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# WELCOME!

MDEQ'S AIR QUALITY DIVISION



# THE AQD

- 177 staff persons
- 10 District Offices
  - Detroit Office, Wayne County
  - 31 staff persons
    - Inspections
    - Monitoring
    - Testing



The DEQ ensures that Michigan's air remains clean by regulating sources of air pollutants to minimize adverse impact on human health and the environment. Goals are to meet and maintain air quality standards, limit emissions of hazardous and toxic pollutants, and inform the public about current air conditions.



# PERMITS

New and modified sources must get a permit



# INSPECTIONS

Inspect sources to ensure compliance with regulations and permits

- Field operations
- Take action against sources not in compliance



# MEASUREMENTS



Stack Testing



Air Monitoring

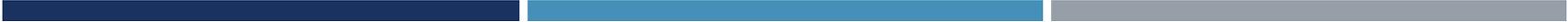
# EVALUATION

- Establish health-based levels
- Air emissions impact reviews

# PLANNING AND IMPROVEMENT

Plan for long-term improvements:

- State Implementation Planning
- Emissions Reporting and Assessment
- MDEQ Environmental Justice and Tribal Affairs



# PERMITTING

ANNETTE SWITZER

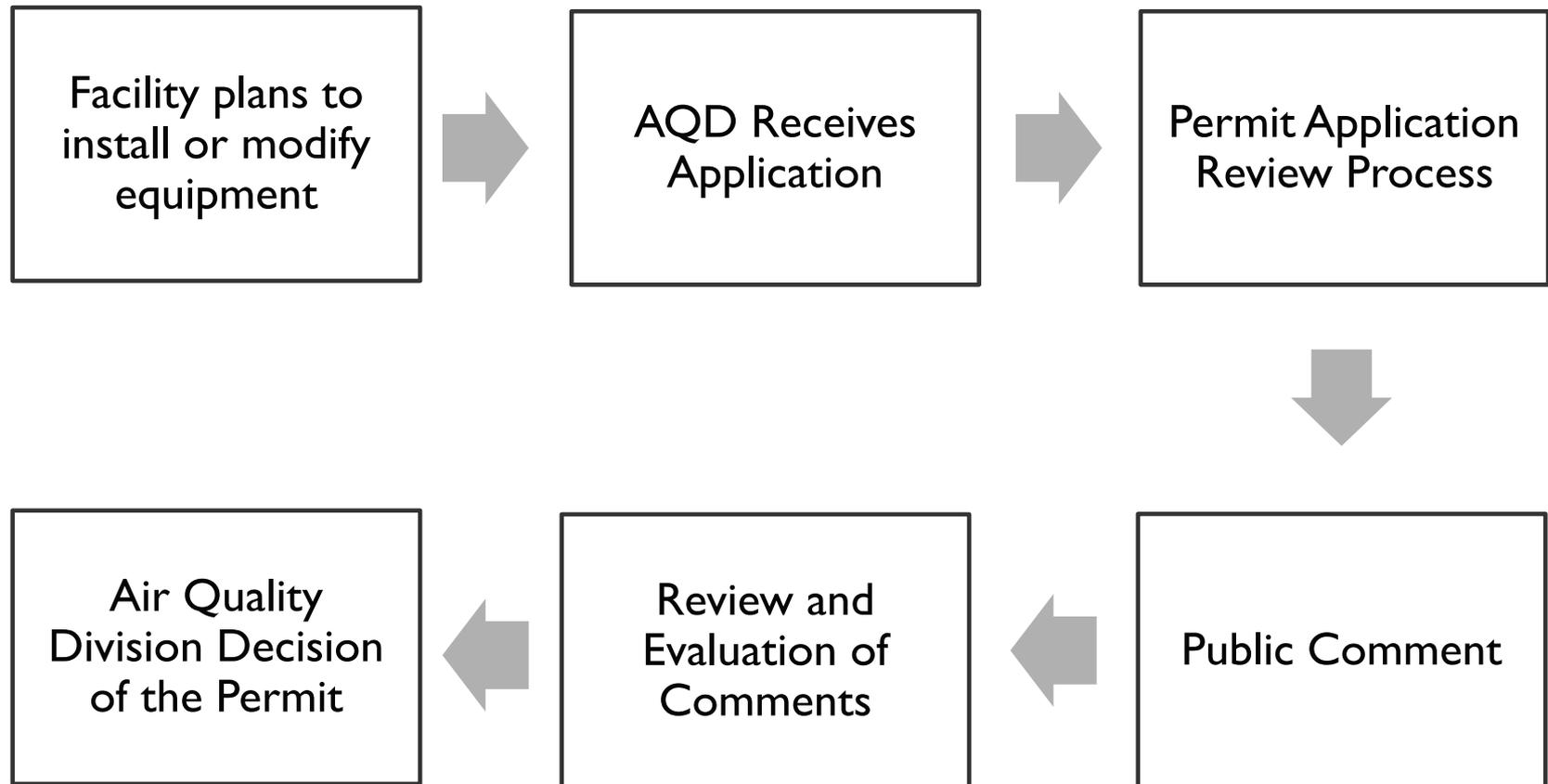


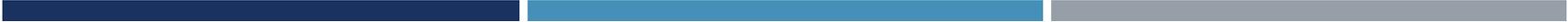
# AIR PERMITTING OF INDUSTRIAL SOURCES

The Air Quality Division regulates and permits industrial sources such as power plants, auto assembly plants, and steel mills.



# THE PERMITTING PROCESS

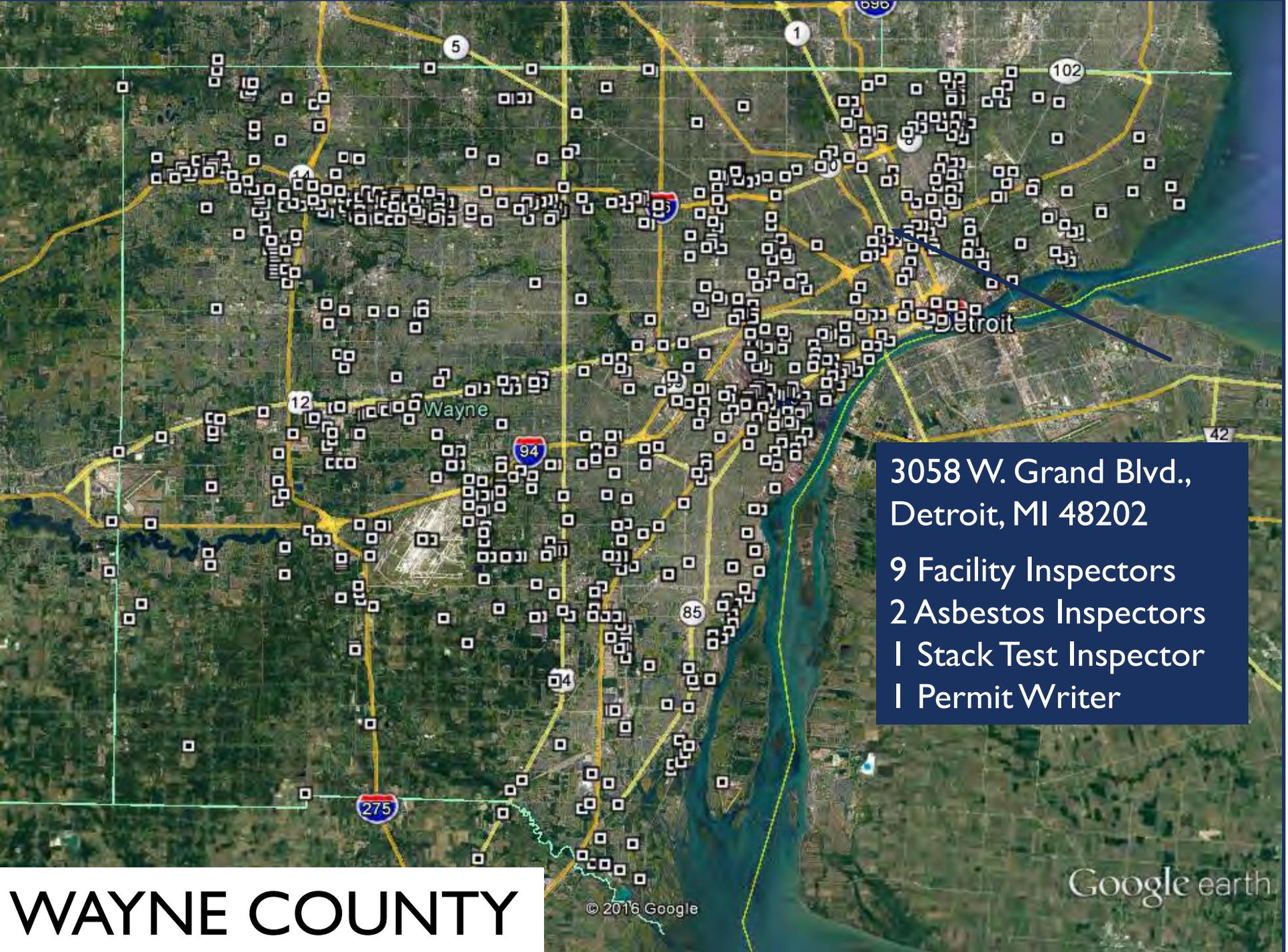




# INSPECTIONS

JEFF KORNISKI





3058 W. Grand Blvd.,  
Detroit, MI 48202

- 9 Facility Inspectors
- 2 Asbestos Inspectors
- 1 Stack Test Inspector
- 1 Permit Writer

