

**Meeting Summary**  
**Air Management Study Group Meeting**

Thursday, May 6, 2021

9:00 am

Lt. Governor Mandela Barnes	Maria Hill, DNR
Renee Bashel, DNR	Joseph Hoch, Alliant Energy
Rob Bermke, Georgia Pacific	Teresa Holloway, UW*
David Bittrich, TRC	Erik Hoven, Dairyland Power
Phillip Bower, DNR	Mike Kolb, WEC Energy Group
James Bridges, DNR	Brenda Kubasik, Madison Gas and Electric
Noelle Brigham, Marquette University*	Anita Martin, Jefferson County Board
Patrick Cardiff, Grande Cheese	Jason Martin, Foth
Michael Cassidy, Kohler*	Caitlin McAleavey, Jefferson County
Rebecca Clarke, SORA	Cynthia Neitzel, GLA
Michael Cloyd, EPA*	Kim Novak, WRMCA
Natalene Cummings, Forest County Potawatomi Community	Todd Palmer, Michael Best*
Craig Czarnecki, DNR	Katie Praedel, DNR
Jack Dallal, John Deere	Maria Redmond, Office of Sustainability and Clean Energy
Brianna Denk, DNR	Sean Schnepfer, John Deere
Steve Dunn, Alliant Energy	Andrea Simon
Eric Eckert, Kohler Co.	Bart Sponseller, DNR
Darsi Foss, DNR	Sheri Stach, DNR
Donald Gallo, Axley	Sean Stephenson, WTBA
John Gibbons, Tetra Tech Inc.	Patti Stickney, Short Elliot Hendrickson, Inc
Gail Good, DNR	Andrew Stewart, DNR
Bob Greco, WEC Energy Group	Patrick Stevens, Wisconsin Paper Council*
Katie Hager, John Deere	Steve Stretchberry, WEC Energy Group
Mark Hammers, SCS Engineers	Craig Summerfield, WMC*
Heather Hansen, Volunteer, US Forest Service	Steven Tasch, Trinity Consultants
Jeff Hanson, Alliant Energy	Mark Thimke, Foley & Lardner LLP
Art Harrington, Godfrey & Kahn*	Jason Treutel, DNR
Kristin Hart, DNR	Deanna Webster, Verso Corporation
Curtis Hedman, DHS*	

\*AMSG member

**Action Items**

**Next AMSG Meeting.** The next study group meeting will be held on **Thursday, August 5** at 9 a.m.

## Meeting Summary

### Opening remarks and agenda repair

Gail Good opened the meeting. Craig ran through some Zoom procedures.

### Task Force on Climate Change

Lt. Governor Mandela Barnes joined the meeting to discuss the Governor's Climate Task Force. Lt. Gov. Barnes says climate change is having effects across the state and is taking a toll on communities.

An office of Sustainability has been created, which now includes many groups that were not typically seated in the same room to discuss an approach to climate change. The farming community is now getting involved and plays an active role on the task force. The group has also had many listening sessions with the public.

Lt. Gov. Barnes said low income communities are most affected by climate change. The task force has brought together many different groups to develop environmental justice solutions.

Lt. Gov. Barnes added that Wisconsin is going to have a leadership role in bringing about a clean energy economy. There are plans to expand tax credits for companies that support their initiatives, partner with stakeholders and invest in a clean energy plan. He added the state has a lot of catching up to do, but the task force is eager to partner with the Biden administration to make the task force a success.

An AMSG member asked if the task force had much engagement with the legislature on these important initiatives. Lt. Gov. Barnes replied the legislature has not been ready to move forward on these issues, even as much of the population is.

### Greenhouse Gas Inventory

Brianna Denk, Air Program Planning and Standards Policy Coordinator gave a presentation on the program's Greenhouse Gas (GHG) Inventory work.

The state is part of the U.S. climate alliance, which is committed to meeting the Paris Agreement targets.

