

Air Management Study Group Quarterly Meeting

August 5, 2021

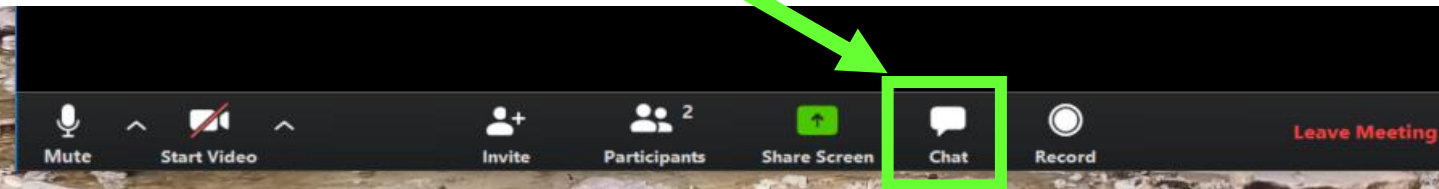
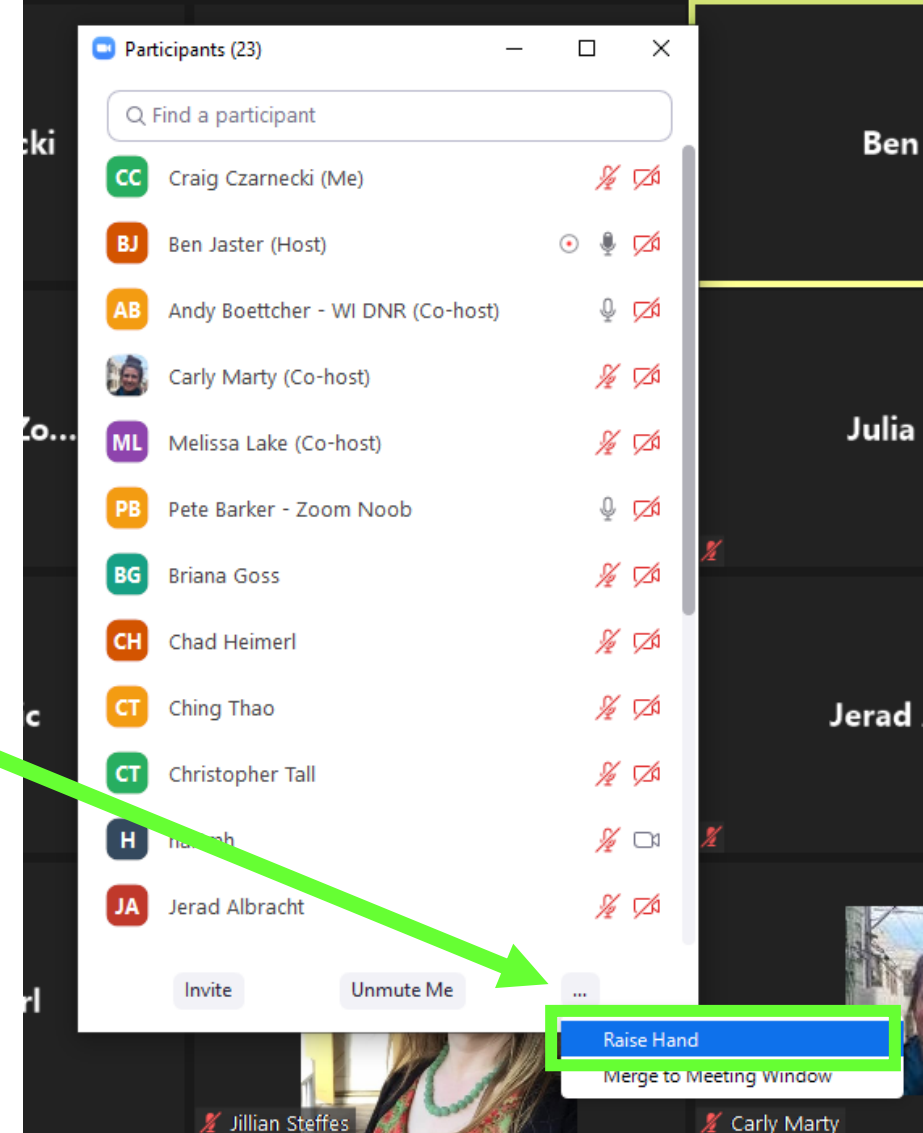
Zoom Guidelines

Hello Everyone,

We've developed some guidelines for this meeting, in the hopes of making this a smooth and enjoyable experience for all. Thank you in advance for your understanding.

Zoom Guidelines

- Questions will be addressed throughout the meeting.
- All participants will be muted and will not be able to unmute themselves.
- If you'd like to speak, use the "Raise Hand" button and you will be unmuted when appropriate.
- Questions may also be asked in the chat. The chat is setup so that all messages are sent to the host privately.



Zoom Guidelines

- The host will attempt to respond to all messages received, but some messages may be missed.
- Participants will join the meeting with their video disabled. We ask that you keep your video disabled for the duration of the meeting.

Zoom Guidelines

- We ask for patience while the Air Program conducts this meeting with this setup.
- Zoom technical support: **support.zoom.us**

Air Management Study Group Quarterly Meeting Agenda

- Opening remarks & agenda review
- Return to Workplace
- Hiring update
- Proposed guidance, rules and legislative update
- Proposed state legislation
- SIP Submittal Updates
- DERA Funding
- Ethylene Oxide
- NR 439 Focus Groups
- Member updates
- 2015 Ozone Standard Revised NAA
- Ozone Update

Return to Workplace

Gail Good
Air Program Director

Return to Workplace/Return to Field

- Program staff, consistent with the agency and other state agencies, were instructed to return to the office July 6.
- Telework agreements up to 60% authorized on a trial basis, with an evaluation prior to end of CY21
- In-person meetings can occur
 - We will offer November AMMSG in-person, with a virtual option (as we had previously)

SER Office – New Location

- DNR
Southeast
Region
Headquarters
- 1027 W. St.
Paul Avenue
Milwaukee,
WI 53233



Hiring Update

Gail Good
Air Program Director

Proposed Guidance and Rules Legislative Update

Kristin Hart
Permits and Stationary Source Modeling Section Chief

Jason Treutel
Air Quality Planning and Standards Section Chief

DNR Guidance

DNR Guidance in Drafting Phase	Description	Target Date
Municipal Solid Waste Landfills	Updates to guidance for MSW Landfills	Fall 2021
DNR Guidance in Public Comment	Description	Date Posted
None		
DNR Guidance in Final Review Phase		Target Posted
Regulation of Non-road and Motive Engine Testing Operations	Clarification on the stationary source status of different engine testing operations	August 2021
Next Day Deviations	Guidance on meeting next day deviation requirements	August 2021
Finalized DNR Guidance	Location	Final Date
None		

Proposed/Final DNR Rules

Proposed DNR rule	Description	Phase
AM-20-18 VOC RACT Revisions	Updates RACT rules in ch. NR 422 to meet current EPA Guidelines for Miscellaneous Metal and Plastic Parts Coatings, and Miscellaneous Industrial Adhesives, and other updates.	In Legislative review.
AM-10-19 2015 Ozone NAAQS	Incorporates the 2015 ozone NAAQS into state rule and makes related updates.	Awaiting Governor's approval. Next: Legislative review.
AM-31-19 Emissions inventory reporting	Revises NR 438 to align with federal Air Emissions Reporting Rule requirements, resolves inconsistencies between state and federal emissions reporting, and addresses ambiguities in current rule.	EIA comment period ended 7/14. Next: Public review period of proposed rule.
AM-05-21 NOx RACT Rule	Updates RACT rules in NR 428 to address implementation issues that have been identified since previous NR 428 revisions in 2001 & 2007	Scope Statement Next: NRB preliminary hearing authorization/scope approval

Proposed EPA Rules/Guidance

Proposed EPA rule/guidance	Docket	Comments due
National Emission Standards for Hazardous Air Pollutants: Municipal Solid Waste Landfills Residual Risk and Technology Review; Correction	EPA-HQ-OAR-2002-0047	05/28/21
California Motor Vehicle Pollution Control Standards; Advanced Clean Car Program; Reconsideration of a Previous Withdrawal of a Waiver of Preemption	EPA-HQ-OAR-2021-0257	07/06/21
Phasedown of Hydrofluorocarbons: Establishing the Allowance Allocation and Trading Program Under the American Innovation and Manufacturing Act	EPA-HQ-OAR-2021-0044	07/06/21

Finalized EPA Rules/Guidance

Finalized EPA rule/guidance	Link	Date finalized
Reclassification of Major Sources as Area Sources Under S. 112 Reverses once-in-always-in applicability or NESHAP	EPA-HQ-OAR-2019-0282	Signed 10/01/2020 not yet published
Project Emissions Accounting – affects netting analysis methodology in New Source Review permitting	EPA-HQ-OAR-2018-0048	Signed 10/23/2020 not yet published
NSR Error Corrections Rule	EPA-HQ-OAR-2019-0435	July 19, 2021
Rescinding the Rule on Increasing Consistency and Transparency in Considering Benefits and Costs in the Clean Air Act Rulemaking Process	EPA-HQ-OAR-2020-0044	May 14, 2021

