



Air Quality Regulations: A breath of fresh air or just hot air?

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Topics for Today

- How's the Air in MN?
- MPCA and Environmental Justice
- MPCA Initiatives

Ongoing NAAQS reviews

	Lead	Ozone	PM ¹	Secondary (Ecological) NO ₂ , SO ₂ , PM ²	Primary NO ₂	Primary SO ₂	CO
Last Review Completed (final rule signed)	Sep 2016	Dec 2020	Dec 2020/Feb 2024	Mar 2012	Apr 2018	Feb 2019	Aug 2011
Recent or Upcoming Major Milestone(s)	<u>Feb 7, 2024</u> Final ISA ³ released <u>Early 2025</u> Draft PA ³	<u>May 2024</u> Science Policy Workshop <u>Fall 2024</u> IRP ³ Volumes 1 and 2	<u>March 6, 2024</u> Final Rule, effective May 6, 2024	<u>April 3, 2024</u> Proposed Rulemaking <u>Dec. 10, 2024</u> Final Rulemaking (consent decree)	<u>Mar. 18, 2024</u> IRP ³ Volumes 1 and 2 <u>Fall 2025</u> Draft ISA ³ and IRP ³ Volume 3	<u>TBD⁴</u>	<u>TBD⁴</u>
Additional information regarding current and previous NAAQS reviews is available at: http://www.epa.gov/ttn/naaqs/							

¹ Combined primary and secondary (non-ecological effects) review of PM

² Combined secondary (ecological effects only) review of NO₂, SO₂, and PM

³ PA – Policy Assessment; REA – Risk and Exposure Assessment; IRP – Integrated Review Plan; ISA – Integrated Science Assessment

⁴ TBD = To be determined

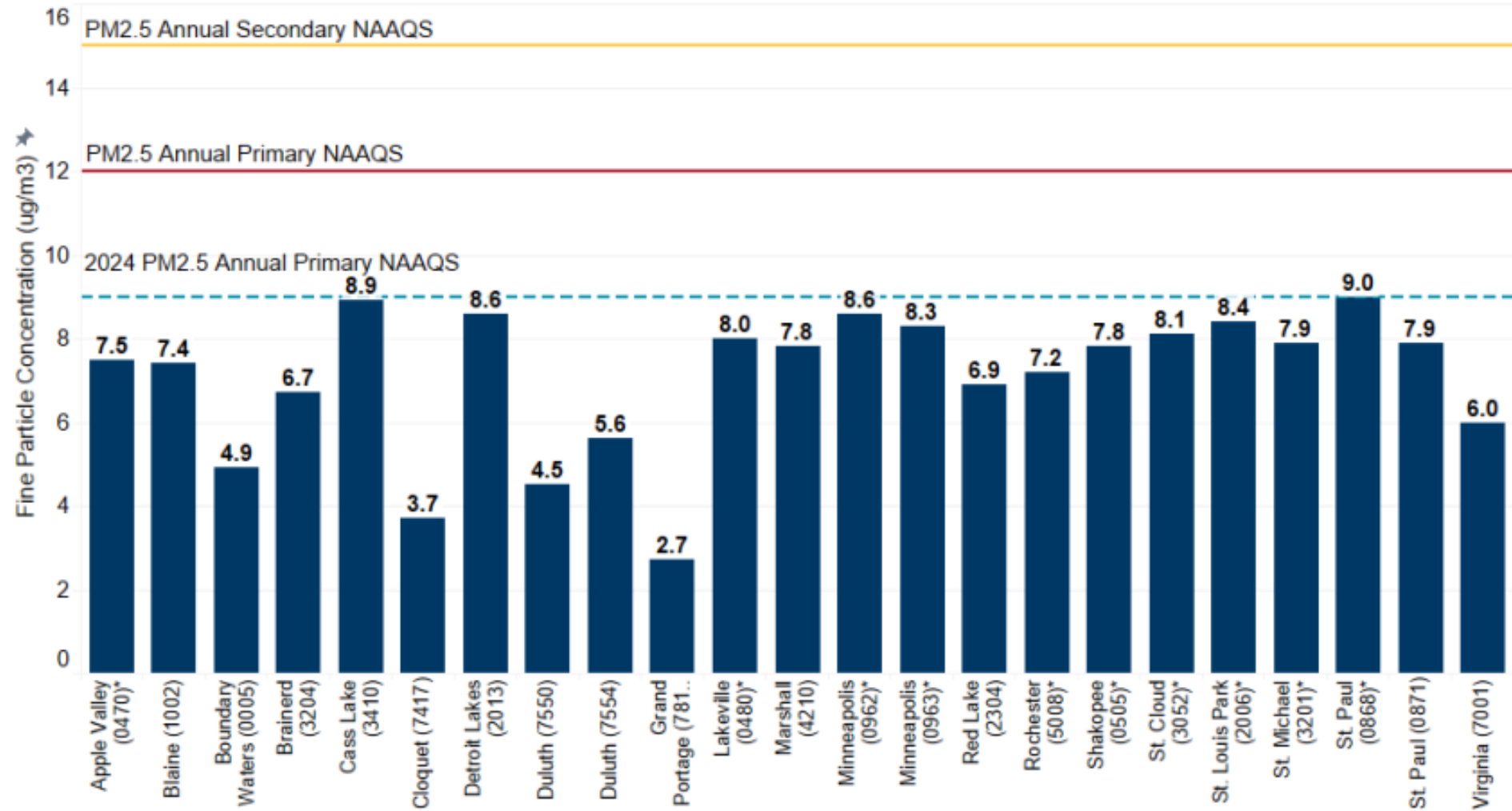
PM NAAQS Revision

- February 7, 2024 Administrator SIGNED revision
- EPA revised the level of the primary (health-based) annual PM_{2.5} standard from 12 µg/m³ to 9 µg/m³ effective May 6, 2024
- EPA is not changing any other PM_{2.5} or PM₁₀ standards.

