

Texas Commission on Environmental Quality

Interoffice Memorandum

To: Commissioners

Date: May 20, 2011

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

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

Docket No.: 2011-0363-SIP

Subject: Commission Approval for the Proposed Dallas–Fort Worth (DFW) Attainment Demonstration State Implementation Plan (SIP) Revision for the 1997 Eight-Hour Ozone Standard
SIP Project No. 2010-022-SIP-NR

Background and reason(s) for the SIP revision:

The Federal Clean Air Act (FCAA) requires states to submit plans to demonstrate attainment of the National Ambient Air Quality Standards (NAAQS). On April 30, 2004, the nine-county DFW area, which consists of Collin, Dallas, Denton, Ellis, Johnson, Kaufman, Parker, Rockwall, and Tarrant Counties, was designated a moderate nonattainment area for the 1997 eight-hour ozone standard, with a June 15, 2010, attainment deadline. Attainment of the 1997 eight-hour ozone standard (expressed as 0.08 parts per million) is achieved when an area's design value from the previous ozone season does not exceed 84 parts per billion (ppb). Because the DFW area's 2009 design value of 86 ppb exceeded this standard, the United States Environmental Protection Agency (EPA) published a final determination of nonattainment and reclassification of the DFW 1997 eight-hour ozone nonattainment area from moderate to serious on December 20, 2010 (75 FR 79302), effective January 19, 2011.

Scope of the SIP revision:

As a result of the reclassification, the commission is required to submit to the EPA by January 19, 2012, an attainment demonstration SIP revision consistent with FCAA requirements for areas classified as serious nonattainment for ozone. June 15, 2013, is the attainment deadline for serious ozone nonattainment areas. This memo applies to the attainment demonstration requirement under a serious ozone nonattainment classification. A new reasonable further progress demonstration will also be required for the area; the details of which are covered in a separate memo (SIP Project No. 2010-023-SIP-NR).

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

The proposed SIP revision uses photochemical modeling in combination with a weight of evidence (WoE) evaluation to demonstrate that the DFW area is expected to attain the 1997 eight-hour ozone standard by the June 15, 2013, attainment deadline. Demonstration of attainment involves a photochemical modeling analysis that forecasts ozone design values in 2012. The photochemical modeling analysis considers reductions in nitrogen oxides (NO_x) and volatile organic compounds (VOC) emissions from existing federal, state, and local control strategies. All DFW regulatory monitors are projected to have 2012 eight-

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hour ozone design values below the level of the 1997 eight-hour ozone NAAQS. The WoE evaluation includes a corroborative analysis and additional control measures not explicitly accounted for in the photochemical modeling.

This SIP revision would incorporate a proposed rulemaking (Rule Project 2010-016-115-EN) to update control requirements for certain coatings operations to meet recommended reasonably available control technology (RACT) requirements in Control Technique Guideline (CTG) documents issued by the EPA between 2006 and 2008. This revision provides a summary of the TCEQ's determinations regarding these eight CTG documents.

On March 17, 2011, the EPA issued a guidance memorandum entitled *Approving SIP Revisions Addressing VOC RACT Requirements for Certain Coatings Categories* for the following three CTG categories: Large Appliance Coatings; Metal Furniture Coatings; and Miscellaneous Metal and Plastic Parts Coatings. Additional discussion regarding the EPA's guidance on these three CTG categories is provided in Appendix D: *Reasonably Available Control Technology Analysis*.

The VOC storage tank rule revisions also being proposed concurrently with this SIP revision (Rule Project Number 2010-025-115-EN) would include a combination of updates to existing and new control measures that the TCEQ has determined are RACT for the DFW area.

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

This revision contains the FCAA-required SIP elements, including analyses for RACT and reasonably available control measures, a motor vehicle emissions budget (MVEB), and a contingency plan.

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

Because this proposal includes on-road mobile source emissions inventories and MVEB based on the MOBILE6.2 model along with preliminary MOVES-based on-road mobile emissions estimates and a preliminary MOVES-based MVEB discussion, staff recommends that the commission solicit comment on using on-road mobile emissions inventories based on the EPA's MOBILE6.2 model as well as the Motor Vehicle Emission Simulator (MOVES) model in the adopted version of this SIP revision. . In the event that MOVES replaces MOBILE6.2 for the adopted version of this SIP revision, it is expected that the final emission figures would be different than those reported in this SIP proposal, and the SIP narrative may change substantially from proposal to adoption. However, although some details within the technical documentation would change, the demonstration of attainment would not be expected to.

