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APPENDIX F: REASONABLY AVAILABLE CONTROL TECHNOLOGY ANALYSIS

1. INTRODUCTION

The Dallas-Fort Worth eight-hour ozone nonattainment area (DFW area) is currently classified as serious under the 1997 eight-hour ozone National Ambient Air Quality Standards (NAAQS) (75 FR 79302, December 20, 2010). Under the 1997 eight-hour ozone 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's (EPA) Final Rule to Implement the Eight-Hour Ozone NAAQS (40 Code of Federal Regulations (CFR) §51.912, November 29, 2005), a state containing areas classified as moderate nonattainment and above must submit a state implementation plan (SIP) revision demonstrating that its current rules fulfill the reasonably available control technology (RACT) requirements for all control techniques guidelines (CTG) emission source categories and all non-CTG major sources of nitrogen oxides (NO_x) and volatile organic compounds (VOC). The major source threshold for serious nonattainment areas is a potential to emit 50 tons per year (tpy) or more of either NO_x or VOC. This appendix provides the TCEQ's analysis of the sources and the applicable rules to demonstrate that the state is fulfilling the RACT requirements for the DFW area.

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 above 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 (BACT) levels expected of new sources or to maximum achievable control technology (MACT) levels required for major sources of hazardous air pollutants.

While RACT and reasonably available control measures (RACM) have similar consideration factors like technological and economic feasibility, there is a significant distinction between RACT and RACM. A control measure must advance attainment of the area towards the meeting the NAAQS for that measure to be considered RACM. 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 issued 11 CTG documents from 2006 through 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 categories.

The RACT analysis included in the DFW RACT Update, 30 Texas Administrative Code Chapter 117 Rule Revision Noninterference Demonstration, and Modified Failure-to-Attain Contingency Plan SIP revision adopted March 10, 2010, addressed the following CTG documents:

- Flat Wood Paneling Coatings, Group II issued in 2006;
- Offset Lithographic and Letterpress Printing, Group II issued in 2006; and
- Fiberglass Boat Manufacturing Materials, Group IV issued in 2008.

The RACT analysis included in this SIP revision addresses following CTG documents:

- Flexible Packaging Printing Materials, Group II issued in 2006;
- Industrial Cleaning Solvents, Group II issued in 2006;
- Large Appliance Coatings, Group III issued in 2007;
- Metal Furniture Coatings, Group III issued in 2007;
- Paper, Film, and Foil Coatings, Group III issued in 2007;
- Miscellaneous Industrial Adhesives, Group IV issued in 2008;
- Miscellaneous Metal and Plastic Parts Coatings, Group IV issued in 2008; and
- Auto and Light-Duty Truck Assembly Coatings, Group IV issued in 2008.

2. RACT EVALUATION APPROACH

2.1. General Discussion

The TCEQ demonstrates that the RACT requirements are being fulfilled in the DFW area by: (1) identifying all CTG source categories of NO_x and VOC emissions and submitting negative declarations for categories where there are no emission sources within the DFW area; (2) identifying all non-CTG major sources of NO_x and VOC emissions; (3) identifying the state regulation that implements or exceeds RACT for each applicable CTG source category or non-CTG major emission source; and (4) describing the basis for concluding that these regulations fulfill RACT.

2.2. Identification of CTG and Non-CTG Emission Sources

The EPA has issued CTG documents defining RACT for existing facilities. The EPA has also issued Alternative Control Technology (ACT) documents that describe available control technologies but do not define presumptive RACT levels. The TCEQ reviewed the EPA's CTG and ACT documents to identify all source categories of NO_x and VOC emissions that require RACT. RACT determinations are not required if there are no facilities in the DFW area that are subject to a CTG or ACT document. A negative declaration is provided for source categories described within the EPA guidance documents that do not exist in the DFW area.

Under the EPA's 1997 eight-hour ozone regulations for serious ozone nonattainment areas, the threshold for major stationary sources is a potential to emit of 50 tpy of either NO_x or VOC emissions. The TCEQ reviewed the point source emissions inventory and Title V databases to identify all major sources of NO_x or VOC emissions. All sources in the Title V database that were listed as a major source for NO_x or VOC emissions are included in the RACT analysis. Since the point source emissions inventory database reports actual emissions rather than potential to emit, the TCEQ reviewed sources that reported actual emissions as low as 25 tpy of NO_x or VOC to account for the difference between actual and potential emissions. Sites from the emissions inventory database with emissions of 25 tpy or more of NO_x or VOC that were not identified in the Title V database and could not be verified as minor sources by other means are also included in the RACT analysis.

2.3. Determining if State Regulations Fulfill RACT Requirements

The EPA previously approved the DFW VOC rules in 30 Texas Administrative Code (TAC) Chapter 115 and NO_x rules in 30 TAC Chapter 117 as meeting the FCAA RACT requirements (74 FR 1903; January 14, 2009). State regulations in Chapters 115 and 117 that implement the controls recommended in CTG or ACT documents or that implement equivalent or superior emission control strategies were determined to fulfill RACT requirements for any CTG or ACT documents issued prior to 2006. For CTG documents issued in 2006 and later, RACT was evaluated by comparing CTG recommendations to TCEQ rules to determine if the existing rules satisfied RACT requirements. RACT determinations for three of the CTG documents issued from 2006 to 2008 were submitted to the EPA on April 6, 2010 (SIP Project Number 2009-021-SIP-

NR). Additional discussion regarding CTG documents issued in 2006 and later is provided in Section 3.3: *VOC RACT Determination* of this appendix. State rules that are consistent with or more stringent than controls implemented in other nonattainment areas were also determined to fulfill RACT requirements. Federally approved state rules and rule approval dates can be found in 40 CFR §52.2270(c), EPA Approved Regulations in the Texas SIP.

BACT is an emission standard that is based on the maximum degree of emission reduction achievable and is at least as stringent as the emission standards set by any applicable FCAA provisions. MACT is an emission standard that requires the maximum reduction of hazardous emissions and is at least as stringent as the average emission level achieved by controls on the top 12% of existing sources in the applicable source category. Therefore, emission sources subject to the more stringent BACT or MACT requirements were determined to also fulfill RACT requirements.

The TCEQ reviewed the emission sources in the DFW area and the applicable state rules to verify that all CTG or ACT emission source categories and non-CTG and ACT major emission sources in the DFW area were subject to requirements that meet or exceed the applicable RACT requirements, or that further emission controls on the sources were either not economically feasible or not technologically feasible.

3. RACT DETERMINATION AND DISCUSSION

3.1. General Discussion

Under the current state rules, the DFW area is subject to some of the most stringent NO_x and VOC emission control requirements in the country and for many source categories the existing rules are more stringent than recommended RACT standards for those categories. 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.

Table F-1: *State Rules Addressing NO_x RACT Requirements in CTG and ACT Reference Documents* provides the emission source categories, the CTG and ACT reference documents, and the state rules addressing the RACT requirements for sources in the CTG and ACT documents. A negative declaration is provided in the table for emission source categories that based on information available to the TCEQ either do not exist in the DFW area or exist but do not meet the applicability criteria recommended for controls, e.g., sources less than the recommended exemption thresholds. Table F-2: *State Rules Addressing VOC RACT Requirements in CTG and ACT Reference Documents* provides the emission source categories, the CTG and ACT reference documents, and the state rules addressing the RACT requirements for sources in the CTG and ACT documents. A negative declaration is provided in the table for emission source categories that based on information available to the TCEQ either do not exist in the DFW area or exist but do not meet the applicability criteria recommended for controls, e.g., sources less than the recommended exemption thresholds.

Table F-3: *State Rules Addressing NO_x RACT Requirements for Major Emission Sources in the DFW Area* and Table F-4: *State Rules Addressing VOC RACT Requirements for Major Emission Sources in the DFW Area* list the major stationary emission sources with actual or potential emissions exceeding the 50 tpy major source threshold in the DFW area. Some sources

listed may actually be less than the major source threshold but were included in the tables. The tables provide the emission source regulated entity number (RN), account number, company name, standard industrial classification (SIC) code, a brief description of the source, and the reported annual emissions (in tpy). The tables also include either the state rules satisfying the RACT requirements, the permit requirements that limit emissions, or the reasoned justification for why controlling the emissions is not considered RACT. Additionally, in order to facilitate review of the major source RACT determination, Tables F-3 and F-4 identify those sites that were included in the major source RACT analysis for the 2007 attainment demonstration SIP revision for the 1997 eight-hour ozone NAAQS.

3.2. NO_x RACT Determination

3.2.1. Chapter 117 NO_x Rules

The Chapter 117 rules represent one of the most comprehensive NO_x control strategies in the nation. The NO_x controls and reductions implemented through Chapter 117 for the DFW ozone nonattainment area encompass both RACT and beyond-RACT levels of control. The current EPA-approved Chapter 117 rules fulfill RACT requirements for all CTG and ACT NO_x source categories. Table F-1 provides additional details on the CTG and ACT source categories.

For non-CTG and ACT major NO_x emission source categories, RACT is fulfilled by separate existing source-specific rules in Chapter 117 for sources that NO_x controls are technologically and economically feasible. Further NO_x controls on certain major sources were determined to be either not economically feasible or not technologically feasible. Table F-3 provides additional detail on the non-CTG and ACT major emission source categories.

3.3. VOC RACT Determination

3.3.1. Existing Chapter 115 VOC RACT Rules

All VOC emission source categories addressed by CTG and ACT documents that VOC controls are technologically and economically feasible are controlled by existing rules in Chapter 115, other EPA-approved regulations that fulfill RACT requirements, and by revisions to Chapter 115 VOC rules that are being adopted concurrently with this SIP revision (Rule Project Numbers 2010-016-115-EN and 2010-025-115-EN). Sections 3.3.2 through 3.3.9 of this appendix discuss the RACT determination for eight CTG documents issued by the EPA between 2006 and 2008. Section 3.3.10 of this appendix discusses the RACT determination for the petroleum liquid storage CTG emission source category. Table F-2 provides additional details on the CTG and ACT source categories.

For all non-CTG and ACT major VOC emission source categories that VOC controls are technologically and economically feasible, RACT is fulfilled by existing Chapter 115 rules, other federally enforceable measures, and by revisions to Chapter 115 VOC rules that are being adopted concurrently with this SIP revision (Rule Project Number 2010-025-115-EN). Section 3.3.10 of this appendix discusses the RACT determination for crude oil and condensate storage tanks with the potential to emit at least 50 tpy of VOC. Additional VOC controls on certain major sources were determined to be either not economically feasible or not technologically feasible. Table F-4 provides additional detail on the non-CTG and ACT major emission source categories.

3.3.2. Flexible Package Printing Materials

Concurrent with this SIP revision, the commission is adopting revisions to the flexographic and rotogravure printing rules in 30 TAC Chapter 115, Subchapter E: *Solvent-Using Processes*, Division 3: *Flexographic and Rotogravure Printing* to implement the EPA's 2006 Flexible

Package Printing CTG recommendations that the TCEQ has determined are RACT in the DFW area (Rule Project Number 2010-016-115-EN). The Chapter 115 rulemaking reduces the VOC content limits of coatings, increases the overall control efficiency of add-on controls used in flexible package printing processes, establishes work practice procedures for materials used during associated cleaning activities, and expands rule applicability to include smaller flexible package printing lines that were previously exempt from these rules.

The TCEQ is not implementing the EPA's 2006 CTG recommendation to exempt flexible package printing operations from all VOC coating content limits if the operations have total actual VOC emissions less than 15 pounds per day from inks, coatings, and adhesives. For the DFW area, the existing Chapter 115 rules provide an exemption for combined flexographic and rotogravure printing operations with the potential to emit less than 50 tpy of VOC from inks. Calculating only the VOC emissions resulting from flexible package printing operations to determine exemption from the required controls may create backsliding issues for properties already complying with the current Chapter 115 rules because sources currently subject to the Chapter 115 rules could potentially become exempt. The existing Chapter 115 exemption limit is equal to or potentially more stringent than the 2006 CTG-recommended exemption threshold for properties conducting multiple flexographic and rotogravure printing operations, and is retained in the rules.

