

Summary

Air Management Study Group Meeting

Thursday, December 10, 2015

9:00 am

Room G09, State Natural Resources Building (GEF2)

101 S. Webster St., Madison, WI

Attendees

Marc Bentley, Bentley Government Affairs
David Bizot, DNR
Phillip Bower, WHD
Kendra Fisher, DNR
John Gibbons, Generac
Gail Good, DNR
Kristin Hart, DNR
Tom Henning, SHE
Chris Hiebert, SEWRPC*
Tracey Holloway, UW-Madison*
Erik Hoven, Dairyland Power Cooperative

Brendan Kubasik, MGE
Kassie Lang, DNR
Todd Palmer, Michael Best*
David Seitz, TRC Environmental
Andrea Simon, Trinity Consultants
Kathleen Standen, We Energies
Andrew Stewart, DNR
Rob Thiboldeaux, DHS
Karen Walsh, DNR
Ken Yass, NRT

* Air Management Study Group (AMSG) members

Action Items

- **Next meeting.** The next study group meeting will be held on **Wednesday, March 9** at 9 a.m. at the State Natural Resources Building (GEF 2), Room G09, 101 S. Webster St., Madison.
- **SSM SIP Call workgroup.** EPA is expected to notify Wisconsin that it must amend its State Implementation Plan (SIP) regarding the treatment of excess emissions during periods of startup, shutdown, or malfunction (SSM) of industrial processes or emission control equipment (see p. 7). The Air Program is forming a workgroup to inform an approach to address this expected SIP call. The program reached out to the study group after the meeting to request volunteers from member organizations and associated stakeholders. If you have any questions or would like more information about this effort, contact Kristin Hart (kristin.hart@wisconsin.gov, 608-266-6876).
- **Proposed CSAPR update.** The study group briefly discussed EPA's proposed transport rule update for the 2008 ozone NAAQS and the associated modeling analyses (see pp. 4 and 5). DNR is submitting comments on the proposed rule, and followed up with the study group members after the meeting to solicit input.

Links to the proposals are provided below:

- Proposed Cross-State Air Pollution Update Rule: <https://www.gpo.gov/fdsys/pkg/FR-2015-12-03/pdf/2015-29796.pdf>

- Air Quality Modeling TSD for the 2008 Ozone NAAQS Cross-State Air Pollution Rule Proposal: http://www.epa.gov/sites/production/files/2015-11/documents/air_quality_modeling_tsd_proposed_rule.pdf
- More information is available on the proposed CSAPR update webpage: <http://www.epa.gov/airmarkets/proposed-cross-state-air-pollution-update-rule>

Meeting Summary

Opening remarks and agenda review

Gail Good, Air Program Director

Good opened the meeting and asked the attendees introduce themselves. She thanked everyone for attending and reviewed the agenda.

Program updates

Ethanol rule implementation

Kristin Hart, Permits & Stationary Source Modeling Section Chief

Hart explained that the Air Program posted proposed guidance addressing ethanol rule implementation in June. The guidance was finalized in August, and is available on the Air Program website at <http://dnr.wi.gov/news/input/documents/guidance/ethanolguidancefinal.pdf>. A few ethanol facilities have been coming to the Air Program for permit work, and the work has been going smoothly.

EPA had changed the definition of a chemical manufacturing facility to exclude ethanol plants. DNR changed the associated state rule in 2008 to reflect the new definition and submitted a revision of the SIP to EPA. EPA did not act on the SIP revision request. However, this issue was litigated in Indiana, and the court determined that Indiana did not need a SIP revision to implement the new definition. DNR decided to implement the new definition without the approved SIP revision as well.

Palmer asked why EPA has been taking so long to approve the SIP revision request. Stewart responded that he does not believe EPA intends to act on the request. Hart added that the Air Program asks EPA staff about the request at their monthly SIP conference call, and they always say there has been no action.

Holloway asked about the number of ethanol plants in Wisconsin. Hart responded that there are about 13. Holloway asked whether EPA might not be acting on the request because the issue is controversial. Stewart said that this would not be the case, because the intent of the revision was for the state's definition of a chemical manufacturing facility to be consistent with EPA's new definition. Hart added that other states such as Minnesota, Iowa, and Illinois immediately implemented the new definition. Palmer asked if that meant that SIP revisions were not approved in these states. Hart and Stewart clarified that Minnesota is not a SIP state and Illinois is delegated.

