Ozone Regulation and the Impact on West Virginia

Presented by:
David M. Flannery
Steptoe & Johnson PLLC

Presented at:
2015 Governor’s Energy Summit
October 27, 2015
Overview

- Where have we been?
  1. Dramatic reductions in emissions.
  2. Dramatic improvement in air quality.

- Critical issue.
  3. Interstate transport of air pollutants.

- Some thoughts about the future.
Where have we been?

– Emission reductions
– Air quality improvement
Southeast Emission Trends (NOx)

Major Source Category Summary
Annual NOx Emissions

http://midwestozonegroup.com/files/AQTrendsSummary_Southeast_2.ppt
Average ozone DVs have decreased in all five regions
Trends are not monotonic, possibly reflecting influence of meteorology

http://midwestozonegroup.com/files/AQTrendsSummary_Southeast_2.ppt
WV Ozone Trend

West Virginia Max O3 Design Values

Trend = -1.65 ppb/yr

West Virginia Average O3 Design Values

Trend = -1.77 ppb/yr
Critical Issue on Path Forward

• Clean Power Plan
• New Ozone Standard
• Interstate Transport
Clean Power Plan
Mass-Based CO₂ Reductions by 2030 from 2012 Baseline

30%+ 15-29% 1-14% increased CO₂
“I guess the bottom line is this: You can legitimately go after me on the clean power plant rule because ... that was hatched by us, and I believe we need to deal with climate change, so we can have a lengthy debate about that”

“And on ozone, this is an existing statute and an existing mechanism, and we are charged with implementing it based on the science that’s presented to us.”
New Ozone Standard

• Announced: October 1, 2015
• New standard: 70 ppb
• Previous standard: 75 ppb (no transport rule, yet)
• Old standard: 85 ppb (last transport rule)
## West Virginia Monitors

<table>
<thead>
<tr>
<th>County</th>
<th>2014 Design Value (ppb)</th>
<th>2017 Projection (ppb)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Greenbrier</td>
<td>62</td>
<td>58.1</td>
</tr>
<tr>
<td>Berkeley</td>
<td>64</td>
<td>60.8</td>
</tr>
<tr>
<td>Ohio</td>
<td>67</td>
<td>64.6</td>
</tr>
<tr>
<td>Hancock</td>
<td>70</td>
<td>67.4</td>
</tr>
<tr>
<td>Wood</td>
<td>69</td>
<td>61.3</td>
</tr>
<tr>
<td>Cabell</td>
<td>65</td>
<td>61.2</td>
</tr>
<tr>
<td>Kanawha</td>
<td>69</td>
<td>68.7</td>
</tr>
</tbody>
</table>
State Maximum Monitor
2018 Projected 8hr Ozone Design Value (ppb)

Percent of state ozone monitors >70 ppb
(proposed standard)

- 0% (16 states)
- 1% - 33% (15 States)
- 34% - 66% (12 States)
- >66% (5 States)

U.S. EPA 2012-14 ozone monitor 3-year average design values.
Interstate Transport of Air Pollutants
Interstate Transport

• Expansion of NEOTR: NE states filed petition (CAA 176A) to have WV included in NE Ozone Transport Region

• Transport rules and Good Neighbor SIPs (CAA 110): Last transport rule based on 85 ppb; Next transport (November 2015) will address 75 ppb; 70 ppb later?

• CAA 126 petitions
Downwind Nonattainment

• An upwind state can only be included if the downwind monitor is showing nonattainment (or is a maintenance monitor)
Projected 2017 Nonattainment Sites in Eastern U.S.

Average Ozone Design Value (DV)

- MD Harford: 81.3
- NY Suffolk: 79.2
- CT Fairfield: 78.0
- CT New Haven: 77.2
- CT Fairfield: 77.1
- NY Richmond: 76.3

2017 Average DV

Source: Notice of Availability of the Environmental Protection Agency’s Updated Ozone Transport Modeling Data for the 2008 Ozone National Ambient Air Quality Standard, Table 1 (http://www3.epa.gov/airtransport/ozonetransportNAAQS.html)
An upwind state can only be included if it will “significantly contribute” to nonattainment or “interfere” with maintenance of a NAAQS, in a downwind state.

In last transport rule, EPA used a screening threshold of 1% of 2008 8-hr ozone NAAQS to identify contributing upwind states.
Example 2018 OSAT Results Harford, MD

Modeled 8hr Ozone Concentration (ppb)

- **Bio/Fire**
- **NonEGU Point**
- **Motor Vehicle**
- **Nonroad/MAR**
- **EGU Point**
- **Area/Other**
- **Boundary**
- **Initial**
Overriding questions

• What if nonattainment would be caused by local sources without regional transport?
• What if the nonattainment were caused by international emissions?
States’ Contribution to a Violating Monitor in CT

Mid-Afternoon Source Apportionment at Greenwich, CT

Summer 2011, Days where O3 > 75 ppb

NY/NJ/PA largest state contribution to CT’s violating monitor

Connecticut Department of Energy and Environmental Protection

http://www.state.nj.us/dep/cleanair/PPP/2015/Pirolli.pdf
CAA 179B:

Notwithstanding any other provision of law, an implementation plan ... shall be approved by the Administrator if –

– such plan or revision meets all the requirements applicable to it ... and

– the submitting State establishes ... the implementation plan of such State would be adequate to attain and maintain the relevant national ambient air quality standards ... but for emissions emanating from outside of the United States.
## International Emissions

<table>
<thead>
<tr>
<th>Monitor</th>
<th>International Contribution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fairfield CT</td>
<td>17%</td>
</tr>
<tr>
<td>Harford MD</td>
<td>17%</td>
</tr>
<tr>
<td>Suffolk NY</td>
<td>17%</td>
</tr>
</tbody>
</table>
Observations about the Future

1. There will be much uncertainty about the regulation of the energy industry as we wait to see how climate change and ozone issues play out in the Courts and in Congress.

2. This uncertainty may result in a period of time in which states can provide leadership on many of these issues (e.g. SCOOT).

3. Even if the Clean Power Plan is knocked out by the Courts, keep in mind that the President may view the ozone standard as a fall-back position.
David M. Flannery
Steptoe & Johnson PLLC
P.O. Box 1588
Charleston, WV 25326-1588

(304) 353-8171
Dave.Flannery@steptoe-johnson.com