SIP Submittal Updates

Jason Treutel
Air Quality Planning and Standards Section Chief

Regional Haze

- Round 2 Regional Haze SIP covers 2018-2028 period
- Public Comment / Legislative Review completed
- Draft SIP updated based on comments and updated resources
- Submitted to EPA 7/30/21

Rhineland SO₂

- Attainment Plan for Partial Oneida County
 - Supplemental Plan Submitted to EPA 3/29/21
 - EPA proposed approval on 7/22/21
 - Final approval expected to be published 12/31/21 when permit conditions go into effect
- Redesignation Request
 - Public Comment / Legislative Review completed
 - Draft SIP updated based on comments
 - Submitted to EPA 7/28/21

Manitowoc 2015 Ozone

- Redesignation Request
 - Work begun to update request based on revised nonattainment area based on 2018-2020 ozone data
 - Public comment period planned to begin in late September
 - Submittal to EPA planned for late November

Nonattainment New Source Review (NNSR)

- Public Comment / Legislative Review completed
- Draft SIP updated based on comments
- Submitted to EPA 7/27/21

DERA Funding

Jason Treutel
Air Quality Planning and Standards Section Chief

DERA Background

- DERA (Diesel Emissions Reduction Act, 2010) provides funding for various clean diesel grant programs. This includes:
 - DERA (state)
 - DERA (national)
 - Tribal and Insular Grants (national)
 - School Bus Rebates Program (national)
- Eligible projects are not the same across grant programs, but national and state grants are similar.
- Historically, WI primarily funded school bus projects.
 - 2019 this was updated to include nonroad vehicles.

DERA FY2020

- Approximately \$385,000 in grant funding available
- 18 Applicants submitted 32 eligible projects for consideration
- DNR awards
 - 12 projects with match funding; 1 project with partial match
 - 8 bus replacements
 - 2 construction equipment replacements
 - 2 stationary pump replacements
 - Replacement of 2 diesel tractors with 1 electric tractor

DERA FY2021

- Grant funding expected in October 2021
- <https://dnr.wi.gov/Aid/CleanDiesel.html>
- Questions regarding this funding opportunity can be directed to DNRCleanDiesel@wisconsin.gov.

Ethylene Oxide

Maria Hill
Compliance and Emissions Inventory Section Chief

Ethylene Oxide Update

- EPA 2016 risk factor resulted in the unit risk factor being more toxic (higher unit risk factor) by a factor of 57 times more toxic.
- May 6, 2021, the Office of the Inspector General (OIG) posted its [latest report on ethylene oxide](#).
- [DNR ethylene oxide website](#) has been updated and the department continues to work with Wisconsin sources and EPA.
- EPA recently stated it will reconsider the risk information for EtO and consideration of lower risk findings as alternatives.

Permit Surveys

Kristin Hart

Permits and Stationary Source Modeling Section Chief

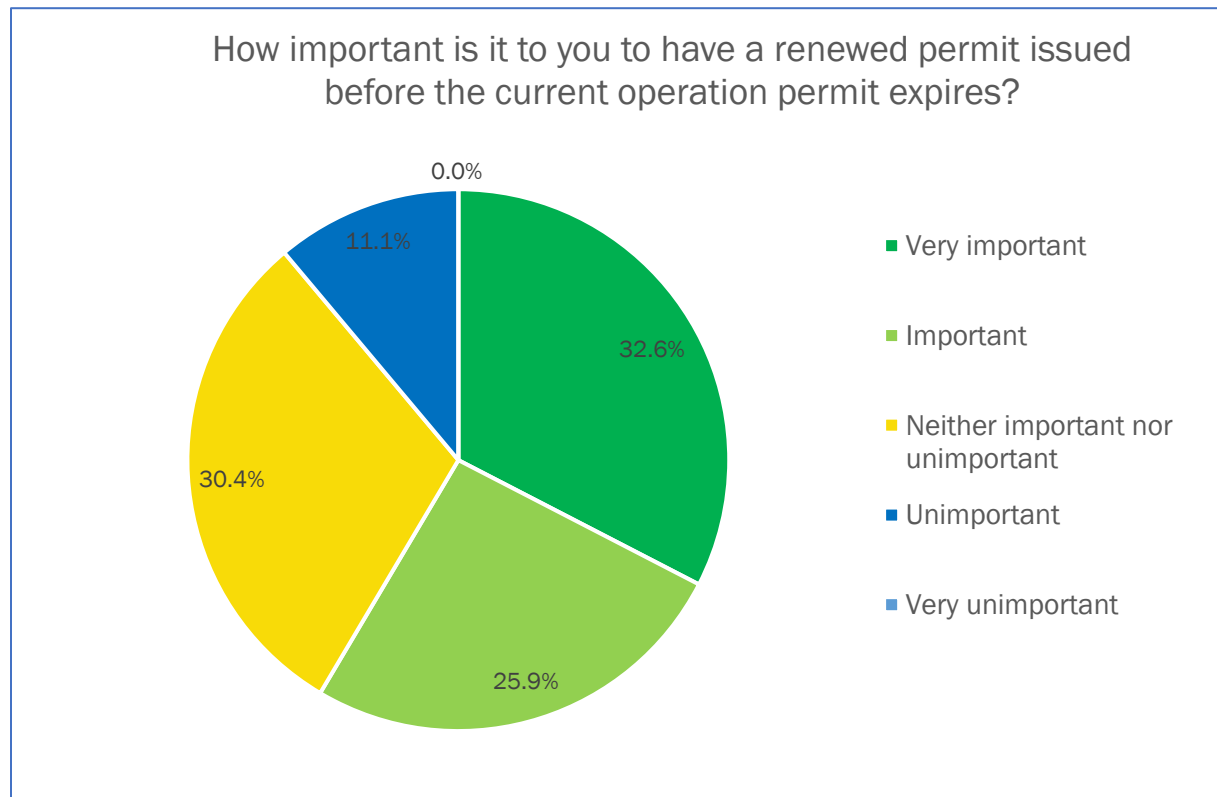
Surveying Sources on Operation Permitting

DNR wants feedback on the operation permit process

- How's our communication
- How valuable is an operation permit to the permittee
- How can DNR improve
- 3 separate surveys have been developed
 - Overall value of the operation permit- send out January 2021 to all Title V operation permit holders
 - Feedback on the application process - surveys are being sent the month after application is received
 - Feedback on the permitting process - surveys are being sent the month after the renewal is issued

2020 Overall Operation Permit Survey Results

Of 135 respondents, 58.5 percent indicated it was important or very important to have a renewed permit before their current operation permit expires.



“Having a current active permit demonstrates consideration for and conformance to existing regulations”

“We strive for compliance and no gaps in documentation”

“The department expects me to act on time, the department should be held to the same standard.”

“Keeping all permits consistent with current operations is important to avoid any confusion that operators may have in maintaining compliance initiatives.”

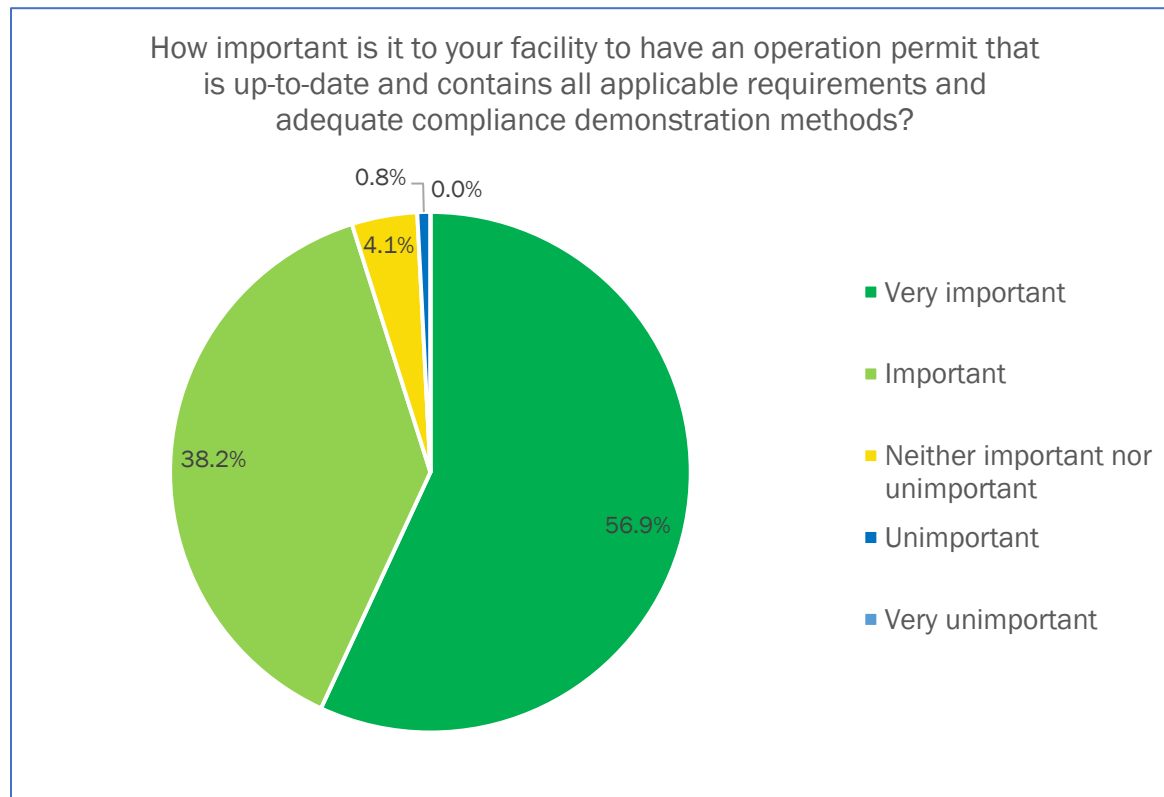
“Public perception of the company’s ability to perform its duty.”

