GEORGIA
DEPARTMENT OF NATURAL RESOURCES
ENVIRONMENTAL PROTECTION DIVISION

EPD Air Protection Overview

State Regulatory Update

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Manager,
Planning & Regulatory Development Unit

A&WMA
Southern Section Conference
September 21, 2016

AIR PROTECTION BRANCH UPDATES

- Organizational Changes

  https://epd.georgia.gov/air/sites/epd.georgia.gov.air/files/related_files/document/airorg.pdf

  New Faces and Other Changes

  Smoke School

- Start Up, Shutdown and Malfunction SIP Call

- NAAQS Updates

  Ozone

  $PM_{2.5}$

  SO_2

- PSD Emission Inventory Tool

ORGANIZATIONAL CHANGES

NEW FACES & OTHER CHANGES

NEW FACES:

- EPD Director – Richard E. Dunn
- EPD Deputy Director – Lauren Curry
- EPD Human Resources Director – Dan Roach

Air Protection Branch

- Assistant Branch Chief – Dika Kuoh
- New NOx Permitting Manager – James Eason
- New VOC Chemical Compliance Manager – Tammy Martiny

OTHER CHANGES:

Compliance Program Changes

- Industrial Source Monitoring Program now part of the Compliance and Enforcement Program

Smoke School Changes

- October 2016 – Last Certifications Offered by EPD

STARTUP, SHUTDOWN, & MALFUNCTION SIP CALL

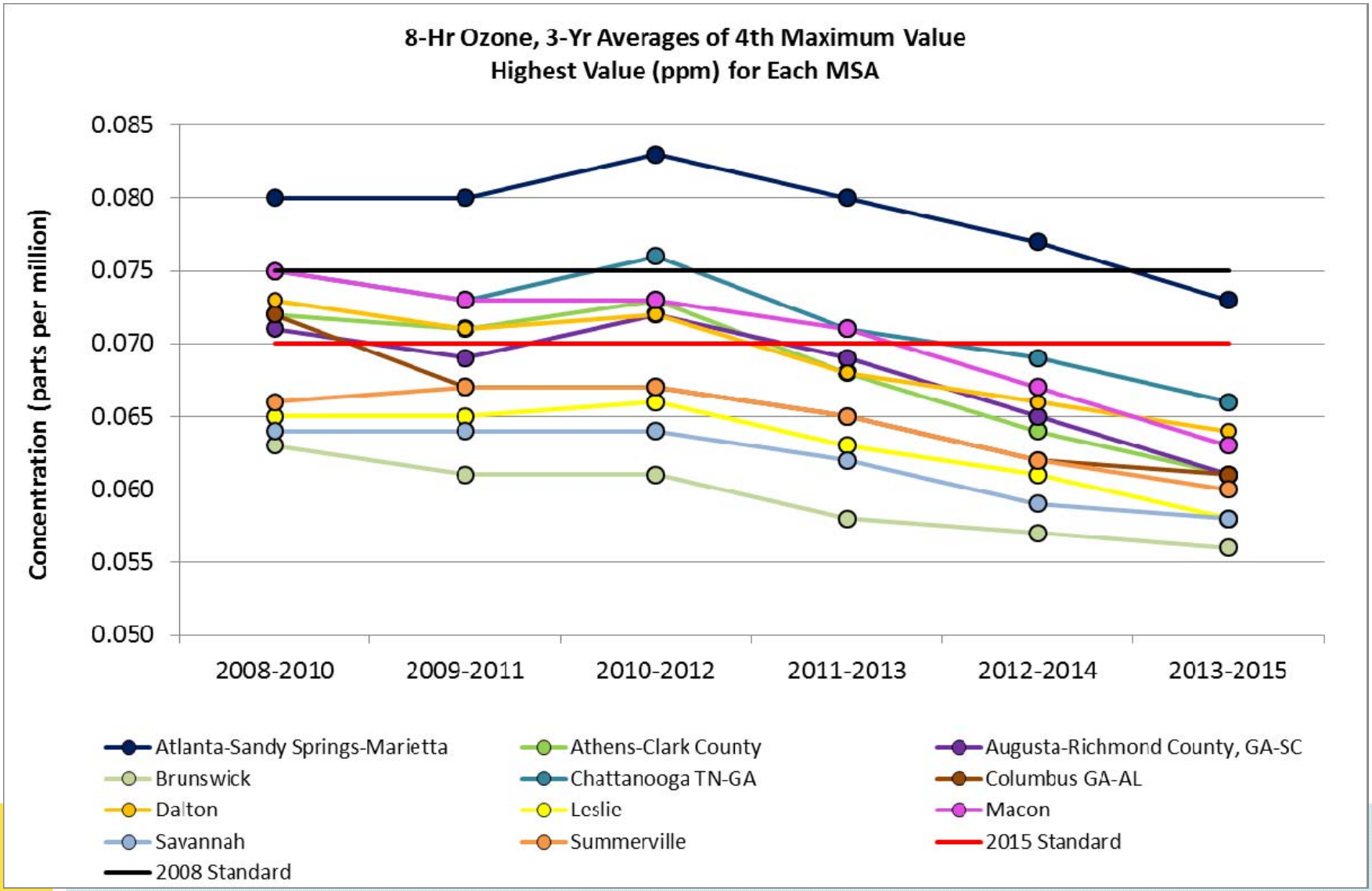
GEORGIA IS CHOOSING WORK PRACTICE STANDARDS (WPS)

- Compliance with emission limits at all times,
  OR
- Follow general WPS in rule for control devices;
- Follow WPS in NSPS or MACT standards; or
- Follow a case-by-case WPS in Permit.

