-hour ozone standard for the DFW area. Three previously identified volatile organic compounds (VOC) rule contingency measures (applicable to offset lithographic printing, petroleum-based dry cleaning, and degassing or cleaning processes of stationary, marine, and transport vessels), along with an allocation of a portion of the surplus emission reductions to result from 2009 through 2010 vehicle fleet turnover, completed the revised failure-to-attain contingency plan.

Effective February 13, 2009, the EPA published a final conditional approval of the DFW nonattainment area's 1997 eight-hour ozone attainment demonstration, as submitted in the May 2007 DFW AD SIP Revision and April 2008 Supplement, and as revised in the DFW AD SIP Contingency Plan Revision. The published notice deemed the failure-to-attain contingency plan

and the VOC reasonably available control technology (RACT) analysis elements of the attainment demonstration to be adequate and both were given final approval by the EPA. A final full approval of the attainment demonstration was withheld by the EPA, pending approval of SIP and rule revisions needed to provide an enforceable mechanism to limit DERC use in the DFW area consistent with the 1997 eight-hour ozone attainment demonstration.

The DFW AD SIP DERC Program Revision was adopted by the commission and submitted to the EPA in December 2008. That SIP revision and the corresponding DERC rule revision addressed the EPA's requirement for final approval of the DFW attainment demonstration by limiting DERC use in the DFW area consistent with attainment of the 1997 eight-hour ozone standard. The DERC rule in 30 Texas Administrative Code (TAC) Chapter 101 was revised to include requirements for the review and determination of annual DERC use limitations and apportionments for DERC use within the nine-county DFW area. At the time of the commission's adoption of this DFW RACT, Rule, and Contingency SIP Revision, the DFW AD SIP DERC Program Revision and the Chapter 101 DERC rule revision had not yet been acted upon by the EPA.

1.1.2. Current SIP Action

This DFW RACT Update, 30 Texas Administrative Code (TAC) Chapter 117 Rule Revision Noninterference Demonstration, and Modified Failure-to-Attain Contingency Plan SIP Revision (DFW RACT, Rule, and Contingency SIP Revision) revises the DFW 1997 eight-hour ozone attainment demonstration, and as a result, the Texas Air Quality Implementation Plan for the Control of Ozone Air Pollution. Several actions required by the FCAA are finalized in this SIP revision, including: (1) an update to DFW VOC RACT analysis determinations; (2) incorporation of adopted 30 TAC Chapter 115 and 30 TAC Chapter 117 rule revisions into the Texas SIP; (3) demonstration that the Chapter 117 rule revision will not interfere with attainment of the 1997 eight-hour ozone standard in the DFW area; and (4) modification of the contingency plan for the DFW 1997 eight-hour ozone attainment demonstration. Additional information about each of these SIP actions is provided in Chapter 4: *Required Control Strategy Elements* of this document.

This SIP revision updates the VOC RACT determination element of the DFW attainment demonstration by including analyses of control techniques guidelines (CTG) documents issued by the EPA in 2006, 2007, and 2008, as required by the FCAA. Documentation of the state's determinations regarding those CTG recommendations is provided in Chapter 4, *Required Control Strategy Elements*, of this SIP revision and in Appendix A: *Dallas-Fort Worth Reasonably Available Control Technology Analysis Update.*

A concurrently adopted 30 TAC Chapter 115 rule revision is incorporated into the Texas SIP via this DFW RACT, Rule, and Contingency SIP Revision. The Chapter 115 rule was revised based on new VOC RACT determinations made for the DFW area for offset lithographic and letterpress printing sources, based on CTG recommendations issued by the EPA in 2006 for those sources. The adopted rule revision (TCEQ Rule Project 2008-019-115-EN) implements the CTG recommendation to reduce the VOC content in fountain and cleaning solutions used by offset lithographic printing operations. Applicability of the rule to smaller sources previously exempt is also expanded by the rule revision. Additional information concerning RACT determinations for heatset press and letterpress printing sources is provided in Chapter 4: *Required Control Strategy Elements* and in Appendix A: *Dallas-Fort Worth Reasonably Available Control Technology Analysis Update*.

This SIP revision also incorporates a 30 TAC Chapter 117 rule revision that was adopted by the commission on January 13, 2010. The Chapter 117 rule was revised in response to a rulemaking petition filed by the Elk Corporation of Texas that was approved by the commission on January 28, 2009. The rule revision exempts from Chapter 117 regulation low temperature drying and curing ovens used in mineral wool-type fiberglass manufacturing and wet-laid, non-woven fiber mat manufacturing where nitrogen-containing resins or other additives are used.

The Chapter 117 rule exemption creates a potential nitrogen oxides (NO_X) emission reduction loss to the DFW area ozone control strategy of up to 0.1 tons per day (tpd) from Chapter 117 control measures included in the DFW 1997 Eight-Hour Ozone AD SIP Revision. To offset the potential loss of this NO_X reduction that could result from the new exemption, this DFW RACT, Rule, and Contingency SIP Revision allocates to the DFW control strategy a replacement 0.1 tpd NO_X reduction out of surplus emission reductions to result from turnover of the vehicle fleet from 2009 to 2010 in the DFW area. This action maintains integrity of the DFW 1997 eight-hour ozone attainment demonstration, and provides the required demonstration of noninterference from Chapter 117 rule revisions.

Prior to this SIP revision, the DFW failure-to-attain contingency plan identified three state VOC rule contingency measures along with an allocation from surplus fleet turnover emission reductions. The VOC rule measures were Chapter 115 rules applicable to (1) offset lithographic printing, (2) petroleum-based dry cleaning, and (3) degassing or cleaning processes of stationary, marine, and transport vessels. Because the offset lithographic printing rule was revised for RACT purposes in this SIP revision, it may no longer be used as a contingency measure. This DFW RACT, Rule, and Contingency SIP Revision modifies the DFW 1997 eight-hour ozone standard failure-to-attain contingency plan to no longer contain the offset lithographic printing measure. The modified plan retains the two state VOC rules applicable to petroleum-based dry cleaning and degassing or cleaning processes of stationary, marine, and transport vessels, along with the fleet turnover emission reductions previously allocated for contingency purposes. The modified plan also contains an additional allocation of the surplus emission reductions predicted to result from vehicle fleet turnover for the one-year period beginning June 15, 2009. The additional reductions are allocated for contingency purposes to offset and replace reductions removed from the plan with removal of the offset lithographic printing rule measure. The modified failure-to-attain contingency plan provides the required 3 percent reduction to the attainment demonstration's 1999 base year emissions inventory with the reductions from the two remaining state VOC rule contingency measures together with the revised fleet turnover reduction allocations for contingency.

Surplus fleet turnover emission reduction allocations are provided in Table 4.3: *Allocation of Surplus Emissions Reductions from 2009 through 2010 Fleet Turnover*. After surplus fleet turnover emission reductions are allocated to offset the possible 0.1 tpd NO_X emission increase from Chapter 117 rule exemption expansion as well as the offset lithographic printing rule contingency measure reductions, a 7.42 tpd NO_X emission reduction from 2009 through 2010 vehicle fleet turnover remains surplus and available for future SIP purposes. Additional information is provided in Chapter 4: *Required Control Strategy Elements*.

There are no outstanding SIP requirements for the DFW area under the one-hour ozone NAAQS. A final rule published in the *Federal Register* by the EPA on October 16, 2008, (73 FR 61357) describes an EPA determination, effective November 17, 2008, that the DFW one-hour ozone nonattainment area (Collin, Dallas, Denton, and Tarrant Counties) has attained the one-hour ozone standard. The EPA based this determination upon its review of certified ambient air monitoring data showing attainment of the one-hour ozone NAAQS for the 2004 through 2006

period. The one-hour ozone standard attainment determination was further supported by EPA review of quality-controlled, quality-assured ozone data for 2007 and 2008. The EPA determination also provided that due to the area's one-hour ozone standard attainment, all requirements to submit any demonstration of attainment, 5 Percent Increment of Progress (IOP) plan, reasonable further progress (RFP) plan, contingency plan, or other planning SIP revisions related to attainment of the one-hour ozone NAAQS, are suspended for as long as the area continues to attain that standard.

1.2. HEALTH EFFECTS

In 1997, the EPA revised the NAAQS for ozone from a one-hour to an eight-hour standard. To support the 1997 eight-hour ozone standard, the EPA provided information indicating that health effects can occur at levels lower than the previous standard and at exposure times longer than one hour. Exposure to ambient ozone can aggravate asthma in some people. Repeated exposures to ozone can make people more susceptible to respiratory infection and lung inflammation and can aggravate preexisting respiratory diseases, such as bronchitis and emphysema.

Children are at a relatively higher risk from exposure to ozone when compared to adults, since they breathe more air per pound of body weight than adults and because children's respiratory systems are still developing. Children also spend a considerable amount of time outdoors during summer and during the start of the school year (August - October) when high ozone levels are typically recorded. Adults most at risk to ozone exposure are people working or exercising outdoors and individuals with preexisting respiratory diseases.

1.3. PUBLIC/STAKEHOLDER PARTICIPATION

The commission held two public hearings to receive oral comments on the proposal of this SIP revision, as follows.

CITY	DATE	TIME	LOCATION
Austin	October 29, 2009	1:00 P.M. (CST)	TCEQ Headquarters 12100 Park 35 Circle Austin, TX 78753 Building E, Room 201S
Fort Worth	November 2, 2009	2:00 P.M. (CST)	TCEQ Region 4 Offices 2309 Gravel Road Fort Worth, TX 76118 Public Meeting Room

The comment period opened on October 9, 2009, and closed on November 9, 2009. Written comments were accepted via mail, fax, and through the eComments system. Prior to and following each of the public hearings, TCEQ staff answered questions and provided information to interested persons. The October 29, 2009, hearing in Austin was not officially opened because no party indicated a desire to provide comment. Comments were received at the November 2, 2009, hearing in Fort Worth. Comments were received via the eComments system that are applicable to the 30 TAC Chapter 115 and Chapter 117 rule revisions associated with this SIP revision, which are addressed in the preambles applicable to each of those rules. Only comments applicable to this DFW RACT, Rule, and Contingency SIP Revision are addressed in the Response to Comments Section of this SIP revision.

1.4. SOCIAL AND ECONOMIC CONSIDERATIONS

There are no social or economic issues of concern attributable to this DFW RACT, Rule, and Contingency SIP Revision. For a detailed explanation of any social and economic issues involved with the associated Chapter 115 and 117 rulemaking, please refer to the preamble of each of those rules, accessed from the TCEQ public Web site at http://www5.tceq.state.tx.us/rules/. TCEQ rules may also be accessed from the *Texas Register* index located on the Secretary of the State of Texas Web site, at http://www.sos.state.tx.us/texreg/index.shtml.