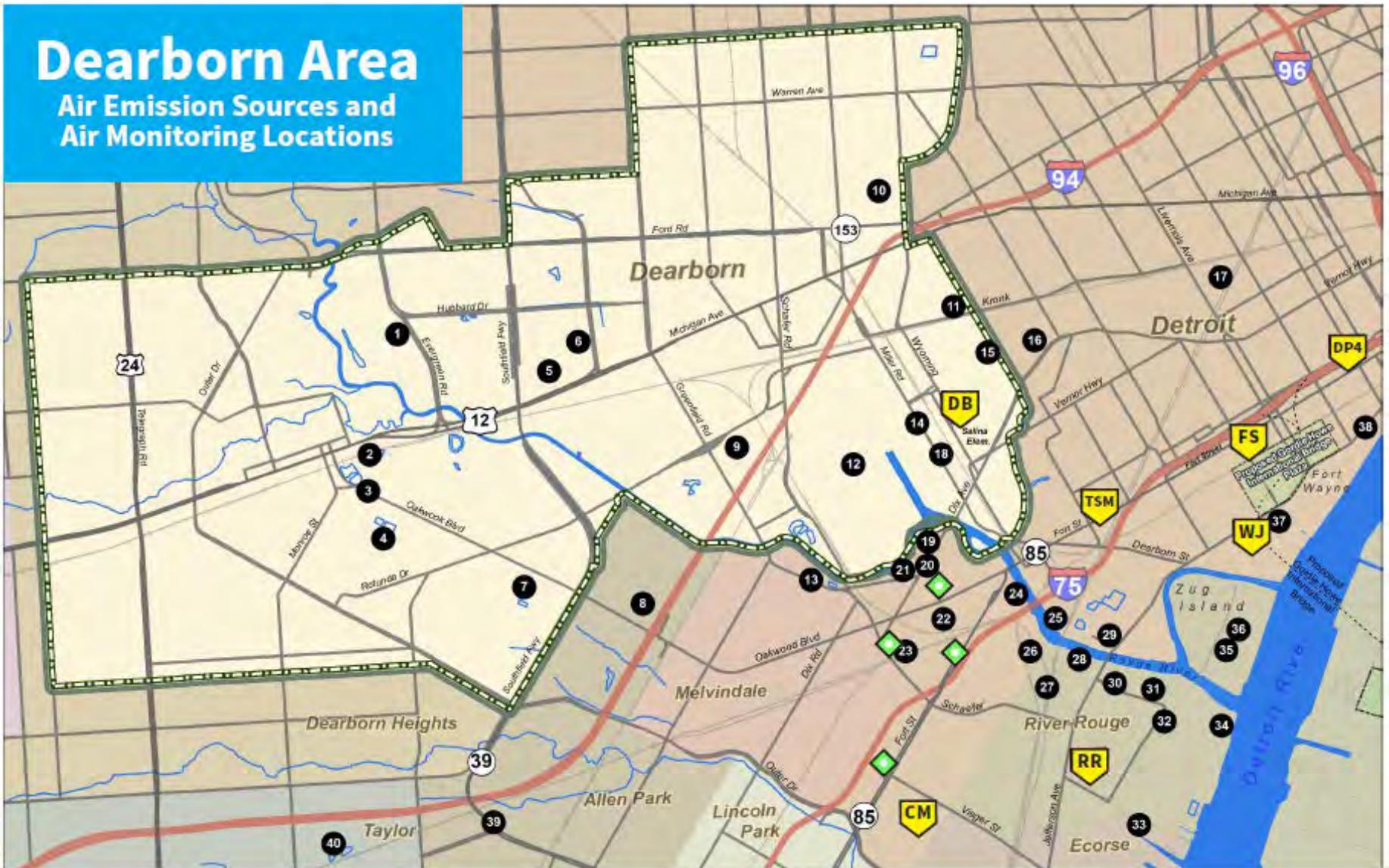
**WAYNE COUNTY**

Google earth

© 2016 Google

# Dearborn Area

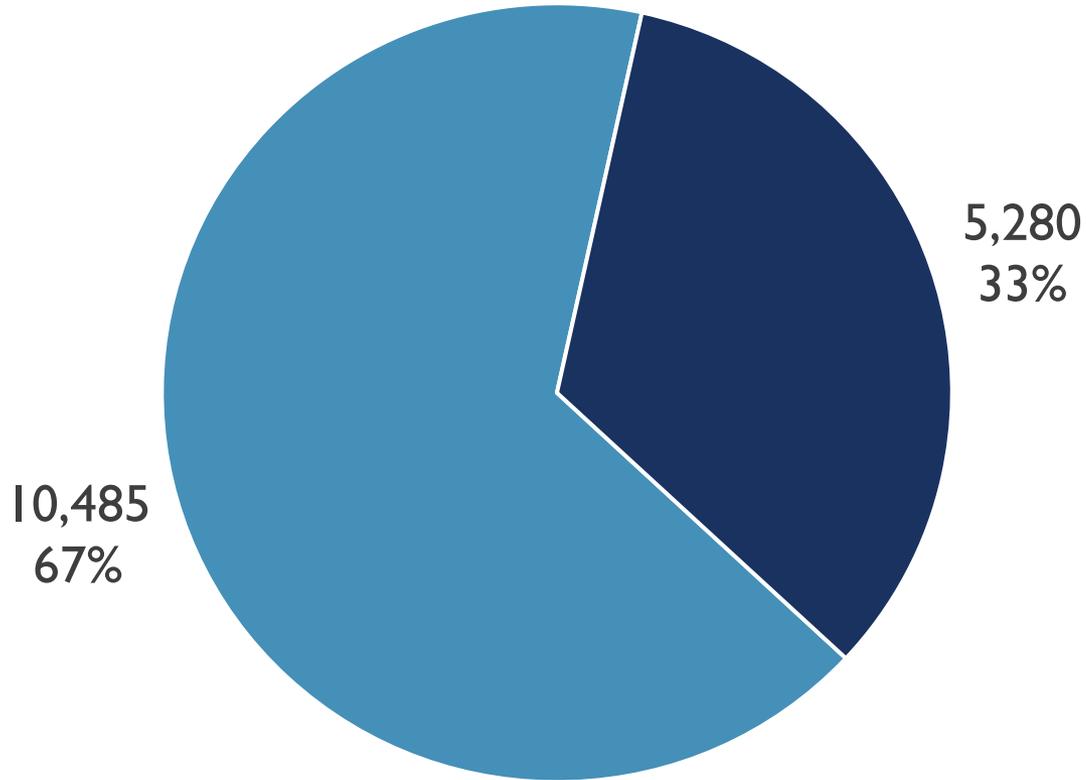
## Air Emission Sources and Air