Update on Planning Activities for the Houston-Galveston-Brazoria (HGB) Ozone Nonattainment Area

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Air Quality Division

HGB Technical Information Meeting
June 23, 2021
2008 Eight-Hour Ozone NAAQS

- 75 parts per billion (ppb)
- HGB area: serious nonattainment
  - Classification became effective on September 23, 2019.
  - July 20, 2021 is the attainment date and 2020 was the attainment year.
- Attainment Demonstration (AD) and Reasonable Further Progress (RFP) SIP revisions
  - Both were adopted on March 4, 2020.
  - Rules to lower the major source emissions threshold for applicable counties and make other technical changes associated with the serious classification were also adopted.
  - HGB RFP SIP revision was partially approved on May 10, 2021.
# HGB 4th High Values

<table>
<thead>
<tr>
<th>2016 4th high</th>
<th>2017 4th high</th>
<th>2018 4th high</th>
<th>2018 Design Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>74</td>
<td>74</td>
<td>88</td>
<td>78</td>
</tr>
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<th>2017 4th high</th>
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<tr>
<td>88</td>
<td>81</td>
<td>68*</td>
<td>79</td>
</tr>
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</table>

*The HGB area’s highest 4th high in 2020 was 75 ppb.

All readings are in ppb.
What’s Next for 2008 Eight-Hour Ozone Serious Nonattainment Areas?

- The HGB area did not attain by the end of 2020.
  - The HGB area qualifies for a one-year extension based on 2020 4th high of 75 ppb.
  - An attainment date extension request was submitted to EPA on April 6, 2021.
- If reclassified to severe:
  - Reclassification for HGB is anticipated in early 2022;
  - AD and RFP SIP revisions are potentially due one year after reclassification; and
  - Areas reclassified to severe will be required to attain the standard by July 20, 2027 with a 2026 attainment year.
### SIP Requirements for Ozone Nonattainment Areas

#### SEVERE
- Nonattainment New Source Review Permitting
  - 25 Tons Per Year Threshold
  - 1.3:1 Offset Ratio
- Vehicle Miles Traveled (VMT) Growth Offset
- Major Source Fees for Failure to Attain (185 Fees)
- Reformulated Gasoline

<table>
<thead>
<tr>
<th>Emission Category</th>
<th>Offsetting Requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nonattainment New Source Review Permitting</td>
<td>25 Tons Per Year Threshold, 1.3:1 Offset Ratio</td>
</tr>
<tr>
<td>Vehicle Miles Traveled (VMT) Growth Offset</td>
<td></td>
</tr>
<tr>
<td>Major Source Fees for Failure to Attain (185 Fees)</td>
<td></td>
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<td>Reformulated Gasoline</td>
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<tr>
<td>MARGINAL (3 Years)</td>
<td>1.1:1</td>
</tr>
<tr>
<td>MODERATE (6 Years)</td>
<td>1.15:1</td>
</tr>
<tr>
<td>SERIOUS (9 Years)</td>
<td>1.2:1</td>
</tr>
<tr>
<td>SEVERE (15-17 Years)</td>
<td>1.3:1</td>
</tr>
<tr>
<td>EXTREME (20 Years)</td>
<td>1.5:1</td>
</tr>
</tbody>
</table>
2015 Eight-Hour Ozone Standard

- 70 ppb
- HGB area: marginal nonattainment
  - Designation became effective on August 3, 2018.
  - August 3, 2021 is the attainment date and 2020 was the attainment year.
- Emissions inventory (EI) SIP revision
  - Base year inventory was developed for 2017.
  - The revision was adopted in June 2020.
What’s Next for 2015 Eight-Hour Ozone Marginal Nonattainment Areas?

• The HGB area did not attain by the end of 2020.
  ▪ The area is not eligible for a one-year attainment date extension based on the 2020 4th high exceeding 70 ppb.

• Reclassification to moderate:
  ▪ Reclassification for HGB is anticipated in early 2022;
  ▪ AD and RFP SIP revisions are due one year later; and
  ▪ Areas reclassified to moderate will be required to attain the standard by August 3, 2024 with a 2023 attainment year.
SIP Requirements for Ozone Nonattainment Areas

MODERATE

- Nonattainment New Source Review Permitting
  - Requirements under most stringent classification would apply (severe)

- Attainment Demonstration SIP Revision
  - Photochemical Modeling
  - Reasonably Available Control Technology
  - Reasonably Available Control Measures

- Reasonable Further Progress
  - 15% Reduction in Volatile Organic Compounds (VOC) and/or Nitrogen Oxides (NO\textsubscript{x}) emissions within first six years
  - VOC-only requirement addressed under previous standards

- Vehicle Inspection and Maintenance
  - Already in place
Potential New SIP Emissions Year

- Potential AD SIP revisions would change the SIP emissions year for credit generation projects.

<table>
<thead>
<tr>
<th>HGB Emissions Sources</th>
<th>Current SIP Emissions Year</th>
<th>New SIP Emissions Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Electric generating units</td>
<td>2018</td>
<td>2019</td>
</tr>
<tr>
<td>All other point sources</td>
<td>2016</td>
<td>2019</td>
</tr>
</tbody>
</table>

- To ensure necessary changes are accounted for in new AD SIP modeling, revisions to previously submitted 2019 point source EIs must be postmarked by July 9, 2021.

- For more information, please contact Jill Dickey-Hull at jill.dickey@tceq.texas.gov.
Contact Information

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