



Redesignation Substitutes (RS): Houston-Galveston-Brazoria (HGB) Area RS for the One-Hour and 1997 Eight-Hour Ozone National Ambient Air Quality Standards (NAAQS)

The Texas Commission on Environmental Quality (TCEQ) submitted to the United States Environmental Protection Agency (EPA) RS reports for the one-hour and 1997 eight-hour ozone NAAQS for the HGB area. The TCEQ followed the RS report submittals with the adoption of formal SIP revisions should incorporation of the redesignation substitutes into the SIP be necessary.

Summary of the RS Reports

HGB One-Hour RS Report

Submittal Date: 07/22/2014

EPA Action: Approved on 10/20/2015 ([80 FR 63429](#) [Exit...](#))

HGB 1997 Eight-Hour RS Report

Submittal Date: 08/18/2015

EPA Action: Approved on 11/08/2016 ([81 FR 78691](#) [Exit...](#))

Background and Key Elements:

The HGB area monitored attainment of the one-hour ozone NAAQS based on certified 2011 through 2013 data and the 1997 eight-hour ozone NAAQS based on certified 2012 through 2014 data. Although the one-hour and the 1997 eight-hour ozone standards were revoked, the HGB area remained subject to the anti-backsliding requirements in 40 Code of Federal Regulations (CFR) §51.905(a) for these standards.

The HGB One-Hour Ozone RS Report and the HGB 1997 Eight-Hour Ozone RS Report were submitted separately to the EPA to fulfill the EPA's requirements to lift anti-backsliding obligations for the revoked one-hour and the revoked 1997 eight-hour ozone standards by ensuring that specific redesignation requirements are met for the HGB area ozone nonattainment areas. The HGB RS reports were submitted to the EPA as provided in the EPA's *Implementation of the 2008 National Ambient Air Quality Standards for Ozone: State Implementation Plan Requirements; Final Rule* (2008 ozone standard SIP requirements rule, [80 FR 12264](#) [Exit...](#)) instead of a redesignation request and maintenance plan, which the Federal Clean Air Act (FCAA) requires to remove anti-backsliding obligations under a standard that has not been revoked.

According to the EPA's 2008 ozone standard SIP requirements rule, the HGB One-Hour Ozone RS Report and the 1997 Eight-Hour Ozone RS Report were based on FCAA, §107(d)(3)(E) redesignation criteria with the exception of certain elements including contingency measures and the commitment to submit a second 10-year maintenance plan. Consistent with the EPA's 2008 ozone standard SIP requirements rule, the HGB RS reports included the following elements:



- Monitoring data showing attainment of the revoked one-hour and 1997 eight-hour ozone NAAQS;
- Showing that attainment was due to permanent and enforceable emissions reductions; and
- Demonstration that the areas can maintain the standards over 10 years via emissions inventory trends and future emission projections.

RS Report Narratives

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

HGB One-Hour Ozone RS Report

- **Redesignation Substitute Report**
- Attachments
 - **Attachment A: Projection Factors for Point and Area Sources**
 - **Attachment B: Characterization of Oil and Gas Production Equipment and Develop a Methodology to Estimate Statewide Emissions**
 - **Attachment C: Condensate Tank Oil and Gas Activities**
 - **Attachment D: MOVES2010b-Based On-Road Inventories in Support of the HGB Ozone Nonattainment Area Redesignation Substitute Analysis**
 - **Attachment E: Development of Statewide Annual Emissions Inventory and Activity Data for Airports**
 - **Attachment F: 2011 Texas Railroad Emission Inventory Report**
 - **Attachment G: Development of 2011 Statewide Toxics and Actual Annual and Ozone Season Weekday Emissions Inventories for Commercial Marine Vessels**
 - **Attachment H: Development of Texas Statewide Drilling Rigs Emissions Inventories for the Years 1990, 1993, 1996, and 1999 through 2040**
 - **Attachment I: Development of Locomotive and Commercial Marine Emissions Inventory - 1990 to 2040**

HGB 1997 Eight-Hour Ozone RS Report

- **Redesignation Substitute Report**
- Attachments
 - **Attachment A: Projection Factors for Point and Area Sources**
 - **Attachment B: Characterization of Oil and Gas Production Equipment and Develop a Methodology to Estimate Statewide Emissions**
 - **Attachment C: Condensate Tank Oil and Gas Activities**
 - **Attachment D: Specified Oil and Gas Well Activities Emissions Inventory Update**
 - **Attachment E: Development of HGB On-Road Emissions Inventories for the Years 2012, 2014, 2017, 2020, 2023, 2026, and 2028**
 - **Attachment F: Development of Air Emissions Inventories for Nonroad Model Category Mobile Sources (Task 3)**