Monitoring Locations



# INSPECTIONS

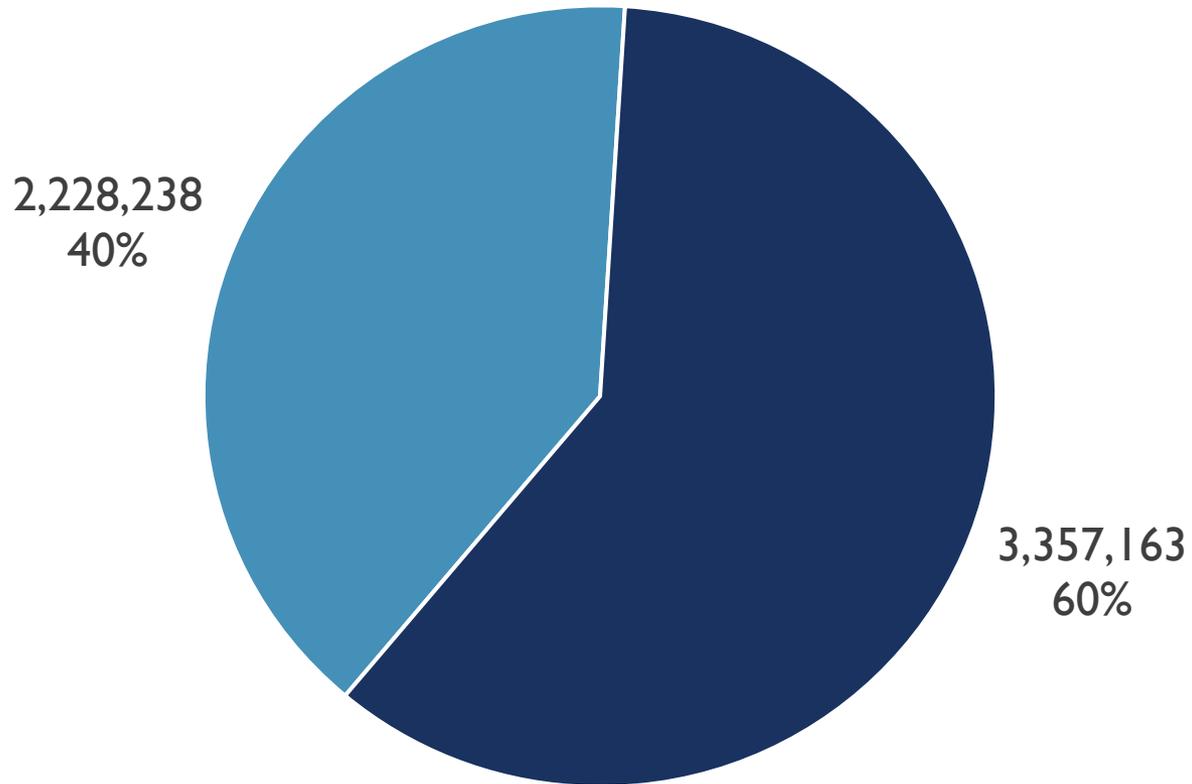
- State and Federal rules and regulations
- Existing permits
- Existing enforcement actions
- Complaints

