Meeting Summary Air Management Advisory Group Meeting Thursday, December 5, 2024

Renee Bashel, Interested Party Dan Bell, Alliant Energy Ron Binzley, DNR Philip Bower, DNR Chelsea Chandler, Clean Wisconsin* Rebecca Clarke, SORA Molly Collins, American Lung Assoc. Natalene Cummings, Forest Co. Potawatomi* Craig Czarnecki, DNR Brianna Denk, DNR Eric Eckert, Bemis Manufacturing Co. Beth Finzer, DNR Beth Freymiller, Donaldson Company Michele Frozena, Foth Infrastructure and Environment Ciaran Gallagher, Clean Wisconsin* Gail Good, DNR Ashley Gray, DNR Jeremy Gruse, Custom Fiberglass Molding Erik Gulbranson, Dairyland Power Coop. Seth Hamilton, Cenovus Energy Art Harrington, Godfrey & Kahn S.C.* Kristin Hart, DNR Maria Hill, DNR Joe Hoch, Wisconsin Utilities Association* Jodi Jensen, WTBA Reid Jenson, Cenovus Energy Nathan Kilger, Bad River Band of Lake Superior

Chippewa Jeremy Luebke, Geosyntec Consultants Mike Kolb, WEC Energy Group* Scott Karbon, Manitowoc Public Utilities Ashley Korer, WEC Sarah Kroening, Children's Health Alliance of WI Jason Martin, Foth Infrastructure and Environment Matt Matrise, DNR John Mooney, EPA Region 5 Michael Moran, DNR Bill Nelson, Godfrey & Kahn S.C.* Todd Palmer, Michel Best * Randy Poelma, Ho-Chunk Nation Brenda Sargent, MGE Andrea Simon, Interested Party Brad Sims, Exxon Mobil Corp Heather Smith, WEDC Pat Stevens, WI Paper Council* Patti Stickney, SEH Steve Stretchberry, WEC Energy Group Troy Stucke, Charter Manufacturing John Tadelski, SCS Engineers Steve Tasch, Trinity Consultants Jeff Vandenbusch, Foth Infrastructure and Environment Kate Verbeten, GBMSD Jeremiah Yee, WI DHS*

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Meeting Summary

Opening remarks and agenda repair

Program Director Gail Good opened the meeting. Craig Czarnecki ran through meeting procedures.

Hiring and Administrative Update

Monitoring Section Manager recruitment is underway, currently Beth Finzer is acting with Erin Howard serving a future acting role.

There was no update on Department Secretary at time of meeting. Since the meeting, Secretary Karen Hyun has been announced, beginning January 27, 2025.

Proposed Guidance, rules and legislative update

Proposed/Final DNR Rules

AM-05-22 Compliance Demonstration Rule – Signed by Governor 8/22/2024. Updates to NR 439 testing, monitoring, recordkeeping, reporting requirements for compliance <u>Rulemaking to Revise Chapter NR</u> 439 | Wisconsin DNR. Entering legislative phase. The rule expected to be finalized Summer 2025.

AM-10-23 NSR Fee Rule - Public Comment Period Closed 9/04/2024. Updates to construction permit fees to assure compliance with Clean Air Act requirements and to meet business needs of permitted sources. <u>NR410 Rulemaking | Wisconsin DNR</u>. Considering public comments. The program expects to have a revised rule ready to present to the NRB for adoption in Spring 2025.

Finalized EPA Rules and Guidance

Air Plan Approval; Wisconsin's Second Period Regional Haze Plan – Effective date: 12/20/24

SIP approval of revisions to NR 428; NOx Emission Control Requirements – Effective date: 12/23/24

<u>Guidelines on Air Quality Models</u> (Appendix W to 40 CFR Part 51) – Final: 11/21/24 Effective: 60 days after publication in Federal Register;

On November 20, 2024 EPA finalized revisions to "Guidelines on Air Quality Models" (also known as Appendix W or the Guideline) and also revision to the AERMOD dispersion modeling system.

The changes included a new Tier 3 NOx to NO₂ conversion algorithm, a new roadway source type, and support for overwater modeling of large wind turbine projects. The changes to the model do not affect the regulatory formulation, so modeled concentrations in Wisconsin will not change.