“It helps with budget and operational planning if we have the certainty of what is in the new permit.”

“It increases our comfort level knowing that the permit is complete and signed. Operating under a permit shield is an uncertainty that we would prefer to avoid.”

2020 Operation Permit Survey Results

Of 123 respondents, 95.1 percent indicated it was important or very important to have an operation permit that is up-to-date and contains all applicable requirements and adequate compliance demonstration methods.



"It is important to have an up-to-date permit to maintain clarity of requirements and avoid questions. It is also a measure of how we run our business."

"Clarify records required to demonstrate compliance to DNR inspector"

"It ensures we have consistent and clear permit conditions and obligations spelled out."

"An up-to-date permit allows facility operations to easily reference appropriate emission limitations and compliance demonstration methods."

"Good to have one document we can use to find all our compliance requirements."

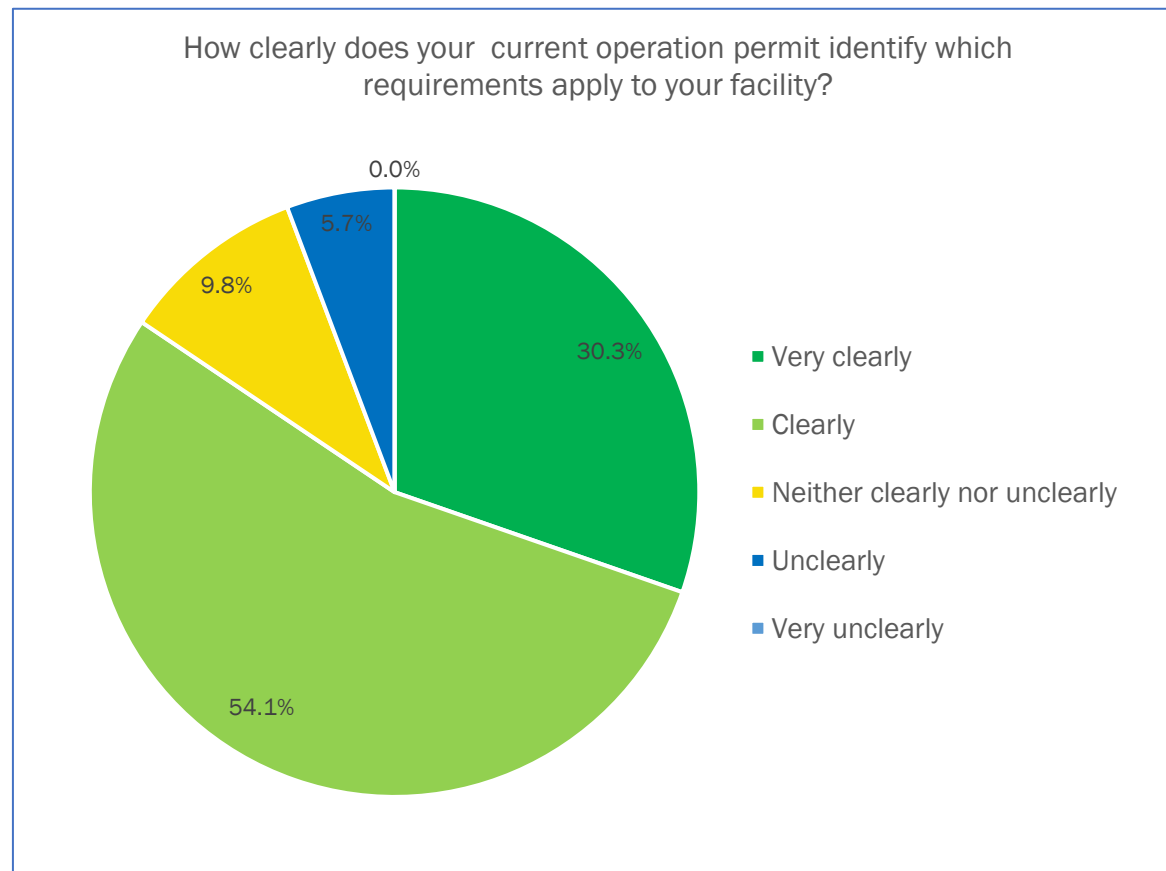
"For third party inquiries."

"It is important so we know what to do to be in compliance."

"To keep up with changing federal regulations"

2020 Operation Permit Survey Results

Of 122 respondents, 84.4 percent indicated that their current operation permit clearly or very clearly identifies which requirements apply to their facility.



How could operation permits be improved to clarify applicable requirements?

"The compliance demonstration column should state plain language tasks, not cite law/code/rule."

"Monitoring requirements should have the frequency of monitoring and the averaging period clearly stated."

"Applicable portions of the NESHAP should be added."

"NESHAP requirements are unclear because the permit writer will include the entire regulation leaving the facility and compliance inspector to determine what does and does not apply. This could be improved by only including the applicable requirements."

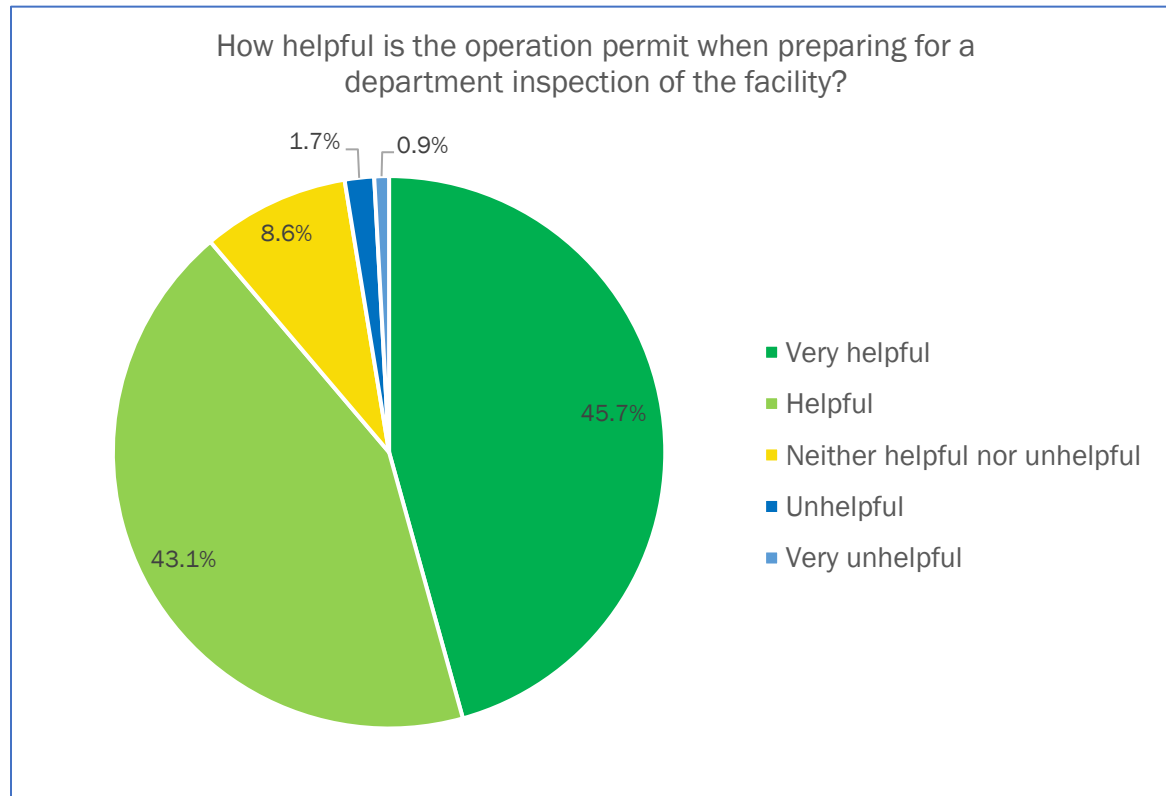
"Consolidating similar emission sources: Tanks, combustion devices, LDAR, etc."

"I feel that our operation permits are clear enough."

"Make sure that all requirements listed in the permit follow the same language that is in the regulation."

2020 Operation Permit Survey Results

Of 116 respondents, 88.8 percent indicated that their current operation permit is helpful or very helpful when preparing for a department inspection of the facility.



