



# Air Management Study Group Quarterly Meeting Agenda

- Opening remarks & agenda review
- Hiring update
- Proposed guidance, rules and legislative update
- Proposed state legislation
- WI Act 369
- EDGE pilot update
- PFAS update
- ACE rule
- DERA grant
- Member updates
- Permit processing update
- Ethylene oxide
- Trends report
- Ozone topics
- 2020 Priority topics and 2020 draft dates

# **Air Management Study Group Quarterly Meeting**

Madison  
November 7, 2019

# Hiring Update

**Andy Stewart**  
Air Program Field Operations Director

# Proposed Guidance and Rules Legislative Update

**Kristin Hart**

Permits and Stationary Source Modeling Section Chief

**David Bizot**

Air Quality Planning and Standards Section Chief

# DNR Guidance in Certification Process

- The Air Program is reviewing guidance as defined in s. 227 Wis. Stats.
- Guidance undergoing certification or recertification  
<https://dnr.wi.gov/news/input/guidance.html>
- Final guidance website  
<https://dnr.wi.gov/news/input/GuidanceFinal.html>

## Proposed DNR Rules

Proposed DNR rule	Description	Phase
AM-24-12(B) Air Permit Streamlining Rule Part 2	Changes to improve operational efficiency and to simplify the permitting processes administered under chs. NR 406 and 407, while remaining consistent with the federal Clean Air Act.	Awaiting governor signature
AM-20-18 VOC RACT	Updates two RACT rules in ch. NR 422 to meet current EPA Guidelines for Miscellaneous Metal and Plastic Parts Coatings, and Miscellaneous Industrial Adhesives.	Rule drafting
AM-10-19 2015 Ozone NAAQS	Incorporates the 2015 ozone NAAQS into state rule.	Rule drafting

# Proposed EPA Rules/Guidance

Proposed EPA rule/guidance	Docket	Comments due
Proposed Revision of the Photochemical Assessment Monitoring Station (PAMS) Requirement Start Date	<a href="#">EPA-HQ-OAR-2019-0137</a>	July 1, 2019
National Emission Standards for Hazardous Air Pollutants: Municipal Solid Waste Landfills Residual Risk and Technology Review	<a href="#">EPA-HQ-OAR-2002-0047</a>	Sept 12, 2019
Reclassification of Major Sources as Area Sources Under S. 112 of the Clean Air Act (Once in always in)	<a href="#">EPA-HQ-OAR-2019-0282</a> <a href="#">EPA-HQ-OAR-2019-0282-0355</a>	Sept 24, 2019 Extended to Nov 1, 2019
Federal Plan Requirements for Municipal Solid Waste Landfills that Commenced Construction on or Before July 17, 2014	<a href="#">EPA-HQ-OAR-2019-0338</a>	Oct 7, 2019
Prevention of Significant Deterioration and Nonattainment Area New Source Review, Project Emissions Accounting	<a href="#">EPA-HQ-OAR-2018-0048</a>	Oct 8, 2019

# Finalized EPA Rules/Guidance

Finalized EPA rule/guidance	Link	Date finalized
Air Quality State Implementation Plans; Approvals and Promulgations: Determinations of Attainment by the Attainment Date, Extensions of the Attainment Date, and Reclassification of Several Areas Classified as Moderate for the 2008 Ozone National Ambient Air Quality Standards	<a href="#">EPA-HQ-OAR-2018-0226</a>	Aug. 23, 2019
The Safer Affordable Fuel-Efficient Vehicles Rule Part One: One National Program	<a href="#">EPA-HQ-OAR-2018-0283</a>	July 15, 2019
Final approval of the Wisconsin 2012 PM2.5 Interstate Transport iSIP	<a href="#">EPA-R05-OAR-2018-0840</a>	Oct. 4, 2019

# State Draft and Final Legislation

Draft legislation	Link
PFAS Legislation	<a href="#"><u>LRB-2297/2</u></a>

Final legislation	Link
None to report	

# **EDGE Pilot Project Update (Formerly known as Act 70 Pilot)**

**Kristin Hart**

Permits and Stationary Source Modeling Section Chief



# EDGE Pilot

- The EDGE pilot is an economic development initiative designed to bring environmentally responsible development to brownfields.