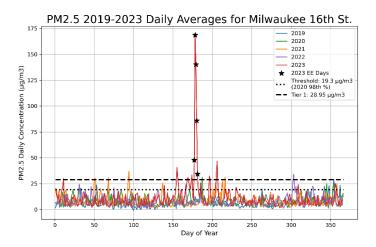
2024 Air Quality Trends Report

This year's report presents 20 years of official state monitoring data through 2023 for the criteria air pollutants regulated under the Clean Air Act. A big success story is the reduction of SO₂ concentrations across the state. Starting in 2018-2020, all SO₂ monitors in Wisconsin measured concentrations below the federal air quality standards, EPA considers all of Wisconsin "in attainment" for federal SO₂ standards. Since the 2001-2003 design value years, SO₂ concentrations have decreased by 89%.

In the last 20 years, ozone has decreased 15% statewide while fine particulate matter has decreased 25%. The new report and associated StoryMap were published Dec. 10 and can be found on the <u>Air</u> <u>Quality trends webpage</u>.

PM2.5 Exceptional Events Demonstration Update

The DNR developed a technical demonstration or Exceptional Events demonstration for the late June 2023 wildfire smoke episode for the two monitors that are above the standard (Milwaukee 16th Street and Waukesha), based on most recent data. Refer to the graph to see just how abnormal the PM values were during that late June episode compared to the previous 5 years of data.



The comment period on this demonstration ran from 10/1 to 10/31. The DNR received three comments: Two supportive and one adverse comment that required additional clarification. If the EPA concurs with this demonstration, all monitors will be meeting the new 2024 PM standard.

In response to a question, John Mooney indicated that similar spikes in June 2023 were also evident in other Region 5 states.

The impact of the exceptional event on design value was approximately 0.5 ppb.

Members Update

Pat Stevens – WI Paper Council – Pat thanked Air Management for presenting at a recent meeting, saying the information was valuable to membership.

Art Harington – Godfrey and Kahn – Art is co-teaching a multi-disciplinary renewable energy course at Marquette University. Marquette recently started an MBA program in sustainability.

Joe Hoch – Wisconsin Utilities Association – The transport rule remand has trading and allowance changes moving back to Group 2 Program. WUA is collaborating on a review of the combustion turbine NSPS proposal and expect to comment. The co-owners of the Columbia Generating Station announced that they are extending facility operations to 2029, then considering transitioning to gas.

Todd Palmer: Asked a question to clarify atypical events in permit background concentrations and exceptional events. The DNR confirmed Todd's understanding that the exceptional event process is different and separate from how atypical events are determined when establishing background concentrations, but also noted that the work done for the exceptional event demonstration can and will be used to inform atypical events decisions.

Air Monitoring Season Wrap Up

99+% data completion on the season across 32 sites. The longest down time was four days at one site due to a power outage. The network saw only 3 days with hourly values >100 ppb, and another 18 days with values exceeding the NAAQS. The last exceedance of the standard for this ozone season was September 23, 2024.

The EPA ran a Technical Systems Audit on the air monitoring network this year. The entire DNR air monitoring network was evaluated from field sites, sampling, data handling, quality assurance and submittal to the national database (AQS). The network was evaluated against CFR criteria, QA handbooks and EPA best practices. There were eight findings in total with one major, five minor and two recommendations. Minor ozone related findings include trees that were too close to shelters at three sites, and to vent instruments to the outside of the shelter. Processes to resolve these findings are underway.

Wisconsin Sites	Concentrations (ppb)				2024 Critical	Days at/above	2024 Critical	Days at/above	Preliminary
	1st high	2nd high	3rd high	4th high	Values (2008 NAAQS)	Critical Values (2008 NAAQS)	Values (2015 NAAQS)	Critical Values (2015 NAAQS)	2022-2024 "Design Value" (2015 NAAQS)
Bayside	84	77	73	73	78	1	63	13	74
Beloit	74	72	69	63	79	0	64	3	70
Chiwaukee	83	81	81	80	74	6	59	33	78
Elkhorn	70	69	67	66	76	0	61	13	72
Grafton	90	75	74	73	79	1	64	17	74
Harrington Beach	90	88	76	75	80	2	65	11	74
Kenosha-WT	74	73	73	73	77	0	62	22	74
Kewaunee	72	68	68	67	81	0	66	5	71
Manitowoc	79	79	75	71	78	2	63	11	73
Milwaukee-UPark	71	70	68	66	82	0	67	3	70
Newport	73	73	68	67	80	0	65	6	71
Racine	86	84	82	78	82	3	67	18	74
Sheboygan-Haven	81	69	68	67	83	0	68	3	70
Sheboygan-KA	92	90	80	76	69	10	54	42	78
Waukesha	71	70	70	66	79	0	64	10	71

Ozone 2024 Critical Value Exceedances (Notetaker: Maria)

2015 NAAQS: 70 ppb

Note: 2024 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.