How could operation permits be made more useful when preparing for an inspection?

“Not just helpful for inspections, we reference to our permit at various times throughout the year.”

“Perhaps an inspection guideline provided by the inspector prior to arrival time would help.”

“List the documents required during the inspection.”

“WDNR staff are the most helpful resource in pre-inspection preparations.”

“Better wording on record keeping requirements. Especially maintenance.”

“Current permit is very helpful.”

“The compliance demonstration column should contain all monitoring and recordkeeping requirements in one place. Align the recordkeeping and monitoring requirements to match the limitations and compliance demonstration methods.”

2020 Operation Permit Survey Results

Is there anything else you would like DNR to know about your experience with Air Permits?

"Just that renewing is painful and takes too long."

"Permit staff have been a good partner to work with on improving the process and creating clearer permits for the last 6 years."

"Nice to have some Part II requirements such as instrument calibration and next day deviation reporting in Part I of the permit. Incorporation of federal requirements such as RICE can be problematic and inconsistent."

"We routinely work very closely with the permit writers at the department throughout the renewal process to make accurate updates to our operation permits. We feel this is a very productive process for all parties involved."

"I work in multiple regions. Regional consistency is a big deal to me."

"Interpretation of various language within our current air permit has proven to be difficult at times when communicating with various staff within the department. I believe that some of the suggestions that I have shared in this survey may be helpful."

"The department has been good about accepting suggested language changes to draft permits to make it more clear to us on what is required."

"The DNR has always been very helpful and easy to work with when renewing or requesting modifications to our air permit."

"I am overall pleased with the air operating permits from WDNR. Please continue to keep requirements, compliance demonstrations and recordkeeping requirements clear."

NR 439 Focus Groups

Maria Hill
Compliance and Emissions Inventory Section Chief

NR 439 Focus Groups

Three listening sessions to collect input:

- Aug 26, 2021, 9-11 am
- Sep 22, 2021, 2-4 pm
- Oct 11, 2021, 9-11 am

Agenda:

- Overview of rule development process
- Summary of chapter NR 439 Wis. Adm. Code
- Attendee opportunity for input on each section of NR 439 Wis. Adm. Code
- Summary and next steps

Member Updates

Designations for the 2008 and 2015 ozone standards

Doug Aburano, Chief, Air Programs Branch
John Mooney, Director, Air & Radiation Division
U.S. Environmental Protection Agency, Region 5

Background of 2015 ozone standards

- ▶ On October 1, 2015, EPA strengthened the National Ambient Air Quality Standards (NAAQS) for ground-level ozone to 70 parts per billion (ppb)
- ▶ Whenever EPA establishes a new NAAQS, the Clean Air Act (CAA) requires EPA to designate all areas of the country based on which areas are meeting or not meeting the NAAQS

Types of area designations

- ▶ **Attainment**
 - ▶ An area that meets the primary or secondary standard for a NAAQS
- ▶ **Nonattainment**
 - ▶ An area that does not meet the primary or secondary standard for a NAAQS
 - ▶ An area that contributes to air quality in a nearby area that does not meet the primary or secondary standard for a NAAQS
- ▶ **Unclassifiable**
 - ▶ An area that cannot be classified on the basis of available information

The designations process

- ▶ States and tribes submit to EPA a list of areas (and associated boundaries) recommended as nonattainment, attainment, and unclassifiable
 - ▶ Deadline is one year from promulgation of a new or revised NAAQS
- ▶ EPA notifies states and tribes of EPA's intended modifications to their recommendations
 - ▶ Deadline is 120 days prior to final designations
- ▶ EPA makes final nonattainment designations

EPA's five factor analysis

- ▶ Generally, where there is a violating monitor, there is a nonattainment designation
- ▶ The geographic extent or boundary of the area is determined using EPA's five factor analysis
 1. Air quality data
 2. Emissions and emissions-related data
 3. Meteorology
 4. Geography and topography
 5. Jurisdictional boundaries

Initial designations

- ▶ In 2018, EPA designated 52 areas as nonattainment for the 2015 ozone NAAQS
- ▶ EPA designated the remaining portions of the country as attainment/unclassifiable for the 2015 ozone NAAQS

Initial designations in Wisconsin

- ▶ In Wisconsin, EPA designated 5 nonattainment areas:
 - ▶ Chicago, IL-IN-WI
 - ▶ Northern Milwaukee/Ozaukee Shoreline, WI
 - ▶ Sheboygan County, WI
 - ▶ Manitowoc County, WI
 - ▶ Door County, WI

Petitions for reconsideration

- ▶ Multiple petitioners (i.e., several environmental and public health advocacy groups, three local government agencies, and the state of Illinois) filed six petitions for review challenging the EPA's 2015 ozone NAAQS designations promulgated on April 30, 2018
- ▶ The District of Columbia Circuit Court consolidated the petitions into a single case: *Clean Wisconsin v. EPA*

Petitioners' arguments

- ▶ Collectively, the petitioners challenged aspects of EPA's decisions associated with nine nonattainment areas
 - ▶ Petitioners challenged all five nonattainment areas in Wisconsin
- ▶ Petitioners primarily argued that EPA improperly designated counties (in whole or part) as attainment that should have been designated as nonattainment based on contributions to nearby counties with violating monitors

EPA's brief

- ▶ After considering petitioners' arguments, EPA requested voluntary remand without vacatur of the original designation decisions associated with four nonattainment areas to further review those designations
 - ▶ In Wisconsin, EPA requested voluntary remand for Northern Milwaukee/Ozaukee Shoreline, WI, Manitowoc County, WI, and the Wisconsin portion of Chicago, IL-IN-WI
- ▶ EPA defended the original designation decisions associated with the remaining areas
 - ▶ In Wisconsin, EPA defended the original decisions for Sheboygan County, WI and Door County, WI

The court's decision

- ▶ On July 10, 2020, the DC Circuit Court issued its decision on the 2018 designations
- ▶ The court granted EPA's request for voluntary remand associated with four nonattainment areas
 - ▶ In Wisconsin, the court granted voluntary remand for Northern Milwaukee/Ozaukee Shoreline, WI, Manitowoc County, WI, and the Wisconsin portion of Chicago, IL-IN-WI
- ▶ The court upheld EPA's original decision for Lake County, IN, associated with the Chicago, IL-IN-WI area
- ▶ The court sided with petitioners for all other areas, and the court remanded those areas to EPA
 - ▶ In Wisconsin, the court sided with petitioners for Sheboygan County, WI and Door County, WI

EPA's revised designations

- ▶ In its decision the court required EPA to “issue revised designations as expeditiously as practicable”
- ▶ EPA reevaluated the designations for the remanded counties, and considered the specific facts and circumstances of the areas using the existing record
- ▶ On June 14, 2021, EPA published a final action revising the boundaries for six nonattainment areas in four states (Illinois, Indiana, Missouri and Wisconsin) and reaffirming the 2018 designation associated with Ottawa County, MI

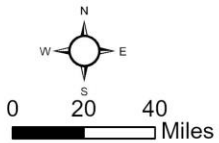
Revised 2015 Ozone NAAQS Nonattainment Area Designations

All Wisconsin Areas

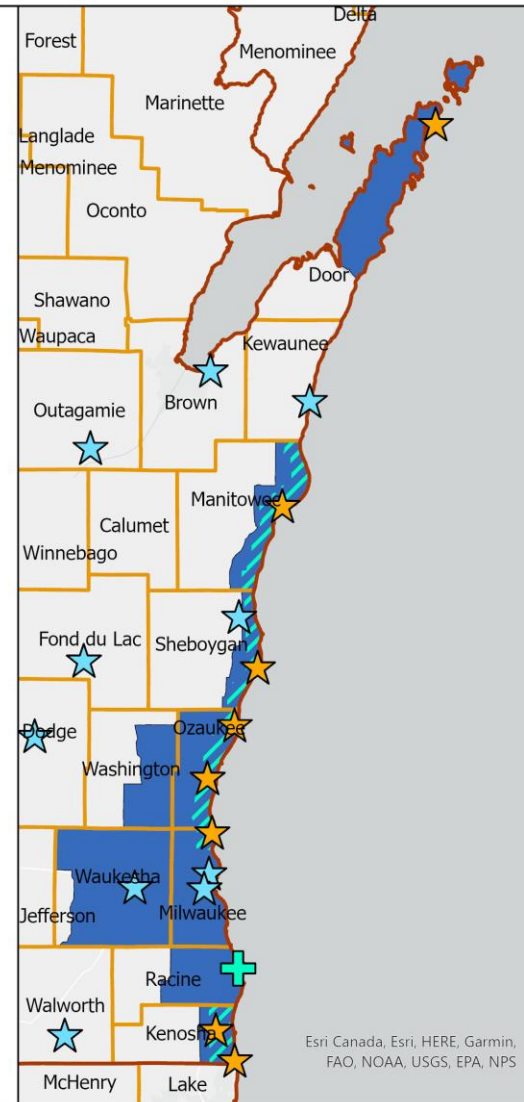
-  State Boundary
-  County Boundary
-  2018 Final Designation
-  2021 Revised Final Designation

Ozone Monitor (2014-2016 Data)