1.5. FISCAL AND MANPOWER RESOURCES (No revision)

CHAPTER 2. PHOTOCHEMICAL MODELING

(No revision)

CHAPTER 3. CORROBORATIVE ANALYSIS

(No revision)

CHAPTER 4. REQUIRED CONTROL STRATEGY ELEMENTS

4.1. OVERVIEW OF EXISTING CONTROL STRATEGIES (No revision)

4.2. NITROGEN OXIDES (NO_X) AND VOLATILE ORGANIC COMPOUNDS (VOC) CONTROL MEASURES

4.2.1. VOC Control Measures

4.2.1.1. Background

The Dallas-Fort Worth (DFW) eight-hour ozone nonattainment area is currently classified moderate nonattainment for the 1997 eight-hour ozone National Ambient Air Quality Standard (NAAQS). Under the standard, the DFW area is required to meet the mandates of the Federal Clean Air Act (FCAA) under §172(c)(1) and §182(b)(2) and (f). According to the United States Environmental Protection Agency (EPA) Final Rule to Implement the 1997 eight-hour ozone NAAQS (40 CFR §51.912), states containing areas classified as moderate nonattainment or higher must submit state implementation plan (SIP) revisions demonstrating that their current rules fulfill the reasonable available control technology (RACT) requirements for all control techniques guidelines (CTG) categories and all non-CTG major sources of nitrogen oxides (NO_X) and volatile organic compounds (VOC).

The EPA previously approved the VOC RACT analysis submitted in the DFW 1997 Eight-Hour Ozone Attainment Demonstration (AD) SIP Revision (74 FR 1903; January 14, 2009). The analysis demonstrated that all CTG emission source categories addressed by CTG documents issued prior to 2006 and all major VOC emission sources in the DFW area were subject to rules in 30 Texas Administrative Code (TAC) Chapter 115 or other federally enforceable measures that meet or exceed applicable RACT requirements, or that further emission controls were not technologically or economically feasible. However, the EPA-approved 2007 VOC RACT analysis did not address 11 CTG documents issued between 2006 and 2008 containing recommendations for VOC controls on a variety of consumer and commercial products. Information regarding TCEQ's RACT determinations for these 11 CTG documents is provided in Appendix A: *Dallas-Fort Worth Reasonably Available Control Technology Analysis Update*. Concurrent with this SIP revision, the Texas Commission on Environmental Quality (TCEQ) adopted revisions to 30 TAC Chapter 115, Subchapter E, Division 4 to implement the EPA's 2006 Offset Lithographic and Letterpress Printing CTG recommendations that represent RACT in the DFW area (TCEQ Rule Project 2008-019-115-EN).

4.2.1.2. 30 TAC Chapter 115 VOC Rule Revision (Rule project 2008-019-115-EN)

The TCEQ has adopted revisions to 30 TAC Chapter 115, Subchapter E, Division 4 to implement the EPA's 2006 Offset Lithographic and Letterpress Printing CTG recommendations that represent RACT in the DFW area concurrent with this SIP revision. The adopted Chapter 115 rulemaking reduces the VOC content of the fountain solutions and cleaning solutions used by offset lithographic printing operations and expands rule applicability to include smaller offset lithographic printing sources that were previously exempt from these rules.

Additional information on the offset lithographic printing rule revision is contained in the preamble for TCEQ Rule project 2008-019-115-EN. Additional information on the RACT

analysis of the 2006 Offset Lithographic and Letterpress Printing CTG can be found in Appendix A: *DFW Reasonably Available Control Technology Analysis Update*.

Because the commission revised Chapter 115 rules to include RACT requirements for offset lithographic printing sources, the state VOC rule for those sources is no longer available for use as a measure in the contingency plan for the DFW 1997 eight-hour ozone attainment demonstration. Therefore, the offset lithographic printing rule is no longer identified as a measure in the modified failure-to-attain contingency plan adopted within this DFW RACT, Rule, and Contingency SIP Revision. To maintain integrity of the attainment demonstration, this SIP revision allocates emission reductions from fleet turnover to replace the contingency reduction removed with the offset lithographic printing rule measure, as more specifically described in Section 4.6: *Contingency Measures*, of this SIP revision.

4.2.2. NO_X Control Measures

4.2.2.1. Major Source NO_X Reductions

Industrial, Commercial, and Institutional (ICI) Sources

On December 11, 2008, a petition for rulemaking requesting an amendment to Chapter 117, Subchapter B, Division 4, for certain DFW area sources, was filed with the commission. The petition (TCEQ Rule Project No. 2009-012-PET-NR), submitted by Brown McCarroll, L.L.P., on behalf of Elk Corporation of Texas, requested that the agency initiate rulemaking to revise 30 TAC Chapter 117, Subchapter B, §117.403(a)(12). The request related to owners and operators of low-temperature drying and curing ovens used in mineral wool-type fiberglass manufacturing and wet-laid, non-woven fiber mat manufacturing located at major sources in the DFW 1997 eight-hour ozone nonattainment area. Source categories affected by the petitioners request are currently required to comply with Chapter 117 rule requirements by March 1, 2010.

Elk Corporation of Texas operates an asphalt shingle manufacturing plant in Ennis, Texas. In the petitioner's manufacturing process, a urea-formaldehyde resin binder is used with other nitrogen-containing compounds on a fiberglass substrate that is then passed through a drying and curing oven. This operation results in nitrogen-containing off-gas that is vented through incinerators and reacts with oxygen to form NO_X. The petitioner asserts that emissions associated with the manufacturing process alone makes compliance with the applicable NO_X emission specification in §117.410(b) of 0.036 pounds per million British thermal unit (lb/MMBtu) infeasible. On January 28, 2009, the commission considered and approved the petition for rulemaking. The commission issued an order on February 2, 2009, directing the executive director to examine the issues in the petition and to initiate rulemaking.

30 TAC Chapter 117 Rule revision (Rule Project 2009-023-117-EN)

On January 13, 2010, the TCEQ adopted an amendment to Chapter 117, Subchapter B, Division 4, §117.403 to implement the stationary source rule changes requested by Elk Corporation of Texas for the DFW 1997 eight-hour ozone nonattainment area. The rule revision expands an exemption to §117.403(a)(12) to include low-temperature drying ovens and curing ovens used in wet-laid, non-woven fiber mat manufacturing, as well as in low-temperature drying ovens used in mineral wool-type fiberglass manufacturing where nitrogen-containing resins or other additives are used. The rule revision became effective on February 4, 2010. This DFW RACT, Rule, and Contingency SIP Revision incorporates a revised §117.403 into the Texas SIP.

In 2006, during Chapter 117 rulemaking development for the DFW 1997 eight-hour ozone nonattainment area, comments were received from Owens Corning pointing out technical

feasibility issues with controlling NO_X emissions from curing ovens of this specific operation. In response to those comments, a provision was added under §117.403(a)(12) to exempt curing ovens used in mineral wool-type fiberglass manufacturing in which nitrogen-bound chemical additives are used. While the type of manufacturing covered by the rule is different from that specified in the current rule exemption, the technical feasibility issue for Elk Corporation of Texas is similar to the Owens Corning issue and is the basis of the current exemption in §117.403(a)(12). The addition of nitrogen-bound chemical additives contributes to the creation of non-combustion related thermal NO_X that cannot be controlled using control methodologies identified by the commission as appropriate for curing ovens used in mineral wool-type fiberglass manufacturing.

NO_X emissions from curing ovens of this type are small contributors to the total NO_X emissions. Due to the expanded exemption from the Chapter 117 rule revision, up to 0.1 tons per day (tpd) of anticipated NO_X emission reduction previously anticipated to support the DFW 1997 eight-hour ozone attainment demonstration will no longer be available. Therefore, a demonstration of noninterference submittal to the EPA is required under the FCAA §110(l).

Demonstration of Noninterference under FCAA §110(l)
The estimated 0.1 tpd NO_X emission increase and potential loss to the DFW control strategy that could result from the Chapter 117 rule exemption expansion is insignificant and does not interfere with the DFW 1997 ozone attainment demonstration. However, the TCEQ provides this demonstration of noninterference to support the state's assertion that expansion of the exemption in §117.403(a)(12) does not negatively impact the status of the area's attainment of the NAAQS.

The EPA issued draft guidance on June 8, 2005, titled "Demonstrating Noninterference under Section 110(l) of the Clean Air Act When Revising a State Implementation Plan." The guidance provides options available for states to demonstrate noninterference in nonattainment areas for affected pollutants. One option for demonstrating noninterference is through the substitution of measures that provide equivalent or greater emissions reduction/air quality benefits than the measure(s) being removed from the SIP.

This SIP revision replaces the potential 0.1 tpd NO_X control strategy reduction loss from the expanded §117.403 exemption with an equal 0.1 tpd NO_X allotment from surplus vehicle fleet turnover emission reductions predicted to occur in the one-year period beginning June 15, 2009. Allocating 0.1 tpd NO_X reduction from fleet turnover surplus emissions ensures that adoption of the Chapter 117 rulemaking associated with this DFW RACT, Rule, and Contingency SIP Revision will not interfere with the DFW 1997 eight-hour ozone attainment demonstration.

4.2.2.2. – 4.2.2.4. (No revision)

4.2.3. – 4.2.7. (No revision)

4.3. REASONABLY AVAILABLE CONTROL TECHNOLOGY (RACT) ANALYSIS

4.3.1. DFW VOC RACT Analysis Update

The DFW eight-hour ozone nonattainment area is currently classified moderate nonattainment for the 1997 eight-hour ozone NAAQS. Under the 1997 eight-hour ozone standard, the DFW area is required to meet the mandates of the FCAA under §172(c)(1) and §182(b)(2) and (f). According to the EPA's Final Rule to Implement the 1997 eight-hour ozone NAAQS (40 CFR §51.912), states containing areas classified as moderate nonattainment or higher must submit a SIP revision

demonstrating that their current rules fulfill the RACT requirements for all CTG categories and all non-CTG major sources of NO_X and VOC.

In the September 17, 1979, issue of the Federal Register (44 FR 53762) RACT is defined as the lowest emissions limitation that a particular source is capable of meeting by the application of control technology that is reasonably available considering technological and economic feasibility. RACT requirements for nonattainment areas classified as moderate and higher are included in the FCAA to assure that significant source categories at major sources of ozone precursor emissions are controlled to a reasonable extent, but not necessarily to best available control technology levels expected of new sources or to maximum achievable control technology levels required for major sources of hazardous air pollutants. Advancing attainment of the area is not a factor of consideration when evaluating RACT because the benefit of implementing RACT is presumed under the FCAA.

The EPA previously approved the VOC RACT analysis as submitted in the May 2007 DFW Eight-Hour Ozone Attainment Demonstration SIP Revision (74 FR 1903; January 14, 2009). The analysis demonstrated all CTG emission source categories addressed by CTG documents issued prior to 2006 and all major VOC emission sources in the DFW area were subject to rules in 30 TAC Chapter 115, or other federally enforceable measures, that meet or exceed the applicable RACT requirements, or that further emission controls on the sources were either not technologically or economically feasible.

However, the EPA-approved 2007 VOC RACT analysis did not address 11 CTG documents issued between 2006 and 2008 with recommendations for VOC controls on a variety of consumer and commercial products. Some of the new CTG recommendations are updates to previously issued CTG documents and some are recommendations for new emission source categories. This RACT analysis update addresses the evaluation of these 11 new CTG documents to determine if additional VOC controls are necessary to fulfill RACT requirements for the DFW area.

The following is a list of the CTG documents:

- *Flat Wood Paneling Coatings, Group II Issued in 2006*
- *Flexible Packaging Printing Materials, Group II Issued in 2006*
- *Industrial Cleaning Solvents, Group II Issued in 2006*
- *Offset Lithographic and Letterpress Printing, 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*
- *Auto and Light-Duty Truck Assembly Coatings, Group IV Issued in 2008*
- *Fiberglass Boat Manufacturing Materials, Group IV Issued in 2008*
- *Miscellaneous Industrial Adhesives, Group IV Issued in 2008*
- *Miscellaneous Metal and Plastic Parts Coatings, Group IV Issued in 2008*

A brief summary of the TCEQ's RACT determinations regarding these 11 CTG documents follows. Additional details regarding the evaluation of the 11 CTG documents are provided in Appendix A: *Dallas-Fort Worth Reasonably Available Control Technology Analysis Update*.

