Air Quality Update, Georgia
EPD

Karen Hays
Chief, Air Protection Branch

Environmental Show of the South
May 17, 2019
Air Protection Branch

**BY NUMBERS**

- **2,767** Air Permits
- **360** Title V Permits (Major Sources)
- **2,407** Other Permits

**EMISSIONS TESTING**

- **3.2 Million** Vehicles Tested (Atlanta)
- **835** Inspection Stations
- **~ 2,500** Vehicle Testers Certified

**MOBILE SOURCES**

- **~ 160** APB Staff

**AIR MONITORING**

- **39** Air Quality Monitoring Sites
- **~ 200** Air Pollutants Measured

**RADIOACTIVE MATERIALS PROGRAM**

- **410** Radioactive Materials Licenses
- **119** General Licenses for Equipment

Updated September 2018

Air Protection Branch website https://epd.georgia.gov/air/
AIR QUALITY IN GEORGIA

The graph shows the percentage of national air quality standards met for various pollutants in Georgia and Metro Atlanta. The pollutants include Ozone, PM$_{2.5}$, Nitrogen Dioxide (NO$_2$), Carbon Monoxide (CO), and Sulfur Dioxide (SO$_2$).

- **Ozone**: The 8-hour standard is met at 107% in Metro Atlanta and 93% in Georgia. Annual and 24-hour standards are met at 93% and 84% in Metro Atlanta and 84% and 80% in Georgia, respectively.
- **PM$_{2.5}$**: The 1-hour standard is met at 69% in Metro Atlanta and 58% in Georgia. Annual and 24-hour standards are met at 65% and 69% in Metro Atlanta and 65% and 69% in Georgia, respectively.
- **Nitrogen Dioxide (NO$_2$)**: The 8-hour standard is met at 26% in Metro Atlanta and 26% in Georgia. Annual and 1-hour standards are met at 58% and 26% in Metro Atlanta and 37% and 26% in Georgia, respectively.
- **Carbon Monoxide (CO)**: The 1-hour standard is met at 9% in Metro Atlanta and 9% in Georgia. Annual and 24-hour standards are met at 19% and 3% in Metro Atlanta and 19% and 3% in Georgia, respectively.
- **Sulfur Dioxide (SO$_2$)**: The 1-hour standard is met at 80% in Metro Atlanta and 80% in Georgia. Annual and 24-hour standards are met at 3% and 6% in Metro Atlanta and 3% and 6% in Georgia, respectively.
WHERE DOES OZONE COMES FROM?

On a Hot Sunny Day…

Volatile organic compounds (VOCs) from trees, gasoline, paints and other sources…

Mix with nitrogen oxides (NO\textsubscript{x}) coming from on-road vehicles and other fuel-burning sources…

Which combine with the oxygen in the air (O\textsubscript{2}) to form…

Ground-level Ozone
VOC EMISSIONS IN ATLANTA

- Power Plants
- Industrial Sources
- Area Sources
- Onroad Mobile
- Nonroad Mobile
- Aircraft and Locomotives
- Biogenic

75% Biogenic
NO\textsubscript{X} EMISSIONS IN ATLANTA

- Power Plants
- Industrial Sources
- Area Sources
- Onroad Vehicles
- Nonroad Mobile
- Aircraft and Locomotives

60%
NO\textsubscript{X} EMISSION TRENDS

![Graph showing NO\textsubscript{X} emission trends over time for different categories: Stationary Fuel Combustion, Industrial and Other Processes, Onroad Vehicles, Off-Road Mobile.](image-url)
• 17 Metro Atlanta Counties
• Bibb County
• 1 Partial North Georgia County

2015
8-Hour Ozone Standard
70 ppb
IMPACT OF IMPROVEMENTS IN AIR QUALITY IN GEORGIA

- Sources in the 13-county Atlanta Metro Area have been considered major Title V sources at 25 TPY VOC and NOx since the 1990’s
- Rule now obsolete due to improvements in air quality
- In 2018, the DNR Board approved changing the major source threshold to 100 TPY, to match requirements in the rest of the state
In August 2018, Georgia requested that US EPA relax the 7.8 Reid Vapor Pressure (RVP) requirement for the 13-county Atlanta Metro Area.

- Step 1 – Non-interference demonstration and maintenance plan revision approved by US EPA on April 23, 2019
- Step 2 – FR publication of RVP relaxation
ROADMAP TO ATTAINMENT

How are we going to get there?
CURRENT AND EMERGING ISSUES

- Regional Haze SIPs in 2021
- Affordable Clean Energy Rule
- Funding Georgia’s permitting program
- What happens next with the Ozone NAAQS and PM2.5 NAAQS (2020)?