-  Attaining
-  Violating
-  No DV



Data from EPA's revised designations final rule (signed 5/24/2021): <https://www.epa.gov/ozone-designations/revised-air-quality-designations2015-ozone-national-ambient-air-quality>



Esri Canada, Esri, HERE, Garmin, FAO, NOAA, USGS, EPA, NPS

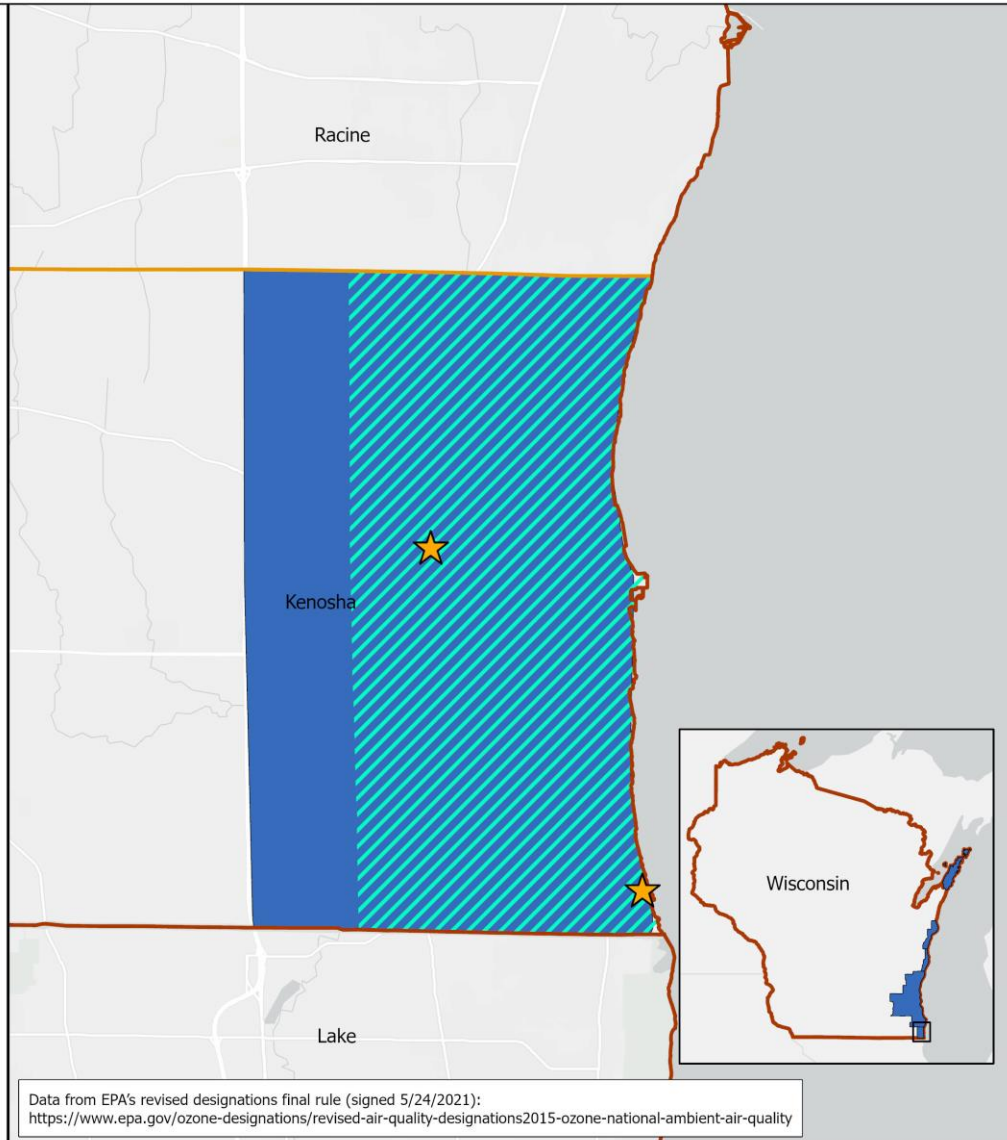
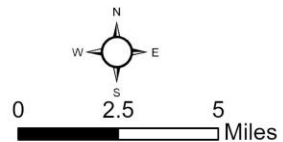
Chicago, IL-IN-WI area

- ▶ In the 2018 final designations, the Wisconsin portion of the Chicago, IL-IN-WI nonattainment area included a portion of Kenosha County
- ▶ In the 2021 revised final designations, the nonattainment area is being expanded to include a larger portion of Kenosha County
- ▶ In Kenosha County, the revised boundary for the 2015 ozone NAAQS is consistent with the existing boundary for the Chicago-Naperville, IL-IN-WI area for the 2008 ozone NAAQS; it is also consistent with the boundary included in EPA's 2017 intended designation (120-day) action for the 2015 ozone NAAQS

Revised 2015 Ozone NAAQS Nonattainment Area Designations

Kenosha County

-  State Boundary
 -  County Boundary
 -  2018 Final Designation
 -  2021 Revised Final Designation
- Ozone Monitor (2014-2016 Data)
-  Attaining
 -  Violating
 -  No DV




Data from EPA's revised designations final rule (signed 5/24/2021): <https://www.epa.gov/ozone-designations/revised-air-quality-designations2015-ozone-national-ambient-air-quality>

Milwaukee, WI area

- ▶ In the 2018 final designations, the Northern Milwaukee/Ozaukee Shoreline, WI nonattainment area included portions of Milwaukee County and Ozaukee County
- ▶ In the 2021 revised final designations, the nonattainment area is being expanded into the larger Milwaukee, WI area, which includes the entirety of Milwaukee County and Ozaukee County and portions of Racine County, Waukesha County, and Washington County
- ▶ The revised boundary includes a smaller geographic area than the boundary included in EPA's 2017 intended designation (120-day) action


Revised 2015 Ozone NAAQS Nonattainment Area Designations

Milwaukee Area
(Ozaukee, Washington,
Waukesha, Milwaukee,
and Racine Counties)

 State Boundary

 County Boundary

 2018 Final Designation

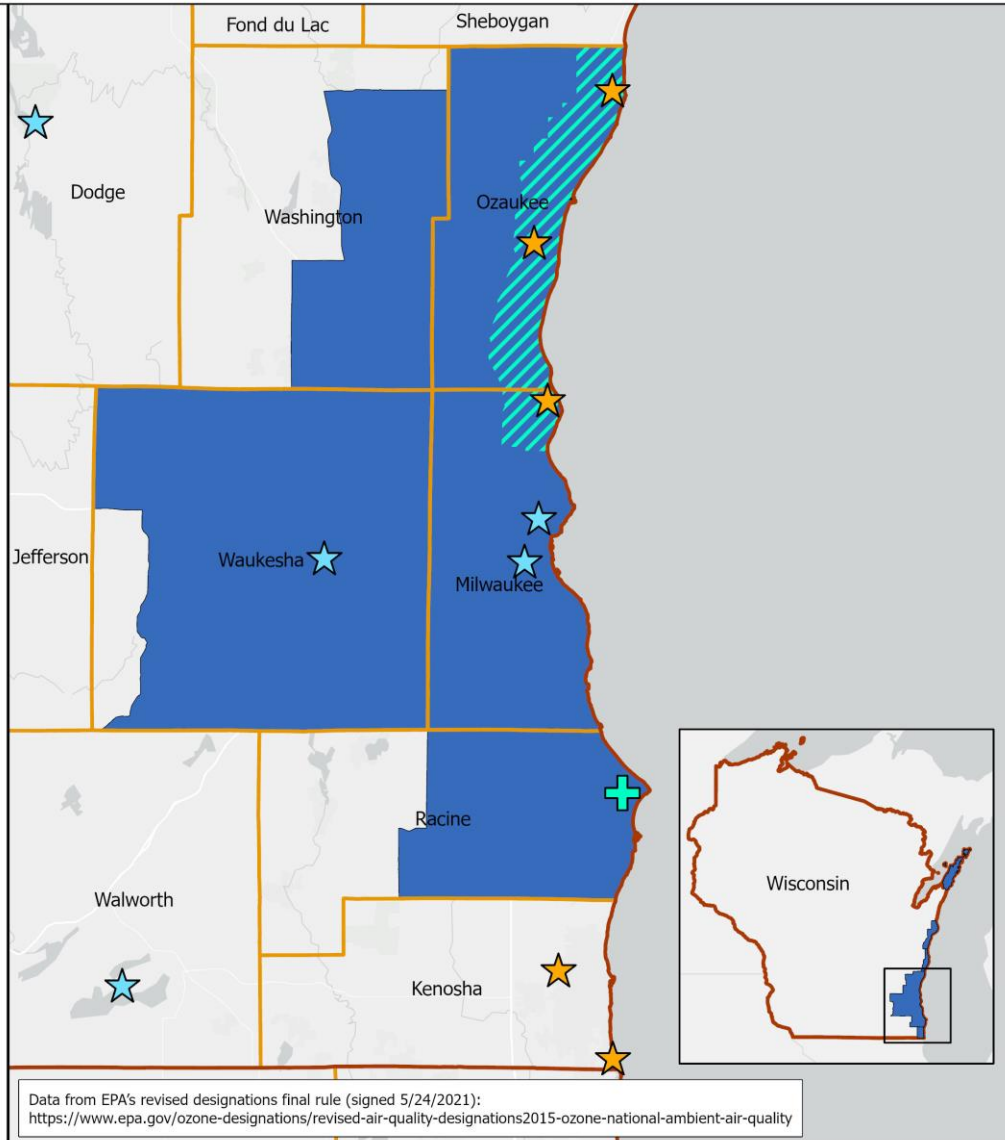
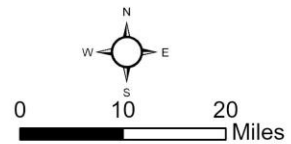
 2021 Revised
Final Designation