# EDGE Pilot

- Participants in the EDGE Pilot program must qualify for coverage under an Air Registration Permit
- Type G Registration Permit for Green Tier 2 facilities (ROPG) was issued on February 1, 2019
- The Air Program is now working with its first applicant for the ROPG!



# EDGE Pilot

- Pilot must report to the legislature 60 months after implementation
- The Communications Team continues to develop promotional materials to attract candidates to the program
- Visit the EDGE webpage:

<https://dnr.wi.gov/topic/GreenTier/EDGE/>

# PFAS Update

**Andy Stewart**

# **Affordable Clean Energy (ACE) Rule**

**David Bizot**



# ACE Rule

- Open meeting held on Sept. 26 to hear from utilities and others information the program should consider as it is developing a plan to implement the rule.
- Program will be scheduling follow-up meetings on a regular basis to maintain visibility to this effort

# **DERA Grant**

**David Bizot**



# DERA Grant

- The 2019 Diesel Emissions Reduction Grant (DERA) program is open for applications through **January 3, 2020**. Approx. \$770, 000 available for eligible projects.
- Eligible are school and municipal buses as well as designated nonroad equipment/vehicles.
- <https://dnr.wi.gov/Aid/CleanDiesel.html>

# Member Updates

# Permit Processing Update

**Kristin Hart**



# Permit Processing Initiatives

- Update to the Proposed Procedures for Title V Permits
- Title V Operation Permit Renewal Applications
- Federal Standards in Permits Initiative



# Proposed Permits

## Current Title V Operation Permit Process

- ✓ Draft Permit is made available for public comment
- ✓ After public comment, comments are addressed and a Proposed Permit is sent to EPA
- ✓ EPA has 45 days to object to the permit
- ✓ If EPA does not object after 45 days, DNR may issue the permit
- ✓ Any person can petition EPA to object to the permit's issuance within 60 days of the end of EPA's 45 day period



# Proposed Permits

- EPA allows states to provide a Draft and Proposed permit concurrently.
- If significant comments are received during the public comment period, EPA may require the agency to address comments and prepare a new proposed permit for a sequential 45 day review



# Proposed Permits

## Proposed Title V Operation Permit Process

- ✓ A Draft and Proposed Permit is provided to EPA at the same time – Concurrent Review
- ✓ **Any public comments received will be posted to the DNR's public website as they arrive**
- ✓ EPA is notified when comments are posted
- ✓ EPA may request *Sequential Review*
- ✓ Upon such request, DNR will address comments and prepare a new Proposed permit
- ✓ EPA's 45 day review period is restarted

# Operation Permit Applications

The Operation Permit Program in Wisconsin is approaching its 30<sup>th</sup> birthday!





# Title-V Renewal Applications

## Operation Permit Application Content

- Application shall include *[NR 407.05(1)-(4), Wis. Adm. Code]* :
  - any new or revised information needed to process the application for the renewal *[s. 285.66(3), Wis. Stats.]*
  - Maximum theoretical emissions calculations for all significant emissions units *[s. NR 407.05(4), Wis. Adm. Code]*
  - Identify new or modified emissions units – reference construction permits or exemption determinations if applicable



# Title-V Renewal Applications

## Operation Application Content *(continued)*

- Identify removed units
- Update insignificant units list
- Add emergency engines (RICE)
- Identify new or updated applicable requirements

## Collaborative Permit Process Guidance

<https://dnr.wi.gov/topic/AirPermits/documents/CollaborativePermitProcess.pdf>

- Explains how to provide marked-up redline/strikeout version of current permit showing proposed changes

# Title-V Renewal Applications

## Operation Permit Renewal Applications [NR 407.05(1)-(4), Wis. Adm. Code]

- Submit applications on forms supplied by the department and supplemented with other materials as indicated on the forms

- 2 copies of the application should be submitted
  - one copy can be an electronic copy emailed to [DNRAMAirPermit@wisconsin.gov](mailto:DNRAMAirPermit@wisconsin.gov)
  - Hard copies are mailed to:

Wisconsin Department of Natural Resources  
Air Program, AM/7  
Attn: Permit Section  
PO Box 7921  
Madison WI 53707-7921



- All applications must be signed and certified as to truth and accuracy by the Responsible Official



# Federal Standards in Permits

## Project Goal:

- Ensure Operation Permits contain up to date requirements for NSPS and NESHAPs
- Ensure Federal Standards are consistently and accurately included in the permit
- Ensure that permit serve as a tool to understand what specifically applies and how to demonstrate compliance



# Federal Standards in Permits

## Questions for Stakeholders

- How can sources best transmit to DNR what NSPS and NESHAP requirements apply?
- What compliance options will the source utilize?
- What is the most useful way to organize these conditions in permits?
- What tools would sources like to see to help keep up with changing federal standards?

