

**RESPONSE TO COMMENTS RECEIVED CONCERNING  
THE DALLAS-FORT WORTH (DFW) REASONABLE  
FURTHER PROGRESS (RFP) STATE IMPLEMENTATION  
PLAN (SIP) REVISION FOR THE 1997 EIGHT-HOUR  
OZONE STANDARD**

**PROPOSED JUNE 8, 2011**

The commission conducted public hearings for the proposed DFW RFP SIP revision at the Arlington City Council Chambers in Arlington, Texas, on July 14, 2011, at 10:00 a.m. and 6:30 p.m., and at the Texas Commission on Environmental Quality (TCEQ) headquarters in Austin, Texas, on July 22, 2011, at 2:00 p.m. Question and answer sessions were held 30 minutes prior to the hearings. Oral comments were received at the 10:00 a.m. and 6:30 p.m. July 14, 2011, Arlington hearings from the North Texas Clean Air Steering Committee (NTCASC) and the Regional Transportation Council of the North Central Texas Council of Governments (NCTCOG), respectively. Oral comments were received at the Austin hearing from Public Citizen and the Sierra Club. The public comment period opened on June 24, 2011, and closed on August 8, 2011. The commission received written comments from COPPs for Clean Air (COPPs), KIDS for Clean Air (KIDS), the NCTCOG, the NTCASC, the United States Environmental Protection Agency (EPA), and 355 individuals.

Comments more directly related to the 30 Texas Administrative Code Chapter 115 (Rule Project No. 2010-025-115-EN), which were incorporated by reference into the proposed RFP SIP revision, are addressed in the Response to Comments section of the preamble to that rulemaking.

**GENERAL**

The NTCASC appreciated that the TCEQ extended the RFP comment period from July 25, 2011, to August 8, 2011.

**The commission extended the comment period to allow the public time to review and comment on additional on-road mobile source emissions inventory information. The RFP SIP revision was proposed with MOBILE6.2-based on-road mobile source emissions inventories as well as approximate MOVES2010-based on-road mobile source emissions inventories developed by the TCEQ. In July 2011, NCTCOG submitted final MOVES2010a-based on-road mobile source emissions inventories to the TCEQ, at which point the data were incorporated into RFP calculations for this RFP SIP revision and provided on the TCEQ's public Web site for consideration in preparing comments on this SIP revision.**

NCTCOG noted a typographical error in the supplement concerning a reference to a table. The EPA cited a number of numerical discrepancies between the proposed narrative and the proposed calculations spreadsheets contained in Appendices 1: *Preliminary MOVES-Based Dallas-Fort Worth Nonattainment Area Reasonable Further Progress Demonstration Calculations Spreadsheet* and 9: *Preliminary MOVES-Based Dallas-Fort Worth Nonattainment Area Reasonable Further Progress Demonstration Calculations Spreadsheet*.

**All references to tables, text, appendices, and calculations in the adopted DFW RFP SIP revision have been updated and checked for consistency.**

KIDS, COPPs, and three individuals stated that previous SIP revisions allowed the public to review emissions inventory input data, but this SIP revision did not. The commenters further stated that the TCEQ only provided the public with summary information.

**Development of air quality SIPs is a complicated, detailed process. In order to provide information that is meaningful to all concerned parties (e.g., the general public, the EPA, regional partners, etc.), the commission provides summary information with appendices and references to other underlying data where appropriate. Detailed emissions inventory data used for the DFW RFP SIP development are available upon request, and source data are referenced (with links provided when available) throughout the DFW RFP SIP revision and associated appendices. The point source emissions data from 2004 to the most recent published inventory year are available anytime online through the [Central Registry](http://www.tceq.texas.gov/permitting/central_registry) portion of the agency's public Web site ([http://www.tceq.texas.gov/permitting/central\\_registry](http://www.tceq.texas.gov/permitting/central_registry)) for any site in the state that meets the point source emissions inventory reporting requirements specified in 30 Texas Administrative Code (TAC) Section 101.10. The inventories and all supporting information and data for on-road mobile, locomotive, airport, and non-road model categories are available upon request from the TCEQ's Mobile Source Programs Team. In addition, the inventories and all supporting information for area sources are also available by request from TCEQ Area Source personnel. No change was made in the RFP SIP revision as a result of this comment.**

Public Citizen commented that the RFP SIP revision will not allow the DFW area to meet attainment.