Ozone Monitor (2014-2016 Data)

 Attaining

 Violating

 No DV










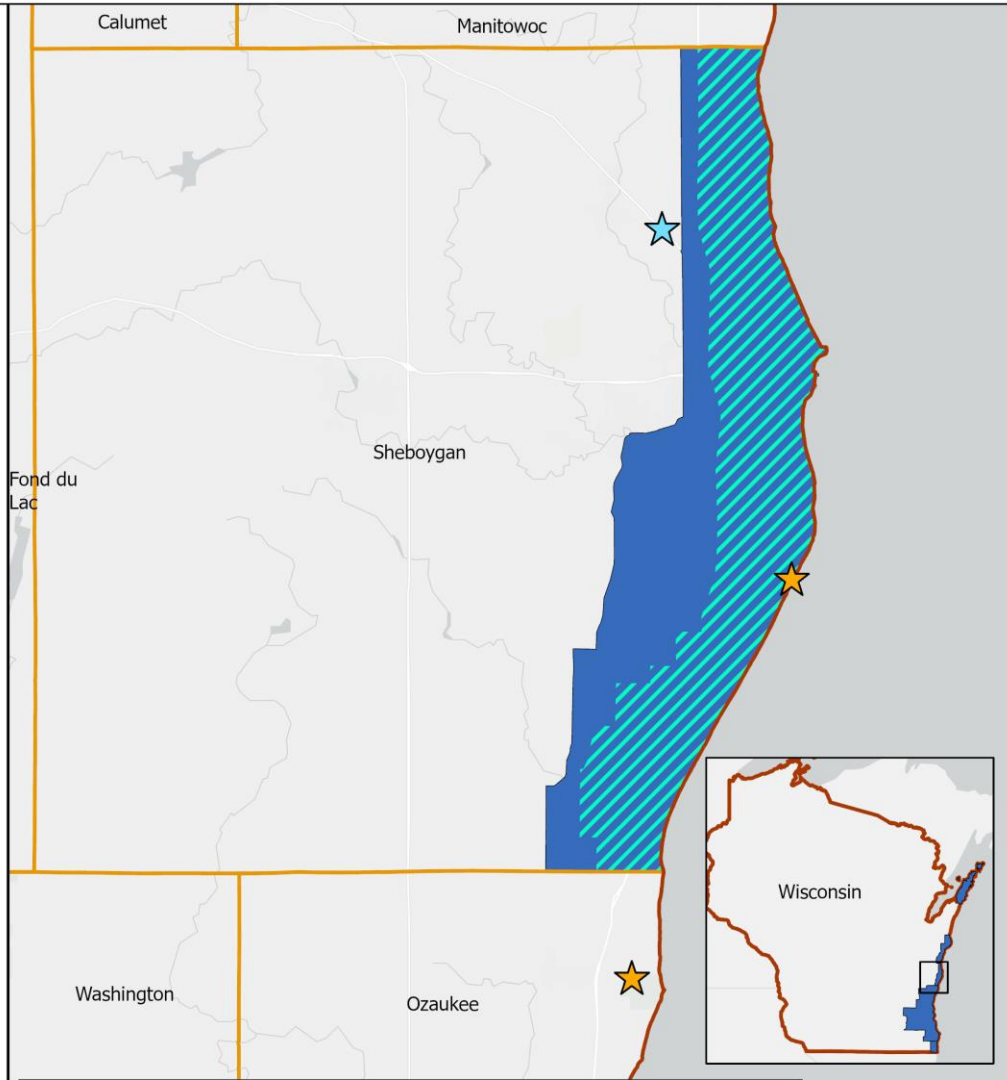
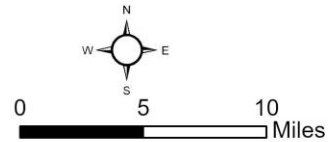
Sheboygan County, WI

- ▶ In the 2018 final designations, the Sheboygan County, WI nonattainment area included a portion of Sheboygan County
- ▶ In the 2021 revised final designations, the nonattainment area is being expanded into a larger partial-county area
- ▶ The revised boundary is consistent with the boundary included in EPA's 2017 intended designation (120-day) action

Revised 2015 Ozone NAAQS Nonattainment Area Designations

Sheboygan County

-  State Boundary
 -  County Boundary
 -  2018 Final Designation
 -  2021 Revised Final Designation
- Ozone Monitor (2014-2016 Data)
-  Attaining
 -  Violating
 -  No DV





Data from EPA's revised designations final rule (signed 5/24/2021): <https://www.epa.gov/ozone-designations/revised-air-quality-designations2015-ozone-national-ambient-air-quality>

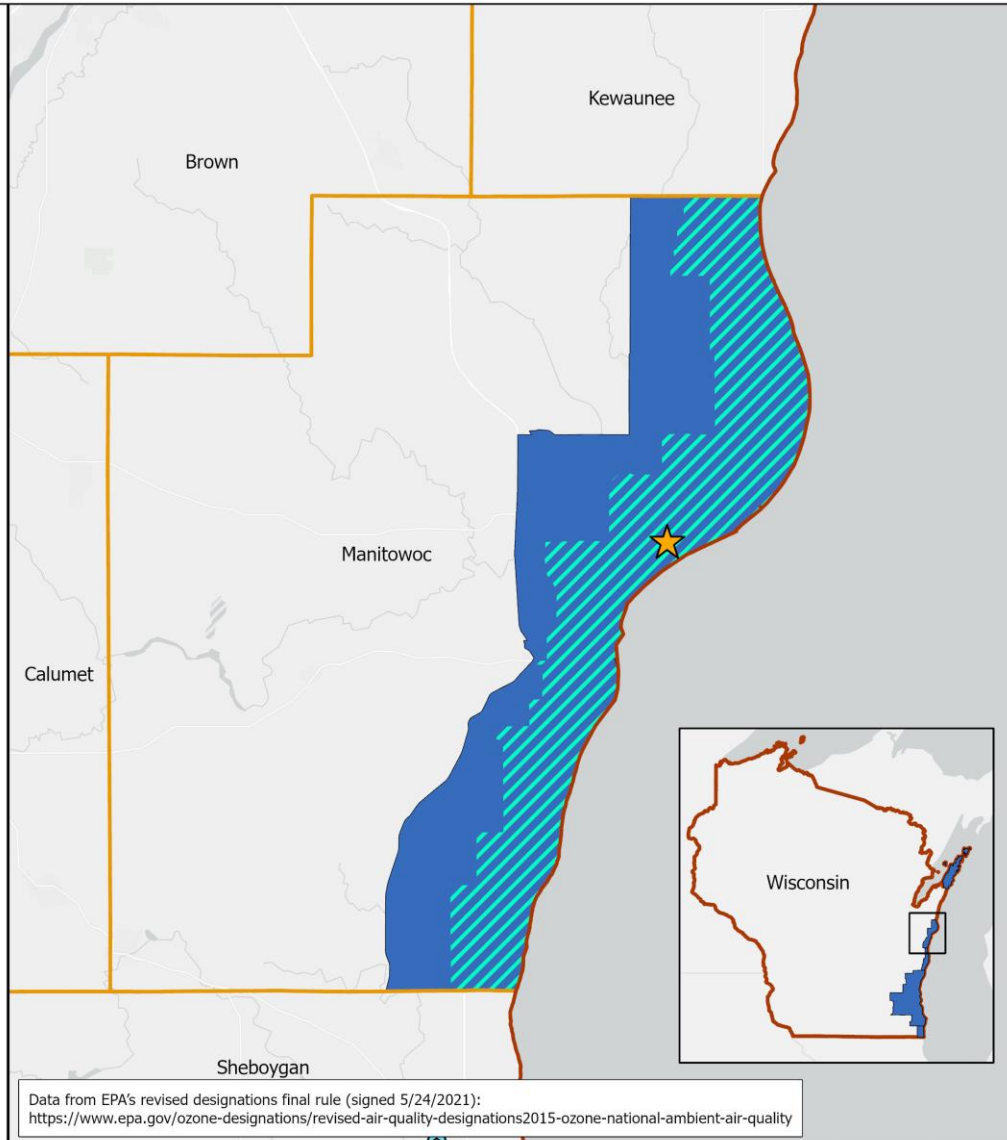
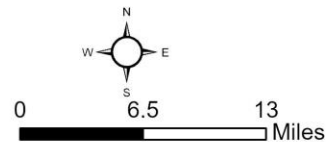
Manitowoc County, WI