Using EPA's Greenhouse Gas Reporting tool, DNR is developing two GHG inventories for the state.

The default data inventory was published in November 2020 and is based on the default data available in EPA's state inventory tool (SIT). This inventory could assist the state with identifying general trends and results, but should not be relied upon for long-term policy planning. This would apply essentially the same methodology used in the state's last GHG inventory completed in 2007. This report includes inventory years 2005 and 2017, with trends for 1990 through 2017.

The refined data inventory is currently under development and will incorporate state-specific data for specific sectors, such as agriculture, solid waste, and forestry. The program is working with other DNR

programs and state agencies on this inventory, which includes inventory years 1990 and 2005-2018 as well as projections to 2025 and/or 2030. This inventory aligns with EPA's annual SIT update, released October 2020.

#### Default Data Inventory Methodology (2020)

The default data for Wisconsin was selected in each module of the SIT. The tool applied the default data to EPA-supplied emission coefficients to produce results for each module. Post processing was conducted outside of the SIT. The department did not use EPA's synthesis module to compile results. Emissions were attributed to eight commonly referenced economic sectors: agriculture, electricity generation, residential, commercial, industrial, transportation, industrial process, and waste. The Land-Use, Land-Use Change, and Forestry (LULUCF) sector is reported separately as it can act as either a net source or a net sink of emissions.

#### Results of the report

The state has reduced GHG by 8 percent from 2005 through 2017. This is primarily driven by reductions in the electric generation sector but reductions are seen in all major energy sectors. Emissions from the agriculture sector have increased. EPA has updated its tool with improvements in some sectors including the agricultural sector.

A study group member asked a question about the transportation sector and how electric vehicles (EV) impact emissions. Denk responded saying improvements in the new tool and DNR's state specific MOVES modeling will be done to get more accurate information for the 2021 report, which will help the program understand how the EV sector is impacting emissions.

Another member asked what the significant sources were in the agriculture sector. Denk responded emissions from enteric fermentation, manure management, and agriculture soils are the significant drivers in this area.

Another member asked about the GHG inventory work done by the Vulcan project out of Arizona State University <https://vulcan.rc.nau.edu/>. This study said that state's numbers may not be accurate. Denk responding that EPA is aware of the ASU data but is not aware of any direct use in EPA's tool.

#### **Hiring Update**

The Air Program has recently hired David Pfothenauer as an air chemist to work on ozone chemistry, PFAS and other emerging contaminants.

Jason Treutel has also been hired as Air Quality Planning and Standards Section Chief.

The department remains in a hiring freeze, but some positions are federally funded which has allowed these recent hires.

After a recent retirement, a [new Non-CMS Inspector Assignment map](#) has been made available.

### **Proposed Guidance, rules and legislative update**

#### Proposed guidance and rules and legislative update

Guidance currently being developed:

Municipal Solid Waste Landfills – The Air Program continues to develop this guidance and is targeting finalization in Fall 2021.

Regulation of Nonroad and Motive Engine Testing Operations – The Air Program continues to develop this guidance and targeting finalization in Summer 2021.

Next Day Deviations – The comment period is closed. The Air Program is revising the guidance based on comments received. Staff will be trained on the changes and the guidance will be released in the summer.

#### Proposed DNR Rules

AM-20-18 VOC RACT Revisions – The Air Program plans to request adoption at the May 26, 2021 Natural Resources Board meeting.

AM-10-19 2015 Ozone NAAQS – This rule incorporates the 2015 ozone standard into state rule. The Air Program plans to request adoption at June 23, 2021 Natural Resources Board meeting.

AM-31-19 Emissions inventory reporting – The Air Program continues to develop this rule.

#### Proposed EPA rules/guidance

National Emission Standards for Hazardous Air Pollutants: Municipal Solid Waste Landfills Residual Risk and Technology Review; Correction – The comment period closes May 28, 2021. The Air Program plans to comment on this rule.

