



SIP Revision: Houston-Galveston-Brazoria (HGB) 2008 Eight-Hour Ozone Attainment Demonstration (AD), December 15, 2016

On December 15, 2016, the Texas Commission on Environmental Quality (TCEQ) adopted an AD State Implementation Plan (SIP) revision for the HGB moderate nonattainment area under the 2008 eight-hour ozone National Ambient Air Quality Standard (NAAQS).

Summary of the SIP Revision

Adoption Date: 12/15/2016

Proposal Date: 09/21/2016

EPA Action: Proposed approval of the attainment demonstration, reasonably available control measures (RACM) analysis, contingency measures plan, and motor vehicle emissions budgets (MVEB) on May 29, 2018 ([83 FR 24446](#) [Exit...](#)); Proposed approval of volatile organic compounds (VOC) and nitrogen oxides (NO_x) reasonably available control technology (RACT) and the 30 Texas Administrative Code (TAC) Chapter 115 VOC storage tank rule revisions on June 26, 2018 ([83 FR 29727](#) [Exit...](#)); Approved vehicle inspection and maintenance, nonattainment new source review, and emission statements requirements on May 15, 2017 ([82 FR 22291](#) [Exit...](#)).

Background: The Federal Clean Air Act (FCAA) requires states to submit plans to demonstrate attainment of the NAAQS for nonattainment areas within the state. On March 12, 2008, the United States Environmental Protection Agency (EPA) lowered the eight-hour ozone standard from 0.08 parts per million (ppm) to 0.075 ppm. On May 21, 2012, the eight-county HGB area, consisting of Brazoria, Chambers, Fort Bend, Galveston, Harris, Liberty, Montgomery, and Waller Counties, was designated nonattainment and classified as marginal under the 2008 eight-hour ozone NAAQS. The attainment date for the HGB marginal nonattainment area was established in the EPA's implementation rule for the 2008 ozone NAAQS published in the *Federal Register* (FR) on May 21, 2012 ([77 FR 30160](#) [Exit...](#)) and was set as December 31, 2015. Attainment of the standard (expressed as 0.075 parts per million) is achieved when an area's design value does not exceed 75 parts per billion (ppb).

As a result of a December 23, 2014 ruling by the United States Court of Appeals for the District of Columbia Circuit and the EPA's final *Implementation of the 2008 National Ambient Air Quality Standards for Ozone: State Implementation Plan Requirements; Final Rule* (2008 ozone standard SIP requirements rule) published in the March 6, 2015 *Federal Register* ([80 FR 12264](#) [Exit...](#)), the attainment date for the HGB marginal nonattainment area changed to July 20, 2015. In addition, because the attainment year ozone season is the ozone season immediately preceding a nonattainment area's attainment date, the attainment year for the HGB marginal nonattainment area changed from 2015 to 2014.

The HGB area did not attain the 2008 eight-hour ozone standard in 2014 but qualified for a one-year attainment date extension in accordance with FCAA, §181(a)(5). The EPA published final approval of the one-year attainment date extension on May 4, 2016, which extended the HGB area's attainment date to July 20, 2016 with a 2015 attainment year ([81 FR 26697](#) [Exit...](#)).

Because the HGB area's 2015 design value exceeded the 2008 eight-hour ozone NAAQS, the EPA published a final determination of nonattainment and reclassification of the HGB 2008 eight-hour ozone nonattainment area from marginal to moderate nonattainment on December 14, 2016 ([81](#)



FR 90207 [Exit...](#)). The EPA set a January 1, 2017 deadline for the state to submit an attainment demonstration that addresses the 2008 eight-hour ozone NAAQS moderate nonattainment area requirements.

Key Changes:

This SIP revision included:

- Requirements to demonstrate attainment through photochemical modeling and a weight of evidence analysis;
- RACT and RACM analyses;
- MVEB for the 2017 attainment year;
- Contingency plan; and
- Revisions to 30 TAC Chapter 115 to update RACT for VOC storage tanks in the HGB area.

SIP Narrative

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

HGB AD SIP Revision (Non-Rule Project No. 2016-016-SIP-NR)

- [Adopted AD SIP Revision](#)
- Appendices
 - [Appendix A: Meteorological Modeling for the HGB Attainment Demonstration SIP Revision for the 2008 Eight-Hour Ozone Standard](#)
 - [Appendix B: Emissions Inventory Modeling for the HGB Attainment Demonstration SIP Revision for the 2008 Eight-Hour Ozone Standard](#)
 - [Appendix C: Photochemical Modeling for the HGB Attainment Demonstration SIP Revision for the 2008 Eight-Hour Ozone Standard](#)
 - [Appendix D: Conceptual Model for the HGB Attainment Demonstration SIP Revision for the 2008 Eight-Hour Ozone Standard](#)
 - [Appendix E: Modeling Protocol for the Eight-Hour Ozone Modeling of the HGB Area](#)
 - [Appendix F: Reasonably Available Control Technology Analysis](#)
 - [Appendix G: Reasonably Available Control Measures Analysis](#)

Associated Rulemaking

The commission adopted the following rule revisions for incorporation into the HGB 2008 Eight-Hour Ozone AD SIP Revision.

- [Rule Project No. 2016-039-115-AI, Chapter 115 VOC RACT Rule Revisions](#)