- ▶ In the 2018 final designations, the Manitowoc County, WI nonattainment area included a portion of Manitowoc County
- ▶ In the 2021 revised final designations, the nonattainment area is being expanded into a larger partial-county area
- ▶ The revised boundary is consistent with the boundary included in EPA's 2017 intended designation (120-day) action

Revised 2015 Ozone NAAQS Nonattainment Area Designations

Manitowoc County

-  State Boundary
 -  County Boundary
 -  2018 Final Designation
 -  2021 Revised Final Designation
- Ozone Monitor (2014-2016 Data)
-  Attaining
 -  Violating
 -  No DV



Data from EPA's revised designations final rule (signed 5/24/2021): <https://www.epa.gov/ozone-designations/revised-air-quality-designations2015-ozone-national-ambient-air-quality>

Door County, WI

- ▶ In the 2018 final designations, the Door County, WI nonattainment area included a portion of Door County
- ▶ In the 2021 revised final designations, the nonattainment area is being expanded into a larger partial-county area
- ▶ The revised boundary is consistent with the boundary included in EPA's 2017 intended designation (120-day) action

Revised 2015 Ozone NAAQS Nonattainment Area Designations

Door County

State Boundary

County Boundary

2018 Final Designation

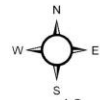
2021 Revised Final Designation

Ozone Monitor (2014-2016 Data)

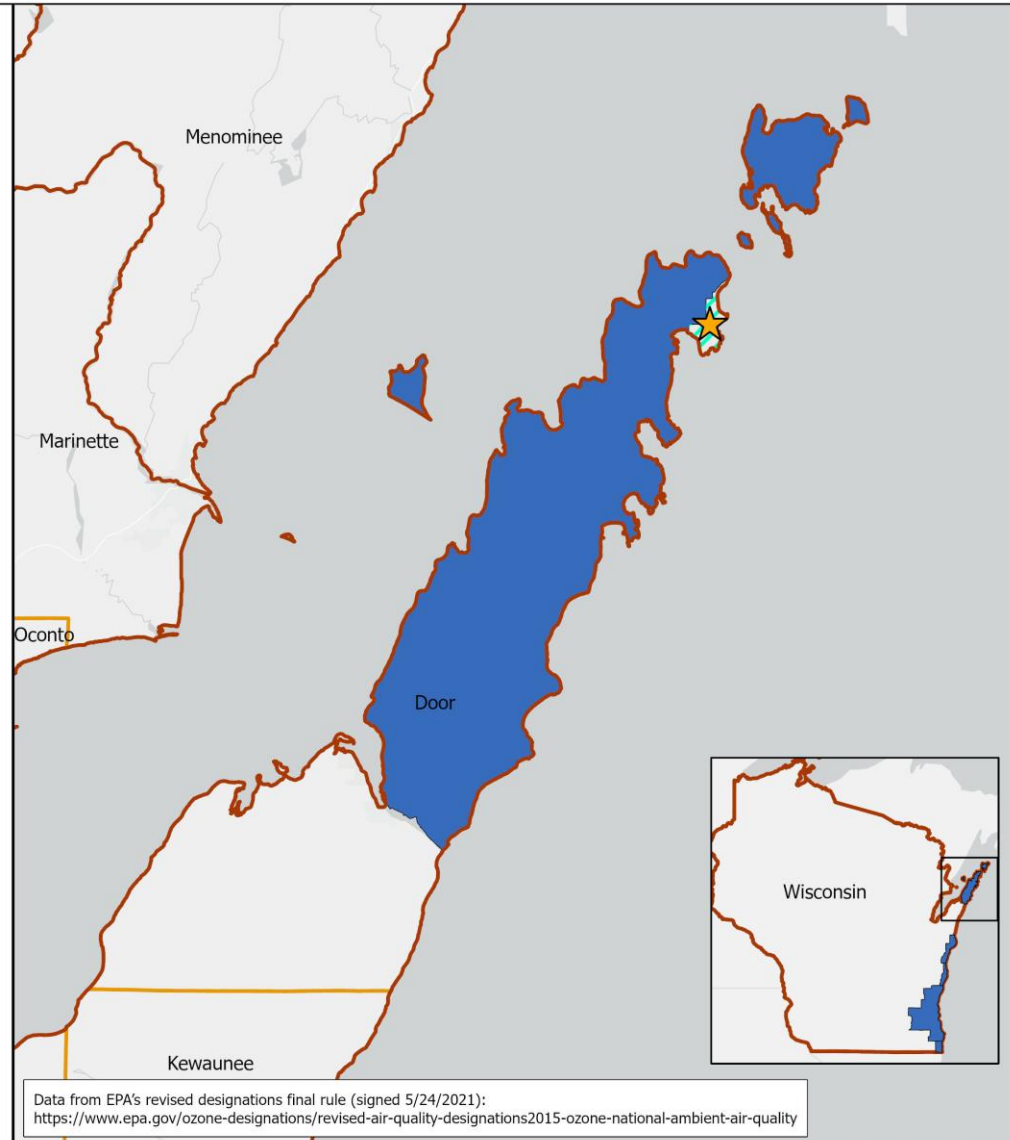
Attaining

Violating

No DV



0 10 20 Miles



Applicable dates

- ▶ The revised designations for the 2015 ozone NAAQS became effective on July 14, 2021
- ▶ The revised nonattainment areas in Wisconsin retain their Marginal classification, and the Marginal attainment date for the 2015 ozone NAAQS of August 3, 2021, is applicable to the areas
- ▶ The Serious attainment date for the 2008 ozone NAAQS of July 20, 2021, is applicable to the Chicago-Naperville, IL-IN-WI area
- ▶ EPA will propose and finalize determinations of attainment by the attainment date, attainment date extensions, and reclassifications (“bump-ups”)
 - ▶ For the 2008 ozone NAAQS, EPA’s deadline is January 20, 2022
 - ▶ For the 2015 ozone NAAQS, EPA’s deadline is February 3, 2022

Upcoming actions and redesignations

Area	Certified 2018-2020 DV	EPA's likely action	Preliminary 2019-2021 DV	Potential for redesignation
Chicago 2008 standard	77 ppb	Bump-up to Severe	74 ppb	Yes
Chicago 2015 standard	77 ppb	Bump-up to Moderate	74 ppb	No
Milwaukee 2015 standard	73 ppb	Bump-up to Moderate	73 ppb	No
Sheboygan 2015 standard	75 ppb	Bump-up to Moderate	72 ppb	No
Manitowoc 2015 standard	70 ppb	Determination of attainment	68 ppb	Yes
Door 2015 standard	72 ppb	Protection from bump-up	70 ppb	Yes

Continuing work

- ▶ EPA Region 5 and the Wisconsin Department of Natural Resources (WDNR) are working together to address implementation concerns
- ▶ When an area attains the NAAQS, EPA Region 5 and WDNR will work together to redesignate the area to attainment

Ozone Topics

Katie Praedel
Monitoring Section Chief

Status of the 2021 Ozone Season

Top Four 8-Hour Average Ozone Concentrations – as of **August 2, 2021**

**Current
Design Values
based on
Preliminary
Data**

Site	Concentrations (ppb)				2021 Critical values		Days at/above C.V.		Current 2019-2021 2015 NAAQS "DV"
	1st high	2nd high	3rd high	4th high	2008 std	2015 std	2008 std	2015 std	
Chiwaukee	80	80	79	79	83	68	0	10	74
Grafton	74	72	70	69	87	72	0	2	70
Kenosha-Water Tower	81	81	72	70	84	69	0	5	71
Newport	78	76	70	69	87	72	0	2	70
Racine	78	78	78	76	85	70	0	6	73
Sheboygan - Kohler Andrae	78	77	73	72	84	69	0	7	72
Northbrook (IL)*	76	75	75	74	80	65	0	14	74
Zion (IL)*	81	80	79	77	86	71	0	7	73
Chicago – SWFP (IL)*	79	77	77	72	80	65	0	10	73
Chicago – ALSIP (IL)*	84	72	70	68	82	67	1	5	71

*Illinois Data are obtained from LADCO Region Ozone DV Tracking Spreadsheet by Angie Dickens – as of **August 2, 2021**

Table for reference: <https://docs.google.com/spreadsheets/d/1M9rma4vELIZmojYVLIzdfkZc0tX44wjjgUdT43yZguhw/edit#gid=1761003760>

NCCO Ozone DV Predictor Tool is also used as a preliminary source when Angie's spreadsheet is not available for recent days/events: <http://airquality.climate.ncsu.edu/dv/>

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.