Perfluoroalkyl and Polyfluoroalkyl Substances Destruction and Disposal – The comment period closed in February. The docket includes the comments provided.

California Motor Vehicle Pollution Control Standards; Advanced Clean Car Program; Reconsideration of a Previous Withdrawal of a Waiver of Preemption – The comment period closes June 11, 2021.

A question was raised about the guidance on insignificant emission units, which was finalized a few months ago. Changes were made between the draft and final versions. The final version only addresses insignificant emission units related to the operation permit program. The emission inventory portion was removed and will be included in the update to NR 438.

#### Finalized EPA rules/guidance

Reclassification of Major Sources as Area Sources Under S. 112 - Reverses once-in-always-in applicability of NESHAP – This rule was signed on October 1, 2020 but has not been published yet.

Project Emissions Accounting – affects netting analysis methodology in New Source Review permitting – This rule was signed on October 23, 2020 but has not been published yet.

Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for which Construction, Reconstruction, or Modification Commenced After July 23, 1984 – This rule was finalized on January 19, 2021. It changed the way inspections can be done for New Source Performance Standards.

Air Quality Designations for the 2010 Sulfur Dioxide (SO<sub>2</sub>) Primary National Ambient Air Quality Standard – Round 4 – Supplemental Amendment –was signed on April 8, 2021. Round 4 included requirements for parts of the state to conduct ambient monitoring to determine impacts. The original designations were proposed based on 2017-2019 data. This amendment took into account the finalized 2020 data. The 2018-2020 data reflected levels within limits allowing for attainment designation with an effective date of April 30, 2021.

The Air Program intends to continue posting guidance for input with the 21-day comment period. The program reviews and considers comments received before finalizing guidance. Program guidance is available in two locations. The first site (<https://dnr.wisconsin.gov/topic/AirPermits/Policy.html>) allows users to search to find current Air Program guidance. The second site (<https://dnr.wisconsin.gov/topic/AirQuality/Input.html>) hosts Air Program guidance in development and provides an opportunity for the public to provide feedback.

#### State Draft and Final Legislation

The Compliance Audit Program legislation is going to committee. This program was presented at the February 2021 study group meeting by Lisa Ashenbrenner-Hunt.

#### **Budget Update**

The budget process is ongoing. Gail Good talked about items that impacted the air program, two positions for PFAS have since been removed.

#### **EPA/Federal Update**

The America Rescue Plan Act of 2021 includes EPA funding in section 6002. EPA is working internally to determine how best to utilize this funding. One portion of funding is \$50M is for ambient air quality monitoring, while the other \$50M is for environmental justice programs. The environmental justice funding includes 4 authorities - Safe Drinking Water Act, Comprehensive Environmental Responses, Compensation and Liability Act (CERCLA), DERA, and Clean Air Act (CAA) 103. It is still too early to determine how this funding will be allocated between the authorities. EPA Region 5 is still waiting on the distribution plan from EPA headquarters and will notify the program when they have more details.

#### **New appointments at EPA**

- Michael Regan – EPA Administrator
- Janet McCabe – EPA Deputy Administrator

Cheryl Newton remains EPA Acting Region 5 Administrator

## Vacatur information

Emission Guidelines Municipal Solid Waste Landfills August 2019 rule setting timing requirements for submittal of state plans for meeting the Emission Guidelines for MSW Landfills.

Significant Contribution Finding (GHG) for Existing EGU's under section 111(b): The rule established a numerical threshold for determining whether a source category's greenhouse gas (GHG) emissions "contribute significantly" to air pollution, thus making it subject to regulation under Section 111(b) of the Clean Air Act. Specifically, the rule provided that source categories may only be considered to contribute significantly to air pollution due to their GHG emissions if the amount of those emissions exceeds 3 percent of total U.S. GHG emissions.

## DERA Grant

The Diesel Emissions Reduction Act grant program funds projects that reduce diesel emissions from older diesel engines and improves air quality and human health. The grant is administered by the DNR with funding provided by EPA.

