

BEFORE THE TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Proposed Revisions to 30 TAC ◆
Chapter 115 - and to the State ◆
Implementation Plan ◆
Rule Project No. 2010-025-115-EN ◆

VOLUME 1 OF 1
PUBLIC HEARING
JULY 18, 2011

The above-entitled matter came on for public hearing, pursuant to notice, on July 18, 2011, at 6:43 p.m., at the Houston-Galveston Area Council, 3555 Timmons Lane, Conference Room C, before Kathy Genung, court reporter and notary public for the State of Texas.

BEFORE: Lola Brown, SIP Coordinator
Texas Commission on Environmental
Quality, Air Quality Division
12100 Park 35 Circle, Building E
Austin, Texas 78753

ALSO PRESENT: Mr. Chance Goodin, TCEQ
Mr. Bob Gifford, TCEQ
Ms. Frances Dowiak, TCEQ

Mr. Thomas A. Hoermann, AkzoNobel

Ms. Shelley Whitworth, HGAC

Mr. Sean Dowiak
Ms. Gloria Dowiak

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I N D E X

SPEAKER	PAGE
Mr. Thomas A. Hoermann	4

1 MS. BROWN: Good evening. I would like to
2 welcome everyone to the public hearing being conducted by
3 the Texas Commission on Environmental Quality. My name
4 is Lola Brown. I'm with the Air Quality Division. And
5 with me are Chance Goodin, Frances Dowiak, and Bob
6 Gifford, all with the Air Quality Division.

7 We're here this evening to receive oral
8 and written comments on the proposed
9 Houston-Galveston-Brazoria Reasonably Available Control
10 Technology, or RACT, Analysis Update State Implementation
11 Plan, or SIP, Revision for the 1997 Eight-Hour Ozone
12 Standard and proposed revisions to 30 Texas
13 Administration Code Chapter 115, Subchapter E, to
14 implement RACT for volatile organic compounds, or VOC
15 emissions from coatings, adhesives, and cleaning solvents
16 used in various processes, and also Chapter 115,
17 Subchapter B, Division 1, to clarify existing rule
18 requirements for VOC storage and provide alternative
19 control options for sources that are currently subject to
20 these rules and to require a more stringent level of
21 control for VOC storage in the Dallas-Fort Worth area.
22 Copies of the proposed SIP and rule revisions are
23 available on the registration table.

24 If you've not already signed in, please --
25 and wish to speak, please sign in now. On the

1 registration table, we also have copies of the public
2 hearing notice that you may take with you so that you can
3 quickly find information on how to submit the written
4 comments on these proposals.

5 We will continue to accept written comment
6 on these proposals until August 8th, 2011.

7 This hearing is structured strictly for the
8 receipt of oral or written comments on these proposals.
9 Open discussion during the hearing is not allowed;
10 however, if you have questions after the hearing, there
11 will be an opportunity to discuss that with the staff.

12 We will now receive comments in the order
13 in which you registered. When I call your name, please
14 come up to the podium, state your name and who you
15 represent, and begin your comments.

16 MR. HOERMANN: Thank you. My name is
17 Thomas A. Hoermann. I am Regional Regulatory Affairs
18 Specialist for International Paint, LLC, which is the
19 Americas Business Unit for Marine, Protective, and Yacht
20 Coatings within AkzoNobel, the world's largest paints and
21 coatings company. International Paint Yacht Coatings,
22 sold under the brand names Awlgrip and Interlux, are
23 recognized for their continuing technical innovation,
24 stringent quality controls, and superlative finish on
25 pleasure craft, ranging from family boats to superyachts

1 around the world. International Paint proudly operates a
2 major coatings manufacturing facility, with associated
3 R&D labs and administrative offices, at 6001 Antoine
4 Drive in northwest Houston.

5 I am here today on behalf of Mr. James
6 Sell, Senior Counsel of the American Coatings
7 Association, or ACA. Although Mr. Sell is unable to
8 participate in today's proceedings, he has previously
9 submitted informal comments on this rulemaking to TCEQ
10 staff. These were entitled "ACA Comments on Pleasure
11 Craft CTG: Modifications Required to South Coast Rule
12 1106.1 for Establishing a Suitable RACT Standard for the
13 Pleasure Craft Coatings Industry," and were sent via
14 e-mail on January 12, 2011.

15 Also included in that e-mail was an EPA
16 Memorandum from Steven D. Page, Director of the Office of
17 Air Quality Planning and Standards, dated June 1st, 2010,
18 subject: "Control Technique Guidelines for Miscellaneous
19 Metal and Plastic Part Coatings - Industry Request for
20 Reconsideration." For the sake of brevity, the "EPA
21 Control Technique Guideline for Miscellaneous Metal and
22 Plastic Part Coatings" will be subsequently referred to
23 as "the EPA CTG."

