Why Tribal Authority?

Glenn Gehring, Office of Air Quality
Department of Science and Engineering
Confederated Tribes of the Umatilla Indian Reservation
Give me an example
NOx & VOC Sources, Ozone Precursors

Emission Source Symbols are Proportional, Larger Dots Emit More

Monitoring (2003)

Sources (1999)

Prevailing Winds (Annual)

- **NOx**
- **VOC**
- **Ozone**
- **NOx**
26.5% of Oklahoma facility NOx emissions are from Muskogee, Mayes and Rogers Counties (1999)

22.9% of Oklahoma facility NOx emissions are from three NE Oklahoma coal-fired power plants (1999)
GRDA Coal-Fired Power Plant & MidAmerica Industrial Park
## Mayes County ODEQ Ozone Monitoring (1998 Only)

<table>
<thead>
<tr>
<th></th>
<th>1st Max</th>
<th>2nd Max</th>
<th>3rd Max</th>
<th>4th Max</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-Hour</td>
<td>0.140</td>
<td>0.106</td>
<td>0.099</td>
<td>0.099</td>
</tr>
<tr>
<td>8-Hour</td>
<td>0.117</td>
<td>0.094</td>
<td>0.088</td>
<td>0.088</td>
</tr>
</tbody>
</table>

### NAAQS:
- **Mayes County Baseline**: 0.088
- **NAAQS**: 0.125

- **Current Ozone Monitoring Levels**
  - 1-Hour: 0.140
  - 8-Hour: 0.117
Chouteau Power Plant (New)
Located in MidAmerica Industrial Park, Mayes County

| Emissions Source: Permit Application, ODEQ | NOx    | 794.91 TPY |
|                                           | CO     | 544.03 TPY |
|                                           | VOC    | 47.24 TPY  |
|                                           | SO₂    | 8.42 TPY   |
|                                           | PM     | 61.59 TPY  |
|                                           | NH₃    | 158.91 TPY |
|                                           | Formaldehyde | 11.105 TPY |
|                                           | Sulfuric acid | 1.225 TPY  |
|                                           | Total HAPs | 16.602 TPY |
Cherokee Heights Near MidAmerica Industrial Park

An Elder’s call about: “a strange green haze”

A mother’s visit: “My kids never had breathing problems before we moved here”
Who speaks for us?

Who speaks for our future?