# Ethylene Oxide

**Maria Hill**

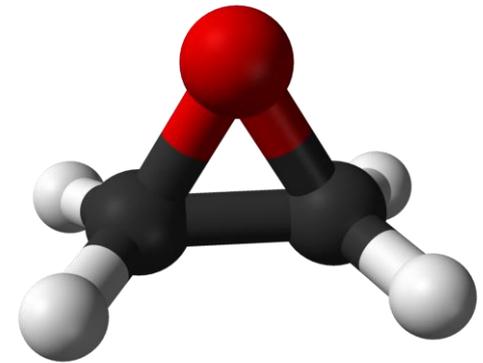
Compliance, Enforcement and Emissions Inventory Section Chief

**Katie Praedel**

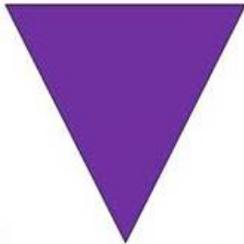
Air Monitoring Section Chief

# Emerging Toxics – Ethylene Oxide

- Ethylene oxide is a flammable, **colorless gas** used to make a range of products, including antifreeze, textiles, plastics, detergents and adhesives.
- Also used to **sterilize equipment** and plastic devices that cannot be sterilized by steam, such as medical equipment.
- The Clean Air Act lists EtO as a **Hazardous Air Pollutant**. U.S. EPA recently **updated its risk value** for ethylene oxide and is working with industry, and state, local and tribal air agencies to address this chemical



## NAAQS Criteria Pollutants



Top-down Approach

- National Ambient Air Quality Standards (NAAQS)
- Established under the authority of the Clean Air Act (CAA)
- Six primary NAAQS
- Federally defined requirements and methods for implementation

## NATTS Toxic Pollutants



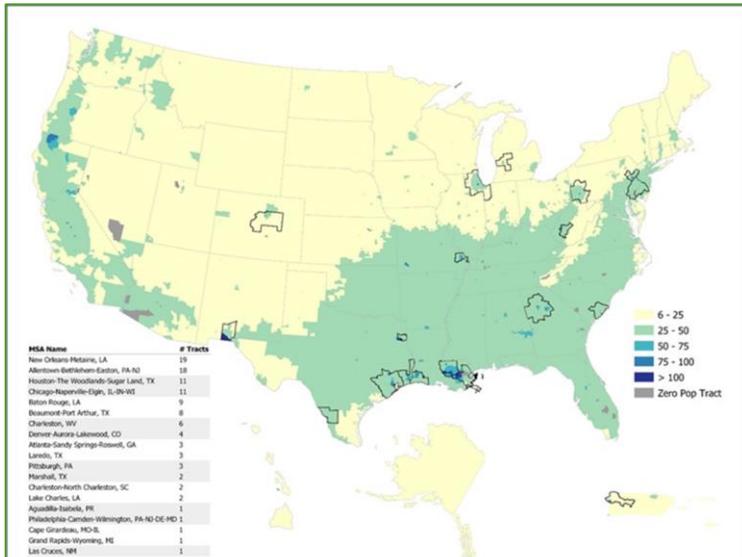
Bottom-Up Approach

- National Air Toxics Trends Stations (NATTS)
- Regulatory action is determined by risk factor
- Hundreds of Hazardous Air Pollutants monitored
- Flexibility in method and detection level