24 With reference to the information
25 previously submitted by Mr. Sell, and to formal written

1 comments that will be submitted during the comment period
2 for this rulemaking, the following summary points are
3 offered for the Commission's consideration:

4 The Pleasure Craft provisions of the EPA
5 CTG do not represent Reasonably Available Control
6 Technology (RACT) for this industry sector.

7 The draft EPA CTG did not mention pleasure
8 craft surface coating operations. EPA introduced the
9 language of South Coast Air Quality Management Division,
10 or SCAQMD, Rule 1106.1, "Pleasure Craft Coating
11 Operations" into the Final EPA CTG. This was apparently
12 done with concern that pleasure craft surface coating
13 operations might otherwise be subject to the various
14 general categories, and their more restrictive VOC
15 limits, for Miscellaneous Metal Parts and Products, which
16 was based on South Coast AQMD Rules 1107 and 1125, and
17 Miscellaneous Plastic Parts and Products, based on South
18 Coast AQMD Rule 1145 and Michigan Rule 336.1632.
19 However, there was no opportunity for the pleasure craft
20 industry to provide comments on this EPA action.

21 Had that opportunity been extended, the
22 pleasure craft industry would have provided the following
23 reasons to support our contention that South Coast AQMD
24 Rule 1106.1, as included in the Final EPA CTG, does not
25 represent RACT:

1 First, the VOC limits and compliance dates
2 in South Coast AQMA Rule 1106.1 were too restrictive to
3 allow coating manufacturers to formulate products that
4 meet the VOC limits, while also maintaining adequate
5 technical performance and meeting customers' aesthetic
6 requirements. As a result, pleasure craft manufacturers
7 relocated from the South Coast area to other locations in
8 the US.

9 Second, the compliance dates in South Coast
10 AQMD Rule 1106.1 and the EPA CTG do not provide
11 sufficient time for coating manufacturers to formulate
12 products that comply with the restrictive VOC limits,
13 while also meeting the technical performance and
14 aesthetic requirements of pleasure craft manufacturers
15 and owners. An example is antifouling coatings, which
16 must be registered as biocidal products under the Federal
17 Insecticide, Fungicide, and Rodenticide Act and
18 corresponding State programs. This process can add years
19 to the actual development and performance testing of new
20 lower-VOC antifouling coatings.

21 Third, South Coast AQMD Rule 1106.1, like
22 other South Coast rules, was developed and adopted to
23 deal with the severe ozone nonattainment conditions in
24 the South Coast air basin. These conditions are not
25 experienced in other areas of California or the US, and

1 thus the provisions of South Coast regulations should not
2 be identified as "RACT" for other areas.

3 Fourth, even in the state of California,
4 only five other Air Quality Management Districts have
5 found the need to introduce rules to regulate pleasure
6 craft surface coating operations. These rules differ
7 from South Coast AQMD Rule 1106.1 in varying degrees.

8 Fifth, South Coast AQMD Rule 1106.1 was
9 adopted in 1992, and most recently revised in 1999.
10 Since then, there have been developments in the marine
11 and pleasure craft industry that provide the basis for
12 revised VOC limits for some coating categories, and the
13 introduction of new categories and VOC limits for other
14 coatings. An example is a new category of "Antifouling
15 Sealer/Tie Coat." This category of coatings was
16 developed to allow the use of nonbiocidal coatings that
17 comply with Annex 1 of the International Maritime
18 Organization Antifouling Systems Convention, which was
19 written in 2001. These developments are not addressed in
20 South Coast AQMD Rule 1106.1 or the EPA CTG.

21 Development of RACT that is appropriate for
22 Pleasure Craft Surface Coating operations should address
23 the following points:

24 First, consideration of an "Averaging
25 Approach" as an alternative compliance option. This

1 approach is successfully used in Europe to provide
2 flexibility to coating manufacturers and end-use
3 customers to provide VOC emission reductions while
4 minimizing adverse economic and productivity impacts at
5 each affected facility.

6 Second, provision of appropriate time until
7 the final compliance date to allow the development,
8 testing, and commercial introduction of low-VOC pleasure
9 craft coatings. Rushing products into this market has
10 the potential for disastrous consequences, as boat
11 builders and pleasure craft owners tend to be
12 conservative; they tend -- they tend to choose coatings
13 with demonstrated performance that best protect the value
14 of their products and investments. A period of four
15 years is suggested to allow completion of existing
16 development projects to bring lower-VOC pleasure craft
17 coatings to the US market.