PM 2.5 Timeline



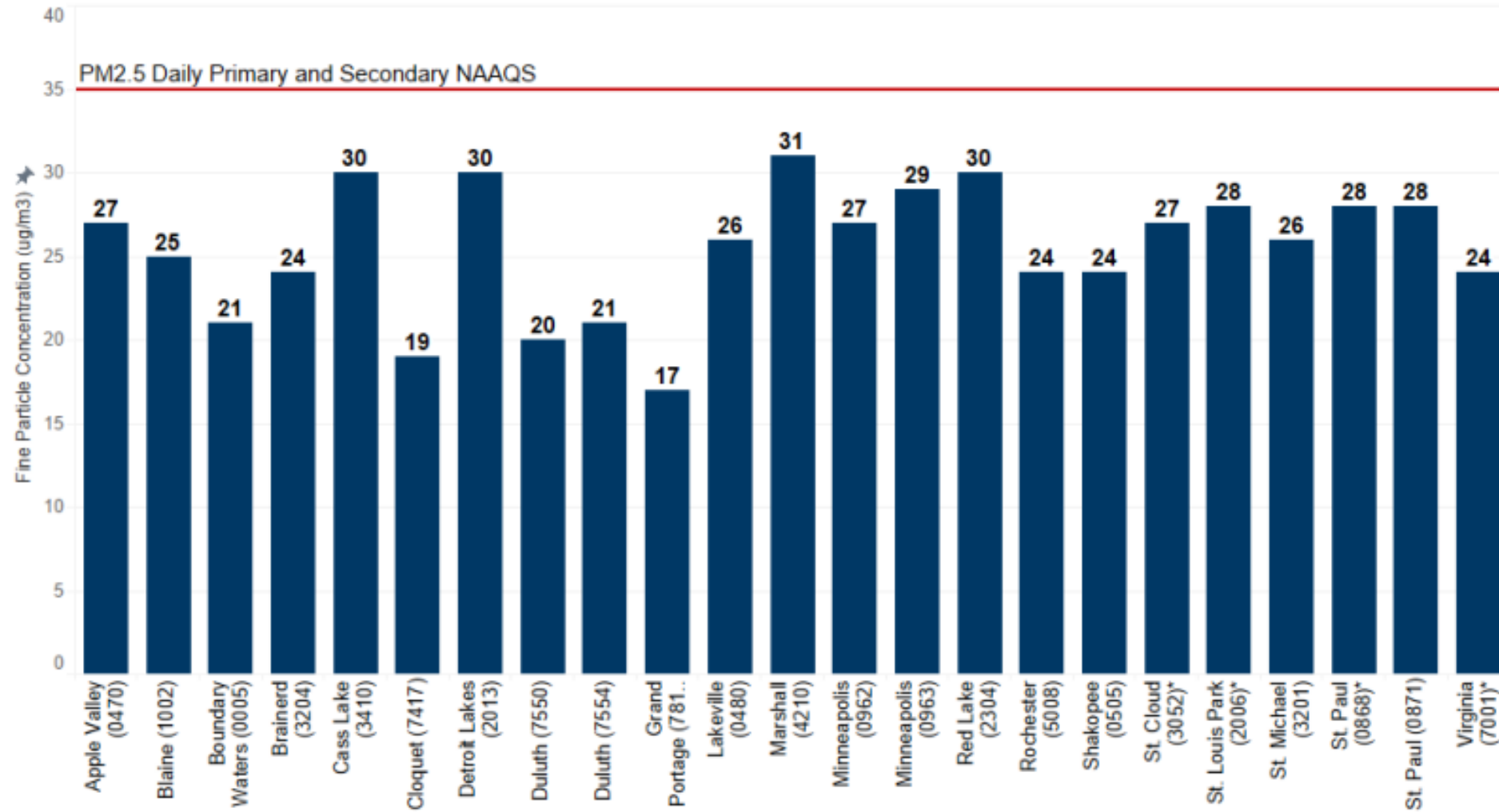
Fine particles compared to annual standard, 2021-2023



*Site did not meet data completeness criteria

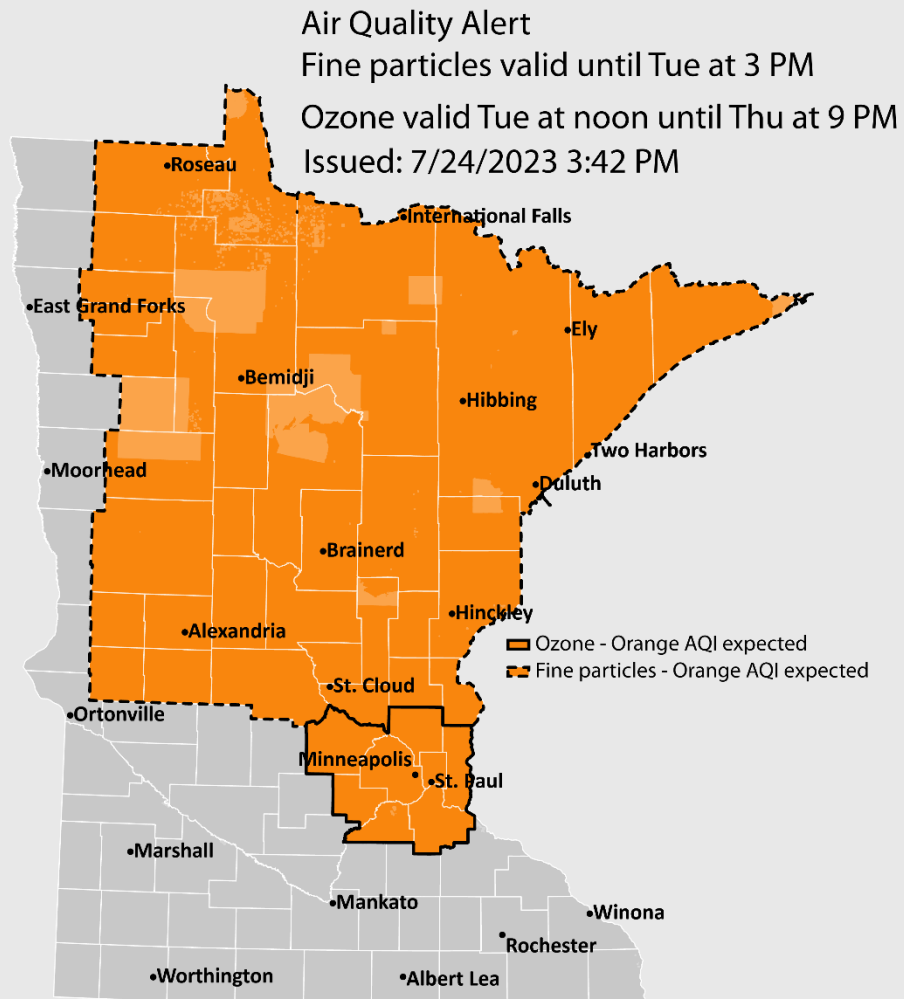
**EPA is in the process of finalizing PM2.5 design values