Statutory authority:

The authority to propose and adopt SIP revisions is derived from the following sections of the Texas Health and Safety Code, Chapter 382, Texas Clean Air Act (TCAA), §382.002,

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which provides that the policy and purpose of the TCAA is to safeguard the state's air resources from pollution; §382.011, which authorizes the commission to control the quality of the state's air; and §382.012, which authorizes the commission to prepare and develop a general, comprehensive plan for the control of the state's air. This SIP revision is required by FCAA, §110(a)(1) and implementing rules in 40 Code of Federal Regulations Part 51.

Under the 1997 eight-hour ozone standard, the DFW area is required to meet the mandates of the FCAA, §172(c)(2) and §182(c)(2)(B) and requirements established under Phase II of the EPA's implementation rule for the 1997 eight-hour ozone NAAQS (70 FR 71615) for nonattainment areas classified as serious.

Effect on the:

A.) Regulated community:

The affected regulated community will be those associated with the rulemakings that are part of this SIP revision. For further information, see the executive summaries for the following rulemakings, that are being adopted concurrently with this SIP revision.

- Rule Project No. 2010-016-115-EN, CTG Update
- Rule Project No. 2010-025-115-EN, VOC storage tank rule revisions

Affected sources may be required to install control technologies to meet the emissions specifications, implement new work practices, or comply with additional monitoring and recordkeeping requirements.

B.) Public:

The general public in the DFW and surrounding areas would benefit from improved air quality as a result of lower ozone levels.

C.) Agency programs:

The Office of Compliance and Enforcement (OCE) conducts field investigations to verify compliance with the rules addressed in SIP revisions. Enforcement of any revised rules in this SIP revision would not significantly increase the number of facilities investigated by state and local governments. However, the rule revisions may increase the OCE workload when investigating the affected facilities.

Stakeholder meetings:

A stakeholder meeting for the proposed SIP revision and the proposed DFW Reasonable Further Progress SIP Revision for the 1997 Eight-Hour Ozone Standard (Project Number 2010-023-SIP-NR) was held on June 24, 2010, from 7:00 p.m. to 9:00 p.m. at the City of Arlington Municipal Building. Stakeholders expressed their concerns about area air quality as it relates to human and environmental health, industrial emissions, and proposed control strategies.

Potential controversial concerns and legislative interest:

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This proposed SIP revision was developed using the EPA's MOBILE6.2 model to develop on-road mobile emissions inventories for MVEB and photochemical modeling. Subsequent to initial planning and development of this proposal, the EPA released the MOVES model to replace MOBILE6.2. The timing of the release of the MOVES model did not allow for its inclusion with this proposal; however, preliminary MOVES-based emissions estimates, sensitivity analyses, and an MVEB discussion are included in this proposal, along with the original MOBILE6.2-based attainment demonstration. With this proposal, the commission would solicit comment on using on-road emissions inventories based on MOBILE6.2 and MOVES in the adopted version of this SIP revision. While the use of MOVES would be expected to result in changes to final emission figures, MVEB, and technical documentation, a MOVES-based SIP revision would still be expected to demonstrate attainment of the 1997 eight-hour ozone standard by June 15, 2013.

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

No.

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

The commission could choose to not comply with requirements to develop and submit this attainment demonstration SIP revision to the EPA. If an attainment demonstration SIP revision is not submitted by January 19, 2012, the EPA could impose sanctions on the state and promulgate a Federal Implementation Plan (FIP). Sanctions could include transportation funding restrictions, grant withholdings, and 200% emissions offsets requirements for new construction and major modifications of stationary sources in the DFW area. The EPA would be required to impose such sanctions and implement a FIP until the state submitted and EPA approved a replacement SIP for the area.

Key points in the proposal SIP revision schedule:

Anticipated proposal date: June 8, 2011

Public hearing dates: July 14, 2011 (DFW); July 22, 2011 (Austin)

Public comment period: June 24, 2011 through July 25, 2011

Anticipated adoption date: November 16, 2011

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