The 2020 Clean Diesel grant application period will begin Wednesday, May 12 and run through Wednesday, June 23.

The eligible projects will be the same as the 2019 DERA funding. This includes school buses, municipal transit buses, nonroad engines and equipment and vehicles used in construction, cargo handling and agriculture.

More information, including application materials, will be available May 12 on the program's [Clean Diesel webpage](#).

This webpage also includes a link to subscribe and receive automatic notifications when clean diesel funding assistance becomes available.

Questions regarding this funding opportunity can be directed to the Clean Diesel Grant Program at [DNRCleanDiesel@wisconsin.gov](mailto:DNRCleanDiesel@wisconsin.gov).

## Non-Road Emissions and Stationary Sources

DNR continues to work on nonroad engine testing in air permitting. The main question to address: are the emissions from testing of nonroad equipment during the manufacturing process stationary source emissions?

The Air Program is developing a Technical Support Document to clarify which unit operations and activities involved in manufacturing of nonroad engines, nonroad vehicles, and other nonroad equipment must be included in stationary source permits.

The draft Technical Support Document is scheduled to be made available the week of May 24 for a 21-day public review period.

A stakeholder meeting to review findings and ask questions is scheduled for June 2.

The program is targeting July 31 to finalize the document and begin implementation.

## **Purple Air**

Whether it's respiratory concerns, wildfire smoke tracking or just sheer curiosity, the public is interested in air quality monitoring. New tools from the Wisconsin Department of Natural Resources (DNR) allow the public to get involved in the tracking and reporting this information using low-cost air quality sensors in an informed and responsible way.

The air sensor technology market is expanding as more companies make lower-cost portable sensors available to the public. The information provided online provides the public with best practices for the use of low-cost, portable air sensors and may be used to assist with the setup of low-cost sensors, evaluation of the data collected and the interpretation of the results.

One of these tools looks to correct known limitations in data comparability between air quality sensors and regulatory air monitors. One commonly used particulate sensor, PurpleAir, provides consistently higher (or more elevated) and less accurate readings than regulatory monitors but produces consistent results.

For DNR's yearlong study, five PurpleAir sensors were deployed at DNR-operated air monitoring sites, where they were paired with established regulatory monitors. A relationship between the sensor data and regulatory data was determined, which allowed for the creation of correction factors for public use to better align PurpleAir data with DNR's regulatory monitor data.

Applying the newly released mathematical [correction factor](#) developed by the DNR for PurpleAir sensors used in Wisconsin dramatically improves the data discrepancy between the sensor and regulatory monitors.

In addition to a correction factor and roadmap resources, [the DNR's monitoring webpage](#) also includes a link to the U.S. Environmental Protection Agency's (EPA) Air Sensor Toolbox, a comprehensive resource including instructional videos, guidebooks, operating procedures and more.

An AMMSG member asked what the benefit was of using a state correction factor vs. a national correction factor. Katie Praedel explained that more localized correction factors can be better tailored to regional environmental factors including meteorological conditions (relative humidity is a known interferent with PurpleAir and other sensor data), particulate composition and other factors.

Another member asked what role then PurpleAir sensor data plays? Praedel said it helps it helps to engage the public and fill in the gaps in monitoring data. Sensors can supplement regulatory network for air quality communication and can inform future decisions and provide qualitative trends. Other sensors can potentially help to define ozone gradients

An attendee asked which sites were utilized for the study. Praedel said the sites had different rural/urban environments. Site-specific correction factors were developed but did not show large

differences over the statewide factor.

A final question asked whether this will affect DNR's approach to PM2.5 as a regional pollutant. Praedel said once properly corrected, the PurpleAir data tends to confirm air quality trends as monitored by regulatory sensors. The DNR approach is not expected to change in the immediate future.