Fine particles compared to daily standard, 2021-2023



*Site did not meet data completeness criteria

Summer 2024 Air Quality Alerts



22 Alert Days so far in 2024
52 Alert Days in 2023

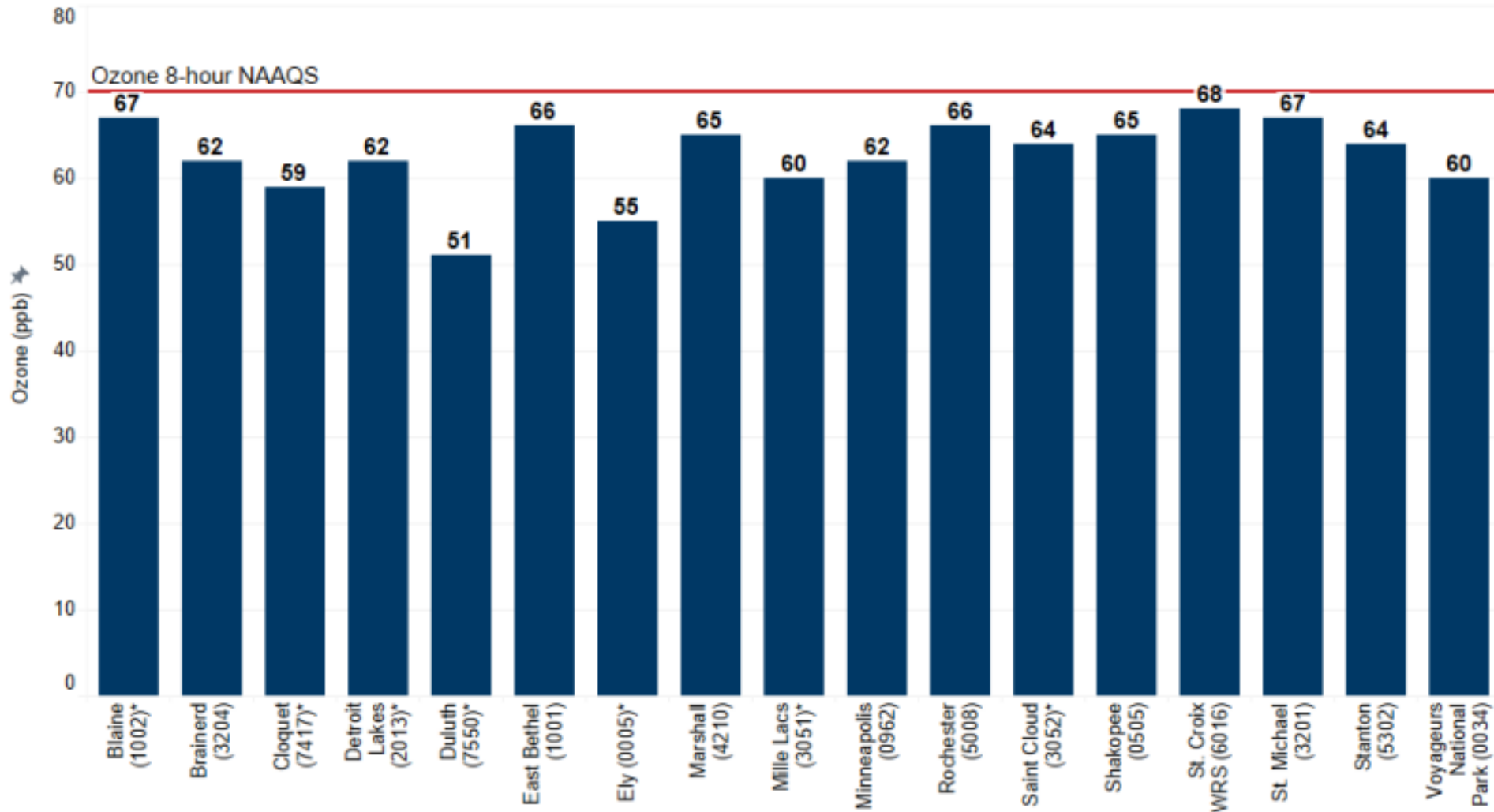
8 Alerts in 2024
21 Alerts in 2023

Mostly impacting Northwest Minnesota

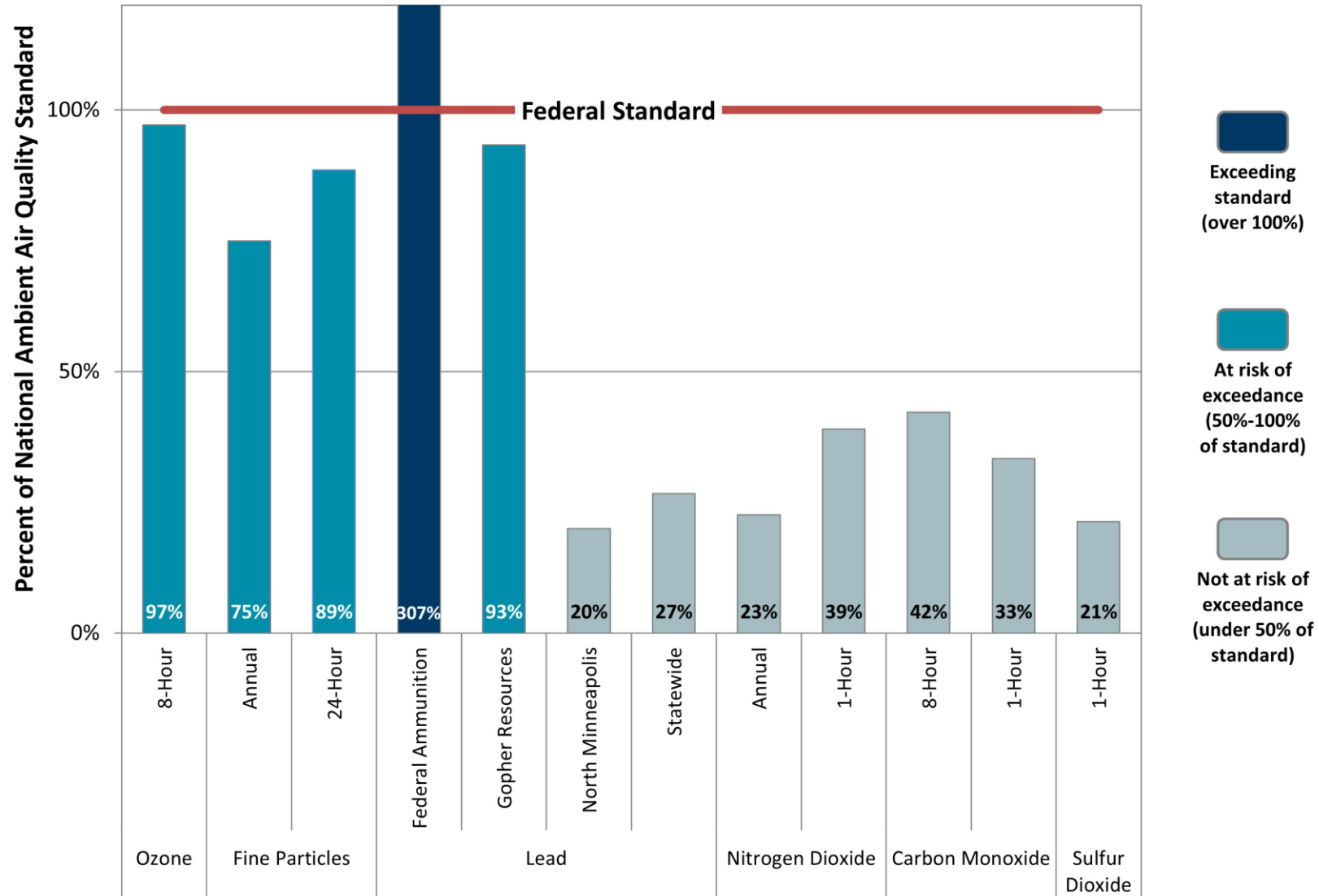
PM NAAQS Revision - MN

- Minnesota appears to be in attainment for the new PM_{2.5} annual standard.
- MPCA's State Designation Recommendation is due February 7, 2025.
- EPA's Final Designation is due February 6, 2026.
- Modeling data is available without “smoke”

Ozone compared to daily standard, 2021-2023



Minnesota's air quality compared to the NAAQS, 2020-2022



Major MACT to Area (MM2A)

- Continuation of HAP's "once in, always in", "major MACT to Area" rule amendments.
- This rule applies when certain "major" sources of HAPs reclassify themselves as "area" sources under the NESHAP program after acting to limit emissions.
- Seven persistent and bioaccumulative HAPs must continue to comply with certain major source emission standards even if these sources reclassify as area sources.
- These requirements will apply to all sources that choose to reclassify after the August 30, 2024 final amendment publication.
- Please direct any specific questions to your Agency air permit engineer.

MPCA and Environmental Justice Work

We must use data from the American Community Survey

Decennial census

- Every 10 years
- **Counts** every person in the US
- Shorter set of questions
- Official count of the population
- **Does not include income or language**