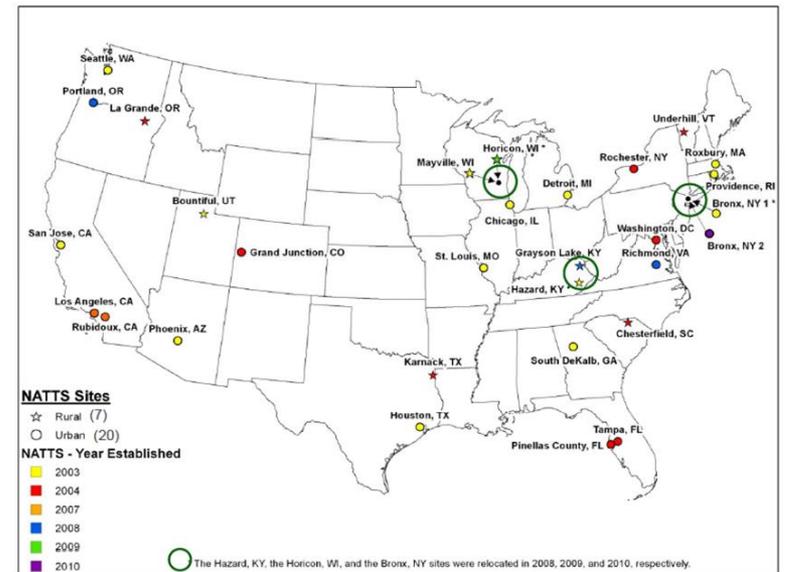
# Emerging Toxics – Ethylene Oxide

- EPA is requiring states with National Air Toxics Trends (NATTS) sites to begin monitoring for Ethylene Oxide
- Required monitoring at the Horicon background NATTS site in 2020.

NATA Cancer Risk Map



NATTS Sites & Years Established



# **2019 Wisconsin Air Quality Trends Report**

**Katie Praedel**

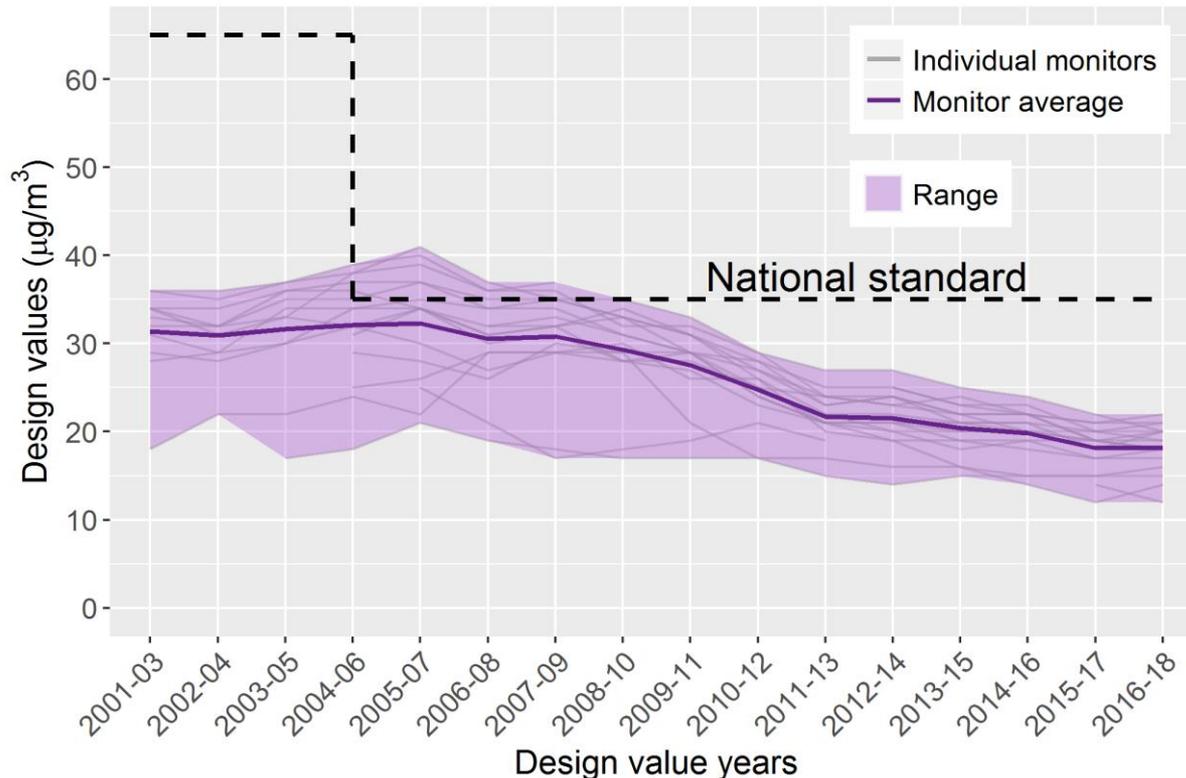
# 2019 Wisconsin Air Quality Trends Report

- The 2019 report continues to show improving trends in Wisconsin's air quality, which reflects the success of regulatory programs over the past several decades.
- Concentrations of most pollutants regulated under the Clean Air Act have been decreasing in all regions of the state since monitoring data has been collected.