### **Member Updates**

Art Harrington announced the AV Forum will be holding a meeting May 26 12-1pm. Topics include municipal opportunities and challenges for electric vehicles. Participants include UW-Madison, UW-Milwaukee, Midwest Energy and Manley Communications. Anyone interested in attending can send [Art an email if interested.](#)

Craig Summerfield brought up NR 439. He has discussed with Maria Hill. DNR is under statutory directive to streamline this rule, and he would appreciate an update on that rulemaking. DNR is planning to hold focus groups likely in fall or winter 2021 and is gathering feedback on NR 439.

Summerfield also said he appreciates the commitment to post guidance. Is it the AM Program intent to respond to comments? The program will evaluate comments received in finalizing guidance.

Summerfield also announced the deadline to apply for the Business Friend of the Environment Awards is Monday, May 24 - <https://www.wmc.org/bfoe>

Todd Palmer announced a coalition of states will be filing an ACE rule and Clean Power Plan petition. Also, because of the discussion of Electric Vehicles (Evs) and the role in climate change strategies, Todd directed the group to a study indicating EV's may increase particulate matter emissions along roadways due to tire wear. He noted that many roadways go through environmental justice communities. Palmer shared a link to an article on the EVs and PM emissions: <https://www.eenews.net/stories/1063731271>

Art Harrington then shared a New York times article link - <https://www.nytimes.com/2021/04/27/magazine/global-life-span.html> which highlights positive impacts for longevity associated with Autonomous Vehicles (AVs) and EVs in the future

Maria Redmond said the Governor's Task Force on Climate Change is looking for feedback, they have been modeling recommendations to show the impact that federal policy changes will have. Electric Integration Center (EIC) – EV policy impact - hosting June 2 virtual meeting. Ultimately looking for more directed thoughts on EV policies for the state. Tracey Holloway mentioned UW has funding to help calculate low carbon policy impacts and capacity to support that work.

### **Ozone Update**

Wisconsin's 2021 ozone monitoring season is underway. Most sites operate April 1 through October 15. The Kenosha County sites operate March 1 through October 31.

New for 2021, remote automated weekly verifications are allowed for better data capture and more



Quality Assurance (QA). There will also be more frequent meteorological data QA and investment and more communications with forecasters.

On April 22, the Air Program submitted to EPA the complete certification packet for the 2020 air monitoring data. This action is federally required and due to EPA annually by May 1. Official data certification includes a state review and verification of every data point collected throughout the year resulting in a formal statement attesting to ambient data completeness and accuracy, followed by a discretionary EPA review. Data certification leads to official design values that drive air program goals.

Enhanced ozone monitoring efforts got underway May 1. The focus for the 2021 ozone season will be on Kenosha and Sheboygan counties.

### **Clean Air Month**

Each May the Air Program celebrates Clean Air Month. It gives us a chance to look back at the past year and share a wealth of information and resources with the public.

Over the past year, with the unpredictable challenges faced, everyone in the program played a key role in keeping our activities and obligations running smoothly. The Air Program's permit and compliance engineers ensure the more than 2,800 permitted facilities in Wisconsin are meeting federal Clean Air Act requirements. In 2020, Air Program engineers undertook several initiatives to improve the quality and clarity of permits and provide additional compliance assistance. Their hard work helps keep businesses across the state in operation and compliant with requirements while also protecting the states air quality.

As citizen use of low-cost air quality sensors gains popularity, DNR is assisting their effort to track air quality closer to home. The Air Program recently conducted a [study](#) comparing low-cost air quality sensors with DNR's federally approved air quality monitors and created tools and correction factors to better align citizen sensor data with DNR's data. Using these low-cost sensors enables citizens to monitor and track air quality in their own back yards, empowering citizens to provide information and create awareness in their local communities. Sensor information along with tools to help the public get involved in air quality monitoring are available on [DNR's Air Monitoring Sensors webpage](#).