OTHER DETAILS

- WPS only apply to SIP rules.
- Current “excess emissions” rule is still in play for non-SIP rules.
- Toggle/rescission clause.

OZONE DESIGN VALUE TRENDS

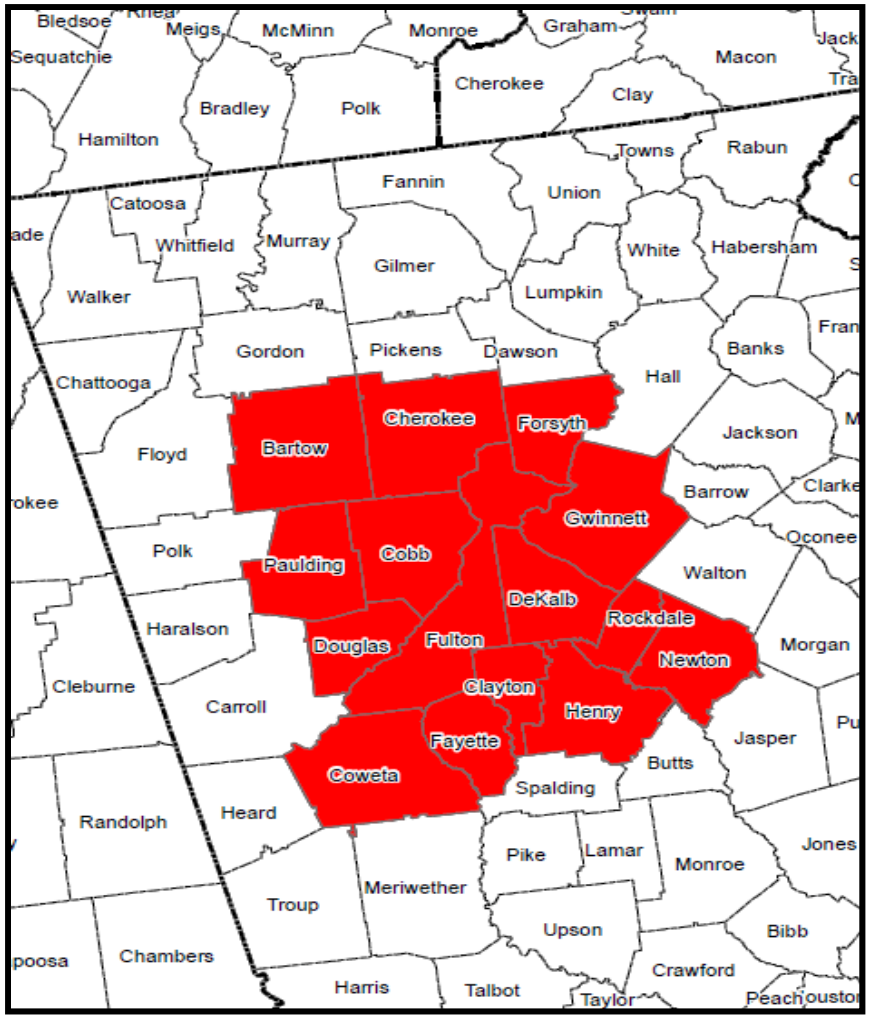


2008 OZONE NAAQS (75 PPB)

Atlanta Area

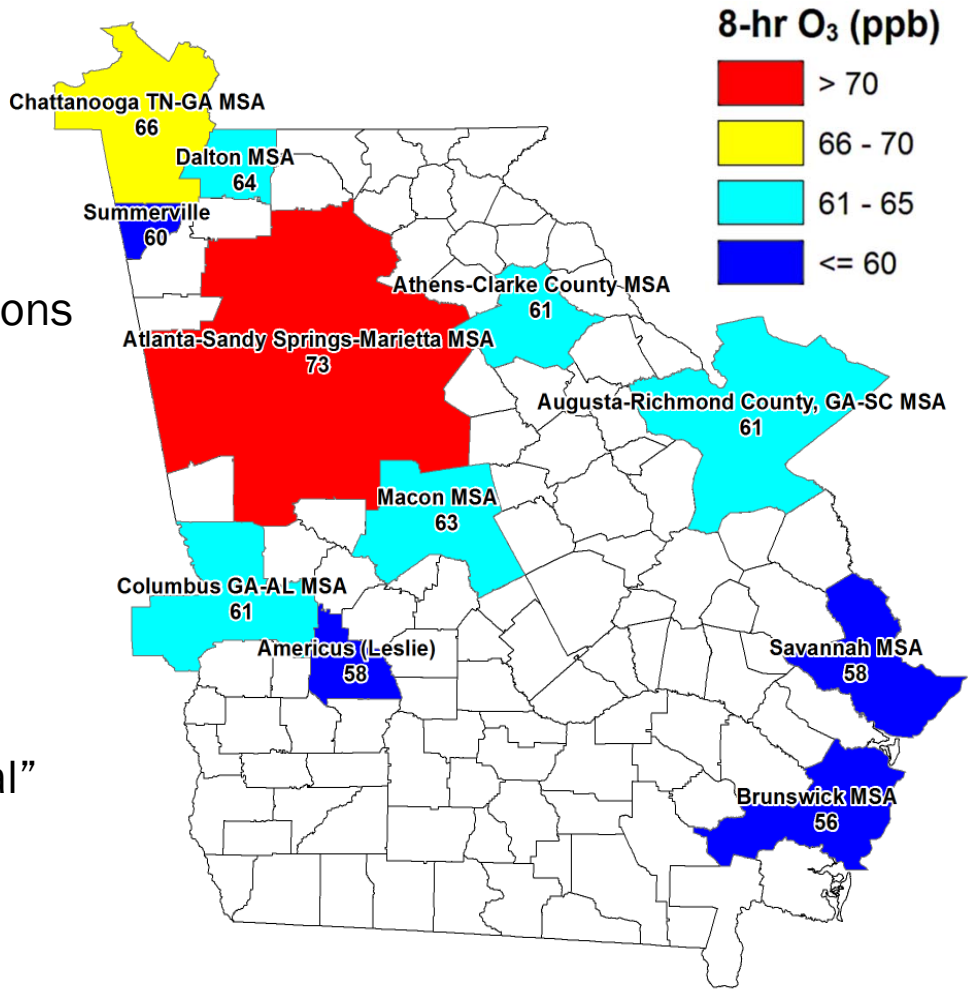
- 2012-2014 data
  - 77 ppb (above 75 ppb)
- August 27, 2015
  - Bumped up to “Moderate” by EPA
- 2013 - 2015 data
  - 73 ppb (below 75 ppb)
- July 18, 2016
  - Maintenance Plan to EPA

Redesignation to attainment in 2016?