Additionally, the TCEQ is not implementing the EPA's 2006 CTG recommendation to exempt a flexible package printing line from complying with VOC coating content limits if the line has the potential to emit less than 50 tpy of uncontrolled VOC emissions from the dryer, from inks, coatings, and adhesives. As previously stated, the current Chapter 115 rules require combining the VOC emissions from all flexographic and rotogravure printing lines to determine exemption from the VOC coating content limits. Implementing the 2006 CTG recommendation may exempt flexible package printing lines co-located on a property with other flexographic and rotogravure printing lines that are currently required to comply with the VOC control limits. The Chapter 115 rules retain the existing VOC content limits for a flexible package printing line with VOC emissions below the 2006 CTG-recommended exemption threshold.

The EPA's 2006 CTG recommends requiring control equipment to have an overall control efficiency ranging from 65% to 80% depending on the first installation date of the press and control equipment. The TCEQ disagrees with the 2006 CTG recommendation to correlate control device efficiency requirements with the first installation date of the printing press or control device regardless of where the equipment was first 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. Instead, the TCEQ is requiring the CTG-recommended 80% overall control efficiency, regardless of the first installation date.

3.3.3. Industrial Cleaning Solvents

Concurrent with this SIP revision, the commission is adopting revisions to Chapter 115, Subchapter E, to create new Division 6: *Industrial Cleaning Solvents* to implement the EPA's 2006 Industrial Cleaning Solvents CTG recommendations that the TCEQ has determined are RACT in the DFW area (Rule Project Number 2010-016-115-EN). The Chapter 115 rulemaking establishes VOC content limits for cleaning solvents used in specific cleaning activities, provides exemptions for certain cleaning activities from all or portions of the rule, and requires certain work practice procedures for the use, storage, and disposal of cleaning solvents. In response to comments on the proposed industrial cleaning solvents rules, the commission is adopting new

§115.461(c) to exempt a solvent cleaning operation from the requirements in this division if the VOC emissions from that solvent cleaning operation are controlled by the control requirements or emission specifications in another division in Chapter 115. The adopted new exemption provides flexibility and reduces the compliance burden for affected sources. Additionally, the commission expects that complying with requirements in other Chapter 115 rules is at least as effective as meeting the industrial cleaning solvents rule requirements. The adopted exemption is consistent with the EPA's 2006 CTG recommendation to ensure that a particular cleaning activity is not subject to duplicative requirements.

3.3.4. Large Appliance Coatings

Concurrent with this SIP revision, the commission is adopting revisions to Chapter 115, Subchapter E, to create new Division 5: *Control Requirements for Surface Coating Processes* to implement the EPA's 2007 Large Appliance Coatings CTG recommendations that the TCEQ has determined are RACT in the DFW area (Rule Project Number 2010-016-115-EN). The Chapter 115 rulemaking reduces VOC content limits of coatings, increases the overall control efficiency for add-on controls used in large appliance coating operations, and establishes minimum transfer efficiency for coating application methods. The rules also require certain work practice procedures for coating-related activities and materials used during associated cleaning operations.

The EPA's 2007 CTG recommends exempting large appliance coating operations from the coating VOC content limits and work practice standards if total uncontrolled VOC emissions from coatings and associated cleaning solvents are less than 15 pounds per day. The current TCEQ rules provide an exemption from the coating VOC content limits for large appliance coating operations if total uncontrolled VOC emissions from all applicable coating processes on a property subject to Chapter 115, Subchapter E, Division 2: *Surface Coating Processes* are less than 3.0 pounds per hour and 15 pounds per day. The existing exemption from the required VOC controls may be more stringent for properties conducting multiple coating operations specified in Division 2 because the exemption is not based on VOC emissions from a single coating category. To prevent potential backsliding for properties already required to comply with the state's regulations, the Chapter 115 rules retain the existing exemption criteria.

The existing TCEQ large appliance coating limits are based on the original CTG recommendations issued by the EPA in 1977. Several of the recommended VOC content limits for specific coating categories listed in the 2007 CTG document are less stringent than the limits specified in the EPA's original CTG recommendations for this coating category. The 2007 CTG also recommends minimum solids transfer efficiency for coating application equipment. Despite the higher VOC content limits for the specialty coatings, the EPA's 2007 CTG claims that implementing the limits as recommended would result in an overall emissions reduction and provides documentation containing the methodology used to estimate the reduction. The TCEQ also conducted a comprehensive comparison of the 2007 CTG recommendations to the existing VOC coating content limit and determined that implementing the 2007 CTG-recommended coating VOC content limits will not negatively impact the status of the state's attainment with the 1997 eight-hour ozone NAAQS, will not interfere with control measures, and will not prevent reasonable further progress toward attainment of the ozone NAAQS. Despite the full demonstration of noninterference provided in the proposed rule preamble (Rule Project Number 2010-016-115-EN), the EPA commented that in order for the proposed rules to be approved as RACT, the state must also demonstrate that the existing Chapter 115 VOC content limits for large appliance coatings, which were based on the EPA's original CTG recommendations, are no longer technologically or economically feasible. The commission contends that by promulgating higher CTG-recommended RACT limits for large appliance

coatings, the EPA has established that the original CTG-recommended limits, and thus the existing Chapter 115 limits, are not technologically or economically feasible. However, the EPA's CTG did not specifically explain why the lower limits included in the original CTG recommendations were no longer technologically or economically feasible. In absence of any specific information indicating that the TCEQ's existing large appliance coating limits are no longer technologically or economically feasible, the adopted Chapter 115 rules only include the CTG-recommended limits that are equivalent to or lower than the existing limit.

3.3.5. Metal Furniture Coatings

Concurrent with this SIP revision, the commission is adopting revisions to Chapter 115, Subchapter E, to create new Division 5 to implement the EPA's 2007 Metal Furniture Coatings CTG recommendations that the TCEQ has determined are RACT in the DFW area (Rule Project Number 2010-016-115-EN). The Chapter 115 rulemaking reduces VOC content limits of coatings, increases the overall control efficiency for add-on controls used in metal furniture coating operations, and establishes minimum transfer efficiency of coating application methods. The rules also require certain work practice procedures for coating-related activities and materials used during associated cleaning operations.

The EPA's 2007 CTG recommends exempting metal furniture coating operations from the coating VOC content limits and work practice standards if total uncontrolled VOC emissions from coatings and associated cleaning solvents are less than 15 pounds per day. The current TCEQ rules provide an exemption from the coating VOC content limits for metal furniture coating operations if total uncontrolled VOC emissions from coatings in all applicable coating processes located on a property subject to Chapter 115, Subchapter E, Division 2 are less than 3.0 pounds per hour and 15 pounds per day. The existing exemption from the required VOC controls may be more stringent for properties conducting multiple coating processes specified in Division 2 because the exemption is not based on VOC emissions from a single coating category. To prevent potential backsliding for properties already required to comply with the state's regulations, the Chapter 115 rules retain the existing exemption criteria.

The existing TCEQ metal furniture coating limits are based on the original CTG recommendations issued by the EPA in 1977. Several of the recommended VOC content limits for specific coating categories listed in the 2007 CTG document are less stringent than the limits specified in the EPA's original CTG recommendations for this coating category. The 2007 CTG also recommends minimum solids transfer efficiency for coating application equipment. Despite the higher VOC content limits for the specialty coatings, the EPA's 2007 CTG claims that implementing the limits as recommended would result in an overall emissions reduction and provides documentation containing the methodology used to estimate the reduction. The TCEQ also conducted a comprehensive comparison of the 2007 CTG recommendations to the existing VOC coating content limits and determined that implementing the 2007 CTG-recommended coating VOC content limits will not negatively impact the status of the state's attainment with the 1997 eight-hour ozone NAAQS, will not interfere with control measures, and will not prevent reasonable further progress toward attainment of the ozone NAAQS. Despite the full demonstration of noninterference provided in the proposed rule preamble (Rule Project Number 2010-016-115-EN), the EPA commented that in order for the proposed rules to be approved as RACT, the state must also demonstrate that the existing Chapter 115 VOC content limits for metal furniture coatings, which were based on EPA's original CTG recommendations, were no longer technologically or economically feasible. The commission contends that by promulgating higher CTG-recommended RACT limits for metal furniture coatings, the EPA has established that the original CTG-recommended limits, and thus the existing Chapter 115 limits, are not technologically or economically feasible. However, the EPA's CTG did not specifically

explain why the lower limits included in the original CTG recommendations were no longer technologically or economically feasible. In absence of any specific information indicating that the TCEQ's existing metal furniture coating limits are no longer technologically or economically feasible, the adopted Chapter 115 rules only include the CTG-recommended limits that are equivalent to or lower than the existing limit.

3.3.6. Paper, Film, and Foil Coatings

Concurrent with this SIP revision, the TCEQ is adopting revisions to Chapter 115, Subchapter E, to create new Division 5 to implement the EPA's 2007 Paper, Film, and Foil Coatings CTG recommendations that the TCEQ has determined are RACT in the DFW area (Rule Project Number 2010-016-115-EN). The Chapter 115 rulemaking reduces the VOC content limits of coatings; increases the overall control efficiency for add-on controls used in paper, film, and foil coating operations; and establishes work practice procedures for materials used during cleaning operations associated with paper, film, and foil coating.

The EPA's 2007 CTG recommends exempting all paper, film, and foil coating operations on a property from the coating VOC content limits and work practice standards if total uncontrolled VOC emissions from paper, film, and foil coatings and associated cleaning solvents are less than 15 pounds per day. The current TCEQ rules provide an exemption from the coating VOC content limits for paper, film, and foil coating operations if total uncontrolled VOC emissions from all applicable surface coating processes on a property subject to Chapter 115, Subchapter E, Division 2 are less than 3.0 pounds per hour and 15 pounds per day. The existing exemption from the required VOC controls may be more stringent for properties conducting multiple coating processes specified in Division 2 because the exemption is not based on VOC emissions from a single coating category. To prevent potential backsliding for properties conducting paper, film, and foil coating operations already required to comply with the state's regulations, the Chapter 115 rules retain the existing exemption criteria.

Additionally, the TCEQ is not implementing the EPA's 2007 CTG recommendation to exempt a paper, film, and foil coating line from complying with VOC coating content limits if the line has the potential to emit less than 25 tpy of uncontrolled VOC emissions from coatings. As previously stated, the current Chapter 115 rules require combining the VOC emissions from all applicable surface coating processes located on a property subject to Subchapter E, Division 2 to determine exemption from the VOC coating content limits. Implementing the 2007 CTG recommendation may exempt paper, film, and foil coating lines co-located on a property with other coating lines subject to Division 2 that are currently complying the VOC coating content limits. To prevent backsliding, the Chapter 115 rules retain the existing VOC content limits for a paper, film, and foil coating line with VOC emissions below the 2007 CTG-recommended exemption threshold.

3.3.7. Miscellaneous Industrial Adhesives

Concurrent with this SIP revision, the TCEQ is adopting revisions to Chapter 115, Subchapter E, to create new Division 7: *Miscellaneous Industrial Adhesives* to implement the EPA's 2008 Miscellaneous Industrial Adhesives CTG recommendations that the TCEQ has determined are RACT in the DFW area (Rule Project Number 2010-016-115-EN). The Chapter 115 rulemaking implements VOC content limits for general adhesive application processes, specialty adhesive application processes, and adhesive primer application processes; provides exemptions for certain cleaning activities from all or portions of the rule; incorporates test methods and recordkeeping requirements; and establishes minimum transfer efficiency of adhesive application methods. The rules also require certain work practice procedures for adhesive-related activities and materials used during associated cleaning operations. In response to

comments, the commission is revising §115.470(a) to clarify the rules in Division 7 apply to manufacturing operations that use adhesives for any of the adhesive application processes specified in the control requirements in §115.473(a); adhesives applied in the field (e.g., adhesives applied at construction jobs in the field) are not subject to this division. The revised rule applicability in §115.470(a) more accurately reflects the sources affected by the CTG recommendations as described by the EPA in the final rule for the 2008 Miscellaneous Industrial Adhesives CTG (73 FR 58489).