# AQD Complaints Received 2008 - 2017



■ Rest of MI   ■ Wayne County

# AQD Penalties Collected FY 2015 - 2017



■ Rest of Michigan    ■ Wayne County



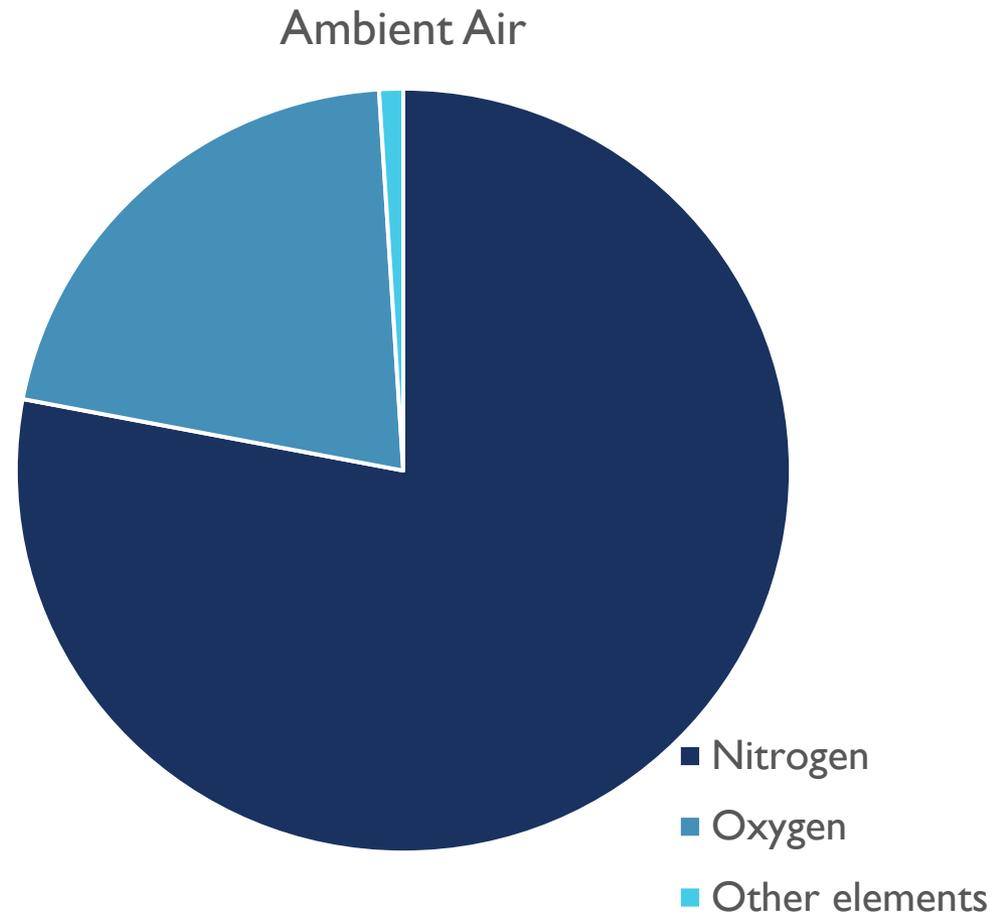
# AIR MONITORING – SALINA ELEMENTARY

SUSAN KILMER



# WHAT IS “AMBIENT” AIR?

- Air in its natural state.
- What we breathe
- Transportation, manufacturing and burning of fossil fuels add pollutants
- Quality is directly affected by the activities of people.