4.3.1.1. CTG Documents Not Applicable to the DFW Area

The TCEQ provides a negative declaration for the Flat Wood Paneling Coatings CTG and the Fiberglass Boat Manufacturing CTG. The TCEQ determined that no sources meeting the applicability criteria recommended in these CTG documents are located in the DFW area.

4.3.1.2. CTG Documents for which RACT Determinations are Not Being Made

The TCEQ is not making a determination at this time of whether the recommendations in the following eight CTG documents represent RACT for Texas: Industrial Cleaning Solvents, Miscellaneous Industrial Adhesives, Large Appliance Coatings, Metal Furniture Coatings, Miscellaneous Metal and Plastic Parts Coatings, Flexible Packaging Printing Materials, Automobile and Light-Duty Truck Assembly Coatings, and Paper, Film, and Foil Coatings.

The TCEQ's initial assessment of Industrial Cleaning Solvents and the Miscellaneous Industrial Adhesives CTG documents indicates that the EPA substantially underestimated the scope and potential impact of implementing the CTG recommendations, as they would have widespread and potentially adverse impacts to small businesses and micro-businesses. The TCEQ will continue to evaluate these CTG documents and will provide small business outreach to engage potentially impacted stakeholders. Research to determine the quantity of sources affected by the recommendations has been initiated. The Executive Director will proceed with RACT analyses of these CTGs and will initiate a future SIP revision and rulemaking for the commission's consideration, if necessary, in order to submit RACT determinations to the EPA in a timely manner.

By letter dated December 8, 2008, the TCEQ requested clarification from the EPA regarding several issues related to recommendations in the CTG documents for Large Appliance Coatings, Metal Furniture Coatings, and Miscellaneous Metal and Plastic Parts Coatings. A number of the VOC content limits recommended for specific coatings categories are less stringent than the more general VOC content limits specified in the EPA's original CTG recommendations. The TCEQ requested clarification to assure that implementation of the new recommendations would not be backsliding and to be certain that the TCEQ has appropriate information to determine if the CTG recommendations actually represent RACT for Texas. As of the September 23, 2009, TCEQ's agenda for proposal of this SIP revision, the EPA had not formally responded to the request for clarification; therefore, the TCEQ did not propose RACT determinations for these CTG document categories. However, in comments submitted for this SIP revision, the EPA provided suggestions and guidance regarding the issues raised by the TCEQ in the December 2008 letter. The Executive Director will proceed with RACT analyses of these three CTG documents based on guidance provided in the EPA's comments and will initiate a future SIP revision and rulemaking for the commission's consideration, if necessary, in order to submit RACT determinations to the EPA in a timely manner.

At the September 23, 2009, agenda for proposal of this SIP revision, the TCEQ determined that emission sources affected by recommendations in the Flexible Packaging Printing Materials, Automobile and Light-Duty Truck Assembly Coatings, and Paper, Film, and Foil CTG documents have enforceable permit limitations in place that restrict VOC emissions to levels consistent with the recommendations and that additional controls were not necessary. However, in response to the EPA's comments on this SIP revision, the TCEQ has decided to reevaluate these CTGs for RACT determination. The Executive Director will proceed with these analyses and will initiate a future SIP revision and rulemaking for the commission's consideration, if necessary, in order to submit RACT determinations to the EPA in a timely manner.

4.3.1.3. CTG Documents that Represent RACT for the DFW Area

Concurrent with this SIP revision, the TCEQ adopted revisions to 30 TAC Chapter 115, Subchapter E, Division 4 to implement the EPA's 2006 Offset Lithographic and Letterpress Printing CTG recommendations that represent RACT in the DFW area (TCEQ Rule Project 2008-019-115-EN). The adopted Chapter 115 rulemaking reduces the VOC content of the fountain solutions and cleaning solutions used by offset lithographic printing operations and expands the rule applicability to include smaller offset lithographic printing sources that were previously exempt from these rules. The overall VOC control level in the adopted Chapter 115 rules is equivalent to or more stringent than the EPA's 2006 CTG recommendations and sufficient to fulfill RACT for offset lithographic printing operations in the DFW area.

4.4. - 4.5. (No revision)

4.6. CONTINGENCY MEASURES

4.6.1. Background

FCAA (42 USC §7502(c)(9) and §7511a(c)(9)) and the EPA's final Phase 2 1997 eight-hour ozone implementation rule require that the SIPs for all 1997 eight-hour ozone nonattainment areas include contingency measures as additional controls needed to further reduce emissions in the event an area fails to attain by its attainment date. The FCAA requires that states with ozone nonattainment areas classified as moderate and above include contingency measures in their SIP (sections 172(c)(9) and 182(c)(9)). Per the FCAA, the failure-to-attain contingency plan must identify control measures sufficient to secure an additional 3 percent reduction (from the base year emissions inventory used for development of the attainment demonstration) in ozone precursor emissions should a moderate nonattainment area fail to attain the 1997 eight-hour ozone NAAQS by the June 15, 2010, required attainment date. The May 2007 DFW AD SIP Revision, Appendix B: *Emissions Inventory Development* identifies 520.08 tpd of VOC and 754.56 tpd of NO_X in the 1999 base year emissions inventory from all anthropogenic sources in the DFW nine-county nonattainment area.

As part of its January 14 2009, final conditional approval of the DFW 1997 Eight-Hour Ozone AD SIP Revision, as supplemented and revised (74 FR 1903), the EPA deemed the failure-to-attain contingency plan (as submitted in the May 2007 DFW AD SIP Revision, supplemented in April 2008, and revised in the November 2008 DFW AD SIP Contingency Plan Revision) to be complete and fully approved. That contingency plan identified emissions reductions from three state VOC rules along with emission reductions from the 2009 through 2010 mobile source fleet turnover as the contingency measures. At the time these VOC rules were identified for the DFW 1997 eight-hour ozone failure-to-attain contingency plan, they were not required to meet VOC RACT requirements. The three rules, applicable to (1) Offset Lithographic Printing, as in 30 TAC § 115.449(c); (2) Degassing or Cleaning of Stationary, Marine, and Transport Vessels, as in 30 TAC §115.549(b); and (3) Petroleum Dry Cleaning, as in 30 TAC §115.559(a), were determined to provide a cumulative 1.80 tpd VOC emission reduction from sources in Collin, Dallas, Denton, and Tarrant Counties. Surplus emission reductions predicted to result from the fleet turnover to occur over a one-year period beginning June 15, 2009, were identified to provide the remainder of emission reductions needed for the 3 percent contingency requirement.

The turnover of the on-road fleet of cars and trucks will result in additional VOC and NO_X emission benefits in 2009 and beyond because newer vehicles have significantly lower emission standards than vehicles they are replacing. New vehicle emission standards are lower primarily

due to a number of federal rules such as the Tier 2 standards for automobiles and light trucks, and the 2007 heavy-duty diesel standards for large diesel highway trucks. Emission reductions predicted to occur from the fleet turnover during the one-year period beginning June 15, 2009, are estimated to total 4.86 tpd VOC and 20.78 tpd NO_X.

4.6.2. Modified DFW 1997 Eight-Hour Ozone Failure-to-Attain Contingency Plan

This DFW RACT, Rule, and Contingency SIP Revision revises the contingency plan for the DFW 1997 eight-hour ozone attainment demonstration. Removal of the contingency measure for offset lithographic printing and a modification of the allotment of fleet turnover reductions dedicated to the failure-to-attain contingency plan are both included in this SIP revision. This DFW RACT, Rule, and Contingency SIP Revision dedicates 13.36 tpd of the NO_X emission reductions, and 4.86 tpd of the VOC emission reductions predicted from the June 2009 through 2010 fleet turnover to provide reductions for the contingency plan.

Due to the associated Chapter 115 rule applicable to the same sources, the offset lithographic printing rule contingency measure (and the associated 0.24 tpd predicted VOC reduction) is being removed as a contingency measure. However, the two other state VOC rules identified in the SIP revision will remain as contingency measures. Those two VOC rule contingency measures provide controls applicable to the degassing or cleaning process of stationary, marine, and transport vessels, and to petroleum-based dry cleaning.

The three contingency measures identified in Table 4.1: *Emission Reductions Provided by Modified Failure-to-Attain Contingency Plan*, and further described below, are measures identified for the DFW 1997 eight-hour ozone failure-to-attain contingency plan, for implementation in the event the contingency plan is triggered.

1. A VOC reduction of 0.18 tpd will be made through controls on the degassing or cleaning process of stationary, marine, and transport vessels. All affected persons in Collin, Dallas, Denton, and Tarrant Counties must be in compliance with 30 TAC, Chapter 115, Subchapter F, Division 3 (relating to Degassing or Cleaning of Stationary, Marine, and Transport Vessels) as soon as practicable, but no later than one year, after notification is published in the *Texas Register* of the commission's determination that this contingency rule is necessary as a result of failure to attain the 1997 NAAQS for ozone by the attainment deadline as set forth in the 1990 Amendments to the FCAA, § 172(c)(9). The commission will submit notification to the *Texas Register* for publication within 60 days after the EPA notifies the state of its failure through publication of a final action in the *Federal Register*.

2. A VOC reduction of 1.38 tpd will be made through controls on petroleum-based dry cleaning businesses. All affected petroleum solvent dry cleaning facilities in Collin, Dallas, Denton, and Tarrant Counties must be in compliance with 30 TAC, Chapter 115, Subchapter F, Division 4 (relating to Petroleum Dry Cleaning Systems) as soon as practicable, but no later than one year, after notification is published in the *Texas Register* of the commission's determination that this contingency rule is necessary as a result of failure to attain the 1997 NAAQS for ozone by the attainment deadline as set forth in the 1990 Amendments to FCAA, §172(c)(9). The commission will submit notification to the *Texas Register* for publication within 60 days after the EPA notifies the state of its failure through publication of a final action in the *Federal Register*.

3. Emission reductions to provide 4.86 tpd VOC and 13.36 tpd NO_X, allotted to the DFW contingency plan from and out of surplus emission reductions that will result from the motor vehicle fleet turnover to occur during a one-year period beginning June 15, 2009.

Table 4.1: Emission Reductions Provided by Modified Failure-to-Attain Contingency Plan

Contingency Plan Emission Reductions (tpd)	*VOC*	*NO_X*
State VOC rule contingency measure applicable to the Degassing or Cleaning of Stationary, Marine, and Transport Vessels*	0.18	00.00
State VOC rule contingency measure applicable to Petroleum Dry Cleaning*	1.38	00.00
Mobile source fleet turnover emission reductions** (portion allocated for contingency)	4.86	13.36
Total Contingency Plan Reductions	*6.42*	*13.36*

*applicable in Collin, Dallas, Denton, and Tarrant Counties only
**attributable to DFW nine-county area

The method used to calculate the DFW 3 percent contingency emission reduction requirement is represented in the following equation:
R_V/VOCBASE + R_N/NO_XBASE >= 0.03 where;
R_V = typical summer day VOC reductions in mass units
R_N = typical summer day NO_X reductions in mass units
VOCBASE = the mass of anthropogenic VOC emissions in the 1999 base year inventory, and
NO_XBASE = the mass of anthropogenic NO_X emissions in the 1999 base year inventory, and was calculated as follows: [(6.42/520.08) + (13.36/754.56)] = 3%

Table 4.2: *Calculations Showing Required 3 Percent Contingency Reductions,* shows that the DFW contingency plan will provide a 1.23 percent reduction from the DFW area 1999 base year VOC emissions inventory, and a 1.77 percent reduction from the corresponding NO_X emissions inventory. Following the EPA's NO_X substitution guidance to calculate the contingency plan reductions, the 1.23 (percent VOC reduction) is added to the 1.77 (percent NO_X reduction) to equal the required 3.00 (percent total VOC and/or NO_X emissions reductions). This modified contingency plan identifies measures to provide the required reductions, totaling 6.42 tpd VOC and 13.36 tpd NO_X.