3.3.8. Miscellaneous Metal and Plastic Parts Coatings

Concurrent with this SIP revision, the commission is adopting revisions to Chapter 115, Subchapter E, to create new Division 5 to implement the EPA's 2008 Miscellaneous Metal and Plastic Parts Coatings CTG recommendations that the TCEQ has determined are RACT in the DFW area (Rule Project Number 2010-016-115-EN). The miscellaneous plastic parts category of the CTG represents a new RACT CTG category for the DFW area, and the current coatings rules in Chapter 115, Subchapter E, Division 2 do not apply to miscellaneous plastic parts. The Chapter 115 rulemaking expands the scope of the existing rule applicability to include the new coating categories recommended in the 2008 CTG. The Chapter 115 rulemaking reduces VOC content limits of coatings, increases the overall control efficiency of add-on controls, and establishes minimum transfer efficiency of coating application methods. The rules also require certain work practice procedures for coating-related activities and materials used during associated cleaning operations.

The EPA's 2008 CTG recommends exempting miscellaneous metal and plastic parts coating operations from the VOC control requirements if total uncontrolled VOC emissions from coatings and cleaning solvents are less than 15 pounds per day. The current TCEQ rules exempt miscellaneous metal parts and products coating operations from the required VOC coating limits if located on a property where total uncontrolled VOC emissions from all applicable surface coating processes subject to Chapter 115, Subchapter E, Division 2 are less than 3.0 pounds per hour and 15 pounds per day. The existing exemption from the required controls may be more stringent for properties conducting multiple coating processes specified in Division 2 because the exemption is not based on VOC emissions from a single coating category. To prevent potential backsliding for sources already subject to the Chapter 115 rules, the rule revisions integrate the new 2008 CTG coating categories into the existing exemption from the VOC control requirements. The Chapter 115 rules retain the state's approach to maintain consistency with the current exemption criteria.

The miscellaneous metal part and product coating limits in Chapter 115, Subchapter E, Division 2 are based on the original CTG recommendations issued by the EPA in 1978. Several of the recommended VOC content limits for specific coating categories listed in the 2008 CTG document are less stringent than the limits specified in the EPA's original CTG recommendations for this coating category. The 2008 CTG also recommends minimum solids transfer efficiency for coating application equipment. Although the 2008 CTG does not quantify the estimated VOC emissions reduced as a result of implementing the recommended VOC content limits, the TCEQ applied an approach consistent with the methodology the EPA used to estimate VOC emission reductions associated with implementing the Large Appliance Coating and Metal Furniture Coating CTG recommendations. The TCEQ determined that implementing the 2008 CTG-recommended coating VOC content limits will not negatively impact the status of the state's attainment with the 1997 eight-hour ozone NAAQS, will not interfere with control measures, and will not prevent reasonable further progress toward attainment of the 1997 eight-hour ozone NAAQS. Despite the full demonstration of noninterference provided in the proposed rule preamble (Rule Project Number 2010-016-115-EN), the EPA commented that in order for

the proposed rules to be approved as RACT, the state must also demonstrate that the existing Chapter 115 VOC content limits for miscellaneous metal part and product coatings, which were based on EPA's original CTG recommendations, were no longer technologically or economically feasible. The commission contends that by promulgating higher CTG-recommended RACT limits for miscellaneous metal part and product coatings, the EPA has established that the original CTG-recommended limits, and thus the existing Chapter 115 limits, are not technologically or economically feasible. However, the EPA's CTG did not specifically explain why the lower limits included in the original CTG recommendations were no longer technologically or economically feasible. In absence of any specific information indicating that the TCEQ's existing miscellaneous metal part and product coating limits are no longer technologically or economically feasible, the adopted Chapter 115 rules only include the CTG-recommended limits that are equivalent to or lower than the existing limits. In light of the technological and economic feasibility issues detailed in the EPA's 2008 CTG that are associated with high performance architectural coatings containing less than 6.2 pounds of VOC per gallon of coating (lb VOC/gal coating), the commission is adopting to retain the EPA's 2008 CTG-recommended 6.2 lb VOC/gal coating limit for high performance architectural coatings in the adopted Chapter 115 miscellaneous metal parts and products rules.

In response to comments, the commission has revised §115.427 to limit the rule applicability to only those designated on-site maintenance shops that re-coat used parts or products that were required to comply with the rules in Division 2 prior to January 1, 2012, which is the beginning of the calendar year shortly after the expected effective date of this rule revision. Additionally, in response to this comment, the commission has revised §115.450(a) to exclude designated on-site maintenance shops from the miscellaneous metal parts and products coatings rule applicability in Division 5. The adopted revisions prevent any potential backsliding concerns by requiring sources that are currently complying with these rules in Division 2 to continue to meet these VOC limits. The adopted revisions are consistent with the intent of EPA's 1977 and 2008 CTG RACT recommendations for miscellaneous metal parts and products coatings and the commission maintains the rules continue to satisfy RACT requirements in FCAA, §172(c)(1) and §182(b)(2) for this CTG emission source category.

In response to comments, the commission added new §115.451(2)(D) to exempt all other coating categories regulated in Divisions 2 and 5 from the miscellaneous metal and plastic parts coatings rules. Incorporating this new exemption into §115.451 clarifies that the miscellaneous metal parts and products coatings rules do not apply to the coating operations characterized by another rule specified in Division 2 and Division 5.

Based on information provided during the public comment period, the commission determined that some of the pleasure craft coating VOC limits included in the EPA's CTG recommendations are not technologically feasible at this time and therefore do not represent RACT. In response to comments, the commission is increasing the VOC limit for *extreme high-gloss coatings* to 5.0 pounds of VOC per gallon of coating (lb VOC/gal coating) and revising the definition include any coating that achieves greater than 90% reflectance on a 60 degree meter. In response to comments, the commission is increasing the VOC limit for *finish primer/surfacer coatings* to 5.0 lb VOC/gal coating. In response to comments, the commission is increasing the VOC limit for *other substrate antifoulant coatings* to 3.34 lb VOC/gal coating. In response to comments, the commission is introducing a new specialty coating category for *antifoulant sealer/tie coatings*, which are coatings applied over biocidal antifoulant coating for the purpose of preventing release of biocides into the environment, or to promote adhesion between an antifoulant and a primer or other antifoulants, and is establishing a VOC limit of 3.5 lb VOC/gal coating for this new category. In response to comments, the commission is revising the

definition of pretreatment wash primer coatings to include any coating that contains no more than 25% solids, by weight, and at least 0.10% acids, by weight; is used to provide surface etching; and is applied directly to fiberglass and metal surface to provide corrosion resistance and adhesion of subsequent coatings.

3.3.9. Automobile and Light-Duty Truck Assembly Coatings

Concurrent with this SIP revision, the commission is adopting revisions to Chapter 115, Subchapter E, to create new Division 5 to implement the EPA's 2008 Auto and Light-Duty Truck Assembly Coatings CTG recommendations that the TCEQ has determined are RACT in the DFW area (Rule Project Number 2010-016-115-EN). The Chapter 115 rulemaking reduces the VOC content limits of coatings and establishes work practice procedures for materials used during cleaning operations associated with automobile and light-duty truck assembly coating operations.

The EPA's 2008 CTG recommends exempting automobile and light-duty truck assembly coating operations from the VOC control requirements if total uncontrolled VOC emissions from coatings and cleaning solvents are less than 15 pounds per day. The current TCEQ rules exempt automobile and light-duty truck assembly coating operations from the required VOC coating limits if located on a property where total uncontrolled VOC emissions from all applicable surface coating processes subject to Chapter 115, Subchapter E, Division 2 are less than 3.0 pounds per hour and 15 pounds per day. The existing exemption from the required controls may be more stringent for properties conducting multiple coating processes specified in Division 2 because the exemption is not based on VOC emissions from a single coating category. To prevent potential backsliding for properties already required to comply with the state's regulations, the Chapter 115 rules retain the existing exemption criteria.

3.3.10. VOC Storage

Concurrent with this SIP revision, the commission is adopting rules in Chapter 115, Subchapter B, Division 1 to implement RACT for the storage of VOC (Rule Project Number 2010-025-115-EN). The Chapter 115 rulemaking revises existing rules to include additional requirements for low-leaking storage tank fittings and to limit situations when a floating roof storage tank is allowed to emit VOC because the roof is not floating on the liquid. Although the revised requirements implement RACT for the petroleum liquid storage CTG emission source category, these rules are more stringent than the EPA's RACT recommendations for these sources (EPA Document Numbers EPA-450/2-77-036, EPA-450/2-78-047, and EPA-453/R-94-001). This Chapter 115 rulemaking also requires 95% control of flash emissions from crude oil and condensate storage tanks with uncontrolled VOC emissions that equal or exceed 50 tpy. The commission is adopting this requirement to implement RACT for major stationary sources in serious nonattainment areas. The TCEQ has determined that these new and revised control requirements are technologically and economically feasible and therefore represent RACT for the storage of VOC.

Table F-1: State Rules Addressing NO_x RACT Requirements in CTG and ACT Reference Documents

Emission Source Category	CTG or ACT Reference Document	State Regulations Fulfilling RACT Requirements
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Emission Source Category	CTG or ACT Reference Document	State Regulations Fulfilling RACT Requirements
Cement Manufacturing	NO _x Emissions from Cement Manufacturing (EPA-453/R-94-004, March 1994, Updated September 2000)	§117.3100 – §117.3145
Glass Manufacturing	NO _x Emissions from Glass Manufacturing (EPA-453/R-94-037, June 1994)	§117.400 – §117.456
Industrial, Commercial, and Institutional Boilers	NO _x Emissions from Industrial, Commercial and Institutional Boilers (EPA-453/R-94-022, March 1994)	§117.400 – §117.456
Iron and Steel	NO _x Emissions from Iron and Steel (EPA-453/R-94-065, September 1994)	§117.400 – §117.456
Nitric and Adipic Acid Manufacturing	NO _x Emissions from Nitric and Adipic Acid Manufacturing Plants (EPA-453/3-91-026, December 1991)	No Nitric or Adipic Acid Manufacturing Plants in DFW.
Process Heaters	NO _x Emissions from Process Heaters (EPA-453/R-93-034, revised September 1993)	§117.400 – §117.456
Stationary Internal Combustion Engines	NO _x Emissions from Stationary Internal Combustion Engines (EPA-453/R-93-032, July 1993) (Updated September 2000)	§117.400 – §117.456 §117.2100 – §117.2145
Stationary Turbines	NO _x Emissions from Stationary Combustion Turbines (EPA-453/R-93-007, January 1993)	§117.400 – §117.456
Utility Boilers	NO _x Emissions from Utility Boilers (EPA-453/R-94-023, March 1994)	§117.1100 – §117.1156

Table F-2: State Rules Addressing VOC RACT Requirements in CTG and ACT Reference Documents

Emission Source Category	CTG or ACT Reference Document	State Regulations Fulfilling RACT Requirements
Aerospace	Guideline Series: Control of Volatile Organic Compound Emissions from Coating Operations at Aerospace Manufacturing and Rework Operations (EPA-453/R-97-004, EPA-68/D1-00115, EPA-453/D-96-016, December 1997) (see 59 FR 29216, June 6, 1994)	§115.420 – §115.429