Non-Attainment for 2015 NAAQS Reached 2015 Critical Value Exceeded 2015 Standard

Ozone Advisories

The DNR issued 12 ozone advisories during the 2024 ozone season, eight fewer than in 2023.

High Ozone Analysis

In 2024, there were two days with ozone in the unhealthy Air Quality Index (AQI) range.

The first occurred on July 15 at the Kohler Andrae monitor when the maximum eight-hour average hit 90 ppb. Meteorological conditions were prime in the area for elevated ozone concentrations - high temperatures in the mid to upper-80s along with sunny clear skies and light southerly winds with a lake breeze. 14 of the state's 16 other ozone monitors recorded Good AQI that day.

The second occurred on Aug. 26, also at the Kohler Andrae monitor, when the maximum eight-hour average hit 95 ppb. It was very hot that day, with temperatures in the mid-90s, sunny skies, light southerly winds and a lake breeze.

2024 Climatology

Compared to a 30-year climatology (1991-2020), daily average temperatures were above normal statewide throughout the 2024 ozone season.

Compared to 2022 and 2023, maximum 1-hour average temperatures in 2024 were warmer in the early spring, late summer, and early fall.

Ozone NAAQS Exceedances – Nonattainment Areas

	2022	2023	2024
Number of days over 70	7	29	16
Number of Exceedances	36	133	55
Highest Day	96 ppb (Sheboygan-KA)	112 ppb (Sheboygan-KA)	95 ppb (Sheboygan-KA)
Average exceedance concentration across all monitors	77.9 ppb	77.8 ppb	76.3 ppb

2015 Ozone Standard: Reclassification from Moderate to Serious

Ozone nonattainment areas are subject to a 5-step classification scheme: Marginal, Moderate, Serious, Severe, and Extreme. The Clean Air Act specifies regulatory requirements for each classification. The higher the classification, the more stringent the requirements.

If an area fails to attain by the attainment date associated with its current classification, the area must be reclassified (or "bumped up") to the next classification within 6 months. Reclassifications are required by operation of law, there is no agency discretion.

Wisconsin's nonattainment areas (Milwaukee, Sheboygan, Kenosha) failed to attain the NAAQS by their Aug. 3, 2024 Moderate area attainment date. The EPA is expected to reclassify these areas to Serious by the end of 2024. This will have permitting and planning implications. New attainment date will be Aug. 3, 2027.

Planning and SIP Implications

Air Management will need to develop and submit plans showing how areas will attain the 2015 ozone NAAQS by the Aug. 3, 2027 Serious area deadline (2026 ozone season). New SIP submittals will be required, likely due January-April 2026. Program work will likely include:

- Review of reasonably available control technology (RACT) programs and rules
- Assessment of emissions inventories, trends, new modeling projections
- Interstate discussions
- Dialogue with the EPA on federal actions needed to support attainment
- Evaluation of need for new emissions control programs

Question: Is EPA looking at other indirect sources?

Response: Yes, EPA is considering a broader look at indirect sources of emissions.

Impacts on Permitting

In an ozone nonattainment permitting requirements become more stringent for ozone precursors: NO_x and VOCs.

• The major source threshold decreases (from 100 to 50 tons per year)

• Emissions offset requirements for new major sources or major modifications increase (from 1.15:1 to 1.2:1)

Sources located in the nonattainment areas need to assess whether operation permit changes are needed to address the new thresholds. Options include:

- Apply for a Title V operation permit
- Apply for an operation permit revision to adjust synthetic minor caps
- Apply for a different Type of Registration Operation Permit (ROP)

Question: Can Wisconsin sources trade emission credits with Chicago area?

Response: Yes, it is allowed however, Illinois does not have an inventory of banked credits available.