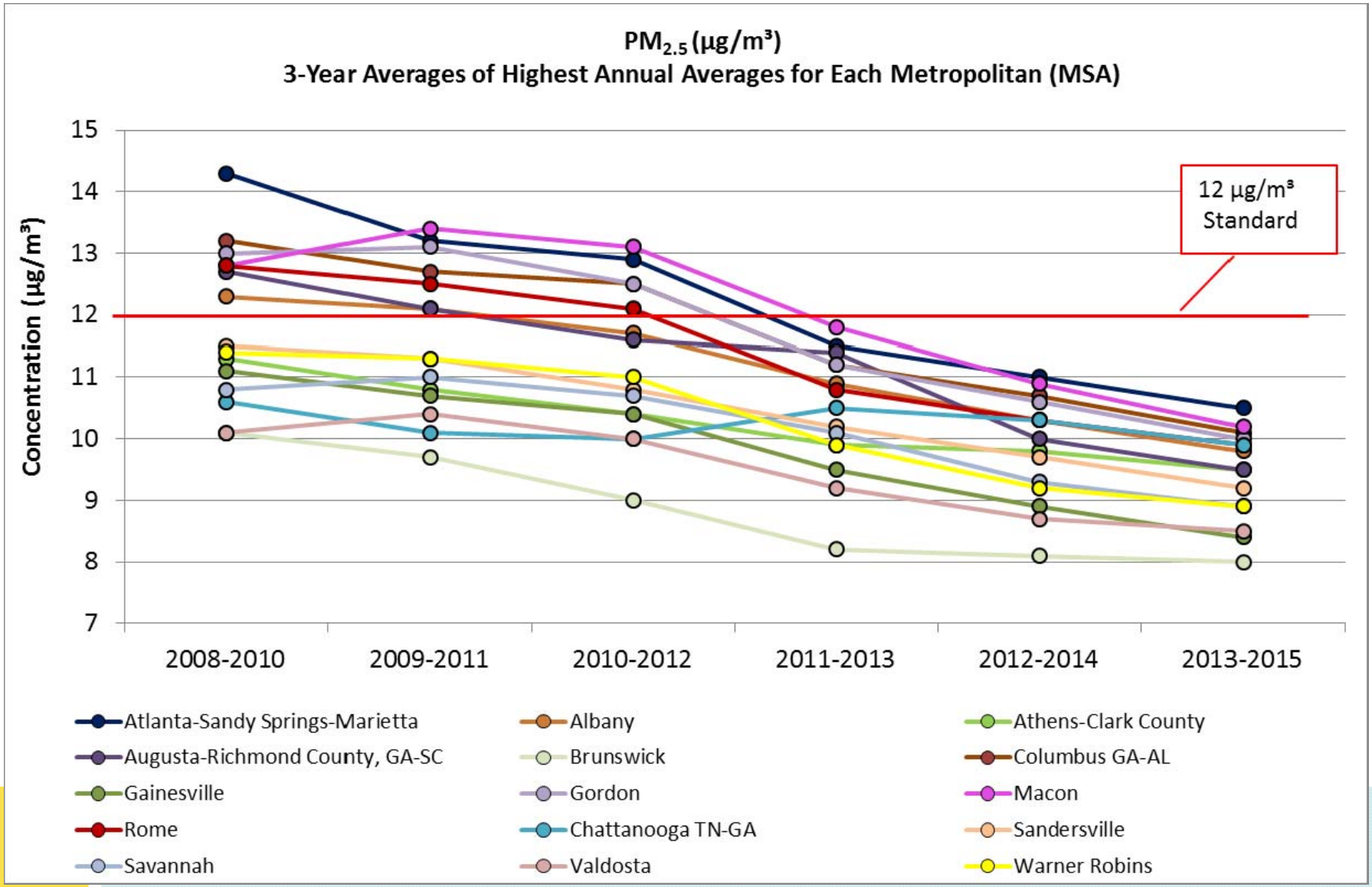


2015 OZONE NAAQS (70 PPB)

- October 1, 2015
  - NAAQS = 70 ppb
- October 1, 2016
  - EPD designation recommendations
  - 2013-2015 data
  - 5 factor analysis
  - Photochemical grid modeling
- October 1, 2017
  - EPA designations
  - 2014-2016 data
  - Atlanta would likely be “Marginal”
  - No additional emission controls required



ANNUAL $PM_{2.5}$ DESIGN VALUE TRENDS



1997 ANNUAL $PM_{2.5}$ (15.0 $\mu g/m^3$)

Atlanta Area (red)