Emission Source Category	CTG or ACT Reference Document	State Regulations Fulfilling RACT Requirements
Agricultural Pesticides	Control of Volatile Organic Compound Emissions from the Application of Agricultural Pesticides (EPA-450/R-92-011, March 1993)	The TCEQ does not regulate the use of agricultural pesticides and this ACT document does not give presumptive controls; therefore, no RACT determination is required for this source category.
Architectural and Industrial Maintenance Coatings	Reduction of Volatile Organic Compound Emissions from Application of Traffic Markings (EPA-450/3-88-007, August 1988). The Architectural and Industrial Maintenance coatings national rule issued in 1998 includes limits for traffic coatings and superseded the ACT.	Emissions from this source category are regulated by the Architectural and Industrial Maintenance National Rule.
Automobile Coating	The Reduction of Volatile Organic Compound Emissions from Automobile Refinishing (EPA-450/3-88-009, October 1988, NTIS No PB-89-148-282)	§115.420 – §115.429
Automobile Refinishing	Alternative Control Techniques Document: Automobile Body Refinishing (EPA-453/R-94-031, April 1994) (Note: a national rule for auto-body refinishing was issued in 1998 after the ACT)	§115.420 – §115.429
Batch Processes	Alternative Control Techniques Document: Control of Volatile Organic Compound Emissions from Batch Processes (EPA-453/R-93-017 or EPA-453/R-93-020, February 1994)	No existing major sources in the DFW area (SIC 2821, 2833, 2834, 2861, 2865, 2869, and 2879).
Bulk Gasoline Plants	Control of Volatile Organic Emissions from Bulk Gasoline Plants (EPA-450/2-77-035, December 1977)	§115.211 – §115.219
Cleaning Solvents	Alternative Control Techniques Document: Industrial Cleaning Solvents (EPA-453/R-94-015, February 1994)	§115.412 – §115.419 §115.420 – §115.429
Cleaning Solvents	Control Techniques Guidelines for Industrial Cleaning Solvents (EPA-453/R-06-001, September 2006)	§115.460 - §115.469 See Section 3.3.3 of RACT Discussion and Rule Project No. 2010-016-115-EN

Emission Source Category	CTG or ACT Reference Document	State Regulations Fulfilling RACT Requirements
Commercial Bakeries	Alternative Control Techniques Document: Bakery Ovens (EPA-453/R-92-017, December 1992)	§115.120 – §115.129
Cutback Asphalt	Control of Volatile Organic Compounds from Use of Cutback Asphalt (EPA-450/2-77-037, December 1977)	§115.510 – §115.519
Ethylene Oxide Sterilization/Fumigation Operations	Alternative Control Technology Document: Ethylene Oxide Sterilization/Fumigation Operations (EPA-450/3-89-007, March 1989)	Emissions from this source category are regulated by MACT per §113.200.
Fiberglass Boat Manufacturing Materials	Control Techniques Guidelines for Fiberglass Boat Manufacturing Materials (EPA 453/R-08-004, September 2008)	No sources meeting the specific category description in the CTG.
Fugitive Emissions	Fugitive Emission Sources of Organic Compounds – Additional Information on Emissions, Emission Reductions, and Costs (EPA-450/3-82-010, April 1982)	§115.352 – §115.359
Gasoline Service Stations	Design Criteria for Stage I Vapor Control Systems - Gasoline Service Stations (November 1975)	§115.221 – §115.229
Graphic Arts	Control of Volatile Organic Emissions from Existing Stationary Sources, Volume VIII: Graphic Arts - Rotogravure and Flexography (EPA-450/2-78-033, December 1978)	§115.430 – §115.439
Graphic Arts	Control of Volatile Organic Compound Emissions from Offset Lithographic Printing (September 1993)	§115.440 – §115.449
Graphic Arts	Alternative Control Technology Document: Offset Lithographic Printing (EPA-453/R-94-054, June 1994)	§115.440 – §115.449
Graphic Arts	Control Techniques Guidelines for Flexible Package Printing (EPA-453/R-06-003, September 2006)	§115.430 - §115.439 See Section 3.3.2 of RACT Discussion and Rule Project No. 2010-016-115-EN.
Graphic Arts	Control Techniques Guidelines for Offset Lithographic Printing and Letterpress Printing (EPA-453/R-06-002, September 2006)	§115.440 – §115.449

Emission Source Category	CTG or ACT Reference Document	State Regulations Fulfilling RACT Requirements
Industrial Adhesives	Control Techniques Guidelines for Miscellaneous Industrial Adhesives (EPA 453/R-08-005, September 2008)	§115.470 - §115.479 See Section 3.3.7 of RACT Discussion and Rule Project No. 2010-016-115-EN.
Industrial Wastewater	Control Techniques for Industrial Wastewater (EPA-453/D-93-056, September 1992) (ACT: April 1994, consists of cover memo with option tables and CTG)	§115.140 – §115.149
Ink and Paint Manufacturing	Alternative Control Technology Document: Control of Volatile Organic Compounds from Ink and Paint Manufacturing (EPA-453/3-92-013)	§115.120 – §115.129
Leather Tanning and Finishing Operations	Alternative Control Technology Document: Leather Tanning and Finishing Operations (EPA-453/R-93-025)	No existing major sources in DFW area (SIC 3111).
Metal Furniture	Control of Volatile Organic Emissions from Existing Stationary Sources, Volume III: Surface Coating of Metal Furniture (EPA-450/2-77-032, December 1977)	§115.420 – §115.429
Natural Gas/Gasoline Processing	Control of Volatile Organic Compound Equipment Leaks from Natural Gas/Gasoline Processing Plants (EPA-450/2-83-007, December 1983)	§115.352 – §115.359
Petroleum Dry Cleaners	Control of Volatile Organic Compound Emissions from Large Petroleum Dry Cleaners (EPA-450/3-82-009, September 1982)	§115.552 – §115.559
Petroleum Liquid Storage	Control of Volatile Organic Emissions from Storage of Petroleum Liquids in Fixed Roof Tanks (EPA-450/2-77-036, December 1977)	§115.110 – §115.119 See Section 3.3.10 of RACT Discussion and Rule Project No. 2010-025-115-EN.
Petroleum Liquid Storage	Control of Volatile Organic Emissions from Petroleum Liquid Storage in External Floating Roof Tanks (EPA-450/2-78-047, December 1978)	§115.110 – §115.119 See Section 3.3.10 of RACT Discussion and Rule Project No. 2010-025-115-EN.
Petroleum Liquid Storage	Alternative Control Techniques Document: Volatile Organic Liquid Storage in Floating and Fixed Roof Tanks (EPA-453/R-94-001, January 1994)	§115.110 – §115.119 See Section 3.3.10 of RACT Discussion and Rule Project No. 2010-025-115-EN.

Emission Source Category	CTG or ACT Reference Document	State Regulations Fulfilling RACT Requirements
Plywood Veneer Dryers	Control Techniques for Organic Emissions from Plywood Veneer Dryers (EPA-450/3-83-012, May 1983)	No existing major sources in the DFW area (SIC 2435 and 2436).
Process Vents	Alternative Control Technology Document: Organic Waste Process Vents (EPA-450/3-91-007, December 1990)	§115.120 – §115.129
Refineries	Control of Refinery Vacuum Producing Systems, Wastewater Separators, and Process Unit Turnarounds (EPA-450/2-77-025, October 1977)	§115.120 – §115.129 §115.131 – §115.139 §115.311 – §115.319
Refineries	Control of Volatile Organic Compound Leaks from Petroleum Refinery Equipment (EPA-450/2-78-036, June 1978)	§115.352 – §115.359
Rubber Tires	Control of Volatile Organic Emissions from Manufacture of Pneumatic Rubber Tires (EPA-450/2-78-030, December 1978)	No existing major sources in DFW area (SIC 3011).
Shipbuilding and Ship Repair	Control Technique Guidelines for Shipbuilding and Ship Repair Operations (EPA-453/R-94-032, April 1994)	No existing major sources in the DFW area (SIC 3731).
Shipbuilding and Ship Repair	Control Technique Guidelines for Shipbuilding and Ship Repair Surface Coating Operations (61 FR 44050, August 27, 1996)	No existing major sources in the DFW area (SIC 3731).
Solvent Cleaning	Control of Volatile Organic Emissions from Solvent Metal Cleaning (EPA-450/2-77-022, November 1977)	§115.412 – §115.419 §115.420 – §115.429
Solvent Cleaning	Alternative Control Technology Document: Halogenated Solvent Cleaners (EPA-450/3-89-030, August 1989)	§115.412 – §115.419
Surface Coating	Control of Volatile Organic Emissions from Existing Stationary Sources, Volume I: Control Methods for Surface Coating Operations (EPA-450/2-76-028, November 1976)	§115.420 – §115.429
Surface Coating	Control of Volatile Organic Emissions from Existing Stationary Sources, Volume II: Surface Coating of Cans, Coils, Paper, Fabrics, Automobiles, and Light-Duty Trucks (EPA-450/2-77-008, May 1977)	§115.420 – §115.429
Surface Coating	Control of Volatile Organic Emissions from Existing Stationary Sources, Volume IV: Surface Coating for Insulation of Magnet Wire (EPA-450/2-77-033, December 1977)	§115.420 – §115.429

Emission Source Category	CTG or ACT Reference Document	State Regulations Fulfilling RACT Requirements
Surface Coating	Control of Volatile Organic Emissions from Existing Stationary Sources, Volume V: Surface Coating of Large Appliances (EPA-450/2-77-034, December 1977)	§115.420 – §115.429
Surface Coating	Control of Volatile Organic Emissions from Existing Stationary Sources, Volume VI: Surface Coating of Miscellaneous Metal Parts and Products (EPA-450/2-78-015, June 1978)	§115.420 – §115.429
Surface Coating	Control of Volatile Organic Emissions from Existing Stationary Sources, Volume VII: Factory Surface Coating of Flat Wood Paneling (EPA-450/2-78-032, June 1978)	§115.420 – §115.429
Surface Coating	Alternative Control Techniques Document: Surface Coating of Automotive/Transportation and Business Machine Plastic Parts (EPA-453/R-94-017, February 1994)	§115.420 – §115.429
Surface Coating	Control Techniques Guidelines for Flat Wood Paneling Coatings (EPA-453/R-06-004, September 2006)	No sources meeting the specific category of the CTG.
Surface Coating	Control Techniques Guidelines for Paper, Film, and Foil Coatings (EPA 453/R-07-003, September 2007)	§115.450 - §115.459 See Section 3.3.6 of RACT Discussion and Rule Project No. 2010-016-115-EN.
Surface Coating	Control Techniques Guidelines for Large Appliance Coatings (EPA 453/R-07-004, September 2007)	§115.450 - §115.459 See Section 3.3.4 of RACT Discussion and Rule Project No. 2010-016-115-EN.
Surface Coating	Control Techniques Guidelines for Metal Furniture Coatings (EPA 453/R-07-005, September 2007)	§115.450 - §115.459 See Section 3.3.5 of RACT Discussion and Rule Project No. 2010-016-115-EN.
Surface Coating	Control Techniques Guidelines for Miscellaneous Metal and Plastic Parts Coatings (EPA 453/R-08-003, September 2008)	§115.450 - §115.459 See Section 3.3.8 of RACT Discussion and Rule Project No. 2010-016-115-EN.
Surface Coating	Control Techniques Guidelines for Automobile and Light-Duty Truck Assembly Coatings (EPA 453/R-08-006, September 2008)	§115.450 - §115.459 See Section 3.3.9 of RACT Discussion and Rule Project No. 2010-016-115-EN.

