SIP Revision: One-Hour Ozone Standard Attainment Demonstration (AD), Dallas-Fort Worth (DFW), April 19, 2000

On April 19, 2000, the Texas Natural Resource Conservation Commission (TNRCC), a predecessor to the TCEQ, adopted an AD State Implementation Plan (SIP) revision for the DFW one-hour ozone National Ambient Air Quality Standard (NAAQS) nonattainment area.

Summary of the SIP Revision

Adoption Date: 04/19/2000
Proposal Date: 12/16/1999

EPA Action: The United States Environmental Protection Agency (EPA) approved the DFW area’s nitrogen oxides (NOx) reasonably available control technology (RACT) demonstration on 09/01/2000 (65 FR 53172). The electric generating unit (EGU) and major source rules were approved on 03/16/2001 (66 FR 15195), and several rules were approved on 11/14/2001, including the ground support equipment (GSE) and non-road large spark ignition standards (66 FR 57219), and the area’s inspection and maintenance (I/M) program (66 FR 57261). The Voluntary Mobile Emissions Reduction Program (VMEP) was approved 08/26/2005 (70 FR 50208). The transportation control measures (TCMs) were approved 09/27/2005 (70 FR 56374).

Background: The TNRCC adopted an AD SIP revision in February 1999 to address the reclassification of four counties in the DFW area from moderate to serious nonattainment. Due to time constraints, the February 1999 SIP revision did not include the rules necessary to bring the DFW area into attainment by the November 1999 deadline and the commission committed to submitting a complete AD to the EPA in the spring of 2000. As a result, the EPA issued a letter of findings that the February 1999 SIP revision was incomplete. This letter started an 18-month sanctions clock effective May 13, 1999 that could only be stopped if the state submitted the necessary rules and modeling for the AD. This April 2000 SIP revision fulfilled those requirements by including new rules, photochemical modeling, a commitment to conduct a mid-course review (MCR) by May 2004, and a commitment to conduct and submit new on-road emissions modeling using the MOBILE6 model within 24 months of the model’s release.

Key Changes:
This SIP revision contains:

- Photochemical modeling of specific control strategies and future state and national rules for attainment of the one-hour ozone standard in the DFW area by the attainment deadline of November 15, 2007;

- A modeling demonstration showing that the air quality in the DFW area is influenced at times by transport from the Houston-Galveston (HGA) area;

- Identification of the level of reductions of volatile organic compounds (VOCs) and NOx emissions necessary to attain the one-hour ozone standard by 2007;

- Control strategies developed by the state involving controls on stationary sources;
• Control strategies selected by the North Central Texas Council of Governments’ North Texas Clean Air Steering Committee; and

• A 2007 mobile-source budget for transportation conformity.

SIP Narrative and Appendices
Files linked from this page are in Portable Document Format (PDF).

DFW AD SIP Revision

- Adopted DFW AD SIP Revision
- Figures
- Response to Comments/Evaluation of Testimony
- Agreed Orders and Memorandums of Agreement (MOA)
  - American Airlines Agreed Order
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  - Delta Airlines Agreed Order
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  - DFW International Airport MOA
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- Appendices
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  - Appendix B: Boundary and Initial Conditions (no change from Feb. 1999 DFW SIP)
  - Appendix C: Meteorological and Air Quality Data (no change from Feb. 1999 DFW SIP)
  - Appendix D: Base Case Modeling Emissions Inventory Development
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  - Appendix H: Survey Results for DFW Point Source VOC and NOx Inventory to Backcast 1990 Emissions and Predict 1999 Emissions (no change from Feb. 1999 DFW SIP)
  - Appendix I: RACT Analysis for DFW 50-100 TPY Non-CTG/ACT Sources (no change from Feb. 1999 DFW SIP)
  - Appendix J: Adjustment of Projected 1999 VOC and NOx Inventories for Contributions from DFW International Airport (no change from Feb 1999 DFW SIP)
  - Appendix K: Point Source Accounts and NOx Emissions in 1996 DFW Inventory (no change from Feb. 1999 DFW SIP)
  - Appendix L: NOx Reductions in DFW Nonattainment Area in 1998 by Texas Utilities for CARE (no change from Feb. 1999 DFW SIP)
  - Appendix M: Modeling Correspondence with EPA (no change from Feb. 1999 DFW SIP)
  - Appendix N: Demonstration of Transport from the HGB Ozone Nonattainment Area to DFW
Appendix O: Calculation of Future Design Value
Appendix P: Dedicated Alternative Fuel Vehicle Information
Appendix R: Ozone Design Value-based Attainment Demonstration Methodology: Application of Two-Ozone Nonattainment Areas in Texas
Appendix S: Reduction of I/M Program Credit in 4-county Area to Account for Non-I/M Commuter Traffic
Appendix T: Estimation of the Benefits from the Tier 2/Low Sulfur Rulemaking for Light-Duty Vehicles and Trucks
Appendix U: Point Source Growth Rates for HGB, BPA, and DFW SIP Modeling
Appendix V: Improved Construction Inventory Documentation
Appendix W: Discussion of Methodology of Airport Ground Support Equipment Emissions Inventory
Appendix X: NCTCOG 2007 On-Road Mobile Source Episodic Emission Inventory, Vol. II

Related Rules:
Texas Low Emission Diesel (Rule Project No. 1999-055A-114-AI)
Airport Ground Support Equipment (Rule Project No. 1999-055E-114-AI)
Vehicle Scrappage (Rule Project No. 1999-055F-114-AI)
California Spark-Ignition Engines (Rule Project No. 1999-055G-114-AI)
Water Heaters, Small Boilers, and Process Heaters (Rule Project No. 1999-055I-117-AI)
Utility Generation in Ozone Nonattainment Areas and Cement Kilns (Rule Project No. 99055d117-AI)
Cement Kilns (Rule Project No. 1999-046-117-AI and 1999-049-117-AI)
Vehicle Inspection/Maintenance (Rule Project No. 1999-055C-114-AI)