Air Management Study Group
Quarterly Meeting

Madison
November 1, 2018
Hiring Update

Gail Good
Air Program Director
Proposed Guidance and Rules
Legislative Update

Kristin Hart
Permits and Stationary Source Modeling Section Chief

David Bizot
Air Quality Planning and Standards Section Chief
### Proposed DNR Guidance

<table>
<thead>
<tr>
<th>DNR Guidance in Drafting Phase</th>
<th>Description</th>
<th>Target Date</th>
</tr>
</thead>
</table>
| Updates to Air Dispersion Modeling Guidelines | Updates addressing:  
  - MERPs  
  - AERMOD updates  
  - SIL Guidance | On hold until EPA finalizes                                                  |

<table>
<thead>
<tr>
<th>DNR Guidance in Public Comment</th>
<th>Description</th>
<th>Date Posted</th>
</tr>
</thead>
<tbody>
<tr>
<td>None</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Finalized DNR Guidance</th>
<th>Location</th>
<th>Final Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>None</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
# Proposed EPA Rules and Guidance

<table>
<thead>
<tr>
<th>Proposed EPA rule/guidance</th>
<th>Docket</th>
<th>Comments due</th>
</tr>
</thead>
<tbody>
<tr>
<td>Guidance on Interpreting “Adjacent” for Source Determinations</td>
<td><a href="https://www.epa.gov/nss/forms/interpreting-adjacent-source-determinations">https://www.epa.gov/nss/forms/interpreting-adjacent-source-determinations</a></td>
<td>10/05/2018</td>
</tr>
</tbody>
</table>
## Finalized EPA Rules and Guidance

<table>
<thead>
<tr>
<th>Finalized EPA rule/guidance</th>
<th>Link</th>
<th>Date finalized</th>
</tr>
</thead>
<tbody>
<tr>
<td>Final SIP approval of Wisconsin 2012 PM2.5 NAAQS</td>
<td><a href="#">EPA-R05-OAR-2018-0008</a></td>
<td>10/17/2018</td>
</tr>
<tr>
<td>Final SIP approval of 2017 revisions to NR 400 and 406</td>
<td><a href="#">EPA-R05-OAR-2017-0280</a></td>
<td>10/9/2018</td>
</tr>
</tbody>
</table>
### Draft and Final Legislation

<table>
<thead>
<tr>
<th>Draft legislation</th>
<th>Link</th>
</tr>
</thead>
<tbody>
<tr>
<td>N/A – legislature not in session</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Final legislation</th>
<th>Link</th>
</tr>
</thead>
<tbody>
<tr>
<td>N/A – legislature not in session</td>
<td></td>
</tr>
</tbody>
</table>
Emission Reduction Credit (ERC) Factsheet

Kristin Hart
Permits and Stationary Source Modeling Section Chief

David Bizot
Air Quality Planning and Standards Section Chief
ERC Factsheet

- A fact sheet addressing some frequently asked questions about emission reduction credits (ERCs) is now available on the DNR website: [https://dnr.wi.gov/files/PDF/pubs/am/AM567.pdf](https://dnr.wi.gov/files/PDF/pubs/am/AM567.pdf)

- Covers general information as well as questions about establishing, maintaining and using ERCs.

- ERC contacts:
  - Kristin Hart (ERC establishment, use and trading)
  - Maria Hill (ERC reporting/emissions inventory)
  - David Bizot (SIP requirements and existing ERCs)
Air Monitoring Update

Katie Praedel
Air Monitoring Section Chief
Air Monitoring - Annual Network Plan

• Summary of key events
  • Wisconsin 2017 Act 159 required exclusion of the Sheboygan Kohler-Andrae air monitoring site from the “Wisconsin Department of Natural Resources 2019 Air Monitoring Network Plan”.
  • On June 21, 2018, EPA responded, noting the plan was not approvable as submitted due to the omission of the Sheboygan Kohler-Andrae monitor.
  • On June 25, a revised version that included Kohler Andrae was made available for public comment
  • On September 20, 2018 EPA approved Wisconsin’s revised Annual Network Plan.
Air Monitoring – Trends Report

• 2018 Wisconsin Air Quality Trends Report
  • Certified monitoring and emissions data and trends through 2017
Air Monitoring – Trends Report

24-Hour PM$_{2.5}$ Design Values in Wisconsin

8-Hour Ozone Design Values in Wisconsin
Air Monitoring – Trends Report

Highlights

• Wisconsin has seen dramatic reductions in emissions since 2002.
  o Emissions of ozone-forming pollutants (NOx and VOCs) have decreased 50 percent.
  o SO2 emissions from point sources (such as power plants, paper mills, and other industrial facilities) decreased 87 percent.
  o Emissions of CO have decreased 47 percent.

