SIP Revision: Post-1999 Rate of Progress (ROP) and Attainment Demonstration for the Houston-Galveston (HGA) Ozone Nonattainment Area, December 6, 2000

Revisions to the Post 1999 ROP and AD State Implementation Plan (SIP) for the HGA nonattainment area for the one-hour ozone National Ambient Air Quality Standards (NAAQS).

Summary of the SIP Revision

Adoption Date: 12/06/2000
Proposal Date: 08/09/2000

EPA Actions: Approved on 11/14/2001: attainment and reasonable further progress (RFP) demonstrations (66 FR 57160); vehicle miles traveled (VMT) offset demonstration (66 FR 57247); nitrogen oxides (NOx) rules (66 FR 57230); Mass Emissions Cap and Trade (MECT) (66 FR 57252); Texas Low-Emission Diesel (TxLED) rules (66 FR 57196); Ground Support Equipment (GSE) electrification rules and non-road large spark ignition standards (66 FR 57219); lawn service operating and idling restrictions (66 FR 57223); and inspection and maintenance (I/M) program (66 FR 57261).

Background: The United States Environmental Protection Agency (EPA) indicated that the state needed to adopt the strategies modeled in the November 1999 SIP submittal, and then adopt sufficient measures to close the remaining gap in NOx emissions in order to have an approvable AD. On December 6, 2000, the commission adopted revisions to the ROP/AD SIP for the HGB one-hour ozone nonattainment area and the rules in 30 Texas Administrative Code (TAC) Chapters 101, 114, 115 and 117.

Key Changes:

Insert a brief description of the SIP revision and any rules associated with the revision. This SIP revision contained the following elements:

- Photochemical modeling analyses;
- Post-1999 ROP plans for the milestone years 2002 and 2005, and for the attainment year 2007;
- Motor Vehicle Emissions Budgets (MVEB) for NOx and volatile organic compounds (VOC);
- Control measures and enforceable commitments to implement further measures in support of the HGB AD; and
- A commitment to perform and submit a mid-course review (MCR).
SIP Narrative and Appendices

Files linked from this page are in Portable Document Format (PDF).

HGB Post-1999 ROP/Ozone AD SIP Revision (Project No. 2000-011-SIP-AI)

- Adopted HGB AD SIP Revision
  - Figures
  - Response to Comments
  - Summary of Actions

- Agreed Orders
  - City of Houston Agreed Order
  - Continental Airlines Agreed Order
  - Southwest Airlines Agreed Order

- Appendices
  - Appendix A: Method to Calculate and Allocate Airport Ground Support Equipment
  - Appendix B: Documentation for the HGB Area Diesel Construction Emissions Project
  - Appendix C: HGA Area Vessel Emissions Inventory
  - Appendix D: Development of the SuperCOAST Modeling Setup
  - Appendix E: Development of Revised Biogenics Emissions for the SuperCOAST Domain Using GloBEIS
  - Appendix F: Treatment of Vessel Emissions as Elevated Point Sources in the HGB Nonattainment Area
  - Appendix G: July 26, 2000 ERG Memo, Revised SIP Modeling Procedures for HGA Nonattainment Area
  - Appendix H: HGA Area Newly-Permitted Growth Project
  - Appendix I: Transportation Control Measures
  - Appendix J: Vehicle Idling Restriction Documentation
  - Appendix K: HGAC Documentation of VMEPs
  - Appendix L: Initial List of Brainstorming Ideas
  - Appendix M: November 14, 2000 HGAC Memo, Analysis of Difference in Year 2007 Forecasted VMT Between that Developed for Original Attainment SIP and that Developed for Proposed Revised Attainment
  - Appendix N: TTI Report, Gridded Mobile Source Emissions Estimates for the Houston-Galveston Nonattainment Counties to Support the Attainment Demonstration SIP, December 2000
  - Appendix O: October 20, 2000 Environ Memo, Comparison of Current and Revised SIP Highway Emissions Modeling
  - Appendix P: October 12, 2000 ERG Memo, Revised Tier 2 Adjustment Factors for COAST SIP Inventory Update
Appendix Q: Supporting Materials Showing Analysis Results of NOX and VOC limitation in the HGB Area using MAPPER

Appendix R: Agreements with Continental Airlines, Southwest Airlines, and City of Houston

Appendix S: November 30, 2000 Updates to the ROP and Attainment Demonstration SIP for the HGB Ozone Nonattainment Area: Point Source Emissions Inventories

Appendix T: November 30, 2000 Updates to the ROP and Attainment Demonstration SIP for the HGB Ozone Nonattainment Area: On-Road Mobile Source Inventories

Appendix U: Supplemental ROP SIP On-Road Mobile Source Emissions Inventories, HGAC, November 2000

Appendix V: December 1, 2000 Updates to the ROP and Attainment Demonstration SIP for the HGB Ozone Nonattainment Area: Non-Road Mobile Source Inventories

Associated Rules

Vehicle Inspection/Maintenance
- Project No. 2000-011A-114-AI

Construction Equipment Operations Restriction
- Project No. 2000-011B-114-AI

Accelerated Purchase of Tier 2/3 Equipment
- Project No. 2000-011C-114-AI

Texas Low Emission Diesel
- Project No. 2000-011D-114-AI

Airport Ground Support Equipment (Withdrawn)
- Project No. 2000-011E-114-AI

Low Sulfur Gasoline (Withdrawn)
- Project No. 2000-011F-114-AI

California Large Spark-Ignition Engines
- Project No. 2000-011G-114-AI

Utility Electric Generation in Ozone Nonattainment Areas
- Project No. 2000-011H-117-AI

Utility Electric Generation in East and Central Texas
- Project No. 2000-011H-117-AI
Industrial, Commercial, and Institutional Combustion Sources in Ozone Nonattainment Areas

- Project No. 2000-011H-117-AI

VOC Reasonably Available Control Technologies

- Project No. 2000-011I-115-AI

Residential Air Conditioners (Withdrawn)

- Project No. 2000-011J-110-AI

Diesel Emulsion (Withdrawn)

- Project No. 2000-011K-114-AI

Heavy-Duty Diesel Engine NOx Reduction Systems (Withdrawn)

- Project No. 2000-011M-114-AI

Vehicle Idling Restrictions

- Project No. 2000-011N-114-AI

Commercial Lawn Service Equipment Operating Restrictions

- Project No. 2000-011O-114-AI

Mass Emissions Cap and Trade Program

- Project No. 1998-089-101-AI (Ch. 101)
- Project No. 1998-089-101-AI (Ch. 115)
- Project No. 1998-089-101-AI (Ch. 117)