Table 4.2: Calculations Showing Required 3 Percent Contingency Reductions

Contingency Plan Reduction Calculations	*VOC*	*NO_X*
1999 base year EI, DFW 9-county area (tpd weekday)	520.08	754.56
tpd emissions reductions from the two state VOC rule measures	1.56	0.00
tpd emissions reductions from the surplus fleet turnover emissions reductions allotted for the contingency plan	4.86	13.36
(Total tpd reductions to be provided by the modified contingency plan)	***(6.42)***	***(13.36)***
Percentage of inventory reduction for each precursor	*1.23%*	*1.77%*
Total percentage of reductions provided by the plan	***3.00% total***	

4.6.3. Allocations from Surplus 2009 through 2010 Fleet Turnover Reductions

Table 4.3: A*llocation of Surplus Emissions Reductions from 2009-2010 Fleet Turnover* consolidates emissions reductions allocations in this DFW RACT, Rule, and Contingency SIP. Out of the total 4.86 tpd VOC and 20.78 tpd NO_X emission reductions predicted to occur from the fleet turnover expected during the one-year period beginning June 15, 2009, all of the 4.86 tpd VOC and 13.36 tpd of the NO_X reductions are allotted to provide reductions for the DFW contingency plan. The remaining 7.32 tpd surplus NO_X emissions reduction from fleet-turnover is surplus and usable for other future SIP purposes.

Table 4.3: Allocation of Surplus Emissions Reductions from 2009 - 2010 Fleet Turnover

Vehicle Fleet Turnover Emission Reductions* (tpd)	*VOC*	*NO_X*
Total emissions reductions from June 2009 through 2010 fleet turnover	4.86	20.78
Allocation to replace NO_X reduction lost from control strategy upon adoption of Chap. 117 rulemaking (see section 4.2.2.1)	-0.00	- 0.10
Allocation to the DFW contingency plan	-4.86	- 13.36
Remaining surplus emission reductions available for future SIP use	***0.00***	***7.32***

* from the nine-county DFW eight-hour ozone nonattainment area

RESPONSE TO COMMENTS SECTION

Regarding the

DALLAS-FORT WORTH (DFW) REASONABLE AVAILABLE CONTROL TECHNOLOGY (RACT) UPDATE, 30 TEXAS ADMINISTRATIVE CODE (TAC) CHAPTER 117 RULE REVISION NONINTERFERENCE DEMONSTRATION, AND MODIFIED FAILURE-TO-ATTAIN CONTINGENCY PLAN STATE IMPLEMENTATION PLAN (SIP) REVISION

The commission received comments from the following entities: Printing and Imaging Association of Mid-America (PIA MidAmerica); Printing Industries of the Gulf Coast (PIGC); and the United States Environmental Protection Agency (EPA).

Comments received regarding the 30 TAC Chapter 115 Offset Lithographic Printing rule revisions (Rule Project no. 2008-019-115-EN) or the 30 TAC Chapter 117 Stationary Sources rule exemption revision (Rule Project no. 2009-023-117-EN), both of which are incorporated by reference into this SIP revision, are addressed in the preambles to those rules. The comments received on the Chapter 115 and Chapter 117 rule revisions are included in this SIP revision through the adoption of those rules.

Changes from Proposal

Substantive changes were made to the Chapter 115 rule revision in response to comments received. Changes made to that rule revision are noted in this SIP revision.

No changes were made to the Chapter 117 rule revision due to comment.

Significant changes were made to the volatile organic compounds (VOC) RACT update element of this SIP revision as a result of comments and guidance received from the EPA.

No changes were made to the Demonstration of Noninterference from the Chapter 117 rule revision as a result of comments received.

No changes were made to the Modified Failure-to-Attain Contingency Plan element of this SIP revision due to comment.

Incorporation of the Chapter 115 rule revision into the SIP

PIA MidAmerica commented that the Chapter 115 rule revision applicable to offset lithographic printing sources may have no significant impact on reducing emissions in the Dallas-Fort Worth (DFW) area. PIGC commented that the printing industry is not a significant contributor to the overall air emissions in the DFW area.

The commission is aware that printing sources do not constitute a large proportion of the emissions in the DFW area. However, revisions to the Chapter 115 offset lithographic printing rules are necessary to fulfill Federal Clean Air Act (FCAA) RACT requirements.

In accordance with FCAA, §172(c)(1) and §182(b)(2), the state is required to revise the DFW SIP to include RACT determinations for VOC emission sources addressed in a control techniques guidelines (CTG) document issued between November 15, 1990, and the area's attainment date. On October 5, 2006, the EPA published a CTG document in lieu of national regulations for VOC emissions from Offset Lithographic Printing and Letterpress Printing (71 FR 58745). The purpose of the offset lithographic printing rule revision is to implement RACT for this CTG emission source category.

No changes were made to this SIP revision due to these comments received from PIA MidAmerica and PIGC. The preamble to the Chapter 115 rule revision addresses changes made to the rule revision as a result of comments received on that rule revision.

DFW VOC RACT Update

The EPA commented that the commission did not propose a RACT determination for the Industrial Cleaning Solvents CTG and Miscellaneous Industrial Adhesives CTG. The EPA further commented that in order for the DFW 1997 eight-hour ozone nonattainment area to meet the requirements of 40 Code of Federal Regulations (CFR) §51.912, the commission will need to complete RACT determinations and take appropriate action for these CTG categories. The EPA indicated that its approval of the VOC RACT update would only be considered for thoroughly addressed CTG categories.

As noted in the EPA's comment, the commission did not make a determination whether the Industrial Cleaning Solvents and Miscellaneous Industrial Adhesives CTG recommendations represent RACT for Texas. The commission maintains the EPA substantially underestimated the scope and potential impact of these CTG recommendations, especially the impacts to small businesses. The commission is conducting research to determine the quantity of affected sources in the DFW 1997 eight-hour ozone nonattainment area and plans to provide small business outreach to engage potentially impacted stakeholders. As a result of the comments received by the EPA, the Executive Director will proceed with RACT analyses of these CTG documents and will initiate a future SIP revision and rulemaking for the commission's consideration, if necessary, to submit RACT determinations to the EPA in a timely manner.

The EPA commented that the commission did not propose any RACT determination for Large Appliance Coatings, Metal Furniture Coatings, and Miscellaneous Metal and Plastic Parts Coatings CTG. The EPA further commented that the commission needs to complete RACT determinations and take appropriate action for these three CTG categories in order for the DFW area to meet the requirements for RACT (40 CFR §51.912). The EPA indicated that approval for any RACT determinations contained in the VOC RACT update would only be considered for CTG categories thoroughly addressed. The EPA recognized that it had not yet responded to the commission's request for clarification on potential backsliding issues regarding the CTG. The commission had previously requested clarification on implementing CTG recommendations for these specialty coatings that are less stringent than general-use coating RACT recommendations from the 1970s. The EPA comments identified options for moving forward with RACT analyses for these CTG categories, to: (1) implement only CTG-recommended specialty coating content limits more stringent than existing state limits; or (2) relax existing coating content limits consistent with the later CTG recommendations and provide additional analyses demonstrating compliance with non-interference provisions under the Federal Clean Air Act, §110(l).

As noted, the commission did not make RACT determinations for the Large Appliance Coatings, Metal Furniture Coatings, and Miscellaneous Metal and Plastic Parts Coatings CTG recommendations. As discussed in Appendix A: *Dallas-Fort Worth Reasonably Available Control Technology Analysis Update*, the CTG documents for these emission source categories did not contain sufficient information for the commission to determine RACT for Texas. On December 8, 2008, the commission asked the EPA to clarify why the VOC content limits recommended for these categories are less stringent than previous EPA recommendations. While the EPA has not formally responded to the December 2008 letter, the commission appreciates the EPA's suggestions regarding the issues raised by the commission. The commission intends to proceed with a RACT analysis of this CTG recommendation based on the guidance provided in the EPA's comments. As a result of the comments received by the EPA, the Executive Director will proceed with RACT analyses of these three CTG documents based on the guidance provided in the EPA's comments and initiate a future SIP revision and rulemaking for the commission's consideration, if necessary, in order to submit RACT determinations to the EPA in a timely manner.

The EPA commented that the commission needs to address the VOC RACT requirements for the Fiberglass Boat Manufacturing Materials CTG source category. The EPA disagreed with the commission's interpretation of its 1988 guidance for determining alternative applicability thresholds for RACT ("Issues Relating to VOC Regulation Cutpoints, Deficiencies, and Deviations, Clarification to Appendix D of November 24, 1987 *Federal Register*" issued May 25, 1988) since the calculation was not specifically based on emission sources in the DFW area. The EPA further commented that the Fiberglass Boat Manufacturing Materials CTG-recommended controls that are cost-effective, and RACT for this emission source category should be addressed.

The 2008 Fiberglass Boat Manufacturing Materials CTG document did not identify any sources in Texas that would be subject to the CTG-recommended controls. However, as of the September 23, 2009, agenda for proposal of this SIP revision, the commission could not make a definitive negative declaration for this source category. Since that time the commission has conducted extensive additional review of sources identified in the point source emissions inventory, Title V permits, and central registry databases. No sources meeting the applicability criteria recommended in the CTG document were identified in the DFW area. Therefore, the commission provides a negative declaration for this emission source category with regard to RACT for the DFW area.

The EPA commented that RACT for Automobile and Light-Duty Truck Assembly Coatings should be federally enforceable. The EPA requested additional information to explain how the use of permit conditions is reasonable to implement RACT and requested a copy of the final permit(s) used in this analysis, including permit information for General Motors Corporation Arlington Assembly Plant. The EPA further commented that work practice requirements for Automobile and Light-Duty Truck Assembly Coatings provide reasonable, cost-effective controls and are an important way to reduce emissions. The EPA stated that in order to meet RACT requirements, the commission should either adopt rules implementing the work practice requirements or provide analyses demonstrating that the requirements are satisfied by existing rules.

Because of the comments received by the EPA, the commission has decided to reevaluate the RACT determination for the Automobile and Light-Duty Truck Assembly Coatings CTG recommendations. The Executive Director will proceed with the RACT analysis of this CTG document and initiate a future SIP revision and rulemaking for the commission's

consideration as appropriate, if necessary, in order to submit a RACT determination to the EPA in a timely manner. As a result, the commission has not included copies of the requested permit information at this time.