American Community Survey

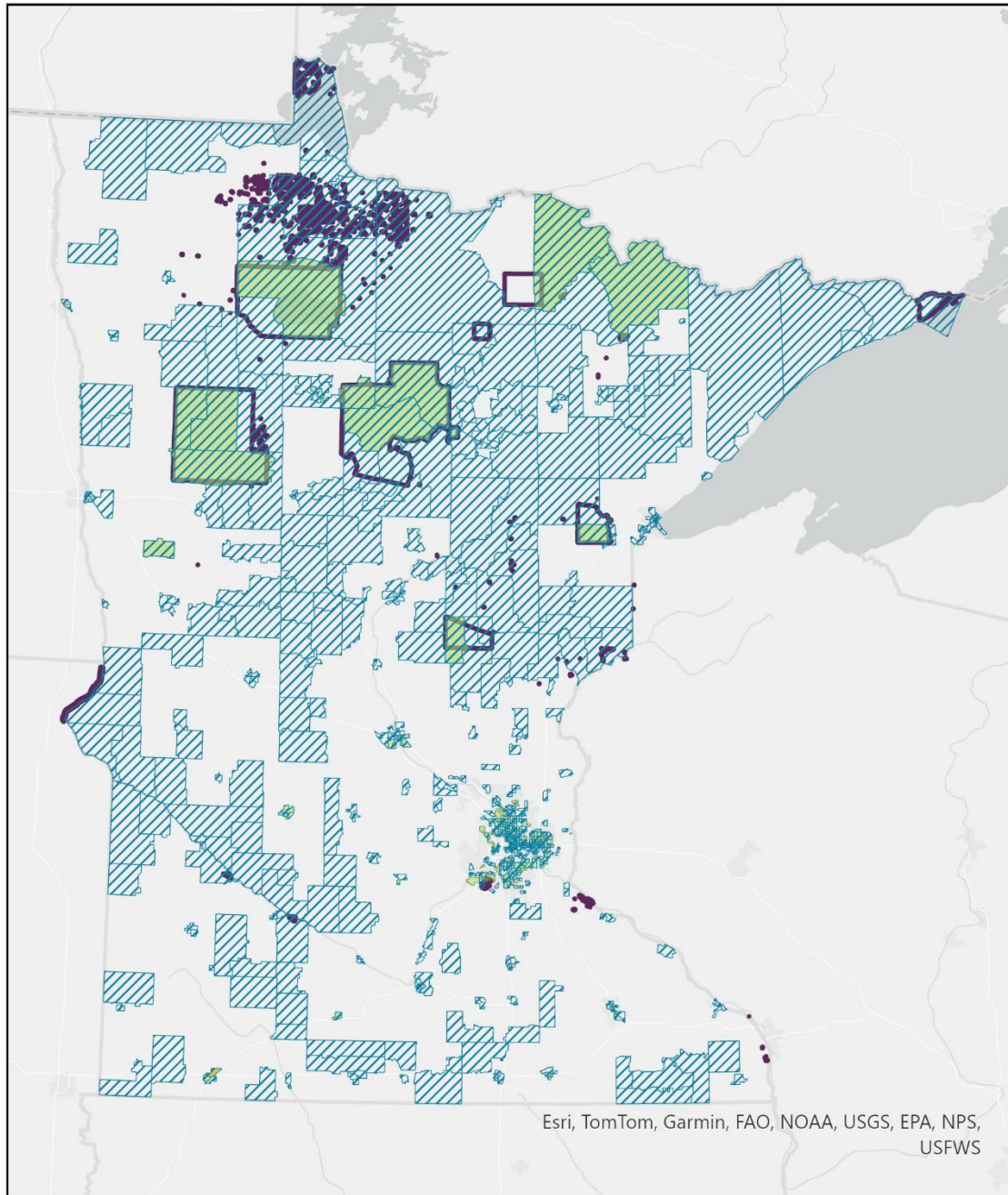
- Every year, with an average available every 5 years
- A subset of the population is **sampled**
- Longer set of questions
- **Includes race, income and language**

Legislatively defined Environmental Justice Areas in 2023

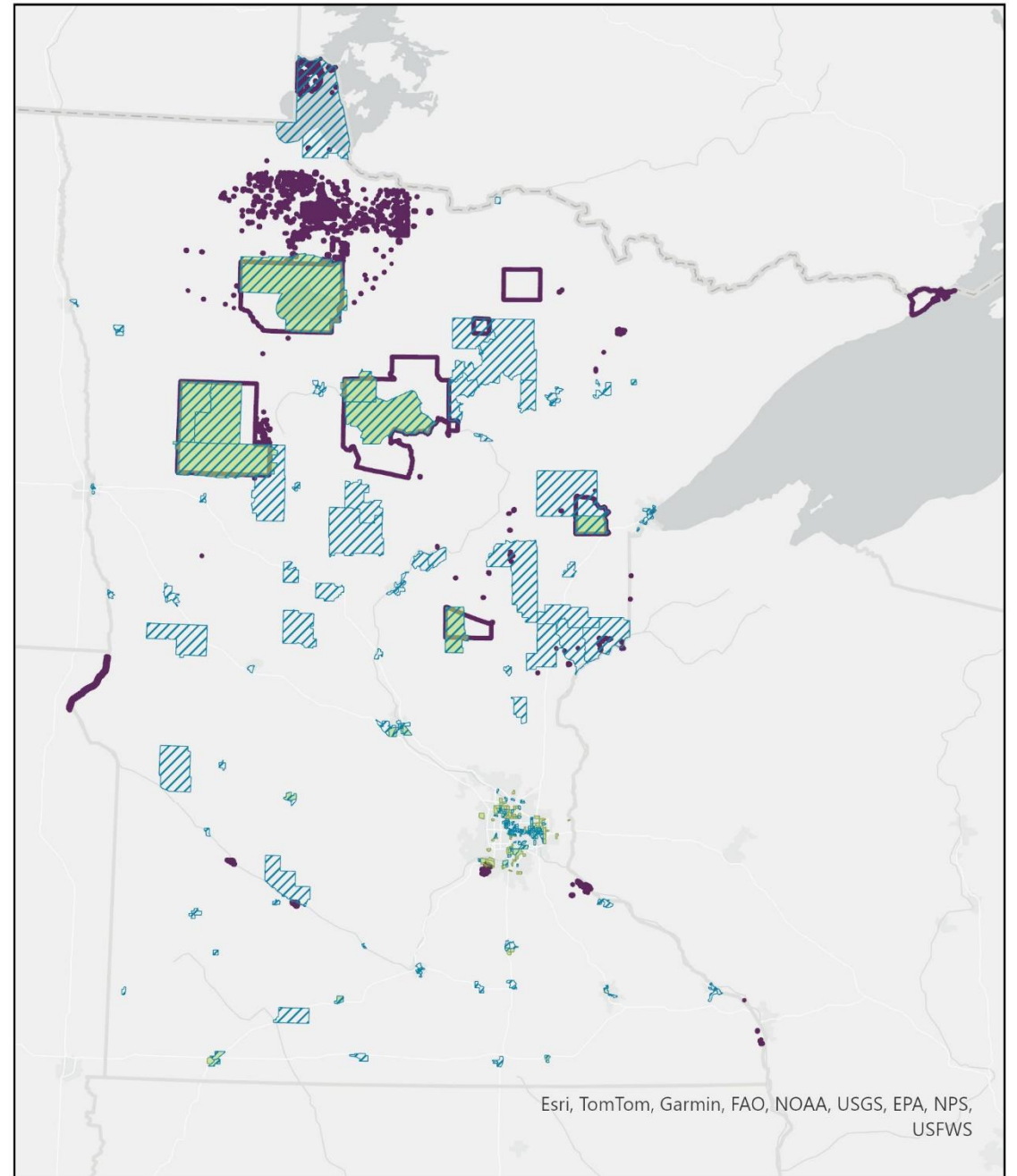
EJ areas are census tracts that meet at least one of the four criterion:

- **Low-income communities:** Census tracts where at least **35%** of people reported less than **200%** of the federal poverty level
- **Communities of color:** Census tracts where at least **40%** of the population were people of color
- **Communities with limited English proficiency:** Census tracts where at least 40% of the population over age 5 have limited English proficiency
- **Tribal land:** Maximum extent of federally-recognized and state-recognized land for federally-recognized tribes. Includes reservation and trust land.

2023 Environmental Justice areas



2024 Environmental Justice areas



- **Facilities with air permits have asked (or want to know) there's a document full of ideas for reducing environmental impacts and engaging with community.**

Voluntary environmental improvements and community engagement resources: Ideas for voluntary environmental improvements or engaging community members. Resources are included to provide additional insight on the history, environmental impacts, demographics, and interest in the area around your facility, along with financial and technical resources.

- Link for form - [Environmental Improvement and Community Engagement Ideas and Resources for Facilities \(state.mn.us\)](https://www.pca.state.mn.us/air/ideas)

\$5.6M



- **What:** Industrial Facility Air Toxics & Criteria Emission Reduction grant RFP
 - Project funding opportunities for regulated air pollution emitting facilities for pollution control equipment and/or process improvements that result in measurably reduced air pollution emissions within Environmental Justice (EJ) areas of concern or within 1-mile of a designated EJ area.
- **Application Deadline: Before 4PM (CST), January 19, 2025**
- **Grant Range:** No minimum or maximum request requirements
 - **No Matching Funds Required**

MPCA initiatives and activities

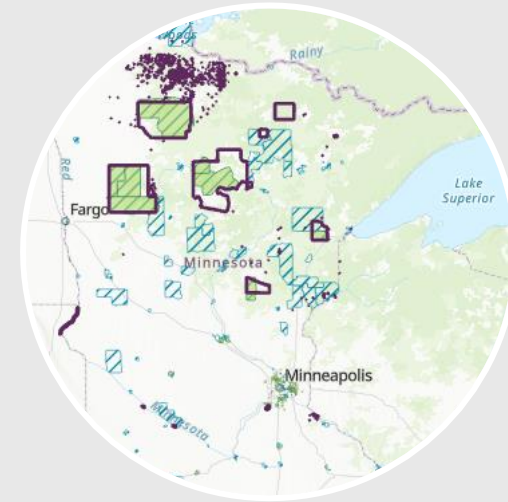
2023-2024 Legislative Activities



2023 Rulemaking



2024 Enhanced Compliance Protocol



Environmental Justice definitions and implementation

2024 Legislative session

- Monitoring Trailer
- Air Toxics monitoring sites
- Expanded authority
- Enhanced Compliance Protocol

Enhanced Compliance Protocol

- Only for a violation of HAP limit (includes violation of any limits within a NESHAP)

- Test failure

Measurement protocol for EVERY Air Toxics emitted – how they will measure them – same hierarchy as emissions inventory

Direct measurement methods (Hierarchy)

CEMS – looking for a third party feasibility

Stack test – looking for third party feasibility

Portable monitors

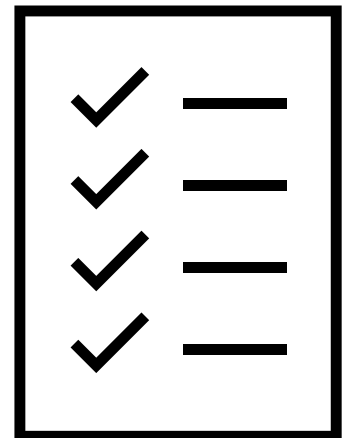
Ambient monitors

Another method approved by commissioner – MPCA discussion

- MPCA has to give report to legislature annually

MPCA Rulemakings

- Proposed rules webpage - <https://www.pca.state.mn.us/get-engaged/proposed-rules>
 - Identifies current rulemaking projects, including the Public Rulemaking Docket
 - [Receive email updates about rules of interest](#)
- Subpages for each upcoming rulemaking
 - Air toxics emissions reporting
 - Air toxics regulations
 - Cumulative impacts
 - Odor management

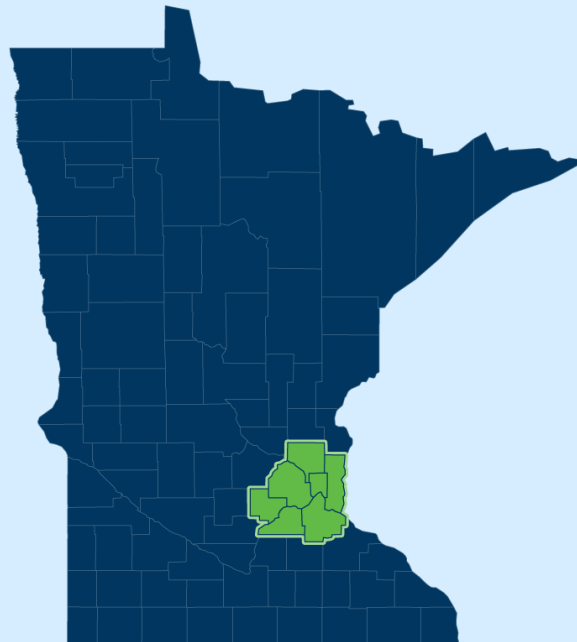


- <https://www.pca.state.mn.us/get-engaged/cumulative-impacts>
- General rule purpose:
 - Address Minnesotans' disproportionate exposure to pollutants (i.e., environmental justice areas)
 - Develop criteria for requiring a cumulative impact analysis and its content
 - Define a substantial adverse environmental and health impact
 - Establish the structure of a community benefits agreement and process
 - Ensure permit applicants have access to social and environmental factors, including elevated rates of disease, poor access to health insurance and medical care, and food insecurity.
- 36 months to publish a notice of intent to adopt