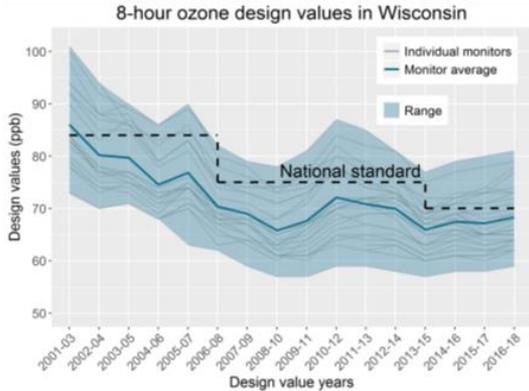
# 2019 Wisconsin Air Quality Trends Report

24-hour PM<sub>2.5</sub> design values in Wisconsin

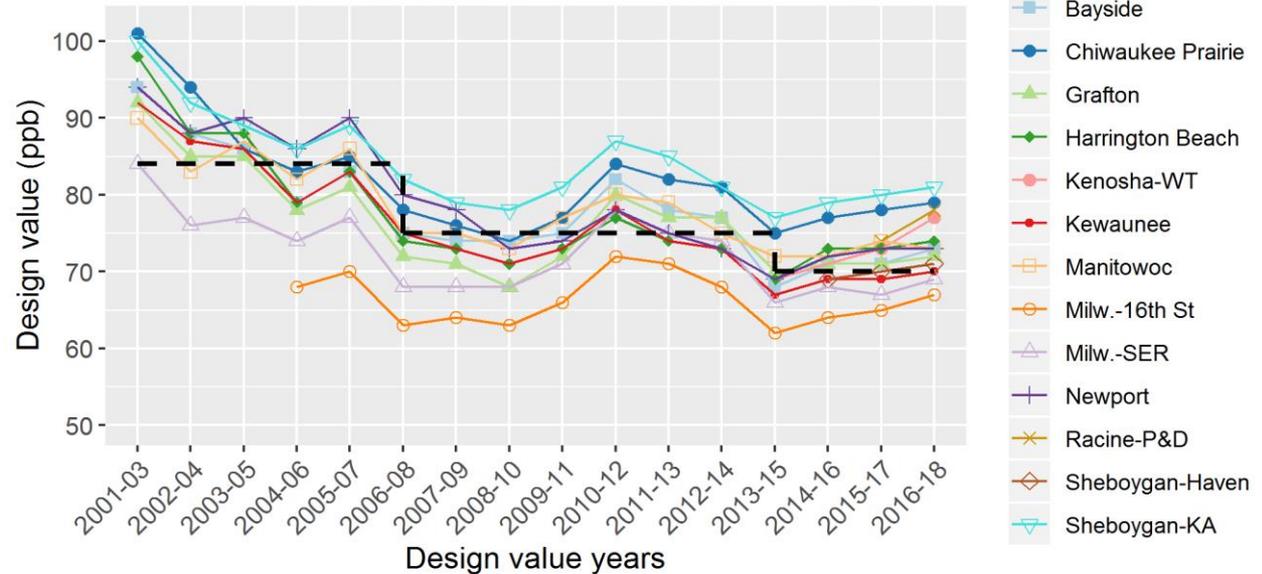


Fine particle concentrations have decreased by over 35 percent

# 2019 Wisconsin Air Quality Trends Report