The EPA commented that RACT for Flexible Packaging Printing Materials should be federally enforceable. The EPA also requested additional explanation as to why it is reasonable to use permit conditions to implement RACT and requested a copy of the final permit(s) used in this analysis, including permit information for Printpak Incorporated. The EPA further commented that work practice requirements for Flexible Packaging Printing Materials provide reasonable, cost-effective controls and are an important way to reduce emissions. The EPA stated that in order to meet RACT requirements, the commission should either adopt rules implementing the work practice requirements or provide an analysis demonstrating that the requirements are satisfied by existing rules.

Because of the comments received by the EPA, the commission has decided to reevaluate the RACT determination for the Flexible Packaging Printing Materials CTG recommendations. The Executive Director will proceed with the RACT analysis of this CTG document and initiate a future SIP revision and rulemaking for the commission's consideration as appropriate, if necessary, in order to submit a RACT determination to the EPA in a timely manner. As a result, the commission has not included copies of the requested permit information at this time.

The EPA commented that RACT for Paper, Film, and Foil Coatings should be federally enforceable. The EPA requested additional explanation as to why it is reasonable to use permit conditions to implement RACT and requested a copy of the final permit(s) used in this analysis, including permit information for Rock Tenn Converting Company and Printpak Incorporated. The EPA commented that work practice requirements for Paper, Film, and Foil Coatings provide reasonable, cost effective controls and are an important way to reduce emissions. The EPA stated that in order to meet RACT requirements, the commission should either adopt rules implementing the work practice requirements or provide analyses demonstrating that the requirements are satisfied by existing rules.

Because of the comments received by the EPA, the commission has decided to reevaluate the RACT determination for the Paper, Film, and Foil Coatings CTG recommendations. The Executive Director will proceed with the RACT analysis of this CTG document and initiate a future SIP revision and rulemaking for the commission's consideration, if necessary, in order to submit a RACT determination to the EPA in a timely manner. As a result, the commission has not included copies of the requested permit information at this time.

The EPA commented that RACT for heatset offset lithographic printing presses should be federally enforceable. The EPA requested additional explanation as to why it is reasonable to use permit conditions to implement RACT and requested a copy of the final permit(s) used in this RACT analysis. The EPA requested copies of the documentation used to determine that all heatset offset lithographic presses in the DFW area meet RACT including copies of facility-specific information for each heatset press identified with uncontrolled emissions greater than 25 tons per year (tpy) located on a site with total emissions less than 50 tpy when uncontrolled, copies of the final permit(s) used in this analysis, and copies of any other applicable documentation.

The overall VOC control level in the adopted Chapter 115, Subchapter E, Division 4 rules is equivalent to or more stringent than the EPA's 2006 Offset Lithographic and Letterpress Printing CTG recommendations and sufficient to fulfill RACT for offset lithographic printing operations in the DFW area. The commission must balance implementing the 2006 CTG recommendations with the potential for backsliding, enforceability considerations, and the possible impacts to sources that have already complied with the existing rules.

The commission notes that in several instances the adopted Chapter 115 content limits are more stringent than EPA's 2006 CTG recommendations. The 2006 CTG recommendations include limiting the VOC content of cleaning solutions used in offset lithographic printing operations to 70 percent VOC by weight in conjunction with work practice standards. The adopted Chapter 115 rules retain the more stringent cleaning solution content limit of 70 percent VOC by volume in conjunction with work practice standards. Assuming the VOC in the cleaning solvent used is kerosene, which is the VOC referenced in the 2006 CTG, the adopted Chapter 115 content limit of 70 percent VOC by volume for cleaning solutions is equivalent to 66 percent VOC by weight. The EPA's 2006 CTG also recommends limiting the fountain solution content to 5 percent alcohol substitutes or less by weight and no alcohol in the fountain solution. To prevent potential backsliding for sources already required to comply with these state regulations, the adopted Chapter 115 rules retain the more stringent fountain solution content limit of 3 percent alcohol substitutes or less by weight and no alcohol in the fountain solution.

The adopted Chapter 115 rules for heatset offset lithographic presses are at least as stringent as the EPA's 2006 CTG-recommended controls. The EPA's CTG recommends an add-on air pollution control device be required on each individual heatset offset lithographic press with the uncontrolled potential to emit 25 tpy of VOC or more from the dryer. The rules in Chapter 115, Subchapter E, Division 4, require control devices, with a control efficiency of at least 90 percent, to be installed on heatset offset lithographic presses on a property in the DFW area with total uncontrolled VOC emissions of at least 50 tpy, which includes VOC emissions from ink oils evaporated by the press dryer and VOC in fountain and cleaning solutions. In Table 5-1: *Model Plant Product Use and Baseline (Uncontrolled) Volatile Organic Compounds (Average Tons Per Year)*, of the 1993 draft Offset Lithographic Printing CTG, the EPA estimates that 26 percent of the total uncontrolled VOC emissions from heatset offset lithographic printing operations are emitted from the press dryer. Based on the EPA's assumption, an individual heatset press located on a property with total uncontrolled VOC emissions of 50 tpy would emit less than 13 tpy of VOC from the press dryer. Therefore, the Chapter 115 rules are effectively more stringent than the EPA's 2006 CTG RACT recommendations with regard to the applicability threshold for this control requirement. Additionally, the EPA's 2006 CTG recommended exempting heatset presses used for book printing and heatset presses with a maximum web width of 22 inches or less from the add-on control device requirements. The existing Chapter 115 regulations do not exempt these sources from the control requirements, and the commission has not adopted these exemptions into the revised rule.

The EPA's CTG recommends requiring control equipment first installed before the effective date of rules implementing the CTG to have an overall control efficiency of 90 percent and control equipment first installed after the effective date of rules implementing the CTG to have an overall control efficiency of 95 percent. The commission disagrees with the EPA's CTG recommendation to tie control device efficiency requirements with the first installation date of the control device regardless of where the equipment is installed. The commission contends imposing this policy may encourage the installation of older, less

efficient equipment because facilities purchasing used equipment would be held to a less stringent standard. The policy could also create significant practical enforceability issues for commission investigators with regard to verifying the first installation date of the control equipment.

Regardless of the first installation date of the device, the EPA recommends providing the alternative option to reduce the control device outlet concentration to 20 parts per million by volume (ppmv) as hexane on a dry basis to accommodate situations where the inlet VOC concentration is too low to demonstrate the 90 or 95 percent control efficiency. The Chapter 115 rules provide affected owners or operators of a heatset offset lithographic printing press the option to operate a control device to reduce VOC emissions from the press dryer exhaust vent by 90 percent by weight or maintain a maximum dryer exhaust outlet VOC concentration of 20 ppmv. The Chapter 115 alternative concentration limit is substantially preferable because it encourages VOC emission reductions without requiring add-on controls and implementing the EPA's recommended approach would penalize operations that were able to achieve the 20 ppmv limit without the installation of expensive add-on control devices.

Based on this analysis, the commission determined that the adopted Chapter 115 rules for offset lithographic printing operations provide an overall VOC control level that is at least equivalent to the 2006 CTG recommendations and are more effective and enforceable. Therefore, the revised Chapter 115, Subchapter E, Division 4 rules are sufficient to fulfill RACT for offset lithographic printing operations in the DFW area.

The EPA disagreed with the statement in the preamble to the offset lithographic printing rule revision that the commission does not agree that applying RACT standards to future equipment installations is necessary to meet the mandates of the Federal Clean Air Act (FCAA) under §172(c)(1) and §182(b)(2) and (f). The EPA stated that RACT should apply to both existing and new sources. The EPA added that such statements may have implications for RACT approvability and requested the commission remove this language as well as any similar statements included elsewhere in the revisions.

The commission has removed this statement from the preamble to the offset lithographic printing rule revision (2008-019-115-EN).

The EPA commented that work practice requirements for cleaning solutions used in offset lithographic printing operations provide reasonable, cost-effective controls and are an important way to reduce emissions. The EPA stated that in order to meet RACT requirements, the commission should either adopt rules implementing the work practice requirements or provide analyses demonstrating that the requirements are satisfied by existing rules.

The EPA's 2006 Offset Lithographic and Letterpress Printing CTG recommends mandating a towel handling program in conjunction with reduced VOC cleaning solution limits. Existing Chapter 115 rules include these work practice requirements for facilities choosing the 70 percent VOC cleaning solution limit; however, these work practice requirements were not proposed with cleaning solutions containing VOC vapor pressure less than 10 millimeters of mercury, because the commission expected most facilities were voluntarily following similar practices for safety reasons or have required work practices as part of their permit authorization.

However, in response to comments received regarding the offset lithographic printing rule revisions, the commission is revising the rule to include the CTG-recommended work practice requirements for offset lithographic printing operations using cleaning solutions with VOC vapor pressure less than 10 millimeters of mercury.

Demonstration of Noninterference (§110(l) demonstration)

The EPA commented that to be able to approve expansion of an existing exemption clause in a SIP revision, it must be shown that the rule revision will comply with §110(l) of the FCAA and has properly accounted for the corresponding SIP credit changes. The EPA agreed with the state's calculations showing that estimated surplus emission reductions from fleet turnover sufficiently substitute for the shortfall left by the Chapter 117 rule revision and adequately demonstrate noninterference with attainment of the 1997 eight-hour ozone standard.

The commission appreciates the EPA's agreement with the state's calculations showing the substitution of the vehicle fleet turnover reductions to replace the shortfall caused by the Chapter 117 rule revision and the §110(l) demonstration of noninterference.

Modified Failure-to-Attain Contingency Plan

The EPA commented that Table 4.2: *Calculations Showing 3 Percent Required Reductions*, of the proposed DFW RACT, Rule and Contingency SIP revision includes reference to a 1999 adjusted base-year emissions inventory (EI); however, the numbers shown are the same as those used in the federally approved 2007 DFW Attainment Demonstration SIP Revision (Appendix B), which does not characterize the 1999 emissions inventory as being an adjusted inventory. The EPA requested clarification of whether the EI used to calculate the contingency reductions is adjusted or not.

The proposed SIP revision incorrectly identified the base-year emissions inventory used to calculate contingency reductions as an adjusted base-year inventory. All references in this SIP revision to the inventory used for contingency plan reduction requirement calculations have been corrected to more accurately reflect the unadjusted emission inventory used, and the word "adjusted" have been removed in those instances. The commission appreciates the EPA pointing out this needed correction. The modified failure-to-attain contingency plan provides the required 3 percent contingency reduction.

Comments from the EPA noted that the offset lithographic printing rule and the associated 0.24 tons per day predicted in emission reductions for VOC are removed as a contingency measure. The EPA agreed with the state's calculations that estimated surplus emission reductions from fleet turnover sufficiently substitute for the shortfall left by removal of the offset lithographic printing measure.

The commission appreciates the EPA's agreement with the state's calculations and the substitution of the vehicle fleet turnover reductions for the removal of the offset lithographic printing measure in the modified failure-to-attain contingency plan.

APPENDIX A:

DALLAS-FORT WORTH
REASONABLY AVAILABLE CONTROL TECHNOLOGY
ANALYSIS UPDATE

Adopted March 10, 2010

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DALLAS-FORT WORTH
REASONABLY AVAILABLE CONTROL TECHNOLOGY ANALYSIS UPDATE

1.0. Introduction

The Dallas-Fort Worth (DFW) eight-hour ozone nonattainment area (Dallas, Denton, Collin, Tarrant, Parker, Johnson, Ellis, Kaufman, and Rockwall Counties) is currently classified moderate nonattainment for the United States Environmental Protection Agency (EPA) 1997 eight-hour ozone National Ambient Air Quality Standard (NAAQS). Under the 1997 eight-hour ozone standard, the area is required to meet the mandates of the Federal Clean Air Act (FCAA) under §§172(c)(1), 182(b)(2) and 182(f). According to the EPA's Final Rule to Implement the Eight-Hour Ozone NAAQS (40 Code of Federal Regulations (CFR) §51.912, November 29, 2005), states containing areas classified as moderate nonattainment or higher must submit a state implementation plan (SIP) revision demonstrating that their current rules fulfill the reasonably available control technology (RACT) requirements for all control technique guidelines (CTG) categories and all non-CTG major sources of nitrogen oxides (NO_X) and volatile organic compounds (VOC).