**An RFP SIP revision is not required or intended to demonstrate attainment of the ozone National Ambient Air Quality Standard (NAAQS), but rather to demonstrate that a nonattainment area will meet the RFP requirements for serious ozone nonattainment areas. The DFW RFP SIP revision demonstrates that the DFW nonattainment area will meet those requirements, which involve reducing ozone precursor (nitrogen oxides (NO<sub>x</sub>) and volatile organic compounds (VOC)) emissions at annual increments between the 2002 base year and the 2012 attainment year.**

#### **NITROGEN OXIDES (NO<sub>x</sub>) SUBSTITUTION**

COPPs, KIDS, Public Citizen, the Sierra Club, and 355 individuals disagreed with the TCEQ's approach of providing surplus NO<sub>x</sub> reductions to offset growth in VOC. The Sierra Club expressed concern that the NO<sub>x</sub> substitution used in the RFP SIP revision was not consistent with the EPA's 1993 NO<sub>x</sub> substitution guidance<sup>1</sup>. COPPs, KIDS, Public Citizen, and 355 individuals questioned the permissibility of using NO<sub>x</sub> reductions in lieu of VOC reductions to account for VOC growth.

The EPA stated that because the state's modeling analysis demonstrates that reducing NO<sub>x</sub> emissions is more effective in reducing the ozone design value than reducing VOC emissions, the TCEQ's approach of providing surplus NO<sub>x</sub> reductions to offset growth in VOC is allowable. The

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<sup>1</sup> EPA, 1993. "NO<sub>x</sub> Substitution Guidance." December 1993, U.S. Environmental Protection Agency, Office of Air Quality and Planning Standards, Research Triangle Park, NC 27711.

EPA indicated, however, that NO<sub>x</sub> substitution must be accomplished according to NO<sub>x</sub> substitution guidance, through a percent-based method. To comply with NO<sub>x</sub> substitution guidance, the EPA specified that the TCEQ must compensate for the VOC shortfall by applying NO<sub>x</sub> emissions reductions of the same percentage as the VOC shortfall. The EPA provided calculations for the percent-based method and indicated that contingency would need to be updated accordingly.

**The commission continues to assert that because NO<sub>x</sub> emissions reductions are more effective at reducing ozone design values in the DFW nonattainment area, providing surplus RFP NO<sub>x</sub> reductions to offset VOC growth is appropriate. Based on comments received, the commission revised the method for substituting those surplus NO<sub>x</sub> reductions from a ton-for-ton to a percent basis, and RFP milestone year and contingency demonstrations were updated for adoption. The VOC emissions reduction shortfalls for 2011 and 2012 are 15.45% and 12.83%, respectively. The DFW RFP SIP revision provides 15.46% (2011) and 12.84% (2012) of surplus NO<sub>x</sub> emissions reductions to offset the VOC shortfalls. For details on the revised NO<sub>x</sub> substitution methodology, see Chapter 3: *Target Emissions Levels and Reasonable Further Progress Demonstration* and Appendix 1: *Dallas-Fort Worth Nonattainment Area Reasonable Further Progress Demonstration Calculations Spreadsheet* of the DFW RFP SIP revision.**

#### **EMISSIONS CONTROLS**

The NTCASC commented that the TCEQ should formalize a number of oil and gas industry best practices as rules and strengthen the VOC storage tank rule (Rule Project No. 2010-025-115-EN) included in the RFP SIP proposal. Doing so, according to the NTCASC, would ensure that the DFW area could meet RFP milestone year demonstrations and allow for additional contingency in the event that the area was not able to meet an RFP milestone.