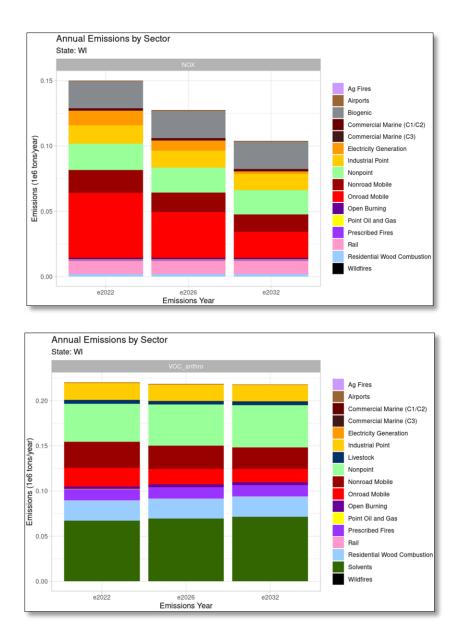
<u>Outreach</u>

The Air Management program is updating the Permitting Requirements webpage, including the addition of a Reclassification Frequently Asked Questions (FAQ) section. The program will also be emailing sources in these nonattainment areas, and communication will be sent out to Air Management's Air News and Air Management Advisory Group email lists. A new shared email inbox was also created to field specific permitting questions related to the bump-up.

2015 Ozone Nonattainment: Long Term Outlook

The tables below depict the likelihood of additional bump up in future years and show annual emissions by sector for both NOx and VOCs.

Projected 2025 & 2026 ozone DVs							
Monitor	Preliminary 2024 4 th High	Projected 2025 DVs (low)	Projected 2025 DVs (ave)	Projected 2026 DVs (low)	Projected 2026 DVs (ave)		
Chiwaukee	80	77	80	71	77		
Racine	78	73	75	70	74		
Sheboygan-KA	76	75	77	70	75		



Nonattainment Implications

Projected NOx reductions may be optimistic. Any rollback in federal rules (EGU and mobile) will also impact anticipated reductions. Optimistic emissions projections will lead to optimistic air quality modeling projections. Area-source VOCs are static; likely require additional attention. Future year reductions may not be sufficient for areas to attain, especially given recent DVs.

Potential Transition-Related Impacts

Air Management will be evaluating the impact to Wisconsin as a result of any changes or rollbacks of federal rules impacting ozone, especially mobile source rules.

Litigation regarding 2015 ozone transport (Good Neighbor Plan) is likely to be impacted, and transport of ozone precursors to the Wisconsin nonattainment areas will remain unresolved.

With new EPA leadership, there is an opportunity to reconnect on specific technical and policy issues (e.g., modeling, SIP reviews/approvals).

The ozone NAAQS review timeline is uncertain.

New or any additional litigation will add to regulatory uncertainty.

Impacts of Severe Reclassification on Permitting and Stationary Sources

The reclassification to Serious sets a timeline for attainment. If Wisconsin does not attain the ozone standard within that attainment timeline, the area will be reclassed again to Severe. The permitting requirements become more stringent for ozone precursors: NO_x and VOCs

- The major source threshold further decreases (from 50 to 25 tons per year)
- Registration Operation Permit (ROP) thresholds decrease
- Emissions offset requirements for new major sources or major modifications further increases (from 1.2:1 to 1.3:1)
- Section 185 penalty fee requirement for major sources

Program Actions to Address Nonattainment

As noted in the presentations, Wisconsin's stationary source contribution to ozone precursors is a small fraction of the ozone-causing emissions affecting Wisconsin's attainment status. To address nonattainment, the Air Management Program will need to tackle the issue from many different angles.

- Expand outreach to different audiences and stakeholders
- Update state VOC and NOx rules to ensure approvable SIPs and potential redesignation
- Engage with the EPA to address barriers to attainment (e.g., SIP approvals, policy and technical changes)
- Manage the impacts on stationary sources and address permitting needs

2025 Priority Topics

- Emerging federal regulation
 - Emerging contaminants (PFAS)
 - o Federal permit actions
 - PM2.5 NAAQS
 - Long term planning at the federal level
 - Climate initiatives
- Ongoing efforts
 - Environmental Justice
 - o 2015 ozone NAAQS implementation
 - Ozone transport
 - SIP submittals and redesignation requests
 - Regional haze
 - Rulemaking

• Opportunities

- Inflation Reduction Act
- Transparency in information
- Goals and vision of DNR
- Working with other states and organizations

2025 Meeting Dates

- Thursday, March 6
- Thursday, June 5
- Thursday, Sept. 11
- Thursday, Dec. 4

Next AMAG Meeting. The next study group meeting will be held on Thursday, March 6 at 9 a.m.