18 Third, revision of the categories and VOC
19 limits from the CTG to address current and future product
20 developments in the pleasure craft industry. Examples
21 include revised VOC limits for several coating
22 categories; a revised definition of "Extreme Gloss --
23 excuse me -- "Extreme High Gloss" topcoats; and the
24 introduction of a new category definition and VOC limit
25 for "Antifouling Sealer/Tie Coat" coatings.

1 Also, the EPA CTG should be consistent with
2 other EPA rulemaking for this industrial sector.

3 The pleasure craft industry is aware that
4 EPA is currently evaluating the Natural Emission Standard
5 for Hazardous Air Pollutants for Shipbuilding and Ship
6 Repair Operations. That's 40 CFR Part 63 Subpart II.
7 This process may result in a revised Subpart II MACT
8 Standard and/or a new Area Source Standard for HAPs
9 emissions from Pleasure Craft Surface Coating operations.
10 Coatings manufacturers have already provided product
11 information to EPA to assist in this process, and the
12 industry supports rulemaking that will provide a
13 consistent approach to reduce emissions of both VOC and
14 HAPs in this industrial sector.

15 Finally, the Pleasure Craft Industry is
16 ready and willing to work with Federal, State, and Local
17 air agencies on this issue.

18 The pleasure craft industry was not
19 afforded the usual opportunity to consult with EPA during
20 the development of the EPA CTG. We, therefore, feel it
21 is imperative to work with EPA, its Regional Offices, and
22 State and Local agencies to develop RACT rules that
23 provide reductions in VOC emissions, while meeting the
24 performance and productivity requirements of an important
25 US industry that is under increasing pressure from

1 economic conditions and global competition. Thank you
2 for your attention and consideration.

3 MS. BROWN: Thank you. Is there anyone
4 else that would like to present testimony? Okay. Then,
5 once again, the Commission will continue to accept
6 written comments on these proposals until August 8th,
7 2011. All comments should reference the rule or SIP
8 project number that the comment pertains to.

9 There's a handout on the table that tells
10 you how to sign up for e-mail updates. And we appreciate
11 your comments, and we thank you for coming. And this
12 hearing is now closed.

13 (Whereupon, at 6:55 p.m., this hearing was
14 concluded)

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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 6
1445 ROSS AVENUE, SUITE 1200
DALLAS, TX 75202-2733

AUG 08 2011

Ms. Charlotte Horn
Texas Register Team
Office of Legal Services, MC 205
Texas Commission on Environmental Quality
PO Box 13087
Austin, TX 78711-3087

Dear Ms. Horn:

Thank you for the opportunity to submit comments on revisions proposed to the Texas Commission on Environmental Quality State Implementation Plan (SIP). These revisions are:

- a) Chapter 115 VOC Storage Tank Rule Amendments
Rule Project No. 2010-025-115-EN
- b) Chapter 115 CTG RACT Rule Amendments
Rule Project No. 2010-016-115-EN
- c) DFW SIP Attainment Demonstration Revision (including photochemical modeling, weight of evidence, RACT, RACM, an MVEB, and a contingency plan) Rule Project No. 2010-022-SIP-NR
- d) DFW SIP Reasonable Further Progress Revision
Rule Project No. 2010-023-SIP-NR
- e) HGB RACT Analysis Update SIP Revision
Rule Project No. 2010—028-SIP-NR
- f) DFW Attainment Demonstration and Reasonable Further Progress (RFP) SIP Revision Supplements

These SIP revisions are important for Texas' plan to address ozone air quality problems in the state. We appreciate the efforts of the State in developing these SIP revisions.

Our detailed comments on the proposed rules are included as an enclosure to this letter. Please contact me or my staff if you have any questions. For questions about our comments on the DFW SIP proposals, please contact Ms. Carrie Paige at 214-665-6521. Please direct questions about comments on the VOC storage tank rules, CTG RACT rules, or the DFW or HGB RACT analysis to Ms. Ellen Belk at 214-665-2164.

Sincerely yours,

Guy Donaldson, Chief
Air Planning Section (6PD-L)

Enclosure

Cc: Lola Brown, MC 206
Michael Parrish, MC 205
Jamie Zeck, MC 206

Detailed Comments

Control of VOC Emissions from Storage and Transfer Operations for the Eight-Hour Ozone Standard (Rule Project No. 2010-025-115-EN)

The amendments in this proposed rule would apply to nonattainment and near nonattainment areas, and would change VOC control requirements in 30 TAC Chapter 115, Subchapter B, Division 1, Storage of Volatile Organic Compounds. These revisions would require a more stringent level of control for VOC storage in the Dallas – Fort Worth 1997 eight hour ozone nonattainment area. In addition, this proposed rulemaking would clarify rule requirements and allow for the use of alternative control options for affected owners or operators in the following areas: HGB 1997 8-hour ozone nonattainment area, Beaumont-Port Arthur area, and in Arkansas, Bexar, Calhoun, El Paso, Gregg, Matagorda, Nueces, San Patricio, Travis, and Victoria Counties. Our comments on this rulemaking project are as follows:

1. EPA Region 6 is supportive of TCEQ's efforts to expand controls for additional VOC emissions in the DFW area. Also, EPA appreciates the decision made by TCEQ requiring 95% control in 115.112(f)(3)(A).
2. Please confirm that this new rule includes all of the components needed for enforcement purposes. As explained in the preamble, "... the compliance date for new requirements in the DFW area will be December 1, 2012". However, if compliance with the new requirements would necessitate emptying and degassing the tank, compliance would not be required until the next time the tank is emptied or degassed but no later than December 1, 2021. In particular, please explain how existing reporting requirements are sufficient for inspectors to be able to verify the most recent time that a vessel was emptied or degassed and, if necessary, add additional reporting requirements which provide for the enforceability of this rule.
3. With respect to any credit which may be taken for reductions from this rule in the reasonable further progress plan or attainment plan, please explain how the reductions were calculated. In particular, please explain how the credit has been appropriately prorated to reflect that many storage tanks may not be controlled until after the deadline for RFP or attainment because of the extended period allowed for compliance.

Detailed Comments

Control of VOC Emissions for Eight Control Techniques Guideline (CTG) Categories. (Rule Project No. 2010-016-115-EN)

The amendments in this proposed rule would change VOC control requirements in 30 TAC Chapter 115 Subchapter E, Solvent-Using Processes for eight Control Techniques Guidelines (CTG) categories issued in 2006, 2007, and 2008. The CTG categories included in this proposal are: Flexible Packaging Printing Materials; Industrial Cleaning Solvents; Large Appliance Coatings; Metal Furniture Coatings; Paper, Film, and Foil Coatings; Auto and Light-Duty Truck Assembly Coatings; Miscellaneous Industrial Adhesives; and Miscellaneous Metal and Plastic Parts Coatings. Our comments on this rulemaking project are as follows:

1. Compliance Dates

Please consider whether these rule revisions should be enhanced to require compliance where possible by the beginning of the ozone season, March 1, 2013. The rules as proposed make a distinction between owners and operators becoming subject to the requirements and complying with the requirements, allowing an additional 60 days for compliance after becoming subject.

For example, as indicated in proposed Division 3: Flexible Packaging Printing Materials 115.439(d), "The owner or operator of a flexible package printing line in the Dallas-Fort Worth and Houston-Galveston-Brazoria areas that becomes subject to the requirements of this division after March 1, 2013, shall comply with the requirements in this division no later than 60 days after becoming subject."

Given this, please consider modifying the rule to require compliance with these regulations no later than March 1, 2013.

Also, please use similar modifications in other compliance sections which are similarly worded, such as: §115.459(b), and §115.469(b).

2. Reasonably Available Control Technology (RACT) Requirements.

Absent the requisite demonstration, EPA will not be able to approve portions of the proposed rules. This is because the proposed rules replace emissions limits previously adopted as RACT with less stringent emissions limits. A demonstration from the State showing that the SIP-approved limits are no longer RACT, will be required for EPA's approval.

EPA's interpretation of the applicable provisions of the CAA is contained in the memorandum titled "Approving SIP Revisions Addressing VOC RACT Requirements for Certain Coatings Categories" dated March 17, 2011. This memo is included as an appendix at the end of our comments. The memo states that "for situations in which 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. Further, "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 . . . 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." Sources have been complying with these limits in some cases for 20 years or more. Texas should explain how it is no longer RACT for these sources to continue to comply with the old limits.

Therefore absent a demonstration portions of the following proposed Division 5 rules may not be approvable these include: Surface Coating Processes §115.453 and Control Requirements. Specifically, EPA anticipates not being able to approve some of the revisions proposed for Large Appliances, Metal Furniture, Miscellaneous Metal Parts and Products, Miscellaneous Plastic Parts and Products, and possibly other sections, including portions of the following:

- Division 5: Surface Coating Processes §115.453 Control Requirements:
 - §115.453(1)(A) Large Appliances
 - §115.453(1)(B) Metal Furniture
 - §115.453(1)(C) Miscellaneous Metal Parts and Products
 - §115.453(1)(D) Miscellaneous Plastic Parts and Products

3. Director's Discretion

The proposed §115.454(b) provides for alternate control requirements approved by the executive director:

§115.454(b) For any surface coating process or processes at a specific property, the executive director may approve requirements different from those in §115.453(a)(1)(A) of this title (relating to Control Requirements) based upon the executive director's determination that such requirements will result in the lowest emission rate that is technologically and economically reasonable. When the executive director makes such a determination, the executive director shall specify the date or dates by which such different requirements must be met and shall specify any requirements to be met in the interim. If the emissions resulting from such different requirements equal or exceed 25 tons a year for a property, the determinations for that property must be reviewed every five years. Executive director approval does not necessarily constitute satisfaction of all federal requirements nor eliminate the need for approval by the United States Environmental Protection Agency in cases where specified criteria for determining equivalency have not been clearly identified in applicable sections of this chapter.