**The TCEQ acknowledges that some oil and gas companies have voluntarily implemented controls and practices to reduce VOC emissions, such as those recommended by the EPA in the Natural Gas Star Program. However, the TCEQ cannot formally adopt such voluntary practices as enforceable control measures for the SIP that were not proposed for public comment. The TCEQ has revised Chapter 5: *Weight of Evidence* of the associated DFW attainment demonstration SIP revision to include discussion about the voluntary practices being employed by the oil and gas industry. Additionally, the adopted revisions to 30 TAC Chapter 115, Subchapter B, Division 1 implement control requirements for storage tanks in the oil and gas industry and additional discussion regarding the revisions to the Chapter 115 storage tank rules is provided in the preamble of the adopted rule (Rule Project No. 2010-025-115-EN) and in Chapter 4: *Control Strategies and Required Elements* of the associated DFW attainment demonstration SIP revision. No new rules were incorporated into the DFW RFP SIP revision based on this comment.**

**Federal Clean Air Act, §182(b)(1) requires that RFP plans provide for specific annual reductions in ozone precursor emissions as necessary to attain the ozone NAAQS by the attainment date. Further, Phase II of the implementation rule for the 1997 eight-hour ozone standard states that RFP does not require more reductions than needed for attainment (70 FR 71649). The DFW RFP SIP revision**

**demonstrates that both the 2011 and 2012 RFP milestone year target level emissions reductions requirements will be achieved. In addition, the SIP revision demonstrates that the contingency requirement, which reserves 3% emissions reductions to be used in the event that the area does not meet a milestone year requirement, is met for both years. Final calculations indicate that the VOC storage tank rule (Rule Project No. 2010-025-115-EN) is not needed to demonstrate reasonable further progress toward attainment of the 1997 eight-hour ozone standard; therefore, the rule has been removed from the DFW RFP SIP revision for adoption.**

The EPA indicated that due to the compliance deadline for the VOC storage tank rule (Project No. 2010-025-115-EN), the reductions associated with the rule should be prorated for the 2012 milestone year and the 2013 contingency year.

**The VOC storage tank rule was removed from the DFW RFP SIP revision because it was no longer needed to demonstrate RFP. No emissions reductions associated with the rule are included in the controlled RFP emissions inventory.**

The EPA supported the use of Texas Emissions Reduction Plan (TERP) reductions to help demonstrate RFP for 2011.

**The commission appreciates the EPA's support. The amount of proposed TERP reductions was retained for the adopted DFW RFP SIP revision. The emissions reductions incorporated into the RFP SIP revision include a portion of the projected/expected emissions reductions from TERP-funded non-road and locomotive projects that became active beginning in 2008. The emissions reduction projections included in this SIP revision were validated based on the actual performance of those projects in 2008, 2009, and 2010.**

#### **MOTOR VEHICLE EMISSION SIMULATOR (MOVES) MODEL**

The EPA, the NTCASC, and the Regional Transportation Council of the NCTCOG supported the use of the MOVES model to determine RFP on-road mobile source emissions inventories.

**The commission appreciates the commenters' support in using the MOVES model to develop on-road mobile source emissions inventories for the DFW RFP SIP revision. The SIP revision uses MOVES2010a for final on-road mobile source emissions inventories.**

#### **MOTOR VEHICLE EMISSIONS BUDGET (MVEB)**

The NCTCOG requested that the TCEQ include a safety margin for the 2012 RFP NO<sub>x</sub> MVEB. The NCTCOG further requested that the entire amount of excess 2012 NO<sub>x</sub> emissions reductions be used for that safety margin.

**A transportation conformity safety margin is allowed when there is an excess in emission reductions required to demonstrate RFP for the milestone year. The commission has applied MVEB safety margins of 10%, when available, as a matter of practice (e.g., the 2009 Houston-Galveston-Brazoria RFP SIP Revision for the 1997 Eight-Hour Ozone Standard (Project No. 2009-018-SIP-NR) and the 2007 DFW RFP SIP Revision for the 1997 Eight-Hour Ozone Standard (Project No. 2006-**

**031-SIP-NR)). The commission agrees that there are enough excess 2012 NO<sub>x</sub> emissions reductions to create a 2012 RFP NO<sub>x</sub> transportation conformity safety margin and has provided a 10% safety margin to the 2012 RFP NO<sub>x</sub> MVEB. The amount of the safety margin is less than the total in surplus NO<sub>x</sub> emission reductions; therefore, even if the safety margin is used for a transportation conformity determination, the DFW area will still meet the eight-hour ozone RFP requirements for 2012. The 10% safety margin provides a 17.76 NO<sub>x</sub> tons per day (tpd) cushion for transportation conformity purposes while retaining 4.16 NO<sub>x</sub> tpd in surplus 2012 emissions reductions. The revised 2012 RFP NO<sub>x</sub> MVEB is 195.39 tpd.**