RACT is defined as the lowest emissions 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 53762; September 17, 1979). RACT requirements for moderate and higher classification nonattainment areas are included in the FCAA to assure that significant source categories at major sources of ozone precursor emissions are controlled to a reasonable extent, but not necessarily to best available control technology levels expected of new sources or to maximum achievable control technology levels required for major sources of hazardous air pollutants. Advancing attainment of the area is not a factor of consideration when evaluating RACT because the benefit of implementing RACT is presumed under the FCAA.

The EPA previously approved the VOC RACT analysis as submitted in the May 2007 DFW Eight-Hour Ozone Attainment Demonstration SIP Revision (74 FR 1903; January 14, 2009). The analysis demonstrated all CTG emission source categories addressed by CTG documents issued prior to 2006 and all major VOC emission sources in the DFW area were subject to rules in 30 TAC Chapter 115, or other federally enforceable measures, that meet or exceed the applicable RACT requirements, or that further emission controls on the sources were either not technologically or economically feasible.

However, the EPA-approved 2007 VOC RACT analysis did not address 11 CTG documents issued between 2006 and 2008 with recommendations for VOC controls on a variety of consumer and commercial products. Some of the new CTG recommendations are updates to previously issued CTG documents and some are recommendations for new emission source categories. This RACT analysis update addresses the evaluation of these 11 new CTG documents to determine if additional VOC controls are necessary to fulfill RACT requirements for the DFW area.

The following is a list of the CTG documents:

- *Flat Wood Paneling Coatings, Group II Issued in 2006*
- *Flexible Packaging Printing Materials, Group II Issued in 2006*
- *Industrial Cleaning Solvents, Group II Issued in 2006*
- *Offset Lithographic and Letterpress Printing, 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*
- *Auto and Light-Duty Truck Assembly Coatings, Group IV Issued in 2008*
- *Fiberglass Boat Manufacturing Materials, Group IV Issued in 2008*
- *Miscellaneous Industrial Adhesives, Group IV Issued in 2008*
- *Miscellaneous Metal and Plastic Parts Coatings, Group IV Issued in 2008*

2.0. RACT Evaluation Approach

2.1. General Discussion

The TCEQ demonstrates that RACT requirements are fulfilled by: (1) identifying all CTG source categories of VOC and NO_X emissions and submitting negative declarations for categories where no major emission sources exist; (2) identifying all non-CTG major sources of VOC and NO_X emissions; (3) identifying the state regulation implementing or exceeding RACT for each applicable CTG source category or non-CTG major emission source; and (4) describing the basis for conclusion that the regulations fulfill RACT. Specifically, this SIP revision updates the DFW VOC RACT analysis to address the 11 consumer and commercial products CTG documents issued by the EPA from 2006 through 2008.

2.2. Identification of CTG Emission Source Categories

The EPA has issued CTG documents defining RACT for existing facilities. The Texas Commission on Environmental Quality (TCEQ) reviewed the 11 consumer and commercial products CTG documents issued by the EPA from 2006 through 2008 to identify all source categories of VOC emissions that require RACT. RACT determinations are not required if there are no facilities in the DFW area that are subject to the CTG document. A negative declaration is provided for source categories described within the EPA guidance documents that do not exist in the DFW area.

2.3. Determining if State Regulations Fulfill RACT Requirements

The EPA previously approved the DFW area VOC rules in 30 Texas Administrative Code (TAC) Chapter 115 as meeting FCAA RACT requirements for CTG documents issued prior to 2006. RACT determinations regarding the 11 CTG documents issued in 2006 and later were made by comparing the CTG recommendations to TCEQ rules to determine if the existing rules satisfy RACT. Although CTG documents provide the EPA's RACT recommendations for controlling emissions from specific sources, EPA guidance on RACT indicates that states can 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. Additional discussion regarding the evaluation of the CTG recommendations

is provided in Sections 3.3.2: Fiberglass Boat Manufacturing Materials, through 3.3.4: Miscellaneous Metal and Plastic Parts Coatings.

3.0. RACT Determination and Discussion

3.1. The EPA Consumer and Commercial Products CTG Documents, Group II Issued in 2006

3.1.1. Flat Wood Paneling Coatings

No facilities meeting the applicability of the 2006 Flat Wood Paneling Coatings CTG document were identified in the DFW area. Therefore, the TCEQ provides a negative declaration for this source category with regard to RACT for the DFW area.

The EPA indicated in Appendix B: *State and Local Regulations for Flat Wood Paneling* of the Flat Wood Paneling Coatings CTG that two facilities in Texas ozone nonattainment areas are potentially subject to the recommendations. Based on a review of the 2005 point source emissions inventory, the TCEQ determined that only one facility in the DFW area, Buell Door Company, TCEQ Account Number DB-0128-U, may fit the source category description in the Flat Wood Paneling Coatings CTG. However, that facility ceased all operations in 2006 and to date has not reported any emissions for the site for subsequent years. The TCEQ does not expect that the company will resume business operations at this facility.

3.1.2. Flexible Packaging Printing Materials

At the September 23, 2009, agenda for proposal of this SIP revision, the TCEQ did not propose to revise the flexographic and rotogravure printing rules in 30 TAC Chapter 115, Subchapter E, Division 3 to implement the 2006 Flexible Packaging Printing Materials CTG recommendations. Flexible package printing sources in the DFW area affected by the CTG recommendations were determined to have enforceable permit limitations in place that restrict VOC emissions to levels consistent with the CTG recommendations. Therefore, the commission proposed that additional controls were not necessary for this CTG category.

At the September 23, 2009, agenda for proposal of this SIP revision the commission proposed that additional controls were not necessary for this CTG category. Because of EPA's comments on this SIP revision, the TCEQ has decided to reevaluate the RACT determination for the Flexible Packaging Printing Materials CTG recommendations. The Executive Director will proceed with the RACT analysis of this CTG document and initiate a future SIP revision and rulemaking for the commission's consideration, as appropriate, in order to submit a RACT determination to the EPA in a timely manner.

3.1.3. Industrial Cleaning Solvents

The TCEQ is not making a RACT determination at this time regarding the Industrial Cleaning Solvents CTG recommendations. The TCEQ's assessment indicates that the EPA substantially underestimated the scope and potential impact of the CTG recommendations. In Appendix D of the CTG document: *Number of nonattainment facilities organized by State that are estimated to meet the applicability criteria recommended in the CTG*, the EPA estimated 92 facilities in Texas nonattainment areas would be subject to the recommendations. However, the North American Industry Classification System (NAICS) codes provided in Appendix C of the CTG document:

Summary of NAICS Codes for nonattainment facilities estimated to meet the applicability criteria recommended in the CTG suggests a much broader applicability. Based on the EPA's suggested exemption threshold of 15 pounds per day of VOC and the listed NAICS codes, the TCEQ estimates that implementing the CTG would have widespread and potentially adverse impacts to small business and micro-business in Texas. An integral part of determining whether a control technology or measure represents RACT is evaluating the technological and economic feasibility of the proposed controls. Determining technological and economic feasibility is not possible when the applicability of the control measure is ambiguous. The TCEQ will continue to evaluate this CTG and intends to provide small business outreach to engage stakeholders that could be potentially impacted by the EPA's suggested control measures. The Executive Director will proceed with the RACT analysis of this CTG document and initiate a future SIP revision and rulemaking for the commission's consideration, if necessary, in order to submit a RACT determination to the EPA in a timely manner.

3.1.4. Offset Lithographic and Letterpress Printing

Concurrent with this SIP revision, the TCEQ adopted revisions to 30 TAC Chapter 115, Subchapter E, Division 4 to implement the EPA's 2006 Offset Lithographic and Letterpress Printing CTG recommendations that represent RACT in the DFW area. The adopted Chapter 115 rulemaking reduces the VOC content of the fountain solutions and cleaning solutions used by offset lithographic printing operations, and expands rule applicability to include smaller offset lithographic printing sources that were previously exempt from these rules. The TCEQ determined that no letterpress printing operations meeting the applicability criteria recommended in the CTG document are located in the DFW area. Therefore, the TCEQ provides a negative declaration for the Letterpress Printing CTG source category.

In its analysis of the EPA's 2006 Offset Lithographic and Letterpress Printing CTG recommendations, the TCEQ must balance the VOC control level in the adopted Chapter 115, Subchapter E, Division 4 rules and potential for backsliding from implementing the 2006 CTG recommendations, along with enforceability considerations, and possible impacts to sources that have already complied with the existing rules.

In several instances the adopted Chapter 115 content limits are more stringent than EPA's 2006 CTG recommendations. The 2006 CTG recommends include limiting the VOC content of cleaning solutions used in offset lithographic printing operations to 70 percent VOC by weight in conjunction with work practice standards. The adopted Chapter 115 rules retain the more stringent cleaning solution content limit of 70 percent VOC by volume in conjunction with work practice standards. Assuming the VOC in the cleaning solvent used is kerosene, the VOC referenced in the 2006 CTG, the adopted Chapter 115 content limit of 70 percent VOC by volume for cleaning solutions is equivalent to 66 percent VOC by weight. EPA's 2006 CTG also recommends limiting the fountain solution content to 5 percent alcohol substitutes or less by weight and no alcohol in the fountain solution. To prevent potential backsliding for sources already required to comply with these state regulations, the adopted Chapter 115 rules retain the more stringent fountain solution content limit of 3 percent alcohol substitutes or less by weight and no alcohol in the fountain solution.

The adopted Chapter 115 rules for heatset offset lithographic presses are at least as stringent as the EPA's 2006 CTG recommended controls. The EPA's CTG recommends an add-on air pollution control device be required on each individual heatset offset lithographic press with the uncontrolled potential to emit 25 tons per year (tpy) of VOC or more from the dryer. The rules in Chapter 115, Subchapter E, Division 4, require control devices, with a control efficiency of at

least 90 percent, to be installed on heatset offset lithographic presses on a property in the DFW area with total uncontrolled VOC emissions of at least 50 tpy, which includes VOC emissions from ink oils evaporated by the press dryer and VOC in fountain and cleaning solutions. In Table Table 5-1: *Model Plant Product Use and Baseline (Uncontrolled) Volatile Organic Compounds (Average Tons Per Year)*, of the 1993 draft Offset Lithographic Printing CTG, the EPA estimates that 26 percent of the total uncontrolled VOC emissions from heatset offset lithographic printing operations are emitted from the press dryer. Based on EPA's assumption, an individual heatset press located on a property with total uncontrolled VOC emissions of 50 tpy would emit less than 13 tpy of VOC from the press dryer. Therefore, the Chapter 115 rules are effectively more stringent than the EPA's 2006 CTG RACT recommendations with regard to the applicability threshold for this control requirement. Additionally, the EPA's 2006 CTG recommended exempting heatset presses used for book printing and heatset presses with a maximum web width of 22 inches or less from the add-on control device requirements. The existing Chapter 115 regulations do not exempt these sources from the control requirements and the TCEQ has not adopted these exemptions into the revised rule.