Thiboldeaux pointed out that complaints regarding ethanol plants, especially converted breweries, are largely related to the byproducts of fermentation of solids. This tended to be a problem at older plants, but not at new plants. Hart agreed, adding that there is now a better understanding of organic compound emissions.

CSAPR implementation in air permits

Kristin Hart, Permits & Stationary Source Modeling Section Chief

Hart stated that the Air Program is using guidance from EPA to develop templates for including Cross-State Air Pollution Rule (CSAPR) requirements in permits. At the same time, the program is leaving Clean Air Interstate Rule (CAIR) requirements in permits because the requirements have been written into state rule, and EPA has not yet provided guidance on removing CAIR provisions from permits. She added that the transport requirements mainly affect larger energy generating facilities. She closed by saying that the Air Program is happy to direct any questions about transport requirements and permitting to the appropriate staff member.

E-documents update

Andy Stewart, Air Program Director

Stewart explained that over the past year, the Air Program has been working on expanding its ability to accept compliance forms electronically. Specifically, it has been developing a system for electronic submittal of monitoring reports, stack testing plans and reports, and annual compliance certifications by major sources and synthetic minor sources capped at 80 percent of the major source threshold. Stewart emphasized that electronic submissions will be optional. The applicable sources will also be able to submit hard copies of these documents as they have in the past.

The Air Program piloted the process over the summer with a number of major sources and consultants. The program made some changes to the system as a result of the pilot, and plans to go live in early 2016 so that annual compliance certifications can be submitted electronically in 2016. The Air Program is developing a webpage to explain the electronic submission process, and will send sources an email with a link to the page. (Note the system is now live and can be accessed at <http://dnr.wi.gov/topic/AirPermits/ComplianceReports.html>.)

Stewart stated that users will convert the compliance forms into pdfs and will be able to upload them into the system 24/7. In response to a question, he explained that submitters would still need to print the signature page and mail it in, though the Air Program is in the process of getting approval from EPA to use electronic signatures.

Stewart said that he hopes sources find the new system useful. It will help DNR manage workloads more efficiently and effectively, because information is immediately available in the system to staff across the state, and because the system will send automatic notifications to DNR and affected sources.

Palmer asked whether the DNR system meets EPA's reporting requirements. Stewart responded that it does not. Hart added that EPA says they no longer need hard copies of the compliance certifications because DNR puts them online (see discussion of this topic on p. 9). Stewart clarified that the system was designed to meet DNR requirements, and does not affect how submissions are made to EPA. If you are not required to submit hard copies to EPA now, you would not have to if you are using DNR's electronic submission process.

SO₂ NAAQS implementation

David Bizot, Regional Pollutants & Mobile Sources Section Chief

Bizot announced that implementation of the SO₂ NAAQS is ongoing, and the Air Program will be giving periodic updates. He mentioned a couple of deadlines coming up in 2016. By January 15, DNR owes a list to EPA of the areas of the state that must be evaluated for potential violations of the NAAQS (mainly sources in Wisconsin that exceeded 2,000 tons of emissions in the last year of available data). DNR must explain to EPA how it will characterize air quality in the identified areas by July 1. The three options for characterization are modeling, monitoring, and a compliance off ramp.

Hiebert asked for clarification of the process for identifying areas of the state that need to be evaluated. Bizot explained that EPA's guidance includes identifying individual sources exceeding 2,000 tons of emissions per year and also identifying clusters of smaller sources that in combination could cause a violation. He also clarified that

inclusion on the list of identified sources does not mean a source will be required to take compliance actions. For example, the Nelson-Dewey power plant is on the list, but is shutting down in two weeks. Hiebert asked what the compliance requirements will be, and Bizot responded that they have not yet been determined.

In response to questions, Good explained that SO₂ is a pollutant that is considered more source-specific than regional. In general, the Air Program is focusing on larger sources of SO₂ emissions to implement the rule. She stated that there are six SO₂ monitors in the state. The Brown County monitor violated the standard last year (design value of 76 ppb based on 2012-14 data), but has not violated so far this year (design value of 75 ppb based on 2013-15 data). A monitor in Rhinelander violates the standard and was designated nonattainment in 2012; Bizot's staff has been working with the contributing source to develop a State Implementation Plan (SIP) to bring the area into compliance with the standard.