2008-2010

- Clean $PM_{2.5}$ data

August 30, 2012

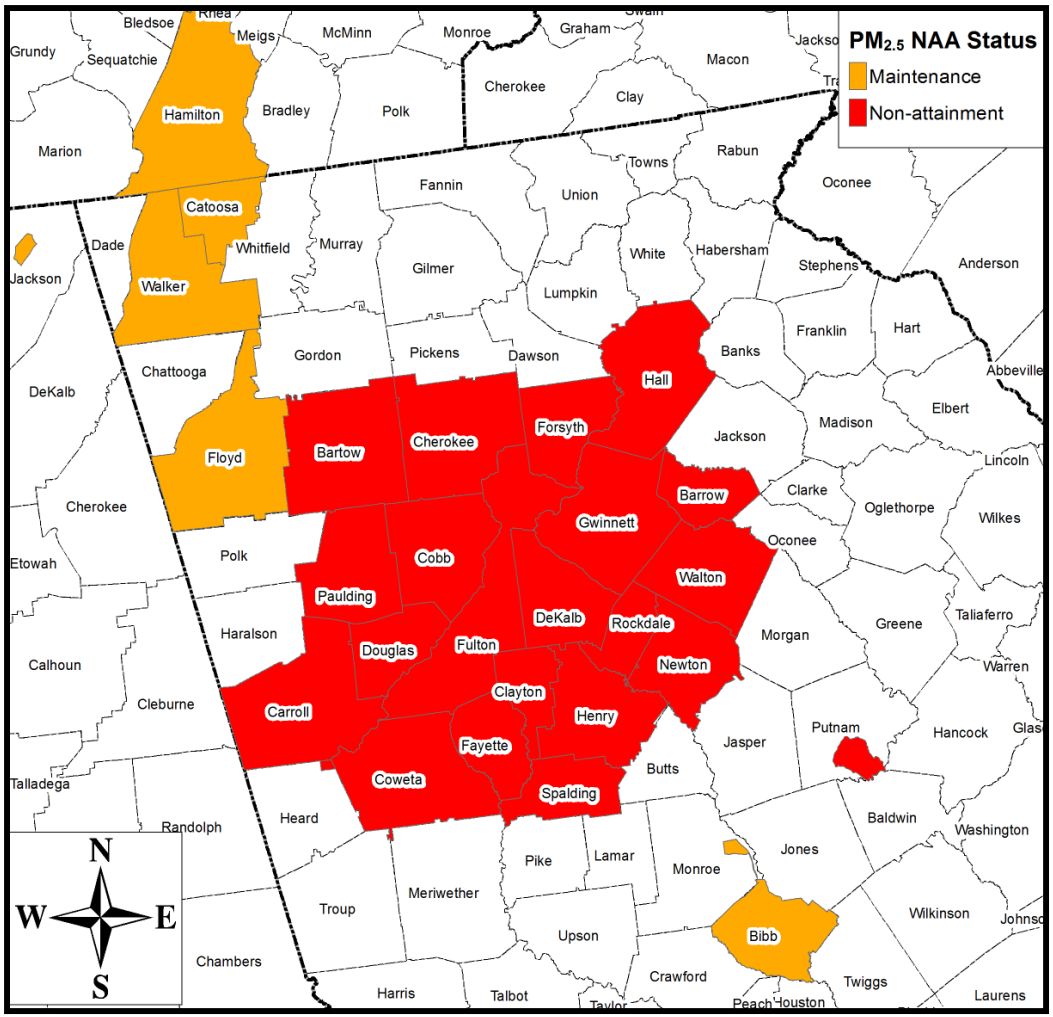
- Maintenance Plan to EPA

February 24, 2016

- Redesignation to attainment!!

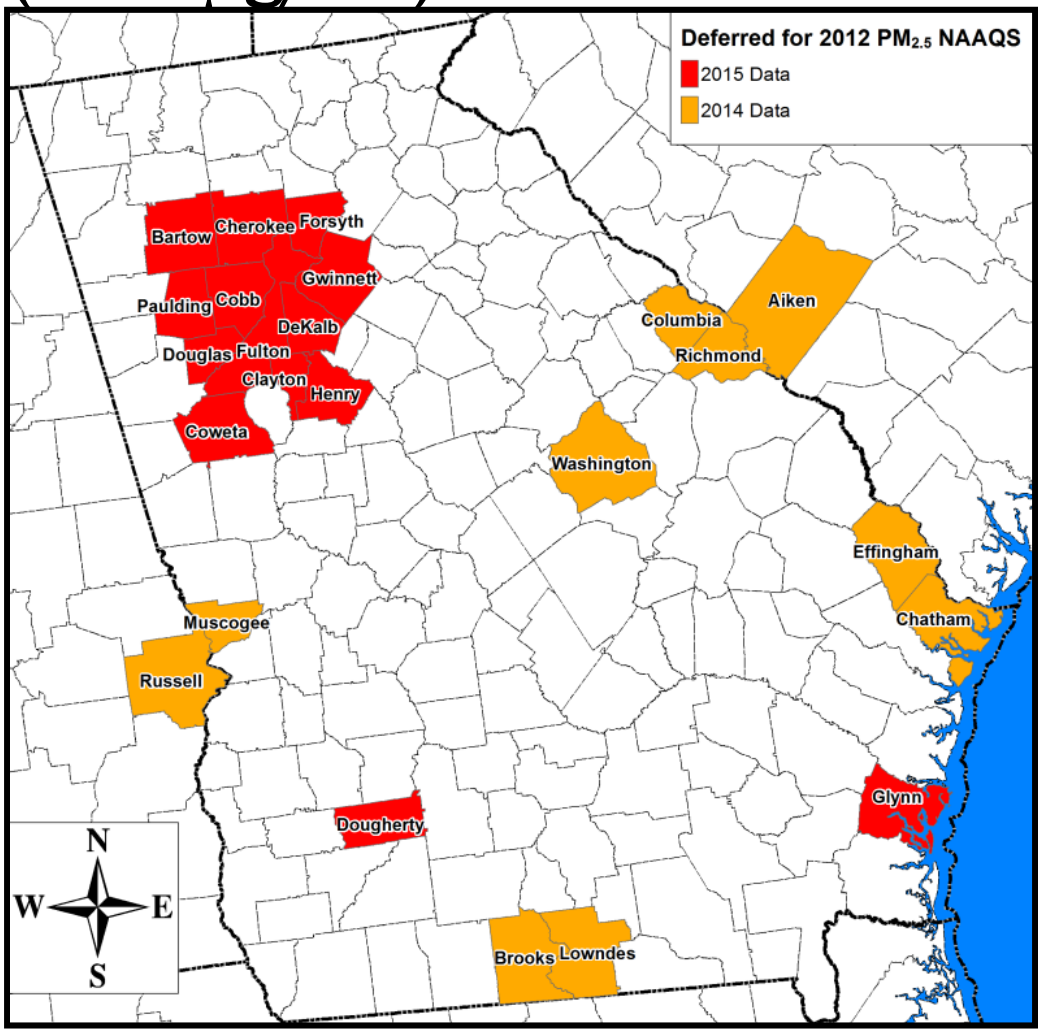
Maintenance Areas (orange)

Macon
Rome
Chattanooga



2012 ANNUAL $PM_{2.5}$ (12.0 $\mu g/m^3$)

- 2011-2013 data
  - All counties without highlights attainment in 2014.
- 2012-2014 data
  - **Orange** counties attainment in 2015.
- 2013-2015 data
  - **Red** counties attainment on September 6, 2016 (effective on October 6, 2016).
    - Atlanta
    - Albany
    - Brunswick



