State Air Quality Plan
Mobile Source Control Strategies

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NOx Emissions in the HGB Region

2005 Emissions Baseline
- Area: 37%
- Point: 32%
- On-Road: 25%
- Non-Road: 6%

Total = 600 tpd

2018 Forecast Emissions
- Area: 12%
- Point: 42%
- On-Road: 32%
- Non-Road: 14%

Total = 364 tpd

Source: TCEQ Initial 2018 HGB Modeling Emissions Inventory
2018 HGB Non-Road Modeled NOx Inventory
HGB Region 8-Hour Ozone Design Value Trends

Ozone Design Value (ppb)

Year

1991 1993 1995 1997 1999 2001 2003 2005 2007
Important SIP Reminders

- Goal: Reduce emissions through local and state commitments

- These commitments:
  - are legally enforceable
  - must be affirmed by MOUs or state actions
  - Must show results before the 2019 attainment deadline
  - Can take the form of TCMs or VMEPs
TCM Commitments

Transportation Control Measures

- Project specific
- Legal SIP commitment(s)
- Reduces transportation-related emissions
- 6 bike & pedestrian projects committed
Voluntary Mobile Emission Reduction Program (VMEP):

On/Off road reductions

- Incentive-driven
- Bottom line SIP commitment
- Program-oriented
Actions for Local Governments

- HGB area governments can take immediate action
- Examples:
  - No idling ordinances for public or private fleets
  - Clean contracting incentives for construction
  - Clean Fleet Policies for on- and off-road equipment:
  - Cooperative efforts for traffic flow improvements along transportation corridors
Actions for Local Governments

• Further examples:
  – Commit to supporting commute alternatives:
    • for employees
    • to citizens within local jurisdictions
    • by requiring new developments to include accessibility, or bicycle trails or lanes.
  – Enact ordinances promoting livable centers and other multi-use developments
  – Support increased transit service
Recommended On Road VMEPs

Estimated NOx reductions by 2018, assuming consistent funding

<table>
<thead>
<tr>
<th>Strategy</th>
<th>NOx Reduction Estimate (tons per day)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alternative Commuting</td>
<td>1.2</td>
</tr>
<tr>
<td>Regional Traffic Flow Improvement</td>
<td>1.7</td>
</tr>
<tr>
<td>Vehicle Retrofit and Replacement</td>
<td>1.1</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>4.0</strong></td>
</tr>
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## Pursue Recommended Non-Road VMEPs

<table>
<thead>
<tr>
<th>Strategy</th>
<th>Description</th>
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<tbody>
<tr>
<td>Voluntary non-road replacement and retrofit programs</td>
<td>Funding for accelerated turnover of construction equipment and other non road equipment</td>
</tr>
<tr>
<td>Government construction incentives</td>
<td>May include funding and tax relief to firms using clean equipment as allowed by State law.</td>
</tr>
<tr>
<td>Promote cleaner lawn and garden equipment</td>
<td>Retirement program for old and malfunctioning lawn and garden equipment</td>
</tr>
<tr>
<td>Development of Clean Air Action Plans for regional port and marine operations</td>
<td>Could Include Vessel Speed Reductions. At Berth Control and engine improvements</td>
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## Recommended Weight of Evidence VMEPs

<table>
<thead>
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<th>Measure</th>
<th>Description</th>
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<tbody>
<tr>
<td>Pay-As-You-Drive Insurance</td>
<td>Insurance cost would increase per mile driven</td>
</tr>
<tr>
<td>Limitations on Truck Idling and equipment</td>
<td>Strategies to be used to reduce idling of fleet vehicles and non-road equipment</td>
</tr>
<tr>
<td>Encourage/mandate livable centers</td>
<td>Reduces vehicle travel</td>
</tr>
<tr>
<td>Continue vehicle scrappage program</td>
<td>Monetary compensation for old vehicle scrappage</td>
</tr>
<tr>
<td>Enforcement for Smoking Vehicles</td>
<td>Enforce existing smoking vehicles legislation and I&amp;M compliance</td>
</tr>
</tbody>
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Comments Received

• Requests to:
  – Greatly expand use of natural gas in vehicle fleets
  – Add bicycle and pedestrian control strategies.
  – Modify report to better explain SIP and how control measures reduce emissions
• Review methodology for calculating emission reductions for bicycle and pedestrian projects.
Comments Received

• Support for:
  – Port and marine control strategies
  – Encouraging practices which reduce emissions
  – Increased education about air quality issues
  – Increased fleet turnover in favor of newer vehicles
  – Options which help commuters reduce their emissions
  – Limits on idling
Next Steps

• Continue to develop local commitments with:
  – Local governments
  – Businesses
  – Industry groups
• Submit TCM & VM EP plan to TCEQ by Feb. 20, 2009
• Formalize agreements & emission reduction commitments by signing MOUs
Timeline

Jan. 23, 2009:  TPC approves TCMs & VMEPs


Feb 20, 2009:  H-GAC send Final Short List of Mobile Control Strategies to TCEQ.