Enhanced Ozone Monitoring

- DNR Efforts
 - Continuous NO_x and tracer pollutants
 - Comparative Carbonyl and VOC samples in Sheboygan and Kenosha to determine originating origins of ozone precursors (PAMS suite) impacting those monitors
 - Five event (exceedance days)
 - Three background days



Enhanced Ozone Monitoring

- External efforts
 - Wind Lidars and pandoras for upper air column measurements
 - In cooperation with U.S. EPA and UW

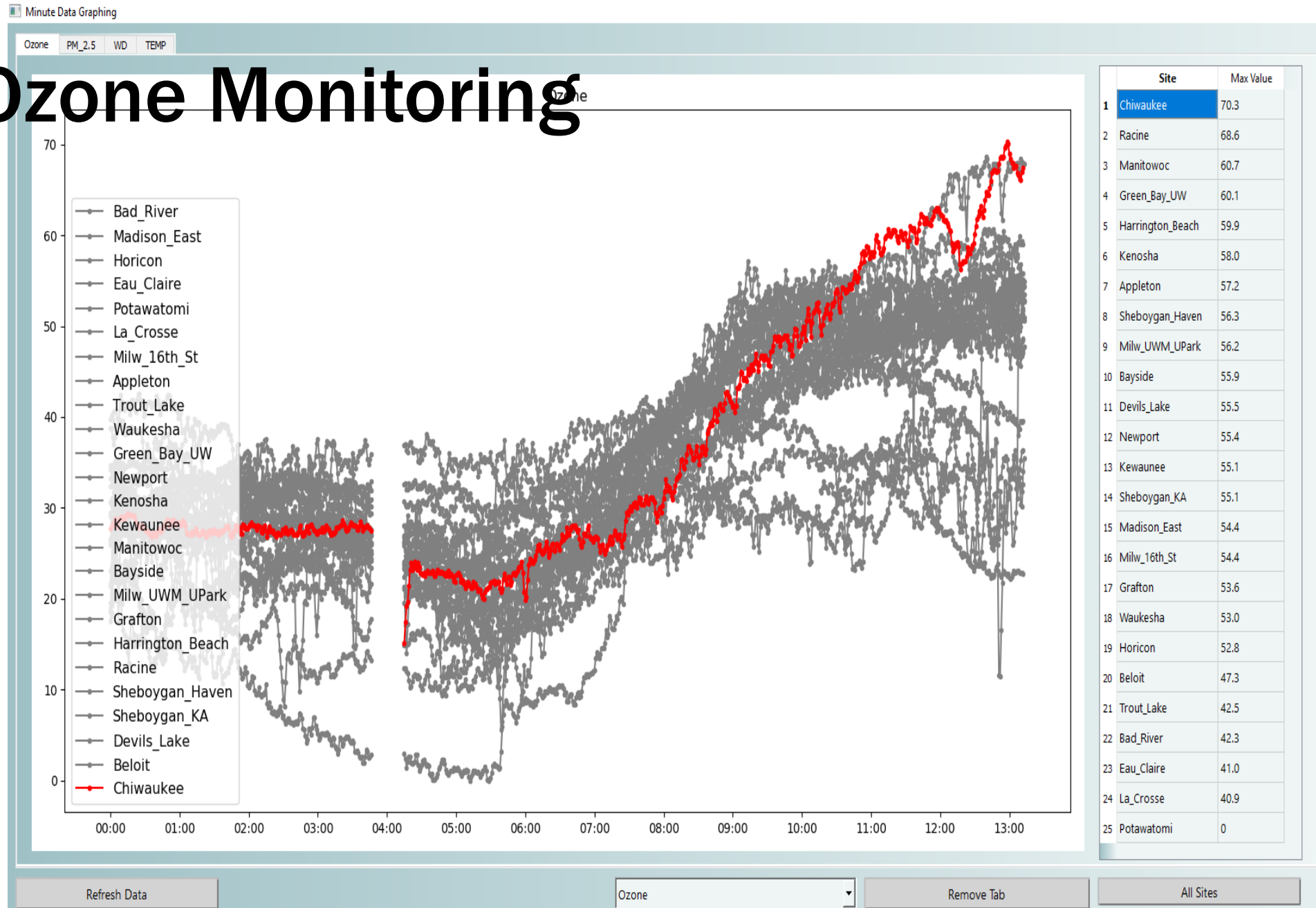


Enhanced Ozone Monitoring

- External efforts
 - Drones for upper air column measurements
 - In cooperation with UW Eau Claire, Purdue and University of CO
 - National Science Foundation funded

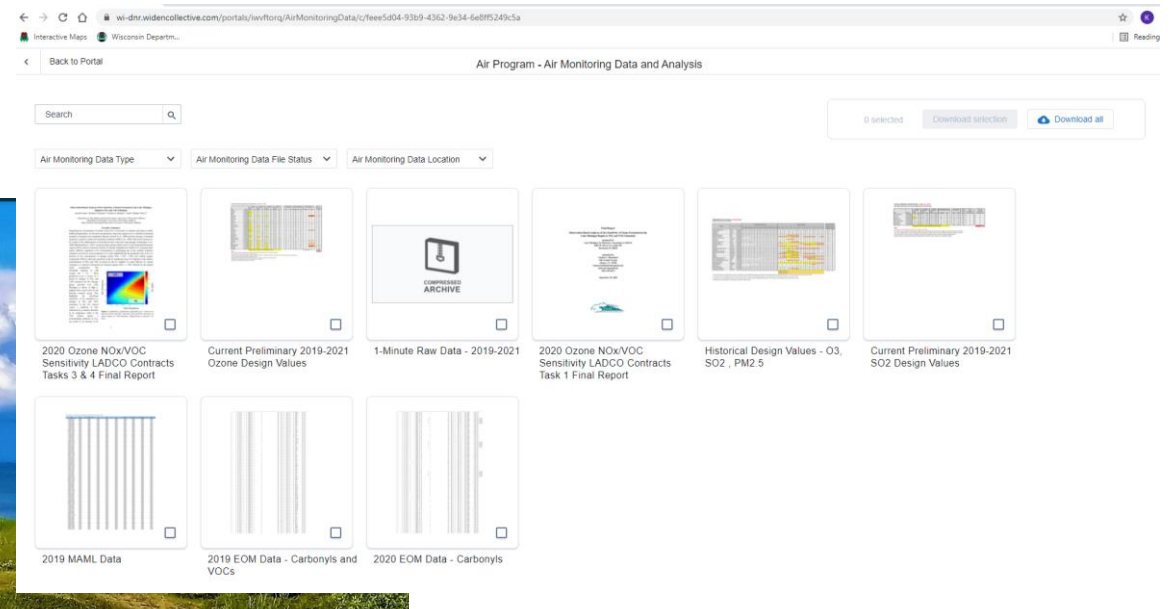
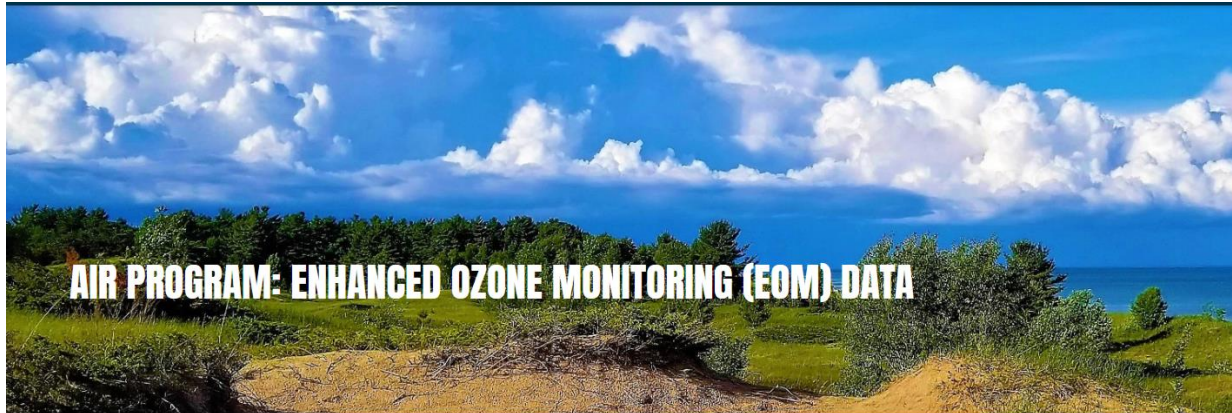


Enhanced Ozone Monitoring



- DNR Communication Efforts
 - Improved forecasting tools and access to real time data

WIDEN Page



The DNR is federally required to conduct Enhanced Ozone Monitoring (EOM). The EOM plan includes monitoring ozone concentrations and ozone precursors at locations along the lake Michigan shoreline to understand the unique chemistry that impacts the ozone concentrations in Wisconsin. In addition to monitoring and analyzing data collected, DNR supports external partners in collecting ozone precursor and meteorological data.

The EOM data collection primarily consists of raw data sets and interim draft analyses that DNR is sharing with research partners. The collection includes data from DNR regulatory monitors, special purpose monitors, non-regulatory methods and experimental data sets collected to support monitoring method development and various research projects.

This portal is available to ensure EOM-related data and documents are easily accessible to external partners and works best in a modern web browser, such as Google Chrome or Microsoft Edge. If you need assistance, please contact [Cody Converse](#) or [Erin Howard](#).

- <https://wi-dnr.widencollective.com/portals/iwvftorq/AirMonitoringData>
- Best in modern web browsers such as Chrome or Edge

CONNECT WITH US

Next Meeting

Thursday November 4, 2021



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OFF THE RECORD"