- **Attachment G: Airport Emissions Inventories for Houston-Galveston-Brazoria and Dallas-Fort Worth Areas for Select Years 2012, 2014, 2017, 2020, 2023, 2026, and 2028**
- **Attachment H: Controlled and Uncontrolled Average Summer Weekday Locomotive Inventories for Houston-Galveston-Brazoria and Dallas-Fort Worth Areas for Select Years 2012, 2014, 2017, 2020, 2023, 2026, and 2028**
- **Attachment I: Controlled and Uncontrolled Average Summer Weekday Commercial Marine Vessel Inventories for Houston-Galveston-Brazoria Area for Select Years 2012, 2014, 2017, 2020, 2023, 2026, and 2028**
- **Attachment J: Development of Texas Statewide Drilling Rigs Emissions Inventories for the Years 1990, 1993, 1996, and 1999 through 2040**

Summary of the RS SIP Revisions

HGB One-Hour Ozone RS SIP Revision

Adoption Date: 07/01/2015

Proposal Date: 11/19/2014

Status: Adopted by the Commission

HGB 1997 Eight-Hour Ozone RS SIP Revision

Adoption Date: 04/27/2016

Proposal Date: 09/23/2015

Status: Adopted by the Commission

Background and Key Elements:

On July 1, 2015, the commission adopted the HGB Redesignation Substitute SIP Revision for the One-Hour Ozone NAAQS (Non-Rule Project No. 2014-011-SIP-NR), and on April 27, 2016, the commission adopted the HGB Area Redesignation Substitute SIP Revision for the 1997 Eight-Hour Ozone NAAQS (Non-Rule Project No. 2015-001-SIP-NR). Although the EPA's 2008 ozone standard SIP requirements rule indicated that public notice and comment are not required, the commission adopted SIP revisions should submittals to the EPA become necessary. The SIP revisions formally document the anti-backsliding obligations for the revoked one-hour and the revoked 1997 eight-hour ozone standards and contain the same key elements as included in the reports previously submitted to the EPA.

RS SIP Narratives

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

HGB One-Hour Ozone RS SIP Revision

- **Redesignation Substitute SIP Revision**
- Appendices
 - **Appendix A: Projection Factors for Point and Area Sources**



Texas State Implementation Plan

- **Appendix B: Characterization of Oil and Gas Production Equipment and Develop a Methodology to Estimate Statewide Emissions**
- **Appendix C: Condensate Tank Oil and Gas Activities**
- **Appendix D: Development of MOVES2014 On-Road Emission Inventories for the Years 2011, 2014, 2017, 2020, 2023, and 2026**
- **Appendix E: Development of Statewide Annual Emissions Inventory and Activity Data for Airports**
- **Appendix F: 2011 Texas Railroad Emission Inventory Report**
- **Appendix G: Development of 2011 Statewide Toxics and Actual Annual and Ozone Season Weekday Emissions Inventories for Commercial Marine Vessels**
- **Appendix H: Development of Texas Statewide Drilling Rigs Emissions Inventories for the Years 1990, 1993, 1996, and 1999 through 2040**
- **Appendix I: Development of Locomotive and Commercial Marine Emissions Inventory - 1990 to 2040**
- **Appendix J: Preliminary MOVES2014 Supplement and Attachment A**

HGB 1997 Eight-Hour Ozone RS SIP Revision

- **Redesignation Substitute SIP Revision**
- **Appendices**
 - **Appendix A: Projection Factors for Point and Area Sources**
 - **Appendix B: Characterization of Oil and Gas Production Equipment and Develop a Methodology to Estimate Statewide Emissions**
 - **Appendix C: Condensate Tank Oil and Gas Activities**
 - **Appendix D: Specified Oil and Gas Well Activities Emissions Inventory Update**
 - **Appendix E: Development of HGB On-Road Emissions Inventories for the Years 2012, 2014, 2017, 2020, 2023, 2026, and 2028**
 - **Appendix F: Development of Air Emissions Inventories for Nonroad Model Category Mobile Sources (Task 3)**
 - **Appendix G: Airport Emissions Inventories for Houston-Galveston-Brazoria and Dallas-Fort Worth Areas for Select Years 2012, 2014, 2017, 2020, 2023, 2026, and 2028**
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 - **Appendix I: Controlled and Uncontrolled Average Summer Weekday Commercial Marine Vessel Inventories for Houston-Galveston-Brazoria Area for Select Years 2012, 2014, 2017, 2020, 2023, 2026, and 2028**
 - **Appendix J: Development of Texas Statewide Drilling Rigs Emissions Inventories for the Years 1990, 1993, 1996, and 1999 through 2040**