Member updates

NAAQS maintenance nonattainment in southeastern Wisconsin

Hiebert thanked DNR for reallocating the safety margin to provide more of a cushion in the PM_{2.5} maintenance area in the southeast. He also stated that Kenosha County is interested in the work DNR is doing to seek redesignation of the eastern part of the county to attainment of the 2008 ozone standard. He explained that the Kenosha nonattainment area is bumping up from marginal nonattainment to moderate, but that SEWRPC is hoping the area will be redesignated to maintenance status after only a modest amount of time as a moderate nonattainment area.

He said DNR should expect a letter from the county requesting a meeting in Kenosha to discuss the status of the effort and its timeline. Good responded that the Air Program will watch for the letter. The program is coordinating the effort with Illinois and Indiana and trying to work out a schedule. Data from the Kenosha monitors, Chiswaukee Prairie and Kenosha Water Tower, were certified early to move the effort along. Hiebert asked whether DNR will be updating the study group on this effort, or providing updates on the website. Good responded that the program could certainly provide updates at the study group meetings.

Hiebert also commented that data from the special purpose monitor in Kenosha would ideally be used to narrow the boundaries of future nonattainment areas. EPA already designated only part of Kenosha County nonattainment for the 2008 ozone standard. He said that DNR and stakeholders worked hard to get approval for an additional monitor to clarify whether the violations are occurring only near the lakeshore, and that a similar effort is being made in Sheboygan County. Good stated that so far the Air Program has been able to continue operating the special purpose monitor in Kenosha, which is east of the current nonattainment boundary. The program will keep the study group updated on further developments involving the monitor.

Proposed transport rule update for the 2008 ozone NAAQS

Palmer asked whether DNR has been able to look at the modeling data associated with EPA's proposed update to the ozone transport rule, and whether the state will be commenting on the proposal. Bizot responded that the Air Program is looking at the data, but is not yet prepared to share its assessment. Wisconsin will probably be submitting comments. Palmer asked when the Air Program could discuss the comments, and Bizot answered that it probably would not be possible until after they are submitted given the short (45-day) comment period. Good added that DNR and a number of other states and interested parties have requested an extension of the comment period.

Bizot stated that he has reached out to utility contacts to solicit feedback on the proposal and the individual utility assessments. He added that study group members are also welcome to provide feedback by the first week of January.

Links to the proposed rule and associated documents are provided under the Action Items on page 1. See page 5 for additional discussion of the proposed rule.

Clean Power Plan

Palmer asked about DNR's planning for implementation of the Clean Power Plan, specifically whether the agency is considering filing a state plan. Good responded that the Air Program has been working on understanding and assessing the content of the final rule, and is actively working on comments on the proposed federal plan. The program reached out to the study group and Jeff Jaekels for input on these comments. However, the state has not decided whether it will be developing a state plan. Palmer stated that his clients generally support the idea of the state developing a plan.

UW Energy Summit

Holloway stated that videos of the presentations at the 2015 UW Energy Summit have been posted to the web and may be of interest to study group members. Speakers included Susan Hedman, Todd Palmer, and Bart Sponseller.

The presentations are available at <https://energy.wisc.edu/events/2015-energy-summit/speakers-and-sessions>.

Ozone NAAQS update

David Bizot, Regional Pollutants & Mobile Sources Section Chief

Gail Good, Air Program Director

Bizot and Good updated the group on several topics related to the ozone NAAQS. The presentation slides are available on the AMMSG website under the December 10, 2015 meeting at <http://dnr.wi.gov/topic/airquality/amstudygroup.html> (starting on slide 2).

2008 ozone standard

Slide 3 provides information about Wisconsin's 2008 ozone standard nonattainment status. In response to a question, Bizot explained that the state proposed adjusting the Sheboygan nonattainment boundary based on data showing attainment of the standard at a special purpose monitor farther from the lakeshore. However, EPA has not acted on the request.