The rule should be revised to make clear that any alternative requirements to §115.453(a)(1)(A), approved by the executive director under §115.454(b) would need to be submitted as a site specific SIP revision for approval by EPA to ensure it meets the requirements for enforceability and public hearings.

4. Division 5: Control Requirements for Surface Coating Processes. Title.

It would be helpful to readily distinguish the rules in this division from those in Division 2. The proposed title for this new Division 5, “Control Requirements for Surface Coating Processes”, seems very similar to Division 2, “Surface Coating Processes”.

Dallas-Fort Worth Attainment Demonstration State Implementation Plan Revision
for the 1997 Eight-Hour Ozone Standard Nonattainment Area

The proposed DFW attainment demonstration SIP revision contains Federal Clean Air Act required SIP elements, including a photochemical modeling analysis, a weight of evidence analysis, a RACT analysis, a reasonably available control measures analysis, a motor vehicle emissions budget (MVEB) for 2012, and a contingency plan. This proposed revision includes concurrent rulemakings to update control requirements for certain coatings operations, in response to recommended RACT requirements in CTG documents issued by the EPA and VOC storage tank rule revisions to update existing and provide new control measures for the DFW area. This proposed revision also includes an on-road emissions supplement to the proposed attainment demonstration SIP.

1. Reasonably Available Control Technology (RACT) Requirements:

Absent a proper demonstration EPA will not be able to approve portions of the proposed rules because the revised limits replace emissions limits previously adopted as RACT with less stringent emissions limits. Without a demonstration from the State that the SIP-approved limits are no longer RACT, considering technological and economic feasibility, the proposed rule will not be approvable. EPA's interpretation of the applicable requirements of the CAA is provided in the memorandum entitled, "Approving SIP Revisions Addressing VOC RACT Requirements for Certain Coatings Categories" dated March 17, 2011. This memo is included as an appendix at the end of our comments. In general, for situations in which 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.... 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."

Therefore, the portions of proposed Division 5 rules which are not approvable without a RACT demonstration include: Surface Coating Processes §115.453 Control Requirements. Specifically, EPA anticipates not being able to approve some of the revisions proposed for Large Appliances, Metal Furniture, Miscellaneous Metal Parts and Products, Miscellaneous Plastic Parts and Products, and possibly other sections, including portions of the following:

Division 5: Surface Coating Processes §115.453 Control Requirements:

§115.453(1)(A) Large Appliances

§115.453(1)(B) Metal Furniture

§115.453(1)(C) Miscellaneous Metal Parts and Products

§115.453(1)(D) Miscellaneous Plastic Parts and Products

2. Motor Vehicle Emission Budgets (MVEBs) and use of the Motor Vehicle Emission Simulator (MOVES) emission modeling system:

EPA Region 6 appreciates the work done by TCEQ and the NCTCOG to incorporate an approximation of MOVES mobile modeling outputs into the proposed attainment demonstration and RFP SIPs for the DFW area. MOVES is EPA's approved model for use in SIP submissions and transportation conformity analyses, because it represents the Agency's most current assessment of on-road mobile source emissions (75 FR 9411).

As noted in the proposed attainment demonstration SIP Revision, Section 3.7.6.3 (Expected Changes to SIP Revision Adoption with MOVES), "[w]hether MOBILE6.2 or MOVES is used for on-road emissions inventory development, the DFW area is anticipated to attain the 1997 eight-hour ozone NAAQS by the June 15, 2013 deadline". It is encouraging to see that the area is predicted to attain the standard by the deadline when on-road emissions are estimated using MOVES. Consistent with EPA's guidance for the use of MOVES in the development of SIPs and conformity determinations, Texas should proceed with finalizing attainment demonstration and RFP SIPs using the MOVES emissions modeling results. This would include establishing MOVES-based MVEBs for the DFW area.

The Supplement to the proposed attainment demonstration incorporates the use of the MOVES2010a emission modeling system. MOVES2010a incorporates new car and light truck energy and greenhouse gas rates and a number of other improvements. Unless substantial work with MOVES has been done, the TCEQ should use MOVES2010a and take full advantage of the improvements incorporated in this version.

