SIP Revision: Attainment Demonstration for the Houston-Galveston (HGA) Nonattainment Area, May 6, 1998

Revisions to the Houston-Galveston-Brazoria (HGB) AD and Post-1996 Rate of Progress (ROP) State Implementation Plan (SIP) for the one-hour ozone National Ambient Air Quality Standard (NAAQS).

Summary of the SIP Revision

Adoption Date: 05/06/1998
Proposal Date: 02/04/1998
EPA Approval Date: 04/25/2001 (66 FR 20746)

Background: On July 18, 1997, the United States Environmental Protection Agency (EPA) set new eight-hour ozone NAAQS intended to replace the previous one-hour NAAQS. The EPA provided implementation guidance for areas that were not yet attaining the one-hour ozone NAAQS on December 29, 1997. Under this guidance, states were required to submit a SIP revision that would:

- Demonstrate that all measures and regulations required for the area under Subpart 2 of the Federal Clean Air Act (FCAA) had been or would soon be adopted and implemented;
- List the measures needed to meet ROP requirements beyond 1999 and attain the one-hour NAAQS, including:
  - Federal measures and their expected emission reduction benefit,
  - Planned state measures,
  - Control measures to be debated amongst area stakeholders, and
  - Measures that required further study;
- Commit to submit a post-1999 ROP plan that would include any control measures needed to meet post-1999 milestones and attain the one-hour NAAQS; and
- Commit to implementing control programs and regulations in a timely manner.

Key Changes: This SIP revision met these requirements by including modeling, identification of the level of controls necessary to achieve attainment of the one-hour ozone NAAQS, identification of emissions sources for potential future control strategies, and a commitment schedule for future attainment demonstration SIP submittals. This revision substituted volatile organic compounds (VOC) or nitrogen oxides (NOx) reductions for certain emission sources to compensate for reductions that the EPA planned to disapprove in the previous 9% ROP SIP revisions.
SIP Narrative and Appendices

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

HGB Attainment Demonstration SIP Revision (Project No. 1997-184-SIP-AI)

- Adopted HGB SIP Revision (Including Post-1996 ROP Plan Revisions)
  - Figure 1: Urban Airshed Model Grid Concept
  - Evaluation of Testimony
- Appendices
  - Appendix 9c-A: Episode Selection and Meteorology
  - Appendix 9c-B: Base Case Emissions Inventory
  - Appendix 9c-C: Performance Evaluation
  - Appendix 9c-D: Future Case Emissions Inventory
  - Appendix 9c-E: Modeling Results
  - Appendix 9c-F: Application of Smog Production Algorithms to the Coastal Oxidant Assessment for Southeast Texas Data
  - Appendix 9c-G: Decrease in Ambient Air Concentrations of Benzene, Toluene, and Total Xylene in Southeast Texas
  - Appendix 9c-H: Calculations of Potential VOC and NOX Reductions-Tables & Explanations
  - Appendix 9c-I: Regional Reduction Strategy
  - Appendix 9c-J: Calculations of Options Suggested During the Public Comment Process
- Appendix 11-A: Alternate Methods of Control (no change from Nov 1994)
- Appendix 11-B: Control Measure Catalog (no change from Dec 1995)
- Appendix 11-C: Creditable Reductions for Houston/Galveston (no change from July 1996 SUPER SIP Appendix 11-C)
- Appendix 11-D: Mobile5 Runs for Houston-Galveston (no change from July 1996 SUPER SIP Appendix 11-D)
- Appendix 11-E: UAM Modeling Reports for Beaumont–Port Arthur and Houston-Galveston (no change from Nov 1994)
- Appendix 11-F: Texas’ Phased Attainment Demonstration (no change from July 1996 SUPER SIP Appendix 11-F)
- Appendix 11-G: Transportation Control Measures (no change from July 1996 SUPER SIP Appendix 11-G)
- Appendix 11-H: RACT Catch-Ups Creditable Reductions (no change from July 1996 SUPER SIP Appendix 11-H)
- Appendix 11-I: Evaluation of Reasonably Available Control Technology (RACT) (no change from July 1996 SUPER SIP)
- Appendix 11c-J: Documentation of NOX Point Source Growth From 1990–1999
- Appendix 11c-K: Additional Documentation of Point Source NOX and VOC Reductions
- Appendix 11c-L: March 17, 1998 Updates to the 9% SIP Houston-Galveston Ozone Nonattainment Area On-Road Mobile Source Emissions Inventories and Individual Control Program Reductions