Kansas City Area Ozone Designation Process Meeting

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June 12, 2008
Kansas City, Missouri
Presentation Overview

- Current Ozone Status/Maintenance Area
- New Ozone Standard
- Designation Process
- Local Stakeholder Involvement
1997 EPA Ozone Standard

- Primary and secondary standards both set at 80 parts per billion, (ppb)
  - Uses an 8-hour averaging time
  - Three years of data needed to determine status
  - Fourth highest value for each year averaged to calculate design value
  - In compliance up to 84 ppb

- More recent science shows 1997 standard not adequate to protect public health
Kansas City Monitoring Locations

Kansas City Area Ozone Monitoring Sites, 2007

Missouri
01 Trimble
02 Watkins Mill State Park
03 Liberty
04 Rocky Creek
05 RG-South

Kansas
06 US Penitentiary
07 JFK-Core
08 Heritage Park

Legend
● Ozone Monitoring Sites

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Legend
● Ozone Monitoring Sites
Missouri’s Actions for Ozone in the Kansas City Area

- 8-hour Maintenance Area
  - New maintenance plan submitted in June 2007
  - Included phased contingency measures and associated triggers
  - Approved by EPA in October 2007
- 2005-07 violations at three monitors
  - Liberty (87)
  - Rocky Creek (87)
  - Trimble (85)
Missouri’s Response to Violation of Ozone Standard

- Phase One of Maintenance Plan Triggered
  - Heavy-Duty Diesel Idle Reduction Measure
  - Early Implementation of CAIR Reductions
  - Continue implementation of voluntary measures

- Phase Two dependent on 2008 & 2009 ozone season values
Kansas’s Recent Actions for Ozone in Kansas City

- 8-hour Maintenance Area
  - New maintenance plan submitted in May 2007
  - Approved by EPA in October 2007
- 2007 was the first ozone season under new plan
- Design values indicated violation likely
  - 2007 trigger values at or below 85 ppb at two monitors
Kansas Response to Violations

- 2007 Maintenance Plan Contingency Measures Triggered
- Phase One of Maintenance Plan Triggered
  - Heavy-Duty Diesel Idle Reduction Regulation
  - NOx Emissions Reduction Rule – Sources > 1000 tons
  - Continue implementation of voluntary measures
- Phase Two dependent on 2008 & 2009 ozone season values
EPA’s New Ozone Standard

- Primary standard – 75 ppb
- Secondary standard – 75 ppb
- No rounding
- Area meets the new standard if design value is less than or equal to 75 ppb
## 2005 – 2007 Monitor Design Values

<table>
<thead>
<tr>
<th>Location</th>
<th>Year</th>
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<tbody>
<tr>
<td>Liberty, MO (Clay Co.)</td>
<td>87</td>
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<tr>
<td>Watkins Mill, MO (Clay Co.)</td>
<td>81</td>
</tr>
<tr>
<td>Rocky Creek, MO (Clay Co.)</td>
<td>87</td>
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<tr>
<td>Richards Gebaur South, MO (Cass Co.)</td>
<td>77</td>
</tr>
<tr>
<td>Trimble, MO (Clinton Co.)</td>
<td>85</td>
</tr>
<tr>
<td>J FK - Kansas City, KS (Wyandotte Co.)</td>
<td>77</td>
</tr>
<tr>
<td>Heritage Park, KS (Johnson Co.)</td>
<td>76</td>
</tr>
<tr>
<td>US Penitentiary, KS (Leavenworth Co.)</td>
<td>77</td>
</tr>
<tr>
<td>Mine Creek, KS (Linn Co.)</td>
<td>74</td>
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## Timeline for Implementation