Modeling/Weight of Evidence

The State has proposed, based on a technical demonstration including modeling and other evidence that the Dallas/Fort Worth areas will attain the 1997 ozone standard by the end of the 2012 ozone season. Based on the current monitoring data and the limited reductions that will happen between now in 2012, however, it seems unlikely that the area will attain. We note that the 2008 and 2009 years and even 2010 had higher wind speeds than normal that resulted in conditions less conducive to ozone formation. The 2011 period has been slightly above normal so far, as it has been very hot, but has had some low wind days and higher wind days. We note that based on the preliminary data that the area's current design value is 88 ppb, short of the 84 ppb goal. To attain by 2012 will require a significant reduction from current monitored levels.

The discussion of ozone design value monitors on page 5-12 and Table 5-4 is not current and does not reflect ozone data for 2010. This information should be updated to include current data.

Evaluation of the model performance data and source apportionment indicates that the model may be oversensitive to low-level NOx reductions. We note that the kv-200 patch

to induce more vertical mixing may be resulting in better performance in the base case, but also making the model overly sensitive to low-level NO_x reductions as the atmosphere may not be mixing as rapidly as the patch is indicating. This may compensate for emission estimation errors in the base, thus resulting in better model performance but also over-predicting the benefit of NO_x reductions. Comparison of baseline modeling and model performance using the MOVES and MOBILE6.2 emission inventories should provide useful information on the model's sensitivity to changes in low-level NO_x emissions.

We also noted that the modeling seems to project significant reductions in ozone levels due to out-of-state emission reductions. We think there may be some error in the magnitude of reductions being projected and request that TCEQ do comparisons with reductions expected with the new Cross State Air Pollution Reduction Rule. A model sensitivity run may help understand if this is part of the discrepancies of the model system.

The calculated RRF values used to project the 2012 DV shown on Table 3-26 range from 0.786 to 0.832, indicating a significant reduction in predicted ozone concentrations over a relatively short period of time. We note that the retrospective analysis (Table 3-24) shows observed RRFs from 1999 to 2006 range from 0.872 to 0.966. In calculation of RRFs, there is some concern that a cut-off of 70 ppb may be too low for determination of which days to include in the RRF calculation. Additional analysis of the sensitivity of the RRF calculation to using a higher cut-off value and including fewer days in the calculation, as well as an evaluation of the day-to-day variability of the RRFs and meteorology on those days, should be provided. Furthermore, evaluation of the sensitivity of RRF values to cell array size should be included, supporting TCEQ's choice of a 3x3 grid cell array about each monitor.

3. General

Throughout the submittal, we notice references to 2010 ozone data as preliminary. Please provide current ozone values in the final submittals.

We are pleased to see improvements to the area source emissions inventories, although the improvements indicate increased emissions from oil and gas activities in the area.

Regarding the discussion on the Clean Fuel Fleet (CFF) requirement, the state should review the CFF equivalency demonstration submitted by the TCEQ for the Beaumont/Port Arthur area, which was approved on October 20, 2010 (75 FR 64675). Since the CFF must be addressed in the DFW SIP, a similar equivalency demonstration is a reasonable option for consideration in the DFW area.

Regarding the discussion on gasoline vapor recovery and the removal of Stage II requirements on pages 4-6 and 4-7, please note that Stage II refueling requirements apply in serious, severe and extreme ozone nonattainment areas, provided the EPA has not yet

found that onboard refueling vapor recovery (ORVR) is in widespread use in the motor vehicle fleet and waived the section 182(b)(3) requirement.¹ Should the EPA finalize the rule as proposed at 76 FR 41731, then Parker, Johnson, Ellis, Kaufman and Rockwall counties would not be required to implement Stage II vapor recovery, nor would the state have to submit a demonstration that ORVR is in widespread use in these counties.

Regarding RACM, as indicated in Appendix G of the state's submittal, in order to advance attainment by one year (i.e., by June 15, 2012), the state would have to implement any additional control measures needed for attainment by the beginning of the 2011 ozone season, which has already passed. Thus, at this time, EPA believes there is insufficient time to implement additional controls that would advance attainment. However, Section 172(c)(1) of the Act requires SIPs to provide for the implementation of all RACM as "expeditiously as practicable" and for attainment of the standard. Therefore, and in light of the preliminary and increasing ozone design values (DVs) in the area, we encourage the state to provide a more robust RACM analysis that includes the magnitude of emissions reductions that would advance the attainment date at the monitors with the highest future DVs. Finally, we encourage the State to explore new technologies and pilot test new strategies to further reduce ozone in the DFW area.