SO_2 DESIGNATIONS

Round 1 – Violating Monitors

- **October 4, 2013** - EPA designated 29 areas nonattainment in 16 states based on monitored violations

Round 2 – Sierra Club Consent Decree

- **July 2, 2016** - EPA makes designations

Round 3 – Modeling Approach

- **January 13, 2017** - Modeling analysis due to EPA
- **December 31, 2017** - EPA makes designations based on modeling

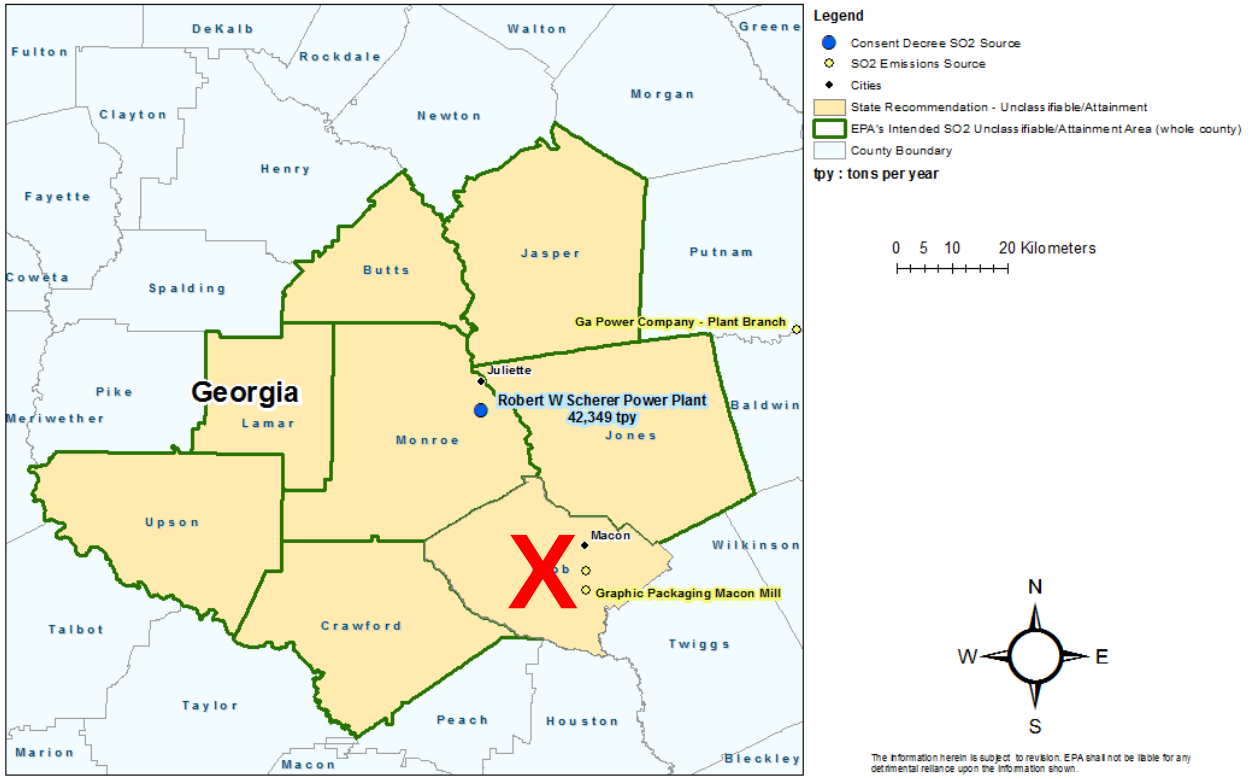
Round 4 – Monitoring Approach

- **January 1, 2017** - New monitors operational
- **December 31, 2020** - EPA makes designations based on 2017-2019 monitoring data

ROUND 2 - PLANT SCHERER IN MONROE COUNTY

GA EPD recommended attainment for Monroe, Bibb, Jones, Jasper, Butts, Lamar, Upson, and Crawford.

EPA's final attainment designation included Monroe, Jones, Jasper, Butts, Lamar, Upson, and Crawford (not Bibb).



LARGE SO_2 SOURCES IN GEORGIA

Site Name	County	2014 SO_2 (tpy)	EPD Characterization Approach for Air Quality
Georgia Power Company - Plant Scherer	Monroe	5,176	Air Quality Modeling
International Paper - Savannah	Chatham	8,123	Air Quality Modeling
Georgia Power Company - Plant Bowen	Bartow	7,204	Air Quality Modeling
Georgia Power Company - Plant Wansley	Heard	2,443	Air Quality Modeling
Georgia Power Company - Plant McIntosh	Effingham	2,268	Air Quality Modeling
Georgia-Pacific Consumer Products (Savannah River Mill)	Effingham	2,105	Air Quality Modeling
International Paper - Rome	Floyd	2,356	Ambient Monitoring
Georgia Power Company - Plant Yates	Coweta	8,105	Permanently Retired (Units 1-5) and Permit Limit (Units 6-7)
Georgia Power Company - Plant Kraft	Chatham	5,140	Permanently Retired
Georgia Power Company - Plant Branch	Putnam	32,545	Permanently Retired

- January 1, 2017 – New monitor operational in Rome.
- January 13, 2017 – Modeling analysis and documentation of retirements/permit limits due to EPA.