<table>
<thead>
<tr>
<th>Milestone</th>
<th>Date</th>
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<tbody>
<tr>
<td>EPA Administrator signed final rule</td>
<td>March 12, 2008</td>
</tr>
<tr>
<td>Effective Day of final rule (60 days following the publication in the Federal Register)</td>
<td>June 2008</td>
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<tr>
<td>State provide recommendations on designations to EPA</td>
<td>March 2009 (based on 2005-2007 monitoring data)</td>
</tr>
<tr>
<td>Final Designations by EPA</td>
<td>March 2010</td>
</tr>
<tr>
<td>Effective Date of Designations</td>
<td>Summer 2010</td>
</tr>
<tr>
<td>SIPs Due</td>
<td>Summer 2013</td>
</tr>
<tr>
<td>Attainment Dates</td>
<td>2013-2030 depending on severity of problem</td>
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</tbody>
</table>
EPA’s Guidance for 2008 Ozone Standard

- New EPA guidance for determining area designations expected in late 2008
  - EPA Region VII has told us that the guidance will likely be “similar” to previous guidance for 2003 designation
- EPA will release new implementation rules/requirements in next few years
EPA’s Previous Guidance for Boundary Recommendation

- Test #1 – Does a monitor in the metropolitan area violate the standard?
- Test #2 – Do VOC and NOx emission sources in each county contribute to ozone concentrations over the standard?
- The designation process is not optional; if a monitor violates the standard, then that county is designated nonattainment and other surrounding counties are also considered based on contribution.
EPA’s Previous Guidance for Boundary Recommendation (cont’d)

- The area determination is based on EPA’s decision that includes each state’s recommendation and supporting documentation.
- Default Area is the Metropolitan Statistical Area (MSA).
- Area can include more or less counties:
  - States must document decisions.
  - Based on eleven (11) boundary determination criteria.
- In Kansas City, current maintenance area is smaller than MSA.
Eleven Boundary Criteria

- Emissions and air quality in adjacent areas
- Population density and degree of urbanization (significant difference from surrounding area)
- Ozone monitoring data in surrounding area
- Location of emission sources
- Traffic and commuting patterns
- Expected growth (extent, pattern and rate)
Eleven Boundary Criteria (cont.)

- Meteorology (weather and transport patterns)
- Geography/topography
- Jurisdictional boundaries (counties, air districts, current maintenance area)
- Level of control of emission sources
- Regional emission reductions
What is a Monitored “Violation” Area?

- Areas adjacent to current Maintenance Area where monitors have recorded ozone levels above the standard
- Indicates areas with high levels of ozone outside of current area with emission controls
- Violations make counties candidates for inclusion in nonattainment area
Opportunity for Input

- State Technical Staff reviews
  - Emission inventory data
  - Transportation/commuting data
- Also consider
  - Standard growth and contribution trends from state/national average
- Question that arises
  - Is there more appropriate “local” data for growth patterns in each county?
How You Can Contribute

- County/area specific
  - Population growth information
  - Economic growth information
  - Commuting patterns
    - Level of interconnectivity with Kansas City
For More Information

- Webpage for ozone designation process
- BAR also currently developing website - (Coming soon)
- Information on designation process
- Eleven boundary factors
- Copies of presentations
- Provides opportunity for stakeholder input
- Future meeting announcements
Next Steps in Designation Process

- Two additional stakeholder meetings
- Next meeting expected to be mid to late July
  - Provide available technical information and update on current status of boundary designation process
- Last meeting expected to be mid September
  - Provide draft designation boundaries for areas
  - Designations proposed at that time will not necessarily be final
  - Opportunity to “pre-review” technical data and logic for recommendation
- Ultimately, EPA will make final boundary decision
Missouri Timeline for Boundary Designation Submission

- Missouri will follow normal MACC adoption process
- Public comment period  
  - Comment period to start in late October
- Public hearing  
  - December MACC meeting
- MACC adoption of boundary recommendations  
  - February MACC meeting
Kansas Designation Process

- Will hold three joint meetings with Missouri DNR in KC
- Not required to hold official public hearing or comment period but....
- KDHE will post draft Designation Technical Document and Recommendation on website for comment period—Probably sometime in September or October
- Will provide electronic copies of draft information to those that request
Questions/Comments?

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