All nine counties in the serious ozone nonattainment area must meet the requirements specified under section 182(c) of the CAA. We have accounted for all but three of these requirements; please specify where the state's rules address how Parker, Johnson, Ellis, Kaufman and Rockwall counties meet the de minimis rule (section 182(c)(6)), the special rules for modification of sources (section 182(c)(7) and (8)), and the increased offset ratio of 1.2 to 1 (section 182(c)(10)).

In the On-road Emissions Supplement to the Proposed DFW Attainment Demonstration, the sentence at the bottom of page 2 appears to be unfinished. We suspect it would direct the reader to Tables 2-3 and 2-4. Please confirm by finishing the sentence.

The state has submitted two recent revisions to Chapter 117 for:

- 1) low-temperature drying ovens at 117.403(a)(12); and
- 2) biogas fired lean-burn engines.

Please confirm that emission increases from these revisions have been captured in the attainment modeling.

¹ On July 15, 2011 (76 FR 41731), the EPA proposed criteria for determining whether ORVR is in widespread use for purposes of controlling motor vehicle refueling emissions throughout the motor vehicle fleet. Based on the proposed criteria, the EPA is proposing to determine that June 30, 2013 will be the date when widespread use will occur and the Stage II waiver will be effective.

Dallas-Fort Worth Reasonable Further Progress State Implementation Plan Revision
for the 1997 Eight-Hour Ozone Standard

The proposed DFW RFP SIP revision contains an analysis of the DFW serious ozone nonattainment area's progress toward attainment of the 1997 eight-hour ozone standard. RFP requirements include annual incremental reductions in ozone precursor emissions (NO_x and VOC) out to an area's attainment year, reductions in ozone precursor emissions as contingency measures for designated milestone years and for the attainment year, and updated RFP MVEBs for an area's milestone years. This proposed SIP revision would incorporate a concurrently proposed revision to Chapter 115 that would reduce VOC emissions from affected sources in the DFW area. (We are providing comments on the proposed revisions to Chapter 115 under Rule Project No. 2010-025-115-EN elsewhere.)

1. The Supplement to the RFP indicates that the state is considering using the emissions reductions earned through the TERP to successfully demonstrate RFP for 2011, which we fully support.
2. The state's modeling analysis demonstrates that reducing NO_x emissions in the DFW area is more effective in reducing the area's 8-hour ozone design value than reducing VOC emissions, thus substitution of creditable NO_x emissions reductions is allowable in this RFP.² For the 2012 milestone year, the proposed VOC emissions reductions fall short of meeting the VOC target by 9.79% to 13.82%, depending on which transportation model is used. The NO_x emissions reductions must therefore provide an excess of the same percentage as the VOC shortfall (9.79% to 13.82%) to compensate for the VOC shortfall and maintain the increment of RFP of 3% and this is provided. We show the calculations below, using the emission levels provided in the state's proposal and supplement. Lines 6-8 are not included in the state's submittals, but are required to demonstrate consistency with RFP and the EPA's NO_x Substitution Guidance.

² See EPA's NO_x Substitution Guidance, December 1993. In addition, on August 5, 1994, we issued "Clarification of Policy for Nitrogen Oxides (NO_x) Substitution," Memorandum from John S. Seitz, Director, Office of Air Quality Planning and Standards.

NOx emissions reductions needed to balance VOC shortfall, in tpd unless otherwise noted.

Description	NOx	VOC
Using Mobile6.2 model		
1. 2012 Target emissions levels	393.59	463.25
2. 2012 Forecast/Projected emissions levels	324.28	517.11
3. Excess (shortfall) [(line 1) – (line 2)]	69.31	(53.86)
4. Amount for contingency measure (3% of 2012 ABY) ³	15.43 (3%)	0%
5. Excess (shortfall) [(line 3) – (line 4)]	53.88	(53.86)
6. Percent of shortfall from VOC target		11.63%
7. 11.63% of NOx target (to cover 11.63% VOC shortfall)	45.77 (11.63%)	
8. Adjusted excess in NOx reductions [(line 5) – (line 7)]	8.11	
Using MOVES model		
1. 2012 Target emissions levels	500.21	445.89
2. 2012 Forecast/Projected emissions levels	398.81	507.50
3. Excess (shortfall) [(line 1) – (line 2)]	101.40	(61.61)
4. Amount for contingency measure (3% of 2012 ABY) ⁴	19.43 (3%)	0%
5. Excess (shortfall) [(line 3) – (line 4)]	81.97	(61.61)
6. Percent of shortfall from VOC target		13.82%
7. 13.82% of NOx target (to cover 13.82% VOC shortfall)	69.13 (13.82%)	
8. Adjusted excess in NOx reductions [(line 5) – (line 7)]	12.84	
Using MOVES2010a model		
1. 2012 Target emissions levels	481.78	471.95
2. 2012 Forecast/Projected emissions levels	379.09	518.14
3. Excess (shortfall) [(line 1) – (line 2)]	102.69	(46.19)
4. Amount for contingency measure (3% of 2012 ABY) ⁵	18.91 (3%)	0%
5. Excess (shortfall) [(line 3) – (line 4)]	83.78	(46.19)
6. Percent of shortfall from VOC target		9.79%
7. 8.91% of NOx target (to cover 9.79% VOC shortfall)	47.17 (9.79%)	
8. Adjusted excess in NOx reductions [(line 5) – (line 7)]	36.61	