Emission Source Category	CTG or ACT Reference Document	State Regulations Fulfilling RACT Requirements
Synthetic Organic Chemical Manufacturing Industry	Control of Volatile Organic Emissions from Manufacture of Synthesized Pharmaceutical Products (EPA-450/2-78-029, December 1978)	§115.531 – §115.539
Synthetic Organic Chemical Manufacturing Industry	Control of Volatile Organic Compound Emissions from Manufacture of High-Density Polyethylene, Polypropylene, and Polystyrene Resins (EPA-450/3-83-008, November 1983)	§115.120 – §115.129
Synthetic Organic Chemical Manufacturing Industry	Control of Volatile Organic Compound Fugitive Emissions from Synthetic Organic Chemical Polymer and Resin Manufacturing Equipment (EPA-450/3-83-006, March 1984)	§115.352 – §115.359
Synthetic Organic Chemical Manufacturing Industry	Control of Volatile Organic Compound Emissions from Air Oxidation Processes in Synthetic Organic Chemical Manufacturing Industry (EPA-450/3-84-015, December 1984)	§115.120 – §115.129
Synthetic Organic Chemical Manufacturing Industry	Polystyrene Foam Manufacturing (EPA-450/3-90-020, 1990)	§115.120 – §115.129
Synthetic Organic Chemical Manufacturing Industry	Control of Volatile Organic Compound Emissions from Reactor Processes and Distillation Operations in Synthetic Organic Chemical Manufacturing Industry (EPA-450/4-91-031, August 1993)	§115.120 – §115.129
Tank Trucks	Control of Hydrocarbons from Tank Truck Gasoline Loading Terminals (EPA-450/2-77-026, December 1977)	§115.211 – §115.219 §115.221 – §115.229
Tank Trucks	Control of Volatile Organic Compound Leaks from Gasoline Tank Trucks and Vapor Collection Systems (EPA-450/2-78-051, December 1978)	§115.211 – §115.219 §115.234 – §115.239
Vegetable Oil Manufacturing	Control of Volatile Organic Emissions from Manufacture of Vegetable Oils (EPA-450/2-78-035, June 1978)	No existing major sources in DFW area (SIC 2046 and 2076).
Wood Furniture Manufacturing	Guideline Series: Control of Volatile Organic Compound Emissions from Wood Furniture Manufacturing Operations (EPA-453/D-95/002)	§115.420 – §115.429
Wood Furniture Manufacturing	Guidelines Series: Control of Volatile Organic Compound Emissions from Wood Furniture Manufacturing Operations (EPA-453/R-96-007, April 1996) (see also 61 FR 25223, and, 61 FR 50823, September 27, 1996)	§115.420 – §115.429

Table F-3: State Rules Addressing NO_x RACT Requirements for Major Emission Sources in the DFW Area

RN	Account	Company	SIC	SIC Description	Annual tpy	Rules Addressing RACT	Notes	2007 RACT
RN100219286	ED0099J	Holcim Texas LP	3241	Cement, Hydraulic	3184.3	§117.3100 - §117.3145		Yes
RN100217199	ED0066B	TXI Operations LP	3241	Cement, Hydraulic	2877.1	§117.3100 - §117.3145		Yes
RN100225978	ED0034O	Ash Grove Texas LP	3241	Cement, Hydraulic	1385.3	§117.3100 - §117.3145		Yes
RN100213420	KB0176S	FPLE Forney LP	4911	Electric Services	1148.4	§117.1300 - §117.1356		No
RN100210889	JH0045I	Texas Lime Company	3274	Lime	1075.3	§117.400 - §117.456		Yes
RN100216472	ED0011D	Chaparral Steel Midlothian LP	3312	Blast Furnaces and Steel Mills	437.9	§117.400 - §117.456		Yes
RN100223585	ED0051O	Owens-Corning	3296	Mineral Wool	364.6	§117.400 - §117.456		Yes
RN100585918	ED0044L	Saint Gobain Containers LLC	3221	Glass Containers	294.7	§117.400 - §117.456		Yes
RN102596400	ED0332D	Midlothian Energy LP	4911	Electric Services	258.5	§117.1300 - §117.1356		No

RN	Account	Company	SIC	SIC Description	Annual tpy	Rules Addressing RACT	Notes	2007 RACT
RN101559854	DB0251U	Luminant Generation Co LLC	4911	Electric Services	206.5	§117.1300 - §117.1356		Yes
RN100673490	DB0249H	Luminant Generation Co LLC	4911	Electric Services	199.1	§117.1300 - §117.1356		Yes
RN100223312	JH0230L	Brazos Electric Power Cooperative Inc.	4911	Electric Services	177.7	§117.1300 - §117.1356		Yes
RN100212430	ED0347N	Ennis Tractebel Power Company LP	4911	Electric Services	155.5	§117.1300 - §117.1356		No
RN100242510	PC03000	Acacia Natural Gas Corp.	1311	Crude Petroleum and Natural Gas	142.1	§117.400 - §117.456		No
RN100216225	DF0558Q	Texas Aero Engine Service LLC	4581	Airports, Flying Fields, Service	123.3	NA	Engine testing, aircraft. Additional control of NO _x emissions not technologically feasible. FCAA prohibition regarding jet engine test cells.	Yes
RN100216399	TA4004G	Tyson Foods Inc.	2099	Food Preparations NEC	114.1	§117.400 - §117.456		Yes

RN	Account	Company	SIC	SIC Description	Annual tpy	Rules Addressing RACT	Notes	2007 RACT
RN100542588	ED0238T	Atmos Energy Corporation Mid-Tex Division	4922	Natural Gas Transmission	107.0	§117.400 - §117.456		No
RN104377692	JHA004D	Energy Transfer Fuel LP	4922	Natural Gas Transmission	93.0	§117.400 - §117.456		No
RN100213719	JH0025O	Johns Manville Corporation	3296	Mineral Wool	91.1	§117.400 - §117.456		Yes
RN105010714	TAA021U	Barnett Gathering LP	1311	Crude Petroleum and Natural Gas	86.3	§117.400 - §117.456		No
RN100218080	DB1073N	American Marazzi Tile, Inc.	3253	Ceramic Wall and Floor Tile	81.6	§117.400 - §117.456		Yes
RN105171029	JHA024X	Texas Midstream Gas Services LLC	1311	Crude Petroleum and Natural Gas	80.2	§117.400 - §117.456		No
RN104283635	JHA001A	Chesapeake Energy Marketing Inc.	1311	Crude Petroleum and Natural Gas	79.2	§117.400 - §117.456		No
RN102903432	EDA001A	Energy Transfer Fuel LP	4922	Natural Gas Transmission	78.8	§117.400 - §117.456		No
RN104891825	PCA006F	Crosstex ccng Processing Ltd.	4922	Natural Gas Transmission	78.6	§117.400 - §117.456		No

RN	Account	Company	SIC	SIC Description	Annual tpy	Rules Addressing RACT	Notes	2007 RACT
RN104763370	JHA014N	Crosstex North Texas Gathering LP	1311	Crude Petroleum and Natural Gas	77.7	§117.400 - §117.456		No
RN100213479	ED0018M	Elk Corporation of Texas	2952	Asphalt Felts and Coatings	75.9	§117.400 - §117.456		No
RN105068001	JHA020T	Peregrine Pipeline Co. LP	1311	Crude Petroleum and Natural Gas	74.6	§117.400 - §117.456		No
RN104488358	DFA087I	Crosstex North Texas Gathering LP	1311	Crude Petroleum and Natural Gas	73.7	§117.400 - §117.456		No
RN102505195	DB0820B	Texas Instruments Inc.	3674	Semiconductors and Related Devices	72.0	§117.400 - §117.456		Yes
RN104962634	JHA028B	Barnett Gathering LP	1311	Crude Petroleum and Natural Gas	71.9	§117.400 - §117.456		No
RN104787478	TAA014N	Barnett Gathering LP	1311	Crude Petroleum and Natural Gas	70.4	§117.400 - §117.456		No
RN104260096	JHA003C	Chesapeake Energy Marketing Inc.	1311	Crude Petroleum and Natural Gas	69.9	§117.400 - §117.456		No

RN	Account	Company	SIC	SIC Description	Annual tpy	Rules Addressing RACT	Notes	2007 RACT
RN100685213	DB3357F	Tyson Foods Inc.	2013	Sausages and Other Prepared Meat	64.5	§117.400 - §117.456		Yes
RN104927876	JHA018R	Devon Gas Services LP	1311	Crude Petroleum and Natural Gas	64.1	§117.400 - §117.456		No
RN100218569	DB4707Q	Mccommas LFG Processing Partners LP	4925	Gas Production and Distribution	63.5	§117.400 - §117.456		No
RN100219963	DB1494I	Solar Turbines, Inc.	3511	Turbines and Turbine Generator	63.1	NA	Engine testing, turbine. Additional control of NO _x emissions not technologically feasible.	No
RN105010797	PCA008H	Barnett Gathering LP	1311	Crude Petroleum and Natural Gas	60.7	§117.400 - §117.456		No
RN105132609	JHA022V	Texas Midstream Gas Services LLC	1311	Crude Petroleum and Natural Gas	60.7	§117.400 - §117.456		No
RN104475157	TAA013M	Barnett Gathering LP	1311	Crude Petroleum and Natural Gas	60.0	§117.400 - §117.456		No
RN104370259	JHA023W	Texas Midstream Gas Services LLC	1311	Crude Petroleum and Natural Gas	59.6	§117.400 - §117.456		No

RN	Account	Company	SIC	SIC Description	Annual tpy	Rules Addressing RACT	Notes	2007 RACT
RN100689934	DB0447B	Hensley Industries, Inc.	3325	Steel Foundries, NEC	57.4	§117.400 - §117.456		No
RN102939626	TAA008H	Crosstex North Texas Gathering LP	1311	Crude Petroleum and Natural Gas	56.5	§117.400 - §117.456		No
RN100225291	DB0632E	Owens Corning	2952	Asphalt Felts and Coatings	54.8	§117.400 - §117.456		No
RN100218643	CP0029G	Exide Corporation	3341	Secondary Nonferrous Metals	53.0	§117.400 - §117.456		Yes
RN105225692	TAA020T	Texas Midstream Gas Services LLC	1311	Crude Petroleum and Natural Gas	48.9	§117.400 - §117.456		No
RN100542257	DF0223E	DFW Recycling and Disposal Facility	4953	Refuse Systems	48.6	§117.400 - §117.456		No
RN105247126	JHA029C	EOG Resources Inc.	1311	Crude Petroleum and Natural Gas	48.6	§117.400 - §117.456		No
RN100215581	DB0476R	Atlas Copco Drilling Solutions Inc.	3531	Construction Machinery	48.0	§117.400 - §117.456		No
RN102505963	TA0157I	General Motors Corporation	3711	Motor Vehicles and Car Bodies	47.2	§117.400 - §117.456		Yes

RN	Account	Company	SIC	SIC Description	Annual tpy	Rules Addressing RACT	Notes	2007 RACT
RN105137475	JHA034H	EOG Resources Inc.	1311	Crude Petroleum and Natural Gas	45.4	§117.400 - §117.456		No
RN104995089	JHA032F	EOG Resources Inc.	1311	Crude Petroleum and Natural Gas	44.1	§117.400 - §117.456		No
RN100226414	PC0013U	Enbridge Gathering North Texas LP	1321	Natural Gas Liquids	43.2	§117.400 - §117.456		Yes
RN100542232	ED0240J	Waste Management of Texas, Inc.	4953	Refuse Systems	42.9	§117.400 - §117.456		No
RN104700711	PCA010J	Energy Transfer Fuel LP	1311	Crude Petroleum and Natural Gas	40.8	§117.400 - §117.456		No
RN105302186	JHA036J	EOG Resources Inc.	1311	Crude Petroleum and Natural Gas	40.8	§117.400 - §117.456		No
RN105302152	JHA035I	EOG Resources Inc.	1311	Crude Petroleum and Natural Gas	40.6	§117.400 - §117.456		No
RN104023353	JHA010J	Devon Gas Services LP	1311	Crude Petroleum and Natural Gas	40.5	§117.400 - §117.456		No
RN104776661	TAA016P	Texas Midstream Gas Services LLC	1311	Crude Petroleum and Natural Gas	40.1	§117.400 - §117.456		No