• Monitoring data shows significant reduction in fine particle pollution.

• All counties in Wisconsin now monitor concentrations of fine particles well below the federal air quality standards and are considered to be “in attainment” by U.S. Environmental Protection Agency.
Air Quality Sensors

- Citizen science and low cost sensor technology rapidly progressing
- Lessons learned from the National Ambient Air Monitoring Conference
  - Tiered approach at evaluating sensor performance
  - Quality Assurance is critical
  - Certain sensor technologies are more advanced than others
Purple Air – PM2.5 Sensor

- Most popular sensor technology
- Real-time world-wide mapping available at: https://www.purpleair.com/map
Purple Air compared to AQI
Purple Air Sensor – what we know

• Purple Air sensors are biased 1-2% high
  • This bias increases as the concentrations increase
• A correction factor is critical to apply to the data when attempting to compare with regulatory monitors
• Correction factor may vary based on region, season or terrain
• Purple Air sensors are in Wisconsin and networks are rapidly expanding
Purple Air Sensor Plan

DNR Proposed Plan for Sensor management

• Purchase four Purple Air Sensors to gain familiarity with the monitor, network and data. Sensors will be collocated at four WI sites, including: Madison East, Green Bay East, Waukesha, LaCrosse.

• Utilize data to calculate a correction factor for the Purple Air sensors that aligns with WI regional conditions.

• The correction factor can be applied to Purple Air sensors used by citizen-based monitoring groups to generate more representative data.
LON Recoding Update

Maria Hill
Compliance, Enforcement and Emission Inventory Section Chief
LON Recoding

- EPA HQ has requested the states hold on any changes to identifying violation letters in ICIS
- EPA HQ is reviewing the LON issue with the regions
  - Considering additional coding options – currently only “warning letter” and “notice of violation”
  - Considering providing more guidance on which violation types equate to which letter type
- During the interim period, WI is using the LOI step more frequently
Act 70 Pilot Project Update

Kristin Hart
Permits and Stationary Source Modeling Section Chief
Act 70 Pilot Project

The Act 70 Pilot Project is a collaboration between Brownfields, Green Tier and Air Management programs

GOAL: Provide incentives for manufacturing facilities to locate on brownfields

• Stakeholders met October 31, 2018
  • Group reviewed outreach materials
  • Update on the Greet Tier Registration Permit
  • Report on Green Tier Charter Template Progress/Direction
  • WEDC Introduction & Involvement
  • Pilot Name!
Act 70 Pilot Project

• Next Steps Stakeholders met October 31, 2018
  • Continue refining outreach materials
  • Continue refining Green Tier model charter and contract materials
  • Provide Type G Registration Permit for public comment
  • Develop Registration Permit outreach plan

• Next Meeting – January 18, 2019
Member Updates
Work Plan

Andrew Stewart
Field Operations Director
Work Plan

• Work planning is part of an approach that directs program activities over the course of the fiscal year.
  • aligns with agency & program priorities
  • focuses on understanding anticipated staff hours
  • adheres to budgets for the upcoming fiscal year

• In addition:
  • work planning identifies specific improvement projects
  • work plan outlines responsibilities & expectations of staff and supervisors
Work Plan Process

• Air Management Team
  • Assess projects to continue into next FY
  • Identifies potential new projects/areas of focus
  • Identifies training & recruitment needs
  • Drafts & approves charters
  • Identifies & quantifies resources
  • Develops timelines
  • Gathers & assesses feedback
  • Finalizes projects, goals & expectations
Work Planning Narrative

- Started using a couple of years ago
- Communicates agreements & expectations
- Increases transparency & understanding
- One of a number of products that come out of work planning effort
  - Performance measures
  - Project charters
Ozone Update