For the Mobile6.2 and both of the MOVES models, the percent of excess in NOx emissions reductions is greater than the percent of shortfall in VOC emissions reductions and provides the area with the required average of 3% per year in emissions reductions. However, the state will need to adjust the amount of “excess reductions from 2012 RFP demonstration” in the tables that show how the state satisfies the 3% emissions reductions that are required for contingency measures, should the area fail to attain the 1997 ozone standard by June 15, 2013.

3. One of the creditable reduction strategies used in the calculation of the total 2011-2012 control reductions is “Storage tank rule 95 control/25 limit.” See Appendix 1, sheet 43. The VOC emissions reductions provided for this strategy is 14.37 tpd. On sheet 44 of Appendix 1, we see

³ Per the state’s proposal, the 2012 adjusted base year (ABY) emissions inventory for NOx, using the Mobile6.2 model, is 514.47 tpd.

⁴ Per the state’s proposal, the 2012 ABY emissions inventory for NOx, using the MOVES model, is 647.80 tpd

⁵ Per the state’s proposal, the 2012 ABY emissions inventory for NOx, using MOVES2010a, is 630.46 tpd

the creditable reduction strategies used in the calculation for the 2012-2013 contingency measures. Again the "Storage tank rule 95 control/25 limit" is listed as one of the control strategies, but the total VOC emissions reductions for this strategy is 0.00. Please confirm that the credit for emissions reductions has been appropriately prorated for 2011-2012 and 2012-2013, to reflect the extended period allowed for compliance with this rule.

4. Please review the tables throughout the proposed submittal (including Appendices and Supplements) for mathematical errors. We found several errors, for example: Table 3-1 in Chapter 3, the sum at step 5D is 105.44 but the table reads 106.96; step 6 shows an error in subtraction; Table 4-29 shows an error in addition; etc.

Detailed Comments

The proposed HGB SIP revision provides a RACT analysis update in response to (CTG) documents that have not yet been included in the HGB Attainment Demonstration (AD) SIP Revision for the 1997 8-hour ozone standard and incorporate concurrently proposed CTG-related rulemaking for the HGB area. SIP Project No. 2010-028-SIP-NR. Our comments on this rulemaking project are as follows:

1. Reasonably Available Control Technology (RACT) Requirements.

The EPA will not be able to approve portions of the proposed rules which replace emissions limits previously adopted as RACT with less stringent emissions limits without a demonstration from the State that the SIP-approved limits are no longer RACT, considering technological and economic feasibility, as explained further below. The EPA's interpretation of the applicable requirements of the CAA is provided in the memorandum entitled, "Approving SIP Revisions Addressing VOC RACT Requirements for Certain Coatings Categories" dated March 17, 2011. This memo is included as an appendix at the end of our comments. In general, for situations in which 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 choose 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 . . . The state would need to first demonstrate that the SIP approved control requirements are not reasonably available considering technological and economic feasibility, consistent with the EPA's definition of RACT."

Therefore, the portions of proposed to Division 5 rules which may not be approvable include: Surface Coating Processes §115.453 Control Requirements. Specifically, EPA anticipates not being able to approve some of the revisions proposed for Large Appliances, Metal Furniture, Miscellaneous Metal Parts and Products, Miscellaneous Plastic Parts and Products, and possibly other sections, including portions of the following:

- Division 5: Surface Coating Processes §115.453 Control Requirements:
 - §115.453(1)(A) Large Appliances
 - §115.453(1)(B) Metal Furniture
 - §115.453(1)(C) Miscellaneous Metal Parts and Products
 - 1§5.453(1)(D) Miscellaneous Plastic Parts and Products

Appendix

Attached Memorandum: "Approving SIP Revisions Addressing VOC RACT Requirements for Certain Coatings Categories", dated March 17, 2011 from Scott Mathias to Regional Air Division Directors. (3 pages)



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 (C539-01)

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, AQP
David Orlin, OGC
Sara Schneeberg, OGC