The EPA's CTG recommends requiring control equipment first installed before the effective date of rules implementing the CTG to have an overall control efficiency of 90 percent and control equipment first installed after the effective date of rules implementing the CTG to have an overall control efficiency of 95 percent. The TCEQ disagrees with the EPA's CTG recommendation to correlate control device efficiency requirements with the first installation date of the control device regardless of where the equipment was installed. Imposing this policy may encourage the installation of older, less efficient equipment and may create potential backsliding issues. The policy may also create significant practical enforceability issues for TCEQ investigators with regard to verifying the first installation date of the control equipment.

Regardless of the first installation date of the device, the EPA recommends providing the alternative option to reduce the control device outlet concentration to 20 parts per million by volume (ppmv) as hexane on a dry basis to accommodate situations where the inlet VOC concentration is too low to demonstrate the 90 or 95 percent control efficiency. The Chapter 115 rules provide affected owners or operators of a heatset offset lithographic printing press the option to operate a control device to reduce VOC emissions from the press dryer exhaust vent by 90 percent by weight or maintain a maximum dryer exhaust outlet VOC concentration of 20 ppmv. The Chapter 115 alternative concentration limit is substantially preferable because it encourages VOC emission reductions without requiring add-on controls and implementing the EPA's recommended approach would penalize operations who were able to achieve the 20 ppmv limit without the installation of expensive add-on control devices.

Based on this analysis, the TCEQ determined that the adopted Chapter 115 rules for offset lithographic printing operations provide an overall VOC control level that is at least equivalent to the 2006 CTG recommendations and are more effective and enforceable. Therefore, the revised Chapter 115, Subchapter E, Division 4 rules are sufficient to fulfill RACT for offset lithographic printing operations in the DFW area.

3.2. EPA Consumer and Commercial Products CTG Documents, Group III Issued in 2007

3.2.1. Large Appliance Coatings

By letter dated December 8, 2008, the TCEQ requested clarification from the EPA regarding several issues related to the Large Appliance Coatings CTG recommendations. Current TCEQ

rules in Chapter 115 for large appliance coating operations are based on the original Large Appliance Coatings CTG issued by the EPA in 1977. A number of the recommended VOC content limits for specific coatings categories listed in the 2007 CTG document are less stringent than the more general VOC content limits specified in the EPA's original CTG recommendations for the Large Appliance Coatings category. Since the 2007 Large Appliance Coatings CTG document does not specifically address this issue, the TCEQ requested clarification to ensure that implementing the CTG recommendations would not be considered backsliding and to be certain that the TCEQ has the appropriate information to determine whether the 2007 CTG recommendations actually represent RACT for Texas. See Attachment 1 for the TCEQ letter to the EPA requesting clarification on these issues.

The EPA did not formally respond to the TCEQ's request for clarification on the CTG document. Therefore, the TCEQ did not propose a RACT determination for the Large Appliance Coatings CTG source category. However, in the comments submitted for this SIP revision, the EPA did provide suggestions and guidance regarding the issues raised by the TCEQ in the December 2008 letter. The Executive Director will proceed with the RACT analysis of this CTG document based on the guidance provided in the EPA's comments and initiate a future SIP revision and rulemaking for the commission's consideration, if necessary, in order to submit a RACT determination to the EPA in a timely manner.

3.2.2. Metal Furniture Coatings

In the previously mentioned letter to the EPA of December 8, 2008, the TCEQ requested clarification regarding several issues related to the Metal Furniture Coatings CTG recommendations. Current TCEQ rules in Chapter 115 for metal furniture coating operations are based on the original Metal Furniture Coatings CTG document issued by the EPA in 1977. A number of the VOC content limits for specific coatings categories recommended in the 2007 CTG document are less stringent than the more general VOC content limits specified in the original recommendations for the Metal Furniture Coatings category. Since the 2007 Metal Furniture Coatings CTG document does not specifically address this issue, the TCEQ requested clarification from the EPA to ensure that implementing the 2007 CTG recommendations would not be considered backsliding and to be certain that the TCEQ has the appropriate information to determine whether the 2007 CTG recommendations actually represent RACT for Texas. See Attachment 1 for the TCEQ letter to the EPA requesting clarification on these issues.

The EPA did not formally respond to the TCEQ's request for clarification on the CTG document. Therefore, the TCEQ did not propose a RACT determination for the Metal Furniture Coatings CTG source category. However, in the comments submitted for this SIP revision, the EPA did provide suggestions and guidance regarding the issues raised by the TCEQ in the December 2008 letter. The Executive Director will proceed with the RACT analysis of this CTG document based on the guidance provided in the EPA's comments and initiate a future SIP revision and rulemaking for the commission's consideration as appropriate, if necessary, in order to submit a RACT determination to the EPA in a timely manner.

3.2.3. Paper, Film, and Foil Coatings

At the September 23, 2009, agenda for proposal of this SIP revision, the TCEQ did not propose to revise the surface coating rules in 30 TAC Chapter 115, Subchapter E, Division 2 to implement the 2007 Paper, Film, and Foil Coatings CTG recommendations. Paper, film, and foil coating operations in the DFW area affected by the CTG recommendations were determined to have

enforceable permit limitations in place that restrict VOC emissions to levels consistent with the CTG recommendations..

Therefore, the commission proposed that additional controls were not necessary for this CTG category. However, in response to EPA's comments on this SIP revision, the TCEQ has decided to reevaluate the RACT determination for the Paper, Film, and Foil Coatings CTG recommendations. The Executive Director will proceed with the RACT analysis of this CTG document and initiate a future SIP revision and rulemaking for the commission's consideration as appropriate, in order to submit a RACT determination to the EPA in a timely manner.

3.3. EPA Consumer and Commercial Products CTG Documents, Group IV Issued in 2008

3.3.1. Auto and Light-Duty Truck Assembly Coatings

One site identified in the DFW area is subject to the Auto and Light-Duty Truck Assembly Coatings CTG document: General Motors Corporation's Arlington Assembly Plant, TCEQ Account Number TA-0157-I. On page 23 of the 2008 Automobile and Light-Duty Truck Assembly Coatings CTG, the EPA indicates that VOC emission reductions will not result from implementing the CTG recommendations because these facilities have previously reduced coating operation VOC emissions in compliance with 40 Code of Federal Regulations (CFR) Part 60, New Source Performance Standards (NSPS), Subpart MM, Automobile and Light-Duty Truck Surface Coating Operations; 40 CFR Part 63, National Emission Standards for Hazardous Air Pollutants (NESHAPS), Subpart IIII, Surface Coating of Automobiles and Light-Duty Trucks; and existing state rules.

At the September 23, 2009, agenda for proposal of this SIP revision the commission proposed that additional controls were not necessary for this CTG category. However, in response to EPA's comments on this SIP revision, the commission has decided to reevaluate the RACT determination for the Automobile and Light-Duty Truck Assembly Coatings CTG recommendations. The Executive Director will proceed with the RACT analysis of this CTG document and initiate a future SIP revision and rulemaking for the commission's consideration, if necessary, in order to submit a RACT determination to the EPA in a timely manner.

3.3.2. Fiberglass Boat Manufacturing Materials

The 2008 Fiberglass Boat Manufacturing Materials CTG document did not identify any sources in Texas that would be subject to the CTG recommended controls. However, as of the September 23, 2009, TCEQ's agenda for proposal of this SIP revision, the TCEQ could not make a definitive negative declaration for this source category. Since that time the TCEQ has conducted extensive additional review of sources identified in the point source emissions inventory, Title V permits, and central registry databases. No facilities meeting the applicability of the 2008 Fiberglass Boat Manufacturing Materials CTG document were identified in the DFW area. Therefore, the TCEQ provides a negative declaration for this source category with regard to RACT for the DFW area.

3.3.3. Miscellaneous Industrial Adhesives

The TCEQ is not making a RACT determination at this time regarding the Miscellaneous Industrial Adhesives CTG recommendations. Similar to the Industrial Cleaning Solvents CTG, the TCEQ's initial assessment indicates that the EPA substantially underestimated the scope and potential impact of the Miscellaneous Industrial Adhesives CTG recommendations. An integral

part of determining whether a control technology or measure represents RACT is evaluating the technological and economic feasibility of the proposed controls. Determining technological and economic feasibility is not possible when the applicability of the control measure is ambiguous. The TCEQ will continue to evaluate this CTG and intends to provide small business outreach to engage stakeholders that could be potentially impacted by the EPAs suggested control measures. The Executive Director will proceed with the RACT analysis of this CTG document and initiate a future SIP revision and rulemaking for the commission's consideration, if necessary, in order to submit a RACT determination to the EPA in a timely manner.

3.3.4. Miscellaneous Metal and Plastic Parts Coatings

In the previously mentioned letter dated December 8, 2008, the TCEQ requested clarification from the EPA regarding several issues related to the Miscellaneous Metal and Plastic Parts Coatings CTG recommendations. The TCEQ rules in Chapter 115 for these coating operations are based on the original CTG recommendations issued by the EPA in 1978. Several of the recommended VOC content limits for specific coatings categories listed in the 2008 CTG are less stringent than the more general VOC content limits specified in the EPA's original CTG recommendations for these categories. Since the 2008 Miscellaneous Metal and Plastic Parts Coatings CTG document does not specifically address this issue, the TCEQ requested clarification to ensure that that implementing the 2008 CTG would not be considered backsliding and to be certain that the TCEQ has the appropriate information to appropriately determine whether the 2008 recommendations actually represent RACT for Texas. See Attachment 1 for the TCEQ letter to the EPA requesting clarification on these issues.

The EPA did not formally respond to the TCEQ's request for clarification on these CTG documents as of the September 23, 2009, agenda; therefore, the TCEQ did not propose a RACT determination for the Miscellaneous Metal and Plastic Parts Coatings CTG source category. However, in the comments submitted for this SIP revision, the EPA did provide suggestions and guidance regarding the issues raised by the TCEQ in the December 2008 letter. The Executive Director will proceed with the RACT analysis of this CTG document based on the guidance provided in the EPA's comments and initiate a future SIP revision and rulemaking for the commission's consideration, if necessary, in order to submit a RACT determination to the EPA in a timely manner.

APPENDIX A

Dallas-Fort Worth Reasonably Available Control Technology Analysis Update

Attachment 1

December 8, 2008, Letter to Mr. William T. Harnett, Director, Air Quality Policy Division, United States Environmental Protection Agency on issues related to Control Techniques Guidelines documents

Buddy Garcia, *Chairman*
Larry R. Soward, *Commissioner*
Bryan W. Shaw, Ph.D., *Commissioner*
Mark R. Vickery, P.G., *Executive Director*

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

December 8, 2008

Mr. William T. Harnett, Director, Air Quality Policy Division
Office of Air Quality Planning and Standards Organization
United States Environmental Protection Agency
Mail Drop C504-01
Research Triangle Park, North Carolina 27711

Dear Director Harnett:

The Texas Commission on Environmental Quality (TCEQ), Air Quality Division is currently reviewing the Consumer and Commercial Products Group II, Group III, and Group IV Control Techniques Guidelines (CTG) documents released by the United States Environmental Protection Agency (EPA) from 2006 through 2008. Our evaluation of these CTG documents has prompted several questions regarding the CTG documents for Large Appliance Coatings, Metal Furniture Coatings, and Miscellaneous Metal and Plastic Parts Coatings. The issues and questions related to these CTG documents are detailed below.