Proposed transport rule

Slide 4 addresses EPA's proposed update to the 2008 ozone NAAQS transport rule. Hiebert asked whether the Air Program has a sense of how the proposed transport rule would affect Wisconsin. Bizot responded that the proposal significantly cuts the state's emission budget, and the Air Program needs to determine whether the budget is achievable and equitable. The proposal requires large reductions in other states as well, including states that have not done as much as Wisconsin to reduce emissions. He stated that from a big picture perspective, the proposal does not solve chronic transport issues, especially in Sheboygan County. None of the proposed options address the right sources in the right states to bring Sheboygan into attainment in the relevant timeframe. Bizot remarked that EPA says that states can do more voluntarily to reduce emissions, but that in practice states tend not to.

A member of the public asked whether EPA has figured out what measures would be needed to address nonattainment in Sheboygan. Bizot responded that he does not think they have. The attainment deadline for moderate nonattainment areas is July 2018, which means attainment is measured using data from the 2017 ozone season. EPA is therefore forced to look at measures reasonably achieved by 2017, which do not include significant means of reductions such as installing major new controls and pursuing reductions from industrial sources. Instead, EPA is mainly looking at short-term reduction measures at EGUs, which is why the options are limited. A member of the public pointed out that Rob Kaleel reported at the UW Energy Summit that LADCO modeling shows that utilities only contribute 12 percent of the emissions leading to nonattainment, a relatively small amount. Others added that Kaleel also spoke about the role of marine transport and higher emissions rates outside Wisconsin

compared to Wisconsin sources. Bizot agreed that the utility sector gets hit hard on transport issues, even though other sources, such as mobile and international sources, contribute significantly to emissions. The low-hanging reductions from EGUs have been achieved, which makes the contribution of other sectors more meaningful.

A member of the public stated that the proposed rule is a big deal for utilities. Even the SCR units at WE Energies and the Wisconsin Public Service Corporation don't achieve the proposed emission rate for Wisconsin. In addition, early action is penalized because allowances held by utilities under the old budget are discounted going forward. The utilities are trying to understand why EPA is identifying a need for more reductions in Wisconsin when the state only contributes to maintenance issues. Another member of the public noted that Wisconsin has to walk a delicate line in its response to the proposal, because the state is significantly affected by transport from other states, but is also required to make the third largest emissions cut.

Proposed exceptional events rule

Slide 4 also addresses EPA's proposed new exceptional events rule. Good noted that the Air Program welcomes feedback from study group members on the proposal. Good mentioned that DNR tried to use the previous exceptional event rule once in the past, in order to exclude monitoring data affected by a wildfire from the set of data used to measure compliance with the PM_{2.5} NAAQS. The request was not acted on because the monitor demonstrated attainment with the standard anyway. DNR would like to comment on the proposed rule in case the state needs to use the rule again in the future.

Gail stated that one of the significant changes between the proposed rule and the previous rule is that the proposed rule does not include "but for" criteria (when an exceedance or violation would not have happened "but for" a certain event). Additional items in the proposal include references to guidance documents discussing how states have successfully demonstrated exceptional events.

Holloway asked whether the proposal mentions the use of satellite data. Good and Bizot agreed that it might. Holloway mentioned that she is leading an AQAST subgroup that is pulling together resources on how satellite data can be useful for the eastern United States, and that the Air Program can contact her if they would like assistance on that topic.

2015 ozone NAAQS

Slides 5 to 7 address the finalized 2015 ozone standard. Good explained that the provision extending the ozone monitoring season is problematic. The extension does not include an increase in funding to support the extra data collection. DNR is working on how to manage the additional work using current resources, and 2016 will be a trial year. In addition, some Wisconsin monitoring sites are difficult to access in the winter. Due to these issues, DNR may request waivers for the extended season in the future.

Good stated that DNR had commented on the extended season in the proposed rule. EPA extended the season for 32 states based on a four year analysis. However, the Air Program conducted a 20 year analysis, and found that extending the season in Wisconsin did not result in any additional violations of the standard at 70 ppb.

In response to questions, Good explained that the ozone monitoring season for Kenosha has been April 1 to October 31 to match Illinois's and Indiana's seasons. These states' seasons now start on March 1 and extend to October 31, and EPA would probably like Kenosha's season to match. Hiebert asked whether Kenosha monitors have shown violations after October 15. Good responded that they have not this year, but that she would have to look at the data to speak to previous years.