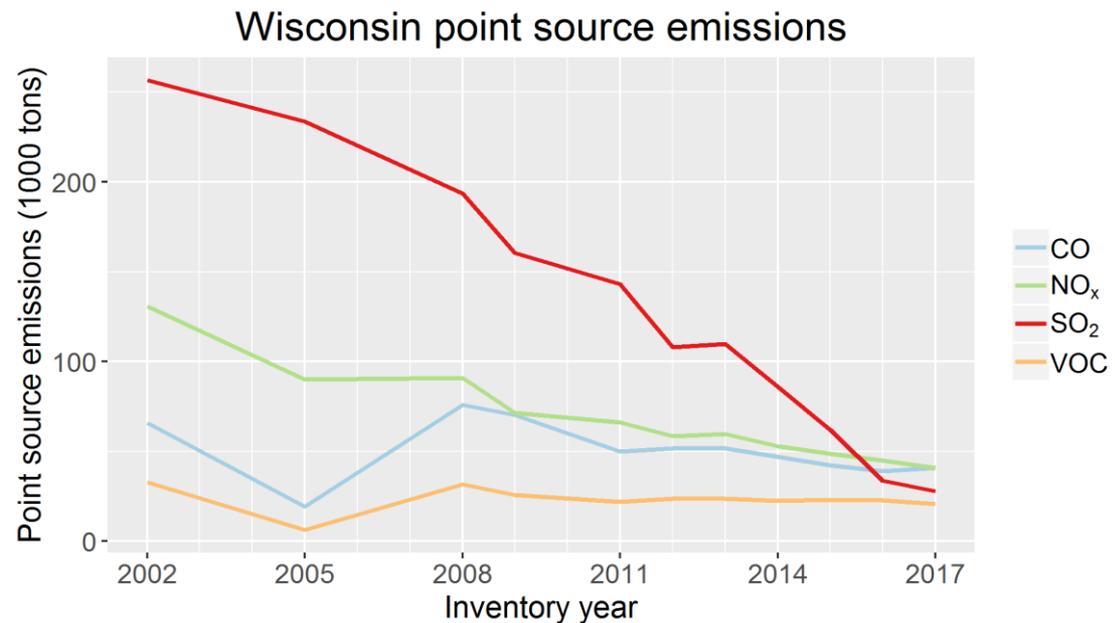
8-hour ozone design values - Lakeshore region



There was a 21 percent average reduction in design values in the lakeshore region from 2001-2003 to 2016-2018

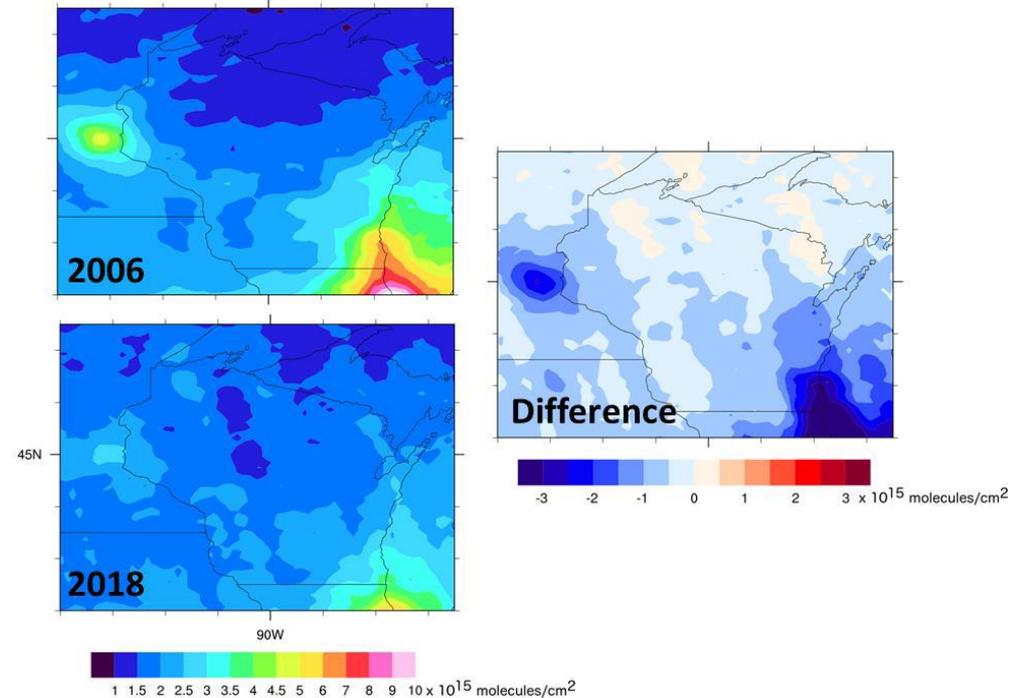
# 2019 Wisconsin Air Quality Trends Report