Texas' existing rules in 30 Texas Administrative Code (TAC) Chapter 115 for controlling volatile organic compound (VOC) emissions from the surface coating of large appliances[1], metal furniture[2], and miscellaneous metal parts and products[3] were based on the EPA's Office of Air Quality Planning and Standards (OAQPS) corresponding 1977 and 1978 Guideline Series[4] (GS) recommendations. The existing emission standards for surface coating of large appliances and metal furniture are not specific to coating types; however, the 2007 CTG documents for Large Appliance Coatings[5] and Metal Furniture Coatings[6] recommend setting coating type specific emission standards. Some of the recommended emissions standards are equivalent or more stringent than the existing generic standards while some recommended emission standards are less stringent than the existing standards. Similarly, the 2008 CTG for Miscellaneous Metal and Plastic Parts Coatings[7] also recommends emission standards for certain coating types that are less stringent than the existing 30 TAC Chapter 115 emission standards. Please see the enclosed table for a more detailed comparison of the existing VOC emission standards based on the 1977 and 1978 GS recommendations (and TCEQ rules) versus the 2007 and 2008 CTG documents for these categories.

Since some of the limits recommended for these specific coating types are less stringent than the existing emission standards based on the EPA's original GS recommendations, TCEQ's Air Quality Division has

concerns that implementing the new CTG recommendations could be perceived as backsliding. In addition, these discrepancies may make it impossible for TCEQ staff to determine if actual VOC reduction benefit would occur from implementing the CTG recommendations. Given the limited explanation[8] of how these differences should be considered in light of the original GS standards, the TCEQ Air Quality Division is requesting written guidance to clarify the intent of the EPA's new CTG recommendations with regard to the following issues.

1. Specific clarification is needed that implementing the recommendations in the new CTG would not be considered backsliding.

2. Are the coating type categories in the new CTG considered by the EPA to be coating types that were unregulated by the original GS recommendations or is this a situation where these specific coatings were covered under the original guidance, but the EPA has re-evaluated what is technically feasible for these specialty coating types? What data was used to make this determination?

3. In light of the varying stringency of the recommended coating standards in these new CTG documents, how did the EPA determine the overall reduction benefit? Additional information, beyond what is provided in the docket, is necessary for the state to determine whether implementing the CTG recommendations will result in a net VOC reduction in the specific nonattainment areas where these CTG recommendations would be implemented.

The EPA's clarification regarding these issues is critical for the Air Quality Division to complete our evaluation of the CTG recommendations and proceed with any recommendation to TCEQ's executive management and the commission regarding the potential implementation of the EPA's CTG recommendations. Therefore, your expeditious response regarding these issues is greatly appreciated. You may contact me at 512-239-4696.

Sincerely,

Richard C Chi

for Susana M. Hildebrand, P.E.
Director, Air Quality Division
Texas Commission on Environmental Quality

SMH/LA/sy

Enclosures: References
Emission Limit Comparison Table

cc: Mr. Guy Donaldson, EPA Region 6
Ms. Ellen Belk, EPA Region 6
Mr. Bruce Moore, EPA, Office of Air Quality Planning and Standards
Mr. Bill Johnson, EPA, Office of Air Quality Planning and Standards

Enclosure: References

1: Title 30 TAC §115.421(a)(1), Emission Specifications for Large Appliance Coating (Amended January 17, 2003).

2: Title 30 TAC §115.421(a)(2), Emission Specifications for Metal Furniture Coating (Amended January 17, 2003).

3: Title 30 TAC §115.421(a)(9)(A), Emission Specifications for Miscellaneous Metal Parts and Products Coating (Amended January 17, 2003).

4: Guideline Series. Control of Volatile Organic Emissions from Existing Stationary Sources - Volume V: Surface Coating of Large Appliances, Publication number EPA-450/2-77-0.34.
Guideline Series. Control of Volatile Organic Emissions from Existing Stationary Sources - Volume III: Surface Coating of Metal Furniture, Publication number EPA-450/2-77-032.
Guideline Series. Control of Volatile Organic Emissions from Existing Stationary Sources - Volume VI: Surface Coating of Miscellaneous Metal Parts and Products, Publication number EPA-450/2-78-015.

5: Control Techniques Guidelines for Large Appliance Coatings. Publication number EPA 453/R-07-004.

6: Control Techniques Guidelines for Metal Furniture Coatings. Publication number EPA 453/R-07-005.

7: Control Techniques Guidelines for Miscellaneous Metal and Plastic Parts Coatings. Publication number EPA 453/R-08-003.

8: EPA Docket Number EPA-HQ-OAR-2007-0329-0009 and EPA Docket Number EPA-HQ-OAR-2007-0334-0010.

Enclosure: Emission Limit Comparison Table

Comparison of 30 TAC Chapter 115 Emission Limits and 2006-2008 CTG Recommended Emission Limits			
Coating Type*	**Chapter 115 Emission Limit****	**CTG Recommended Emission Limit****	
		Baked Coating	**Air-Dried Coating**
Large Appliance Coating			
General, One Component	2.8	2.3	2.3
General, Multi-Component	2.8	2.3	2.8
Extreme High Gloss	2.8	3.0	2.8
Extreme Performance	2.8	3.0	3.5
Heat Resistant	2.8	3.0	3.5
Metallic	2.8	3.5	3.5
Pretreatment Coatings	2.8	3.5	3.5
Solar Absorbent	2.8	3.0	3.5
Metal Furniture Coating			
General, One Component	3.0	2.3	2.3
General, Multi-Component	3.0	2.3	2.8
Extreme High Gloss	3.0	3.0	2.8
Extreme Performance	3.0	3.0	3.5
Heat Resistant	3.0	3.0	3.5
Metallic	3.0	3.5	3.5
Pretreatment Coatings	3.0	3.5	3.5
Solar Absorbent	3.0	3.0	3.5
Miscellaneous Metal Parts and Products Coating			
General One Component	3.0	2.3	2.8
General Multi Component	3.0	2.3	2.8
Camouflage	3.0	3.5	3.5
Electric-Insulating Varnish	3.0	3.5	3.5
Etching Filler	3.0	3.5	3.5
Extreme High-Gloss	3.0	3.0	3.5
Extreme Performance	3.5	3.0	3.5
Heat-Resistant	3.5	3.0	3.5
High Performance Architectural	3.0	6.2	6.2
High Temperature	3.0	3.5	3.5
Metallic	3.0	3.5	3.5
Military Specification	3.0	2.3	2.8
Mold-Seal	3.0	3.5	3.5
Pan Backing	3.0	3.5	3.5
Prefabricated Architectural Multi-Component	3.0	2.3	3.5
Prefabricated Architectural One-Component	3.0	2.3	3.5
Pretreatment Coatings	3.0	3.5	3.5
Repair and Touchup	3.0	3.0	3.5
Silicone Release	3.0	3.5	3.5
Solar-Absorbent	3.0	3.0	3.5

Comparison of 30 TAC Chapter 115 Emission Limits and 2006-2008 CTG Recommended Emission Limits			
Coating Type*	**Chapter 115 Emission Limit****	**CTG Recommended Emission Limit****	
		Baked Coating	**Air-Dried Coating**
Vacuum-Metalizing	3.0	3.5	3.5
Drum Coating, New, Exterior	3.0	2.8	2.8
Drum Coating, New, Interior	4.3	3.5	3.5
Drum Coating, Reconditioned, Exterior	3.0	3.5	3.5
Drum Coating, Reconditioned, Interior	4.3	4.2	4.2

* The CTG recommended emission limits for coating types listed in red font are less stringent than existing Chapter 115 limits.
** Limit expressed in pounds per gallon of coating (minus water and exempt solvent) delivered to the application system.

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TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

ORDER ADOPTING
REVISIONS TO THE STATE IMPLEMENTATION PLAN

Docket No. 2009-1127-SIP

On March 10, 2010, the Texas Commission on Environmental Quality (Commission), during a public meeting, considered adoption of the Dallas-Fort Worth (DFW) Reasonably Available Control Technology (RACT) Update, 30 Texas Administrative Code (TAC) Chapter 117 Rule Revision Noninterference Demonstration, and Modified Failure-to-Attain Contingency Plan State Implementation Plan (SIP) Revision (DFW RACT, Rule, and Contingency SIP Revision). The Commission adopts this SIP revision demonstrating as required by the 1990 Federal Clean Air Act (FCAA) Amendments under §§ 172(c)(1), 182(b)(2) and 182(f), an updated RACT determination for the DFW area that documents the state's RACT analysis of 11 control technique guidelines (CTG) documents issued between 2006 and 2008 by the EPA. In addition to the RACT update, this SIP revision incorporates associated 30 TAC Chapter 115 and 30 TAC Chapter 117 rule revisions adopted concurrently into the Texas SIP, demonstrates noninterference of the Chapter 117 rule revision with the SIP, and includes a modified failure-to-attain contingency plan.

Under Tex. Health & Safety Code Ann. §§ 382.011, 382.012, and 382.023 (Vernon 2008), the Commission has the authority to control the quality of the state's air and to issue orders consistent with the policies and purposes of the Texas Clean Air Act, Chapter 382 of the Tex. Health & Safety Code. Notice of the proposed SIP revision was published for comment in the October 9, 2009 issue of the *Texas Register* (34 TexReg 7133).

Pursuant to 40 Code of Federal Regulations § 51.102 and after proper notice, the Commission conducted public hearings to consider the revision to the SIP. Proper notice included prominent advertisement in the areas affected at least 30 days prior to the dates of the hearings. Public hearings were held in Austin, Texas on October 29, 2009 and in Fort Worth, Texas on November 2, 2009.

The Commission circulated hearing notices of its intended action to the public, including interested persons, the Regional Administrator of the EPA, and all applicable local air pollution control agencies. The public was invited to submit data, views, and recommendations on the proposed SIP revision, either orally or in writing, at the hearings or during the comment period. Prior to the scheduled hearings, copies of the proposed SIP revision were available for public inspection at the Commission's central office and on the Commission's Web site.

Data, views, and recommendations of interested persons regarding the proposed SIP revision were submitted to the Commission during the comment period, and were considered by the Commission as reflected in the analysis of testimony incorporated by reference to this Order. The Commission finds that the analysis of testimony includes the names of all interested groups or associations offering comment on the proposed SIP revision and their position concerning the same.

IT IS THEREFORE ORDERED BY THE COMMISSION that the DFW RACT, Rule, and Contingency SIP Revision incorporated by reference to this Order is hereby adopted. The adopted revision to the SIP is incorporated by reference in this Order as if set forth at length verbatim in this Order.

IT IS FURTHER ORDERED BY THE COMMISSION that on behalf of the Commission, the Chairman should transmit a copy of this Order, together with the adopted revision to the SIP, to the Regional Administrator of EPA as a proposed revision to the Texas SIP pursuant to the Federal Clean Air Act, codified at 42 U.S. Code Ann. §§ 7401 - 7671q, as amended.

If any portion of this Order is for any reason held to be invalid by a court of competent jurisdiction, the invalidity of any portion shall not affect the validity of the remaining portions.

Date issued:

TEXAS COMMISSION ON
ENVIRONMENTAL QUALITY

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Bryan W. Shaw, Ph.D., Chairman