Today’s Discussion

• PDEQ Basics
• Air Monitoring Sites
• Historic & Current Air Quality Trends
• PDEQ Community Outreach & Public Education
Pima County
Department of Environmental Quality

- PDEQ made up of six divisions:
  - Permitting
  - Compliance/Enforcement
  - Water (wastewater, drinking water, stormwater)
  - Solid Waste
  - Air Monitoring & Analysis
  - Community Education & Outreach
- Thirty-eight employees
Pima County Monitoring Sites

- 11th / Craycroft
- 22nd / Alvernon
- Geronimo
- South Tucson
- Corona de Tucson
- Santa Clara
- Green Valley
- Children’s Park/NCore
- Orange Grove
- Tangerine
- Rose Elementary
- Coachline
- Cherry / Glenn
- Fairgrounds
- Saguaro National Park East
- Golf Links / Kolb

PDEQ Monitoring Sites
- Major Streets
- Washes

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Comments
All information is provided as is, with all faults, and without warranty of any kind, expressed or implied, including, but not limited to, the implied warranties of merchantability and fitness for a particular purpose.

Prepared By
Pima County Department of
Environmental Quality
Positive Trends in Air Pollution Levels

**Sulfur Dioxide 1990-2016**
99th Percentile Concentration

SO₂ 1-Hr standard: 3 year average of the 99th percentile value is ≤ 75 ppb

**Carbon Monoxide 1990-2016**
Highest 8-Hour Average Concentration

CO 8-Hour NAAQS = 9 ppm

**Nitrogen Dioxide 1990-2016**
Annual Average Concentration

NO₂ Annual Average NAAQS = 53 ppb
Particulate Matter - two sizes
PM$_{2.5}$ from combustion; PM$_{10}$ is more crustal
Positive Trend for Ground-level Ozone
More protective EPA health standards

- Still in attainment -- Very close to exceeding EPA health standard
- Challenging pollutant to control
- Not emitted directly from a source
- Photochemical reaction with VOCs and NOx in direct sunlight
- Emissions Inventory being completed
- More community education on sources, health impacts and solutions
2017 Ozone Season (to date)

How close are we to a violation???

• So far this season, the 4th highest 8-hour average is .070 ppm (at the standard)
• The three-year average of 4th highest reading is .068 ppm (definition of violation)

<table>
<thead>
<tr>
<th>Year - Saguaro Park</th>
<th>4th highest 8-hr. average</th>
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<tbody>
<tr>
<td>2015</td>
<td>.066 ppm</td>
</tr>
<tr>
<td>2016</td>
<td>.069 ppm</td>
</tr>
<tr>
<td>2017</td>
<td>.070 ppm (as of 5/19/17)</td>
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<tr>
<td>3-year average</td>
<td>.068 ppm</td>
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</tbody>
</table>
PDEQ Projects to Increase Awareness

- Healthy Air Is In Our Hands - alternative modes
- “Use The Loop For Your Commute” - bicycling
- Annual 2016 Outreach to Community
  - 72 Presentations - Reached 1,852 Residents
  - 37 Booths - Reached 72,796 Individuals
  - 209 Tweets - 65,776 Impressions
  - 8 Community-wide events planned & participated in
  - 400 web articles, brochures, fact sheets
  - 23 news releases generating 152 news stories or website postings
  - 48,290 items with air quality messages distributed
- Extra funding to do more outreach to new groups
Beth Gorman
Pima County Department of Environmental Quality
(520) 724-7446
Beth.Gorman@pima.gov
www.pima.gov/deq
@PimaDEQ