The program released the most recent annual Air Quality Trends report in October 2020. The report includes air monitoring data through 2019 and shows overall air quality in Wisconsin continues to improve. Since the early 2000's fine particle concentrations have dropped more than 35 percent, while emissions of ozone-forming pollutants like nitrogen oxides (NOx) and volatile organic compounds (VOCs) dropped 63 percent and 58 percent, respectively. These improvements are thanks to the implementation of variety of federal and state pollution control programs, and cleaner burning and more efficient fuel combustion from both highway vehicles and electric utilities.

Using Raspberry Pi micro-computers, a mobile air monitoring lab, and vertical air column monitoring techniques, DNR's Air Program is paving the way nationally for new ozone monitoring techniques and tools. The program also partners with the University of Wisconsin-Madison, NASA, U.S. EPA and the Lake Michigan Air Directors Consortium (LADCO), to further expand the ozone research effort.

To get kids involved in the air quality celebration, the Air Program's 10<sup>th</sup> annual Air, Air Everywhere poetry contest is underway. The department is accepting entries from Wisconsin's third, fourth and fifth grade students through May 7. Typically the contest is tailored towards teachers and includes some curriculum for their classes. But with a number of students continuing to learn from home, we expanded the contest to parents as well this year. Winners will be announced at the end of the month. Jacob LeFleur, the first ever poetry contest winner will be helping choose this year's winners. The three winning poems will be posted to the program's [Air, Air Everywhere poetry contest webpage](#).

The outreach staff has also created a new activity: Clean Air Bingo. The Facebook and Instagram posts went up Monday, May 3. Check the items off one-by-one and you'll be helping improve air quality in your neighborhood in no time. Visit the Clean Air Month page to download the Bingo Card:

<https://dnr.wisconsin.gov/topic/AirQuality/CleanAirMonth.html>

The program also made a number of updates to our Clean Air Month webpage. A section has been added highlighting environmental justice and how the program is involved in that work.

Users can also find the "What 50 Years of Clean Air Looks Like" episode from the WI Off the Record Podcast and our 3-part video series: *Committed to Clean Air*. These materials were also recently added to our Air Education and Outreach page

The Clean Air Month page also includes ways to get involved. The program has provided links and resources to some creative air related activities that parents and teachers can do with their kids.

There are also many ways to stay informed, and can find links to the Air quality mapping tool Wisconsin Air Monitoring and Data Acquisition system, or (WAMDAS) for Current air quality conditions, reports, monitor information and more

The Air Program mobile app is also available. Users can download the free WisconsinAQM mobile app to receive air quality updates from anywhere using their mobile device. The app includes an interactive map of near real-time data from the state's air monitoring network, individual monitoring station reports, weather information and more. Download in the [Apple App Store](#) or the [Google Play Store](#).

The public can also [subscribe to receive Air Quality news and notices](#) straight to their email inboxes.

Subscribe to the Air newsletter and receive updates on state air quality issues

Visit the [DNR's Clean Air Month](#) webpage for more.

Gail Good thanked everyone for their attendance and participation before concluding the meeting.

The next AMSG meeting is scheduled for August 5.

## Links

Below are the links that were shared in the Zoom chat during the meeting.

Paper on air quality implications on climate policies:

<https://www.frontiersin.org/articles/10.3389/fpubh.2020.563358/full>

CO2 Inventory: <https://vulcan.rc.nau.edu>

Article suggesting that cities underreport GHG emissions:

<https://vulcan.rc.nau.edu/assets/files/Gurney.Nat.Comm.2021.pdf>

Current air program guidance: <https://dnr.wisconsin.gov/topic/AirPermits/Policy.html>

Guidance available for public comment: <https://dnr.wisconsin.gov/topic/AirQuality/Input.html>

Article on Electric Vehicles and PM emissions: <https://www.eenews.net/stories/1063731271>

Article highlighting positive impacts for longevity associated with AVs and EVs:

<https://www.nytimes.com/2021/04/27/magazine/global-life-span.html>