Air toxics regulations rulemaking

Restrictions

- 36 months (May 18th, 2026)
- Applicable to all 7 Metro Area Counties
 - Anoka
 - Carver
 - Dakota
 - Hennepin
 - Ramsey
 - Scott
 - Washington
- No registration option B facilities



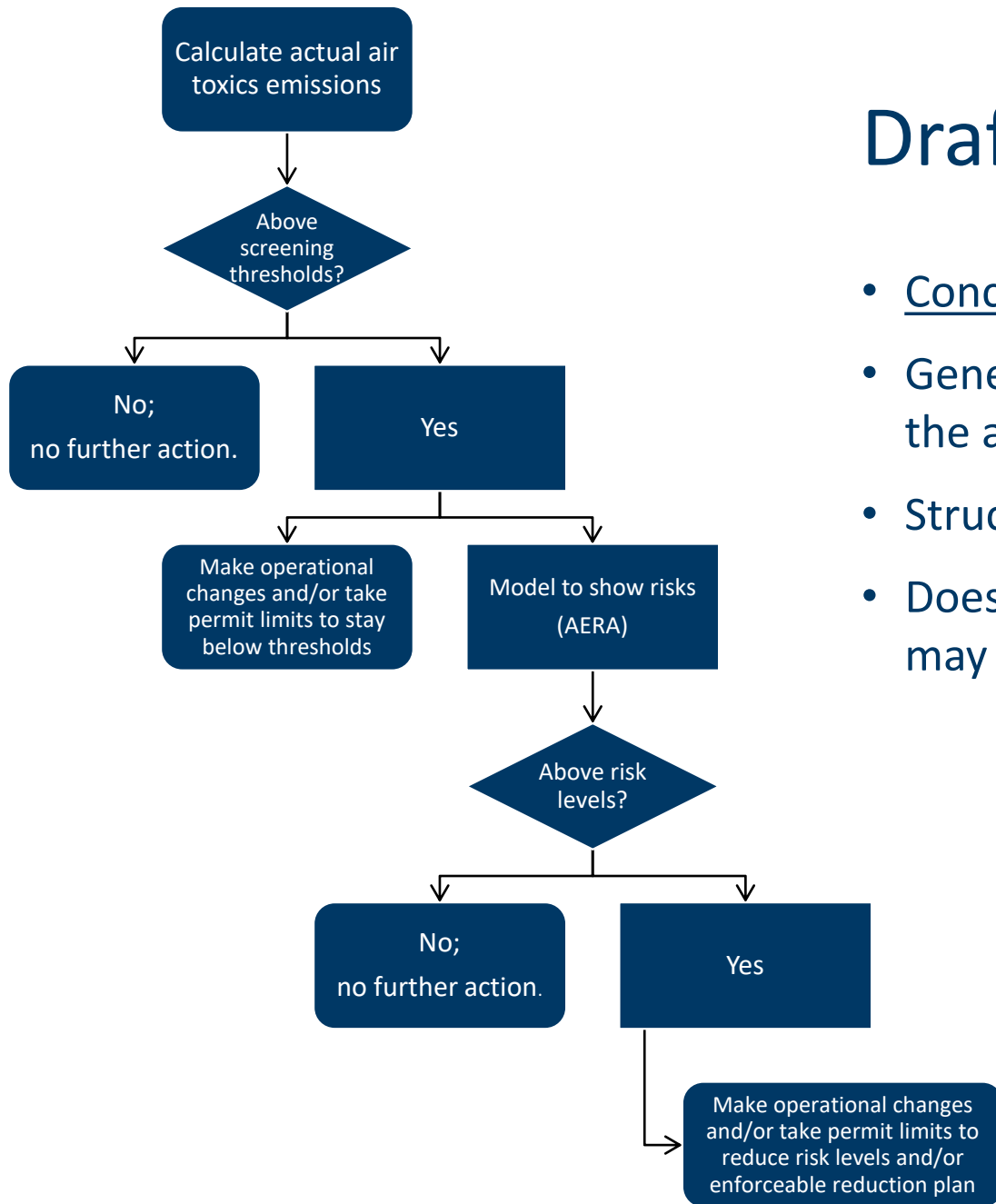
Statute requirements

- Specific air toxics
- Types of facilities
- Performance tests
- Monitoring of emissions
- Reporting requirements
- Recordkeeping
- Inspection frequency
- Must reflect:
 - Risks to human health and environment
 - Facility's compliance record
 - Residents' exposure in environmental justice areas

Air Toxics Regulations Rulemaking

- <https://www.pca.state.mn.us/get-engaged/air-toxics-regulations>
- Sign up for the email list!
- Recordings of virtual informational meeting
- Future meetings, date & time will be announced through email list

The screenshot shows the Minnesota Pollution Control Agency (MPCA) website. The header includes the MPCA logo and navigation links for "Air, Water, Land, Climate", "Trending Topics", "Business With Us", "Get Engaged", and "About MPCA". Below the header, there is a breadcrumb trail "Get Engaged / Proposed rules" and a main heading "Air toxics regulations". A sidebar on the left lists various rulemaking topics, with "Air toxics regulations" highlighted. The main content area includes the "Revisor number: R-04807", a description of the rulemaking process, and a section for "Procedural rulemaking documents" dated "July 2023", which includes links for "Request for comments (aq-rule4-12a)" and "Comments received in response to Request for Comments (aq-rule4-12b)". A "Background" section is also visible. At the bottom of the page, there is a "Stay connected" section with an email sign-up form and a "Subscribe" button. A large green arrow points from the text on the left towards the "Stay connected" section.