Bizot showed maps indicating potential nonattainment areas under the 2015 ozone standard (slides 6 and 7). He noted that they represent probable best and worst case scenarios for area designations. If summer 2016 is cool, the designations may look similar to the map on slide 6, and if the summer is hot, the designations would probably look

more like the map on slide 7. On slide 6, the problem areas are the traditional lakeshore areas: Sheboygan, Kenosha, and Manitowoc counties.

Bizot clarified that the full Green Bay statistical area is marked as nonattainment on slide 7, because the Kewaunee design value is 73. It is typical for the full statistical area to be designated nonattainment, but DNR would likely argue that the striped area (Oconto County) should not be included.

Hiebert asked whether Kenosha nonattainment would likely be tied to Chicago. Bizot responded that he thinks it should stay linked to Chicago, because it forces Illinois and Indiana to work harder to address their contributions to nonattainment in Sheboygan. EPA probably would not break that link.

Holloway stated that her group looked at different models and data for Chicago over a long time frame, and found that ozone days increase by a factor of two to eight over a 100-year time horizon. As a result, a hot summer like the summer of 2012 will become more common. She offered to help DNR with a longer term analysis if it would be useful. Hiebert added that the assessed increase in ozone days does not account for additional emissions controls and reductions from the mobile source sector. Bizot also pointed out that ozone emissions are not actually decreasing in all sectors, for example, some EGUs in states other than Wisconsin have installed NO_x controls, but do not run them because it is cheaper to buy emission allowances.

Start up, shutdown, and malfunction SIP issue briefing

Kendra Fisher, Air Program Attorney

Kristin Hart, Permits & Stationary Source Modeling Section Chief

Fisher and Hart discussed an expected SIP call¹ regarding the treatment of excess emissions during periods of startup, shutdown, and malfunction (SSM) of industrial processes or emission control equipment. Fisher stated that DNR hopes to convene a small working group to inform DNR's approach to amending the SIP. The presentation slides are available on the AMSG website under the December 10, 2015 meeting at <http://dnr.wi.gov/topic/airquality/amstudygroup.html> (starting on slide 8).

Fisher explained that SSM provisions have been in place in Wisconsin since 1972. Recent court actions have shifted EPA's view of these types of exceptions (slides 9 and 10). EPA issued a SIP call to 36 other states requiring removal of SIP provisions that provide an affirmative defense for excess emissions during planned events, such as startup and shutdown. EPA later amended the SIP call to also require removal of provisions that provide excess emission exceptions during malfunction events. Wisconsin's code language in s. NR 436.03 constitutes an affirmative defense, and while the state was not included in the original SIP call, EPA is expected to issue a SIP call specifically for Wisconsin in the near future.

The Air Program will continue granting the NR 436.03 exceptions, which are often requested during compliance testing. However, the Air Program is now including additional language at the end of approval letters explaining the SIP issue (slide 11). Palmer commented that he has heard from EPA that they do not think this section of the state code is in the SIP, and that the language for the approval letters supports that (because it states that the approval constitutes DNR approval only). Hart clarified that the statement means that even though EPA plans to issue the SIP call, the exception is still part of state rule. Fisher added that the language is meant to provide full disclosure about the issue. Palmer suggested that the second sentence of the additional approval language should be stronger and say that the approval does preclude EPA from taking action.

Slide 12 presents the SIP amendment process schedule. Hart added that, given the expected timeline, DNR wants to start working on it in advance, and find out how other states are amending their SIP.

¹ A notification from EPA that Wisconsin must amend its State Implementation Plan (SIP).

Palmer asked whether the SIP call would address any Wisconsin code other than s. NR 436.03. Fisher responded that s. NR 436.03 is the only relevant provision DNR is aware of. Palmer said that he has gotten mixed signals from EPA and DNR about whether that section of the state code is included in the SIP. Fisher agreed that that is probably part of the reason Wisconsin was initially excluded from the SIP call. Palmer said that if the provision is not in the SIP, it is not binding. Fisher responded that EPA did make a statement in a petition that the provision is included in the SIP. Hart added that DNR is therefore proceeding as if it is part of the SIP.