David Bizot
Air Quality Planning and Standards Section Chief

Katie Praedel
Air Monitoring Section Chief
### Status of the 2018 Ozone Season

#### Top Four 8-Hour Average Ozone Concentrations – as of October 16, 2018

<table>
<thead>
<tr>
<th>Site</th>
<th>Concentrations (ppb)</th>
<th>2018 Critical values</th>
<th>Days at/above C.V.</th>
<th>Current 2016-2018 &quot;design value&quot;</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1st high</td>
<td>2nd high</td>
<td>3rd high</td>
<td>4th high</td>
</tr>
<tr>
<td>Newport</td>
<td>80</td>
<td>76</td>
<td>75</td>
<td>75</td>
</tr>
<tr>
<td>Jefferson</td>
<td>78</td>
<td>72</td>
<td>68</td>
<td>68</td>
</tr>
<tr>
<td>Chiwaukee Prairie</td>
<td>92</td>
<td>88</td>
<td>87</td>
<td>79</td>
</tr>
<tr>
<td>Kenosha WT</td>
<td>84</td>
<td>84</td>
<td>81</td>
<td>80</td>
</tr>
<tr>
<td>Kewaunee</td>
<td>86</td>
<td>78</td>
<td>77</td>
<td>72</td>
</tr>
<tr>
<td>Manitowoc</td>
<td>93</td>
<td>90</td>
<td>81</td>
<td>76</td>
</tr>
<tr>
<td>Milwaukee SER</td>
<td>86</td>
<td>73</td>
<td>71</td>
<td>71</td>
</tr>
<tr>
<td>Bayside</td>
<td>86</td>
<td>78</td>
<td>77</td>
<td>73</td>
</tr>
<tr>
<td>Grafton</td>
<td>93</td>
<td>77</td>
<td>74</td>
<td>73</td>
</tr>
<tr>
<td>Harrington Beach</td>
<td>88</td>
<td>87</td>
<td>82</td>
<td>73</td>
</tr>
<tr>
<td>Racine Payne &amp; Dolan</td>
<td>90</td>
<td>88</td>
<td>81</td>
<td>78</td>
</tr>
<tr>
<td>Beloit</td>
<td>80</td>
<td>69</td>
<td>69</td>
<td>68</td>
</tr>
<tr>
<td>Sheboygan Kohler Andrae</td>
<td>99</td>
<td>93</td>
<td>84</td>
<td>83</td>
</tr>
<tr>
<td>Sheboygan Haven</td>
<td>75</td>
<td>74</td>
<td>72</td>
<td>70</td>
</tr>
<tr>
<td>Lake Geneva</td>
<td>78</td>
<td>77</td>
<td>70</td>
<td>70</td>
</tr>
</tbody>
</table>

- **2008 NAAQS**: 75 ppb
- **2015 NAAQS**: 70 ppb

Note: Data have not yet been quality assured or certified and are subject to change. Values are only shown for monitors that exceeded their critical value at least once.
Draft
Ozone 2016-18
Design Values

As-of
10/16/2018

Data is neither
quality assured
nor certified and
is subject to
change
2008 ozone NAAQS implementation

• Neither the partial Kenosha (part of 3-state Chicago area) or Sheboygan County nonattainment areas attained the 2008 ozone NAAQS by July 20, 2018.
  • Kenosha is expected to be reclassified to “serious” no later than January 2019 (final action).
  • Sheboygan is eligible for and is expected to be granted a one-year extension to attain, to July 20, 2019.
    • Based on draft 2018 data, area will not attain; bump-up to serious is expected in late 2019.

• Requirements for serious areas
  • NNSR offset ratio goes to 1.2:1 (from 1.15:1)
  • Major source threshold decreases to 50 tpy (from 100 tpy)
  • Attainment plan showing attainment by July 2021
Emission Inventory Update

Maria Hill
Compliance, Enforcement and Emission Inventory Section Chief
Emission Inventory

2017 Data to NEI (tons)

<table>
<thead>
<tr>
<th>SO2</th>
<th>NOx</th>
<th>PM10</th>
<th>VOC</th>
<th>CO</th>
<th>HAPs</th>
</tr>
</thead>
<tbody>
<tr>
<td>30k</td>
<td>42k</td>
<td>18k</td>
<td>22k</td>
<td>34k</td>
<td>2.5k</td>
</tr>
</tbody>
</table>

2018:

- January FET seminars will include one-on-one assistance
- Skype assistance will be available
- Updates to Source Classification Codes (SCC); new, retired, revised
- PM2.5 emissions reporting strategy will match permitting strategy
2019 Meeting Dates and Priority Topics

Gail Good
Air Program Director
2019 Meeting Dates

All meetings scheduled in G09, Natural Resources Building

• February 7, 2019
• May 23, 2019
• August 8, 2019
• November 7, 2019
2018 Priority Topics

- Permit streamlining
  - Rule making process
  - Improvements to other regulatory programs
- Ozone
  - 2008 and 2015 ozone NAAQS implementation
  - SIP submittals and redesignation requests
  - Maintenance areas in southeast Wisconsin
- PM2.5 strategy implementation
- NO₂ NAAQS implementation
- Opportunities to provide more information and data to the public
  - Use of data viewer
  - Accessibility of details on permitted amounts, emissions levels, NOVs and LONs
- Long-term planning under the new federal administration
- Additional time-sensitive topics as relevant