RN	Account	Company	SIC	SIC Description	Annual tpy	Rules Addressing RACT	Notes	2007 RACT
RN100219203	CP0026M	City of Garland	4911	Electric Services	38.4	§117.1300 - §117.1356		Yes
RN104948005	JHA016P	EOG Resources Inc.	1311	Crude Petroleum and Natural Gas	36.9	§117.400 - §117.456		No
RN100942259	TA0512K	Village Creek Wastewater Treatment	4952	Sewerage Systems	34.9	§117.400 - §117.456		Yes
RN105011290	JHA017Q	EOG Resources Inc.	1311	Crude Petroleum and Natural Gas	34.9	§117.400 - §117.456		No
RN105225924	TAA018R	Texas Midstream Gas Services LLC	1311	Crude Petroleum and Natural Gas	34.8	§117.400 - §117.456		No
RN101559235	DB0252S	Extex Laporte LP	4911	Electric Services	34.3	§117.1300 - §117.1356		Yes
RN104311741	JHA026Z	Etc Texas Pipeline Ltd.	1311	Crude Petroleum and Natural Gas	33.9	§117.400 - §117.456		No
RN100754779	KB0156B	Corrugated Services, LP	2631	Paperboard Mills	33.4	§117.400 - §117.456		No
RN100213537	ED0168P	Dartco of Texas LP	3089	Plastics Products, NEC	33.3	§117.400 - §117.456		No

RN	Account	Company	SIC	SIC Description	Annual tpy	Rules Addressing RACT	Notes	2007 RACT
RN104920160	TAA017Q	Texas Midstream Gas Services LLC	1311	Crude Petroleum and Natural Gas	33.0	§117.400 - §117.456		No
RN105337554	DFA151U	Williams Barnett Gathering Systems LP	1311	Crude Petroleum and Natural Gas	32.2	§117.400 - §117.456		No
RN105354062	DFA173Q	Texas Midstream Gas Services LLC	1311	Crude Petroleum and Natural Gas	31.8	§117.400 - §117.456		No
RN104890355	JHA030D	Williams Barnett Gathering Systems LP	1311	Crude Petroleum and Natural Gas	31.3	§117.400 - §117.456		No
RN105093512	PCA007G	Enbridge G&P North Texas LP	1321	Natural Gas Liquids	30.9	§117.400 - §117.456		No
RN100218007	TA0009B	Alcon Laboratories Inc.	2834	Pharmaceutical Preparations	30.5	§117.400 - §117.456		No
RN102336906	TA0353G	Extex Laporte LP	4911	Electric Services	30.0	§117.1300 - §117.1356		Yes
RN104807680	JHA005E	EOG Resources Inc.	1311	Crude Petroleum and Natural Gas	28.9	§117.400 - §117.456		No
RN104807755	JHA006F	EOG Resources Inc.	1311	Crude Petroleum and Natural Gas	28.7	§117.400 - §117.456		No

RN	Account	Company	SIC	SIC Description	Annual tpy	Rules Addressing RACT	Notes	2007 RACT
RN104457114	JHA007G	EOG Resources Inc.	1311	Crude Petroleum and Natural Gas	28.2	§117.400 - §117.456		No
RN104488416	DFA086H	Crow Creek Energy II LLC	1311	Crude Petroleum and Natural Gas	27.4	§117.400 - §117.456		No
RN105234728	TAA025Y	Texas Midstream Gas Services LLC	1311	Crude Petroleum and Natural Gas	26.8	§117.400 - §117.456		No
RN105011092	PCA005E	Empire Pipeline Corp.	4922	Natural Gas Transmission	26.6	§117.400 - §117.456		No
RN105227763	TAA024X	Cowtown Pipeline LP	1311	Crude Petroleum and Natural Gas	26.2	§117.400 - §117.456		No
RN104876263	PCA009I	Energy Transfer Fuel LP	4922	Natural Gas Transmission	25.7	§117.400 - §117.456		No
RN105224224	JHA041O	Williams Barnett Gathering Systems LP	1311	Crude Petroleum and Natural Gas	25.7	§117.400 - §117.456		No
RN105171649	JHA031E	EOG Resources Inc.	1311	Crude Petroleum and Natural Gas	25.6	§117.400 - §117.456		No
RN100693308	TA0352I	Luminant Generation Company LLC	4911	Electric Services	--	§117.1300 - §117.1356	No reported emissions for 2008	Yes

RN	Account	Company	SIC	SIC Description	Annual tpy	Rules Addressing RACT	Notes	2007 RACT
RN100754779	KB1056B	Orange County Container Group LLC	2631	Paperboard Mills	--	§117.400 - §117.456	No reported emissions for 2008	No
RN100784735	CP0065C	Luminant Generation Company LLC	4911	Electric Services	--	§117.1300 - §117.1356	No reported emissions for 2008	Yes
RN105304521		Barnett Gathering LP	1311	Crude Petroleum and Natural Gas	--	§117.400 - §117.456	No reported emissions for 2008	No

Table F-4: State Rules Addressing VOC RACT Requirements for Major Emission Sources in the DFW Area

RN	Account	Company	SIC	SIC Description	Annual tpy	Rules Addressing RACT	Notes	2007 RACT
RN100213537	ED0168P	Dartco of Texas LP	3089	Plastics Products, NEC	865.1	§115.110 - §115.119 §115.211 - §115.219	VOC emissions from storage, loading, and unloading addressed through Chapter 115 rules. Other VOC emissions are controlled per BACT in NSR Permit No. 18505. 90% of VOC emissions are building fugitives. Additional control for RACT is not economically feasible.	Yes
RN100219286	ED0099J	Holcim Texas LP	3241	Cement, Hydraulic	582.0	NA	Additional control for RACT is not economically feasible.	Yes
RN102505963	TA0157I	General Motors Corporation	3711	Motor Vehicles and Car Bodies	381.8	§115.420 - §115.429 §115.450 - §115.459	See Section 3.3.9 of RACT Discussion and Rule Project No. 2010-016-115-EN.	Yes
RN100216472	ED0011D	Chaparral Steel Midlothian LP	3312	Blast Furnaces and Steel Mills	320.9	§115.211 - §115.219	VOC emissions from other operations are controlled per BACT in NSR Permit Nos. 1635, 3026, 5983, 8097, and 8099. Further control may also be required by MACT. Additional control for RACT is not economically feasible.	Yes

RN	Account	Company	SIC	SIC Description	Annual tpy	Rules Addressing RACT	Notes	2007 RACT
RN100211762	DF0051J	Peterbilt Motors Company	3711	Motor Vehicles and Car Bodies	184.3	§115.420 - §115.429 §115.450 - §115.459	See Section 3.3.10 of RACT Discussion and Rule Project No. 2010-016-115-EN.	Yes
RN105171649	JHA031E	EOG Resources Inc.	1311	Crude Petroleum and Natural Gas	135.9	§115.110 - §115.119	See Section 3.3.10 of RACT Discussion and Rule Project No. 2010-025-115-EN.	No
RN102649399	TA0235N	Miller Brewing Company	2082	Malt Beverages	131.6	§115.120 - §115.129 §115.211 - §115.219	Vent gas streams meet applicable exemptions in §115.127. 75% of VOC emissions are fugitive emissions from product loss. Additional control for RACT is not technologically or economically feasible.	Yes
RN105132609	JHA022V	Texas Midstream Gas Services LLC	1311	Crude Petroleum and Natural Gas	97.9	§115.110 - §115.119	See Section 3.3.10 of RACT Discussion and Rule Project No. 2010-025-115-EN.	No
RN100212885	DB0802D	Quebecor World Dallas	2754	Commercial Printing, Gravure	94.4	§115.430 - §115.439 §115.440 - §115.449	Publication printing.	Yes

RN	Account	Company	SIC	SIC Description	Annual tpy	Rules Addressing RACT	Notes	2007 RACT
RN100223585	ED0051O	Owens-Corning	3296	Mineral Wool	89.2	§113.710 and §113.930	VOC controls from organic HAP MACT controls in 40 CFR 63 Subparts NNN and JJJ, incorporated via §113.710 and §113.930. Additional control for RACT is not economically feasible.	Yes
RN100213719	JH0025O	Johns Manville Corporation	3296	Mineral Wool	88.5	§113.710 and §113.930 §115.120 - §115.129 §115.420 - §115.429	VOC controls from organic HAP MACT controls in 40 CFR 63 Subparts NNN and JJJ, incorporated via §113.710 and §113.930. Vent gas streams meet applicable exemptions in §115.127. VOC emissions meet exemption in §115.427. Additional control for RACT is not economically feasible.	Yes
RN104380811	JHA015O	American Film and Printing Ltd	2759	Commercial Printing, NEC	86.1	§115.430 - §115.439	See Section 3.3.10 of RACT Discussion and Rule Project No. 2010-016-115-EN.	No
RN104459078	JHA008H	EOG Resources Inc.	1311	Crude Petroleum and Natural Gas	81.8	§115.110 - §115.119	See Section 3.3.10 of RACT Discussion and Rule Project No. 2010-025-115-EN.	No

RN	Account	Company	SIC	SIC Description	Annual tpy	Rules Addressing RACT	Notes	2007 RACT
RN100689934	DB0447B	Hensley Industries, Inc.	3325	Steel Foundries, NEC	79.3	§115.120 - §115.129 §115.420 - §115.429 §115.450 - §115.459	Vent gas streams meet applicable exemptions in §115.127. See Section 3.3.8 of RACT Discussion and Rule Project No. 2010-016-115-EN.	Yes
RN100218783	KB0015U	Oldcastle Windows Inc. dba Vistawall	3354	Aluminum Extruded Products	73.6	§115.420 - §115.429 §115.450 - §115.459	See Section 3.3.8 of RACT Discussion and Rule Project No. 2010-016-115-EN.	Yes
RN100217199	ED0066B	TXI Operations LP	3241	Cement, Hydraulic	71.6	NA	Additional control for RACT is not economically feasible.	No
RN100225804	TA0499A	Trinity Industries Inc.	3743	Railroad Equipment	69.4	§115.420 - §115.429 §115.450 - §115.459	See Section 3.3.8 of RACT Discussion and Rule Project No. 2010-016-115-EN.	No

RN	Account	Company	SIC	SIC Description	Annual tpy	Rules Addressing RACT	Notes	2007 RACT
RN102505195	DB0820B	Texas Instruments Inc.	3674	Semiconductors and Related Devices	67.6	§115.110 - §115.119 §115.120 - §115.129 §115.211 - §115.219		No
RN100218023	DB0374D	Fritz Industries Inc.	3272	Concrete Products, NEC	66.8	§115.120 - §115.129		No
RN102418563	TA0285V	Trinity Industries Inc.	4789	Transportation Services, NEC	64.4	§115.412 - §115.419 §115.420 - §115.429 §115.450 - §115.459	See Section 3.3.8 of RACT Discussion and Rule Project No. 2010-016-115-EN.	No
RN104962634	JHA028B	Barnett Gathering LP	1311	Crude Petroleum and Natural Gas	57.8	NA	Compressor station - VOC emissions mostly from stationary internal combustion engines with lean burn technology. Additional VOC control not technologically or economically feasible.	No