Palmer noted that he thinks there are some sources that could not meet the existing SIP limits during start-up and shutdown events, which presents the issue of enforcing rules that cannot be met. Fisher said that EPA lays out options to address this, and the main one they suggest is source-specific limits during start-up and shutdown events. Hart stated that DNR faces the task of determining how sources can meet all applicable limits during startup and shutdown, what provisions in the Wisconsin code provide exceptions, and how to write code that is SIP-approvable. Hart added that a lot of limitations have been in place since the 1970s, so there have not been a lot of sources saying they could not meet the requirements during start-up/shut down events. Therefore, it is not clear how many sources would have difficulty meeting the requirements. Fisher pointed out that there are other ways to make the requirements achievable, such as Michigan's enforcement discretion rule, which according to EPA does not violate the Clean Air Act. The Air Program hopes to get feedback from affected sources so it can develop a good response to the SIP call. And if there are specific rules that are problematic, the program would like to start there.

Palmer suggested that larger sources would have Best Available Control Technology (BACT) limits, so the BACT process could be used to address SSM, and these sources would not be affected by the SIP issue. Hart agreed and said DNR has a lot more discretion with BACT. Fisher said the issue is more the rule-based limits, such as ch. NR 415, NSPS, and NESHAPs.

Palmer said that he recalls that by approving DNR's Title V program, EPA was rejecting a comment from the Sierra Club that the Clean Air Act does not recognize SSM exceptions. Fisher says the view of the issue has shifted. Hart asked whether Palmer thinks DNR should argue that EPA already approved the rule because the exceptions are determined case by case, like BACT. Palmer agreed that this is not a blanket exception, and sources have to request it and receive approval from DNR. Sometimes DNR requires modeling, and often approval includes requirements that sources have to meet during the approved event to ensure they will not violate standards. Fisher and Hart concluded that there are a number of options for addressing the issue, including making a case to EPA that DNR's rule is approvable as is, adding text to ch. NR 436 to emphasize that use of the exception is discretionary, or start from scratch with a different approach. Palmer agreed that a workgroup would be helpful.

Hart asked the group how the SIP issue would affect industry. A member of the public said that the concepts laid out in ch. NR 436 could be used more rigorously in the permitting process, and questioned whether NR 436 is an affirmative defense rule, because it requires an upfront request rather than a request after the event. The rule lays out the requirements in advance. Fisher said that EPA is requesting amendments to both types of exceptions, whether automatic or requiring evaluation by the regulatory agency. Fisher and Hart agreed that this point should be part of the conversation about the issue.

Hart said that DNR welcomes any number of participants in the workgroup. The Air Program would like to explore different ideas and how they would be implemented procedurally. Once EPA issues the SIP call, the effort will need to gear up. If EPA is delayed, DNR has more time to work on it. Hart stated that they would like to get the group started in January.

Additional discussion

ROP B program

A member of the public asked about the status of the ROP B program. Hart responded that the ROP B permit will be issued at the same time as DNR's PM_{2.5} guidance. Development of the PM_{2.5} guidance is still in progress. DNR received a number of comments on the draft guidance, and the process was delayed because the Ho Chunk Nation requested a consultation and provided additional comments. DNR's response to the comments has been reviewed by the legal team, and DNR hopes to post the final guidance early next year.

1-hour NO_x standard

A member of the public asked about implementation of the 1-hour NO_x standard effective January 1. Good responded that the state is in compliance with the standard. There are five monitors in the state measuring NO_x in different ways, including one near-road monitor.

Compliance documents and submission to EPA

A member of the public asked whether a state rule change is needed to reflect EPA's position that sources no longer need to submit compliance documents to EPA. Hart said DNR does not think rule revision is required, but that the Air Program needs to remove the relevant language from permits, which it has been doing when issuing renewals or process revisions. The Air Program also sent an email to sources letting them know they can ignore that provision of their permit until it is removed. Hart stated that EPA addressed this issue through a determination that all Region 5 states (except for one) post submitted compliance documents online, and that the determination only affects Title V sources. Stewart added that the Air Program will confirm that this assessment is correct and sources do not need to submit documents to EPA. Fisher stated that EPA has said that submission to the state is sufficient; the DNR would not find a source deficient, and EPA would not want to.