- From 2002 to 2018 emissions data from large stationary sources decreased:
  - SO<sub>2</sub> decreased 89%
  - VOC decreased 37%



# 2019 Wisconsin Air Quality Trends Report

- New this year, satellite data!
- Consistent with decreases observed by ground based monitors, from 2006 to 2018, the Ozone Monitoring Instrument (OMI) on NASA's Aura satellite observed large reductions of  $\text{NO}_2$  across most of the state, with the greatest reductions found in the Milwaukee area.



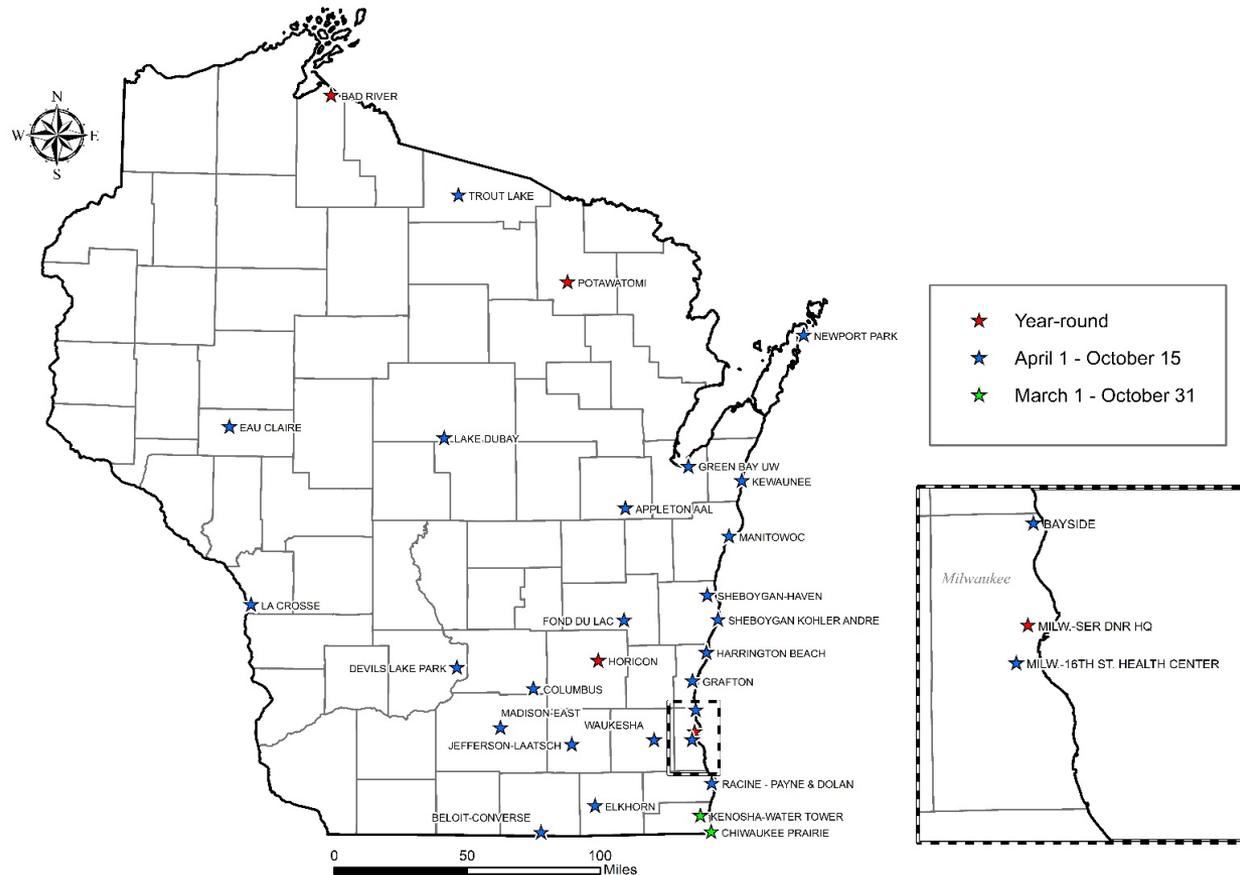
# Ozone Update

**David Bizot**

**Katie Praedel**

# Wisconsin's 2019 Ozone Season

- 30 Seasonal ozone monitors run from April 1 through Oct 15
- Kenosha County monitors operate March 1 – Oct 31
- Horicon, Milwaukee SER, Potawatomi, Bad River operate year-round