RN	Account	Company	SIC	SIC Description	Annual tpy	Rules Addressing RACT	Notes	2007 RACT
RN105010714	TAA021U	Barnett Gathering LP	1311	Crude Petroleum and Natural Gas	57.0	NA	Compressor station - VOC emissions mostly from stationary internal combustion engines with lean burn technology. Additional VOC control not technologically or economically feasible.	No
RN104377692	JHA004D	Energy Transfer Fuel LP	4922	Natural Gas Transmission	55.6	NA	Compressor station - VOC emissions mostly from stationary internal combustion engines already equipped with oxidative catalyst or lean burn technology. Additional VOC control not technologically or economically feasible.	No
RN100218643	CP0029G	Exide Corporation	3341	Secondary Nonferrous Metals	53.7	§115.120 - §115.129	Vent gas streams meet applicable exemptions in §115.127. VOC emissions are controlled per BACT in NSR Permit No. 1147A. Additional control for RACT is not economically feasible	Yes
RN100218320	DB0914O	Vought Aircraft Industries Inc.	3721	Aircraft	53.0	§115.420 - §115.429 §115.450 - §115.459	See Section 3.3.8 of RACT Discussion and Rule Project No. 2010-016-115-EN.	Yes

RN	Account	Company	SIC	SIC Description	Annual tpy	Rules Addressing RACT	Notes	2007 RACT
RN104787478	TAA014N	Barnett Gathering LP	1311	Crude Petroleum and Natural Gas	52.0	NA	VOC emissions mostly from stationary internal combustion engines with lean burn technology. Additional VOC control not technologically or economically feasible.	No
RN102593894	DB0838F	Texwood Industries, LP	2434	Wood Kitchen Cabinets	50.8	§115.420 - §115.429		Yes
RN100221779	TA0142V	Citgo Petroleum Corp.	5171	Petroleum Bulk Stations and Terminals	48.0	§115.110 - §115.119 §115.211 - §115.219	See Section 3.3.10 of RACT Discussion and Rule Project No. 2010-025-115-EN.	No
RN100213479	ED0018M	Elk Corporation of Texas	2952	Asphalt Felts and Coatings	47.7	NA	VOC emissions are controlled per BACT in NSR Permits. Additional control for RACT is not economically feasible.	Yes
RN105775779	DFA172P	Burlington Resources Oil and Gas Co. LP	1311	Crude Petroleum and Natural Gas	47.5	§115.110 - §115.119	See Section 3.3.10 of RACT Discussion and Rule Project No. 2010-025-115-EN.	No
RN100519651	DB0795V	Motiva Enterprises, LLC	5171	Petroleum Bulk Stations and Terminals	47.2	§115.110 - §115.119 §115.211 - §115.219	See Section 3.3.10 of RACT Discussion and Rule Project No. 2010-025-115-EN.	Yes

RN	Account	Company	SIC	SIC Description	Annual tpy	Rules Addressing RACT	Notes	2007 RACT
RN104700711	PCA010J	Energy Transfer Fuel LP	1311	Crude Petroleum and Natural Gas	46.7	§115.110 - §115.119	See Section 3.3.10 of RACT Discussion and Rule Project No. 2010-025-115-EN.	No
RN100542257	DF0223E	DFW Recycling and Disposal Facility	4953	Refuse Systems	44.4	§115.152 - §115.159		No
RN102903432	EDA001A	Energy Transfer Fuel LP	4922	Natural Gas Transmission	42.5	NA	Compressor station - VOC emissions mostly from stationary internal combustion engines already equipped with oxidative catalyst or lean burn technology. Additional VOC control not technologically or economically feasible.	No
RN100242015	DB0588F	Magellan Terminals Holdings LP	4226	Special Warehousing and Storage	42.3	§115.112 – §115.119 §115.211 - §115.219	See Section 3.3.10 of RACT Discussion and Rule Project No. 2010-025-115-EN.	No

RN	Account	Company	SIC	SIC Description	Annual tpy	Rules Addressing RACT	Notes	2007 RACT
RN105068001	JHA020T	Peregrine Pipeline Co. LP	1311	Crude Petroleum and Natural Gas	41.1	NA	Compressor station - VOC emissions mostly from stationary internal combustion engines already equipped with oxidative catalyst or lean burn technology. Additional VOC control not technologically or economically feasible.	No
RN105010797	PCA008H	Barnett Gathering LP	1311	Crude Petroleum and Natural Gas	40.7	NA	Compressor station - VOC emissions mostly from stationary internal combustion engines already equipped with oxidative catalyst or lean burn technology. Additional VOC control not technologically or economically feasible.	No
RN100222231	DF0261T	American Airlines Inc.	4581	Airports, Flying Fields, Service	40.5	§115.131 - §115.139 §115.412 - §115.419 §115.420 - §115.429		No

RN	Account	Company	SIC	SIC Description	Annual tpy	Rules Addressing RACT	Notes	2007 RACT
RN100219419	CP0396W	Encore Wire Limited	3351	Copper Rolling and Drawing	40.4	§115.110 - §115.119 §115.120 - §115.129 §115.412 - §115.419 §115.420 - §115.429	Vent gas streams meet applicable exemptions in §115.127. VOC emissions meet exemption in §115.427.	No
RN102572682	TA0685B	Film Pak Inc.	3089	Plastics Products, NEC	39.5	§115.430 - §115.439	See Section 3.3.2 of RACT Discussion and Rule Project No. 2010-016-115-EN.	No
RN102096377	TA0175G	Chevron USA Inc.	5171	Petroleum Bulk Stations and Terminals	38.4	§115.110 - §115.119 §115.211 - §115.219	See Section 3.3.10 of RACT Discussion and Rule Project No. 2010-025-115-EN.	No
RN100664853	DB0155R	Tamko Roofing Products, Inc.	2952	Asphalt Felts and Coatings	37.4	§115.120 - §115.129		No
RN100225440	TA0236L	Ball Metal Beverage Container Corp.	3411	Metal Cans	37.4	§115.420 - §115.429		No

RN	Account	Company	SIC	SIC Description	Annual tpy	Rules Addressing RACT	Notes	2007 RACT
RN105590228	DFA157A	Burlington Resources Oil and Gas Co. LP	1311	Crude Petroleum and Natural Gas	37.0	§115.110 - §115.119	See Section 3.3.10 of RACT Discussion and Rule Project No. 2010-025-115-EN.	No
RN102595816	DB1690G	Dallas Semiconductor	3674	Semiconductors and Related Devices	36.0	§115.120 - §115.129		No
RN102560067	TA0508B	Nustar Logistics LP	5171	Petroleum Bulk Stations and Terminals	35.7	§115.110 - §115.119 §115.131 - §115.139 §115.211 - §115.219	See Section 3.3.10 of RACT Discussion and Rule Project No. 2010-025-115-EN.	No
RN102939626	TAA008H	Crosstex North Texas Gathering LP	1311	Crude Petroleum and Natural Gas	34.8	NA	Compressor station - VOC emissions mostly from stationary internal combustion engines already equipped with oxidative catalyst or lean burn technology. Additional VOC control not technologically or economically feasible.	No

RN	Account	Company	SIC	SIC Description	Annual tpy	Rules Addressing RACT	Notes	2007 RACT
RN100211291	TA0282E	Printpack Incorporated	2671	Paper Coated and Laminated Pkg.	34.4	§115.412 - §115.419 §115.420 - §115.429 §115.430 - §115.439 §115.450 - §115.459	See Section 3.3 of RACT Discussion and Rule Project No. 2010-016-115-EN.	No
RN101649317	TA0102K	ConocoPhillips Co.	5171	Petroleum Bulk Stations and Terminals	33.5	§115.110 - §115.119 §115.211 - §115.219	See Section 3.3.10 of RACT Discussion and Rule Project No. 2010-025-115-EN.	Yes
RN100212984	DB0344M	ExxonMobil Corp.	5171	Petroleum Bulk Stations and Terminals	33.4	§115.110 - §115.119 §115.211 - §115.219	See Section 3.3.10 of RACT Discussion and Rule Project No. 2010-025-115-EN.	Yes

RN	Account	Company	SIC	SIC Description	Annual tpy	Rules Addressing RACT	Notes	2007 RACT
RN104891825	PCA006F	Crosstex Ccng Processing Ltd	4922	Natural Gas Transmission	33.2	§115.352 - §115.359	Natural gas processing facility fugitive emissions addressed through §115.352 - §115.359. VOC emissions from stationary internal combustion engines – engines already equipped with oxidative catalyst or lean burn technology. Additional VOC control not technologically or economically feasible.	No
RN102615747	DF0089H	Tetra Pak Materials LP	2752	Commercial Printing Lithograph	32.9	§115.440 - §115.449		No
RN100242510	PC03000	Acacia Natural Gas Corp.	1311	Crude Petroleum and Natural Gas	32.8	§115.110 - §115.119	Condensate Tanks - See Section 3.3.10 of RACT Discussion and Rule Project No. 2010-025-115-EN. Compressor station - VOC emissions mostly from stationary internal combustion engines already equipped with oxidative catalyst or lean burn technology. Additional VOC control not technologically or economically feasible.	No

RN	Account	Company	SIC	SIC Description	Annual tpy	Rules Addressing RACT	Notes	2007 RACT
RN104475157	TAA013M	Barnett Gathering LP	1311	Crude Petroleum and Natural Gas	32.8	NA	Compressor station - VOC emissions mostly from stationary internal combustion engines already equipped with oxidative catalyst or lean burn technology. Additional VOC control not technologically or economically feasible.	No
RN100218197	DB0728N	The Sherwin Williams Company	2851	Paints and Allied Products	32.7	§115.110 - §115.119 §115.120 - §115.129		No
RN104807680	JHA005E	EOG Resources Inc.	1311	Crude Petroleum and Natural Gas	32.4	§115.110 - §115.119	See Section 3.3.10 of RACT Discussion and Rule Project No. 2010-025-115-EN.	No
RN100746007	DB4914J	Trend Offset Printing Services Inc.	2752	Commercial Printing Lithograph	31.4	§115.440 - §115.449		No
RN100223312	JH0230L	Brazos Electric Power Cooperative Inc.	4911	Electric Services	31.4	NA	VOC emissions arise from natural gas combustion. Additional control for RACT is not economically feasible.	No

RN	Account	Company	SIC	SIC Description	Annual tpy	Rules Addressing RACT	Notes	2007 RACT
RN102496684	TA1222P	Flint Hills Resources LP	5171	Petroleum Bulk Stations and Terminals	31.2	§115.110 - §115.119 §115.211 - §115.219	See Section 3.3.10 of RACT Discussion and Rule Project No. 2010-025-115-EN.	No
RN100226414	PC0013U	Enbridge Gathering North Texas LP	1321	Natural Gas Liquids	30.8	§115.110 - §115.119 §115.211 - §115.219 §115.352 - §115.359	See Section 3.3.10 of RACT Discussion and Rule Project No. 2010-025-115-EN.	Yes
RN100219344	TA0172M	Fort Dearborn Co.	2752	Commercial Printing Lithograph	30.3	§115.440 - §115.449		No
RN100747435	TA4073K	Pro Line Printing Inc.	2752	Commercial Printing Lithograph	30.3	§115.440 - §115.449		No
RN101964849	DB2035O	Surepak LP	3086	Plastics, Foam Products	29.8	§115.120 - §115.129		No
RN104025556	DBA003C	Western Cabinets Inc.	2434	Wood Kitchen Cabinets	29.6	§115.420 - §115.429		No

RN	Account	Company	SIC	SIC Description	Annual tpy	Rules Addressing RACT	Notes	2007 RACT
RN100215995	DB0286B	Valspar Coatings	2851	Paints and Allied Products	29.4	§115.110 - §115.119 §115.120 - §115.129		No
RN100225291	DB0632E	Owens Corning	2952	Asphalt Felts and Coatings	29.2	§115.120 - §115.129 §115.211 - §115.219 §115.412 - §115.419		No
RN102566890	TA0106C	Styrochem US Ltd	2821	Plastics Materials and Synthetic Resins	29.0	§115.120 - §115.129 §115.352 - §115.359		No
RN100773381	JH0376F	Technical Chemical Co	2899	Chemical Preparations, NEC	28.5	NA	VOC emissions are controlled per BACT in NSR permit. Additional control for RACT is not economically feasible.	No
RN100673490	DB0249H	Luminant Generation Co LLC	4911	Electric Services	28.4	NA	VOC emissions arise from natural gas combustion. Additional control for RACT is not economically feasible.	Yes