# MONITORING IN DEARBORN

- Near Salina Elementary since the 1970's
- Wayne Co. Air Pollution Control Agency
- MDEQ since 2001
- Partnering with researchers, EPA, and instrument manufacturers



# WHAT IS AN AIR MONITOR?

- Samples the air for different elements
- Some sample in 'real-time'
- Some collect a sample that is sent to a laboratory

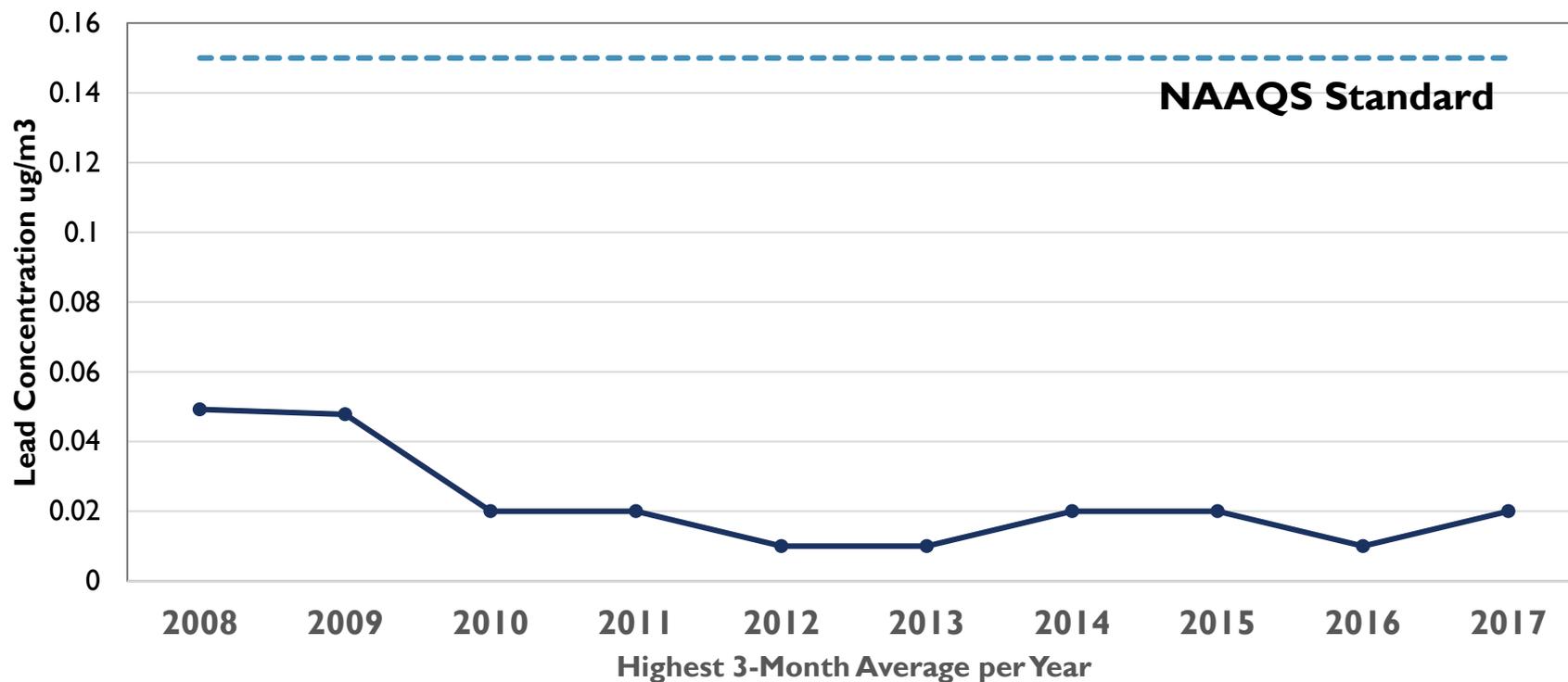


# WHAT POLLUTANTS ARE SAMPLED?

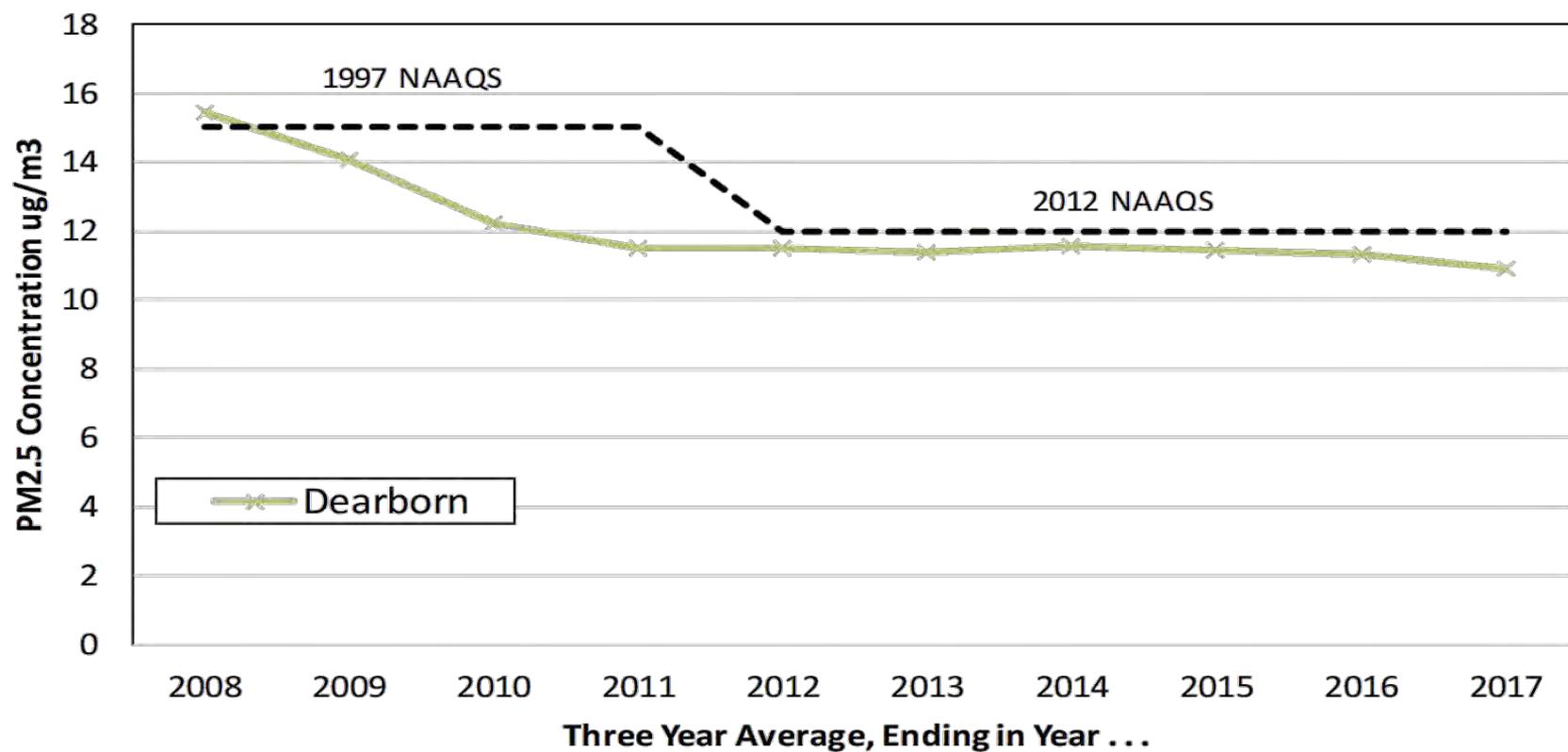
- Fine particulate matter = PM<sub>2.5</sub>
- Particulate matter = PM<sub>10</sub>
- Metals = including lead (Pb)
- Carbonyl Compounds
- Volatile Organic Compounds = VOCs
- Polycyclic Aromatic Hydrocarbons = PAHs
- Black Carbon



# AIR MONITORING - LEAD



# AIR MONITORING - ANNUAL PM2.5



# SIGN UP FOR ALERTS

[www.deqmiair.org](http://www.deqmiair.org)

See real-time data!

## Announcements

TIP ... Click on an AQI "dot" to view air monitor data.

[\(more\)](#)

## Forecast Discussions

FORECAST SUMMARY: Monday, June 4th, 2018 through Monday, June 11th, 2018  
Ozone: 8-hour Ozone concentrations will be generally Go...