PSD EMISSIONS INVENTORY

- GA EPD created a statewide emission inventory for the PSD air impact analysis
  - NAAQS & Increment
  - PM10, PM2.5, NOx, SO_2, and CO
  - Follow 40 CFR 51 Appendix W
  - Contractor support from AMEC

- GA EPD will maintain future updates to the emission inventory through the permit application process.

- All emissions are available on-line.
  - https://epd.georgia.gov/air/psd-permitting-resources

PROJECT DELIVERABLES

- Emission Inventory Data and Notebook
- 792 SM and 389 Title V sources
- Emissions Inventory Web Application
  - Select location and radius
  - AERMOD ready file
  - Excel file with Q/d calculations
- Facilities can submit updates to EPD

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Georgia Department of Natural Resources
Georgia PSD Modeling Inventory
Help
About
Search by County
Richmond
Search
Search by Address
Augusta
50
KM
Search
Location View
Download Aermod
Download Excel
Download Aermod & Excel
Print Map
Exempt
CO
PM25
PM10
SO2
NOx
Satellite
Boral Bricks - Augusta Plants 3, 4, & 5
AIRS #: 24500009
Address: 1630 Athern Road, Augusta, GA 30903
County: Richmond
Pollutants (in tons per year)
CO
PM25
PM10
SO2
NOx
326
136
136
282
97
Zoom to
Legend
Title 5 Facility
Title 5 facility
Synthetic Minor Facility
Synthetic Minor facility
Search Location
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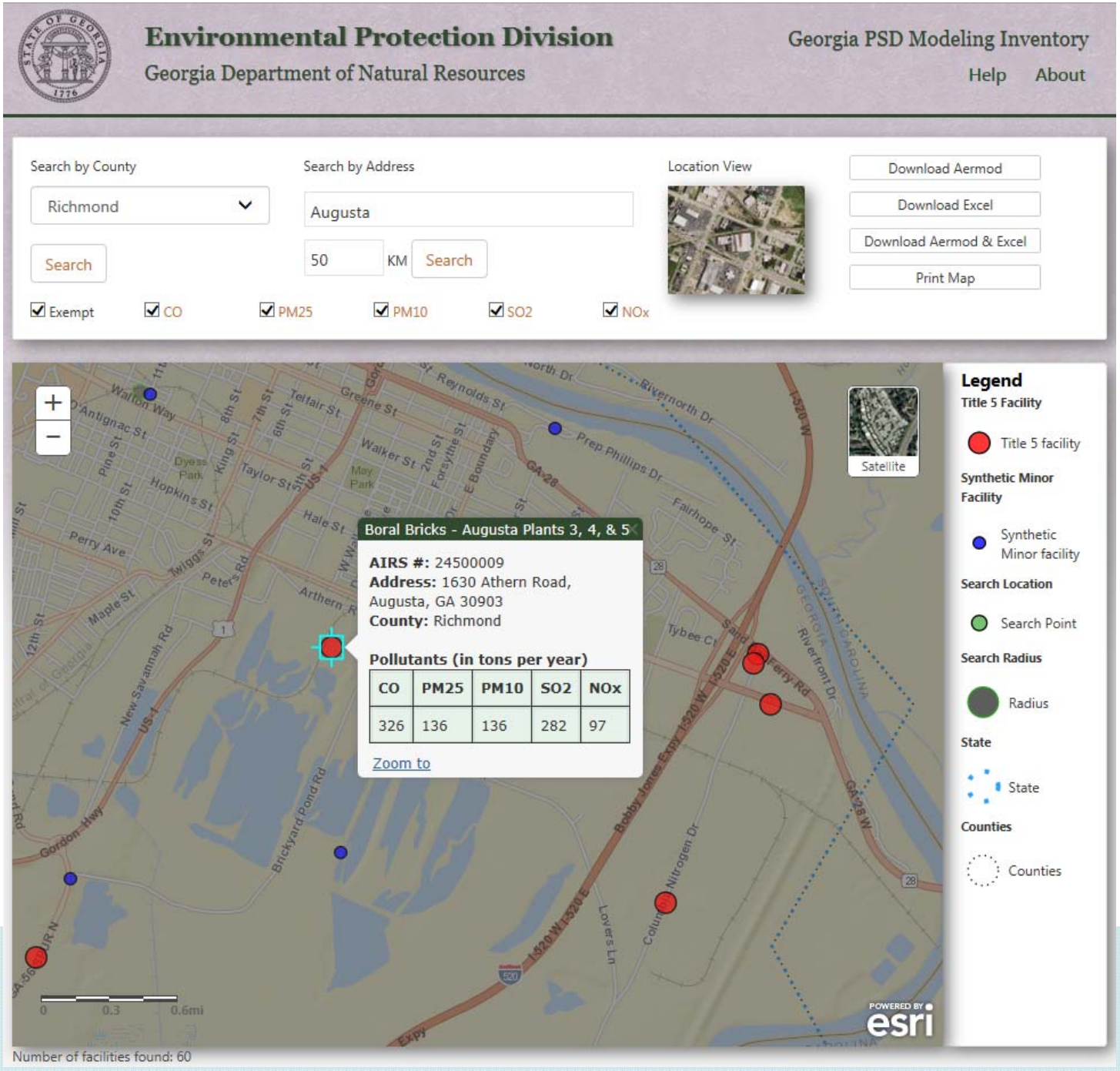
Number of facilities found: 60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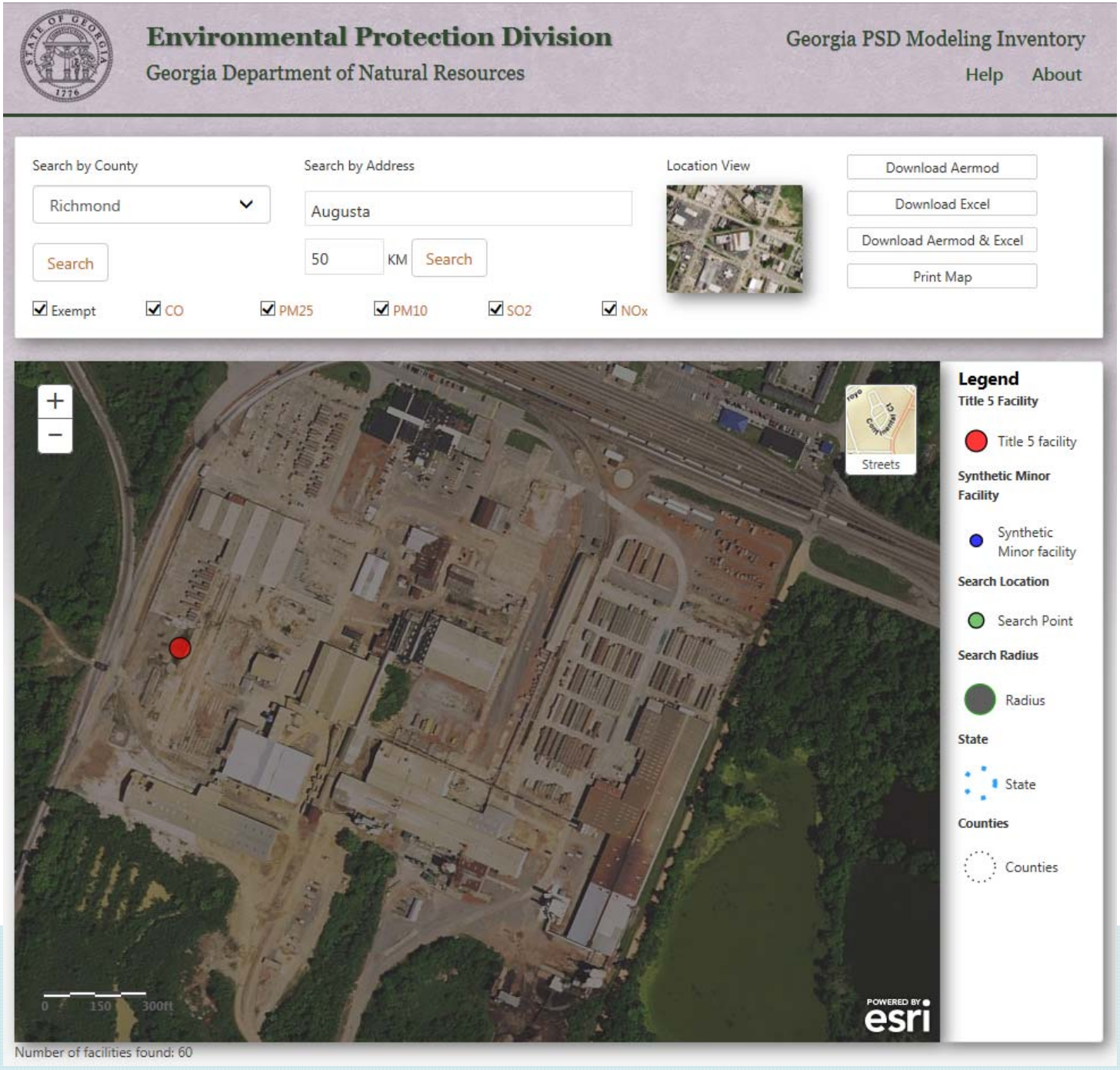
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POWERED BY esri
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