RN	Account	Company	SIC	SIC Description	Annual tpy	Rules Addressing RACT	Notes	2007 RACT
RN100215508	DB1276U	Tekni-Plex, Inc.	5169	Chemicals and Allied Products NEC	28.0	§115.412 - §115.419 §115.430 - §115.439		No
RN102338027	DB2321K	Tube Forming Inc.	3463	Nonferrous Forgings	28.0	§115.412 - §115.419		No
RN100225184	PC0001E	Acme Brick Co.	3251	Brick and Structural Clay Tile	28.0	NA	VOC emissions are controlled per BACT in NSR permit. Additional control for RACT is not economically feasible.	Yes
RN102302007	DB3613K	Western Cabinets Inc.	2434	Wood Kitchen Cabinets	27.8	§115.420 - §115.429		No
RN103184545	TAA004D	Marco Display Specialists Gp LC	2449	Wood Containers, NEC	27.4	§115.420 - §115.429		No
RN104808472	PCA018R	Etc Texas Pipeline Ltd.	1311	Crude Petroleum and Natural Gas	27.3	§115.110 - §115.119	See Section 3.3.10 of RACT Discussion and Rule Project No. 2010-025-115-EN.	No
RN100212356	TA0156K	Lockheed Martin Aeronautics Company	3721	Aircraft	27.3	§115.412 - §115.419 §115.420 - §115.429		No

RN	Account	Company	SIC	SIC Description	Annual tpy	Rules Addressing RACT	Notes	2007 RACT
RN100220417	TA2193N	Bimbo Bakeries USA Inc.	2051	Bread, Cake and Related Products	27.3	§115.120 - §115.129		No
RN100215581	DB0476R	Atlas Copco Drilling Solutions Inc.	3531	Construction Machinery	27.1	§115.420 - §115.429 §115.450 - §115.459	See Section 3.3 of RACT Discussion and Rule Project No. 2010-016-115-EN.	No
RN102324142	KB0073G	Madix Inc.	2542	Partition and Fixtures Except Wood	26.7	§115.420 - §115.429 §115.450 - §115.459	See Section 3.3 of RACT Discussion and Rule Project No. 2010-016-115-EN.	Yes
RN100559988	DB0969M	Rmax Inc.	3086	Plastics, Foam Products	26.4	NA	VOC emissions are controlled per BACT in NSR permit. Additional control for RACT is not economically feasible.	No
RN100210210	DB1182H	Texwood Industries, Inc.	2434	Wood Kitchen Cabinets	26.0	§115.420 - §115.429		No
RN104927876	JHA018R	Devon Gas Services LP	1311	Crude Petroleum and Natural Gas	26.0	NA	VOC emissions mostly from stationary internal combustion engines already equipped with oxidative catalyst or lean burn technology. Additional VOC control not technologically or economically feasible.	No

RN	Account	Company	SIC	SIC Description	Annual tpy	Rules Addressing RACT	Notes	2007 RACT
RN102764792	PC0003A	Antelope Oil Tool and Mfg. Co.	3499	Fabricated Metal Products, NEC	25.9	§115.420 - §115.429 §115.450 - §115.459	Metal furniture coating See Section 3.3.5 of RACT Discussion and Rule Project No. 2010-016-115-EN.	No
RN102216819	TA0051C	Bell Helicopter Textron Inc.	3721	Aircraft	25.7	§115.110 - §115.119 §115.120 - §115.129 §115.412 - §115.419 §115.420 - §115.429		No
RN105592026	DFA113I	Burlington Resources Oil and Gas Co LP	1311	Crude Petroleum and Natural Gas	25.6	§115.110 - §115.119	See Section 3.3.10 of RACT Discussion and Rule Project No. 2010-025-115-EN.	No
RN104807755	JHA006F	EOG Resources Inc.	1311	Crude Petroleum and Natural Gas	25.5	§115.110 - §115.119	See Section 3.3.10 of RACT Discussion and Rule Project No. 2010-025-115-EN.	No
RN102198868	DB1068G	Littelfuse LP	3674	Semiconductors and Related Devices	25.4	§115.120 - §115.129		No

RN	Account	Company	SIC	SIC Description	Annual tpy	Rules Addressing RACT	Notes	2007 RACT
RN100661073	DB1573L	Vertis Inc.	2752	Commercial Printing Lithograph	25.4	§115.440 - §115.449		No
RN102660909	DB0482W	General Dynamics Ots (Garland) LP	3483	Ammunition, Except for Small Arm	25.3	§115.420 - §115.429		No
RN100216043	DB0259E	Dallas Woodcraft Company LP	2499	Wood Products, NEC		§115.420 - §115.429	No reported emissions in 2008	Yes
RN102000924	DB4237J	City of Irving	4953	Refuse Systems		§115.152 - §115.159	No reported emissions in 2008	No
RN100747104	TA0133W	New Styrochem US Ltd.	2821	Plastics Materials and Synthetic Resins		§115.110 - §115.119 §115.120 - §115.129 §115.131 - §115.139 §115.140 - §115.149 §115.352 - §115.359	No reported emissions in 2008	Yes

RN	Account	Company	SIC	SIC Description	Annual tpy	Rules Addressing RACT	Notes	2007 RACT
RN100693308	TA0352I	Luminant Generation Company LLC	4911	Electric Services		NA	<p>No reported emissions in 2008</p> <p>VOC emissions arise from natural gas combustion. Additional control for RACT is not economically feasible.</p>	No



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
RESEARCH TRIANGLE PARK, NC 27711

MAR 17 2011

OFFICE OF
AIR QUALITY PLANNING
AND STANDARDS

MEMORANDUM

SUBJECT: Approving SIP Revisions Addressing VOC RACT Requirements for Certain Coatings Categories

FROM: Scott Mathias, Interim Director *Scott Mathias*
Air Quality Policy Division (6539-01)

TO: Regional Air Division Directors

The Office of Air Quality Planning and Standards has received requests from Regional Offices for guidance on approving State Implementation Plan (SIP) revisions resulting from newly-issued Control Techniques Guidelines (CTGs) documents. These CTGs provide recommendations to inform state determinations as to what constitutes reasonably available control technology (RACT). In some cases, the newly-issued CTGs contain recommended emission limits that are less stringent than limits recommended in older CTGs covering the same industry, and may be less stringent than limits already adopted into SIPs based on the older CTGs. This is the case for industries covered by CTGs pertaining to Large Appliance Coatings, Metal Furniture Coatings, and Miscellaneous Metal and Plastic Parts Coatings.

The U. S. Environmental Protection Agency (EPA) issued new CTGs for these categories in 2007 and 2008, under authority of Clean Air Act (CAA) section 183(e), to address volatile organic compound (VOC) emissions from categories of consumer and commercial products. They replace similar CTGs issued by EPA in 1977 and 1978. The new CTGs recommend more stringent limits for general use coatings, but also include new recommendations for several "specialty use" categories that are less stringent than the general use limits established in the 1970s guidelines.

States are required to submit a SIP revision in response to any newly-issued CTGs.¹ If an existing SIP contains requirements that are not less stringent than the applicability thresholds and/or coating operations limits recommended in new CTGs, the state may choose to submit as a SIP revision a certification that the existing SIP meets RACT requirements.

¹ CAA section 182(b)(2) requires Moderate and above ozone nonattainment areas to revise SIPs when a new CTG is issued by EPA after 1990. EPA is required to set a SIP submission deadline with the issuance of each CTG. For CTGs we have issued in the past several years, we have specified a submission deadline of one year after the CTG was issued (See 72 FR 57215 Oct 9, 2007 and 73 FR 5848 Oct 7, 2008).

We anticipate that EPA Regional Offices would be able to approve the RACT determinations in these circumstances. We note that EPA's recommendations in CTGs are generally treated as "presumptive" RACT and states may demonstrate that other limits are RACT for one or more sources within the source category addressed by the CTG. Where a state has previously determined that more stringent applicability thresholds and/or control levels are RACT for one or more sources in a source category and the sources have complied with those requirements, then those existing controls should be considered RACT for such sources.

If a state chooses to revise more stringent rules that are already in the approved SIP, so that those rules reflect the less-stringent recommended limits in the new CTGs, there are additional considerations that must be factored into any EPA decision to approve the SIP revision. The state would need to first demonstrate that the SIP-approved control requirements are not reasonably available considering technological and economic feasibility, consistent with EPA's definition of RACT. *See* 44 FR 53762 (September 17, 1979). In addition, in order to comply with the SIP approval conditions of CAA section 110(l), the state would need to demonstrate that the revision to the SIP would not interfere with attainment of, or reasonable further progress toward attainment of, the National Ambient Air Quality Standards, nor interfere with any other applicable requirement of the CAA. This would be demonstrated if the stricter limits on general use coatings provide sufficient emission reductions to entirely offset any emission increase caused by adopting the less stringent limits for specialty coatings. Alternatively, the state could adopt supplemental measures that achieve additional emission reductions from another source category in another industry to offset the increased emissions from the specialty coatings. In general, if a proposed SIP revision achieves the same or greater emission reductions as the approved SIP within the same timeframe as provided under the existing plan, the Regional Office should be able to determine that the SIP revision is consistent with the approval conditions of CAA section 110(l).

The public dockets for the Large Appliance Coatings and the Metal Furniture Coatings CTGs contain information that states may find helpful in determining the reductions that can be achieved by adopting the new general use category CTG limits for these industries. According to the docketed information, the estimated reductions from the new CTGs are 30 to 35 percent greater than from the older CTGs. *See* documents EPA-HQ-OAR-2007-0329-0009 and EPA-HQ-OAR-2007-0334-0010 in dockets EPA-HQ-OAR-2007-0329 and EPA-HQ-OAR-2007-0334, respectively. The increase in emissions reductions in any specific nonattainment area may vary depending on the volume usage distribution among the general and specialty categories in that area. The dockets for the new CTGs do not contain area-specific analyses of potential emissions reductions. Generally, if a state believes the volume usage distribution among the general and specialty categories in the docket is representative of the distribution in the nonattainment area, we believe that if a state undertakes wholesale adoption of the new categorical limits in a specific CTG, the state may rely on the assessments in the docket to demonstrate that the range of new limits will result in an overall reduction in emissions from the collection of covered coatings. However, if a state adopts some specialty category limits, but not all of the new categorical limits, or determines that it has a different volume usage distribution among categories, the state may need to do an area-specific assessment of whether tighter restrictions for some coatings, coupled with

less stringent restrictions on other coatings would provide overall equal or greater emissions reductions than the set of rules based on the recommendations in the 1970s guidelines.

If you have further questions on SIP-related issues you should contact Butch Stackhouse at (919) 541-5208. If you have further technical questions on the topics covered in this memorandum you should contact Kaye Whitfield at (919) 541-2509.

cc: Robin Dunkins, SPPD
Kimber Scavo, AQPD
David Orlin, OGC
Sara Schneeberg, OGC

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 appliances¹, metal furniture², and miscellaneous metal parts and products³ were based on the EPA's Office of Air Quality Planning and Standards (OAQPS) corresponding 1977 and 1978 Guideline Series⁴ (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 Coatings⁵ and Metal Furniture Coatings⁶ 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 Coatings⁷ 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

Mr. William T. Harnett
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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 explanation⁸ 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,



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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bcc: Theresa Pella
Ashley Forbes
Vincent Meiller
Lindley Anderson
Amy Browning