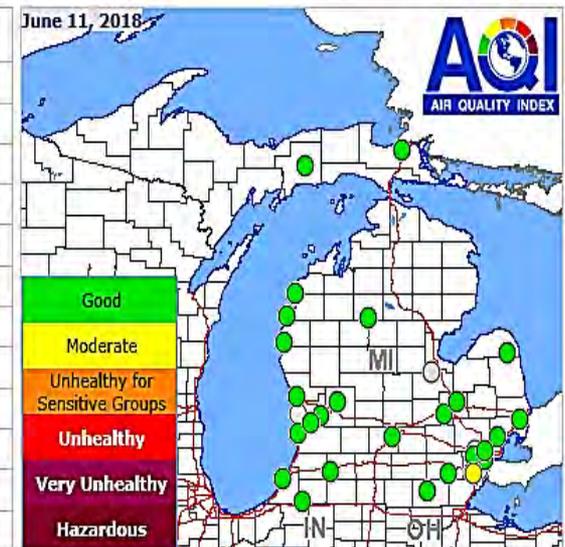
[\(more\)](#)

## Latest AQI Information

Select Map:

## Legend

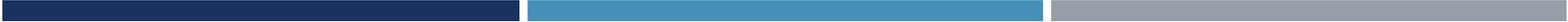
Location	Current AQI Value	Forecast	
		Today	Tomorrow
<a href="#">Ann Arbor</a>	35 - PM <sub>2.5</sub>	Ozone	
<a href="#">Benton Harbor</a>	31 - O <sub>3</sub>	Ozone	
<a href="#">Detroit</a>	52 - PM <sub>2.5</sub>	Ozone	
<a href="#">Eastern U.P.</a>	27 - O <sub>3</sub>	Ozone	
<a href="#">Flint</a>	30 - O <sub>3</sub>	Ozone	
<a href="#">Grand Rapids</a>	28 - PM <sub>2.5</sub>	Ozone	
<a href="#">Houghton Lake</a>	33 - O <sub>3</sub>	Ozone	
<a href="#">Kalamazoo</a>	31 - PM <sub>2.5</sub>	Ozone	
<a href="#">Lansing</a>	32 - PM <sub>2.5</sub>	Ozone	
<a href="#">Ludington</a>	33 - O <sub>3</sub>	Ozone	
<a href="#">Saginaw</a>	30 - O <sub>3</sub>	Ozone	
<a href="#">Traverse City</a>	33 - O <sub>3</sub>	Ozone	



[AQI Breakpoints](#) [Actions To Protect Health](#)

Click on site to display hourly monitor values





# THE AIR AND YOUR HEALTH

BOB SILLS



# HOW CAN AIR QUALITY AFFECT YOUR HEALTH?

- It depends on the pollutant, the level, and how long the exposure lasts.
  - Some air pollutants can irritate the respiratory system.
  - Some air pollutants can raise other concerns, such as cancer risk.
- In Michigan, we regulate almost all air pollutants. Many other States do not.

# THE GOAL...

Air quality that is healthy for even the most sensitive groups



## HAVE WE REACHED OUR GOAL YET?

- Wayne County air has improved greatly since the 1970s.
- Air pollution does not appear to be a significant cause of cancer rates in Michigan.
- Still several days per year with unhealthy air quality for sensitive groups such as asthmatics.
- Still many odor and fallout complaints.
- Not attaining the national health standards for ozone and sulfur dioxide.

## WHAT ABOUT ASTHMA?

- Asthma attacks can be triggered by many indoor and outdoor factors, including air pollution.
- The State health department collects data on asthma rates.
- Compared to the rest of Michigan, Detroit asthma rates are elevated, but Dearborn rates are not.



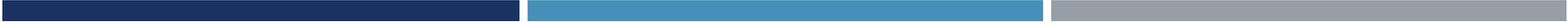
# HOW WILL WE GET THERE?

- A plan will be developed to get ozone and SO<sub>2</sub> levels below the health standard.
- Vehicle fuel standards keep getting more stringent, and newer vehicles emit less pollutants.
- Trend toward less coal, more natural gas and renewable energy.
- Responding to complaints, compliance and enforcement and stringent air emission permits.

## STILL WORK TO BE DONE

How can you help?

- Continue to participate in the public process
- Ask questions
- Report environmental concerns



# ENVIRONMENTAL JUSTICE

KATIE KRUSE



# ENVIRONMENTAL JUSTICE

- Environmental Justice Liaison position
- Governor's Environmental Justice Work Group
- What is “environmental justice”?
- How has the MDEQ addressed environmental justice?

THANK YOU!

Question and Answer