Draft rules structure flowchart

- Conceptual framework
- Generally, outlines how we're looking to structure the air toxics rules.
- Structure is similar to rules from other states.
- Does not include all the details, like where there may be exemptions.

Air Toxics Reporting Rulemaking

Restrictions

- **18 months** to promulgate rule
- Applicable to all 7 Metro area counties
 - Anoka, Carver, Dakota, Hennepin, Ramsey, Scott, Washington
- No Registration Option B facilities
- Notice of Intent to Adopt must be before November 26, 2024
- NOIA: Public Comment period will be open until mid-January

Statute Requirements

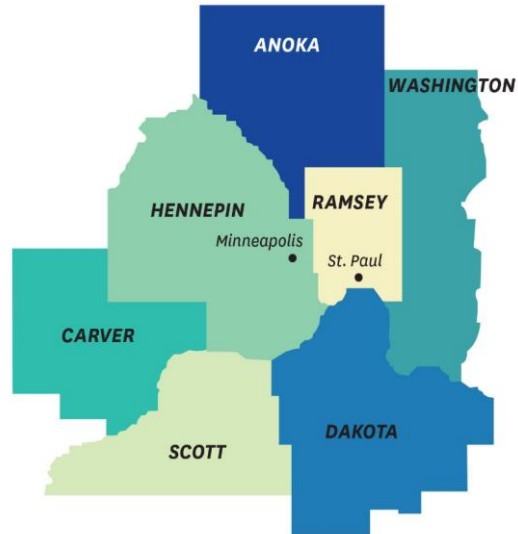
- Annual reporting for all facilities emitting air toxics
- Emissions measurement or estimation methods
- 5 lists of potential air toxics
 - Any of the chemicals on those lists:
 - HAP, IRIS, TRI, MDH values, past reported

Air Toxics Emissions Reporting – What’s *PROPOSED* in the Rule

- The List:
 - All HAPs
 - TRI PFAS
 - PFAS relevant to Minnesota including OTM-45 and OTM-50
 - Health Guidance/Risk Assessment Advice pollutants from MDH
 - Pollutants from TRI, IRIS with inhalation risks
 - Persistent, Bioaccumulative, Toxic pollutants
- Same processes for GHG/CP reporting
- Hierarchy of methodologies
- 5-year recordkeeping
- For material balance: De minimis consistent with TRI reporting, except for worst chemicals

Odor management

<https://www.pca.state.mn.us/get-engaged/odor-management>



All facilities except

- Refineries
- On-farm animal and agricultural operations
- Wastewater treatment plants
- Painting and coating operations not required to be licensed
- Temporary activities and operations
- Vehicles
- Homes
- Restaurants
- More....

General process

10 or more people
complain about an
odor



MPCA must investigate
and determine if an
objectionable odor
was emitted



Facility must submit
and follow an odor
management plan that
works

Penalty options include
revoking permit if they
can't/won't resolve the
odor

What MPCA must develop

Standards
for odors or air pollution
that could be an objectionable odor

Processes
for determining if an odor is
objectionable and
investigating/addressing complaints

Guidance
on what must be considered and
included in a facility's odor management
plan

Criteria
for determining the success or failure of
odor management plan

Rules Comparisons

	<i>Where the rule applies:</i>			<i>Who the rule applies to:</i>				<i>When:</i>	
Rule	7-county metro area?	Duluth, Rochester, Indian Country	Environmental Justice areas only?	Individual permit holders?	Capped permit holders?	Registration permit holders?	More than permitted facilities?	Rulemaking timeline	Modifying permits timeline
Air Toxics Reporting	✓			✓	✓	✓		18 months	No timeline in statute
Air Toxics Regulation	✓			✓	✓	✓	?	36 months	Within 3 years after adopting rules
Cumulative Impacts	✓	✓	✓	✓				36 months	No timeline in statute
Odor	✓			✓	✓	✓	✓	No timeline in statute	No timeline in statute

Conditional Monitoring Off-Ramp

Has your facility been required to monitor ambient air?

Do you have years of low concentration data piling up?

Unable to model?

A conditional monitoring off-ramp could be for you!



Learn more at Facility Ambient
Monitoring Session
@ 3pm, Room M100E

Conditional Monitoring Off-Ramp

- Eligibility Criteria includes:
 - 3-5 years of monitoring under an approved plan
 - Low probability the monitor will exceed ambient standards
 - Actual emissions are representative of permit allowable (willing to take limits if not)
 - In compliance with your air permit
 - And more! See form for details!
- If you meet the eligibility criteria, fill out and submit the **OR-01** as a major amendment.
- Details and form available on our website: <https://www.pca.state.mn.us/business-with-us/air-permit-application-forms>

Small Business Environmental Loan Program

Loan Funds

- Equipment purchases
- 0% interest
- Up to 7 years repayment term
- \$1,000 to \$75,000

More Information

www.pca.state.mn.us/smallbizloans
smallbizfunding.pca@state.mn.us

Eligibility

- small business corporation, sole proprietorship, partnership, or association
- less than 100 full-time employees
- an after-tax profit of less than \$500,000
- a demonstrated ability to repay the loan

Stay informed! Get involved!



www.pca.state.mn.us



www.pca.state.mn.us/govdelivery



<https://www.airnow.gov/airnow-mobile-app/>



Keep up with us on social media, too!

Questions?



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