# Status of the 2019 Ozone Season

Top Four 8-Hour Average Ozone Concentrations – as of **October 16, 2019**

site	Concentrations (ppb)				2019 Critical values		Days at/above C.V.		Current 2017-2019 "design value"
	1st high	2nd high	3rd high	4th high	2008 std	2015 std	2008 std	2015 std	
Newport	74	68	68	66	84	69	0	1	70
Chiwaukee Prairie	76	72	70	67	70	55	3	34	75
Kenosha WT	73	69	68	66	72	57	1	21	74
Manitowoc	70	68	68	66	81	66	0	4	71
Bayside	71	71	65	64	85	70	0	2	69
Grafton	73	73	72	68	82	67	0	4	71
Harrington Beach	71	69	67	66	84	69	0	2	70
Racine Payne & Dolan	75	69	68	66	70	55	1	29	74
Sheboygan Kohler Andrae	73	73	68	68	70	55	2	25	75

2008 NAAQS: 75 ppb  
2015 NAAQS: 70 ppb

Exceeds the 2015 NAAQS critical value or standard  
Exceeds the 2008 NAAQS critical value or standard

Note: Data have not yet been QA'ed or certified and are subject to change. Values are only shown for monitors that exceeded their critical value at least once.



# Ozone redesignations

- Based on 2019 preliminary data showing attainment, program is currently preparing redesignation requests for:
  - Kenosha County (partial) 2008 ozone NAA
  - Shoreline Sheboygan County 2008 ozone NAA
  - Door County 2015 ozone NAA
- Once submitted, areas will not be redesignated until EPA has completed notice-and-comment rulemaking finalizing this change and confirms all requirements for redesignation are met.



# Ozone redesignations

- DNR submitted a redesignation request to EPA for the Inland Sheboygan County 2008 ozone NAA on Oct. 9, 2019.
- Based on Sheboygan Haven monitoring data showing area was attaining standard and that area otherwise met all other requirements for redesignation.



# 2008 ozone reclassifications

- Reclassification (bump-up) to “serious” for Kenosha County was effective Sept. 23, 2019.
- One-year extension for Sheboygan County to attain (to July 20, 2019) also effective same day.
  - Area has since reviolated based on 2016-2018 date, but is also eligible for redesignation based on preliminary 2017-2019 data.

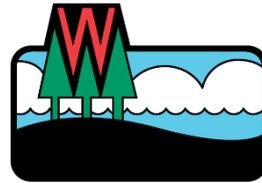






# Wisconsin's Long Term EOM Plan

- **Phase 1 (2019):** Deploy Mobile Air Monitoring Lab (MAML) at multiple O3 lakeshore sites
- **Phase 2 (2020-2021):** Phase 1 + Ceilometer, Pandora, Vertical Column O3 measurements on Water Tower
- **Phase 3 (2022-?):** Phase 1 +2 + Formaldehyde, Hydrocarbon, Biogenic VOCs, Monitoring from Lighthouses, and Ships



# Future of Wisconsin EOM and BEYOND

- Learning Experience
- Continually Evolving
- Collaboration with Externals

# 2020 Priority Topics and Draft Dates

**Andy Stewart**

# 2019 Priority Topics

- **Emerging federal regulation**
  - Emerging contaminants (PFAS)
  - New source review reform
  - Long term planning at the federal level
  - ACE rule
- **Ongoing efforts**
  - 2008/2015 ozone NAAQS implementation
  - SIP submittals and redesignation requests
  - Regional haze
  - Permit streamlining and other rulemaking
- **Opportunities**
  - Transparency in information (data, digitization)
  - Other states and organizations

## 2020 Meeting Dates

- Thursday, February 20
- Wednesday, May 27
- Thursday, August 20
- Wednesday, November 11