



Red Wing Air Permit Reissuances – Xcel and USG Interiors

April 8, 2024

Agenda

Topic

Why We Are Here

Air Permitting Process

Xcel Red Wing Facility Overview

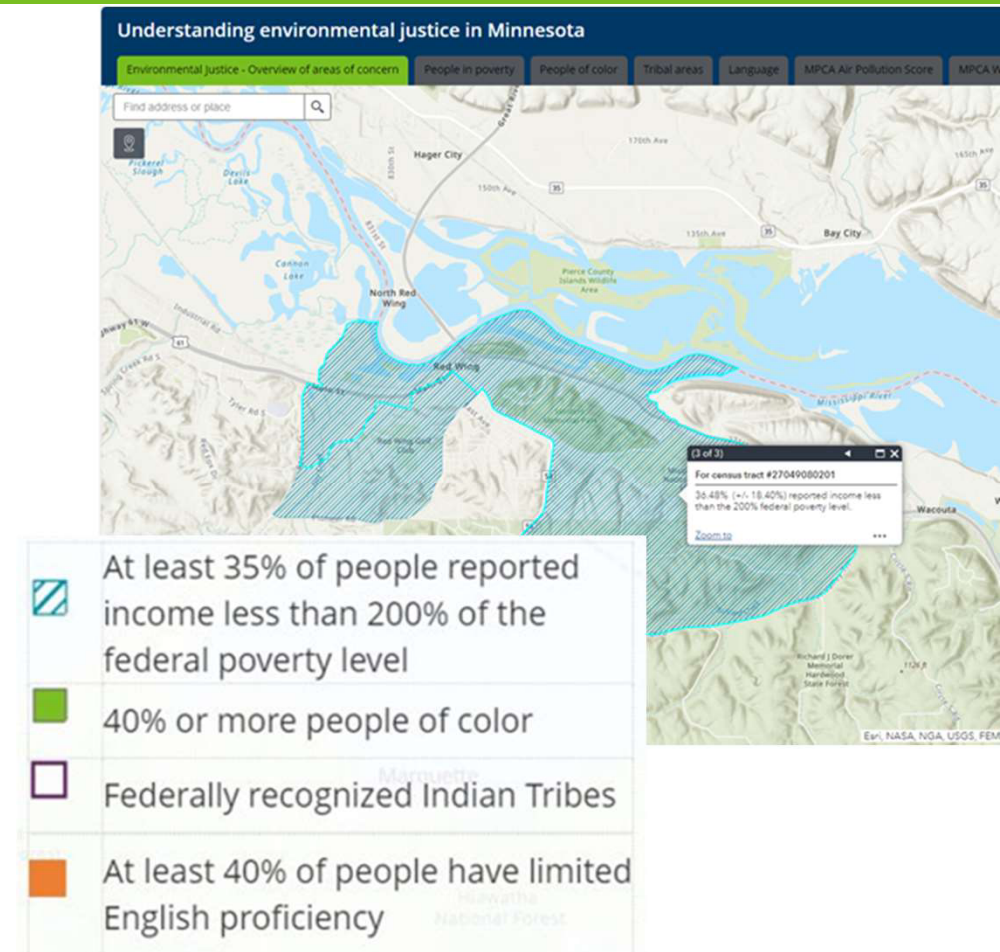
USG Interiors Facility Overview

Public Commenting

Questions

Why Are We Here

- We are working to more effectively inform communities when permit actions occur, and to provide more opportunity for engagement – particularly in areas of environmental justice concern.
- The MPCA is committed to environmental justice, meaning: the fair treatment and meaningful involvement of all people, concerning the development, implementation, and enforcement of environmental laws, regulations, and policies.



The image shows the front facade of the Minnesota State Capitol building, featuring a large central dome with a golden top and a series of arches supported by columns. A blue circular overlay is positioned on the right side of the image, containing the text 'Air Permitting Overview' in white. The sky is clear and blue.

Air Permitting Overview

Types of air permits in Minnesota

We issue all air quality permits in Minnesota*

* Exception: Permits for facilities located on tribal lands are issued by EPA Region V (Chicago)

1,971 Permitted sources in Minnesota

237 Federal operating permits

1,734 State operating permits

- 120 Individual operating permits
- 1,614 Registration and capped permits

State operating permits

- **Individual operating** permits and federal operating permits are much longer and go to “large facilities.”
- **Registration and capped** permits are single-page permits for very small sources, with low emissions (“small facilities”).

*Number of Permitted Sources current as of 4/1/2024

What is in an individual air permit?

An air permit includes:

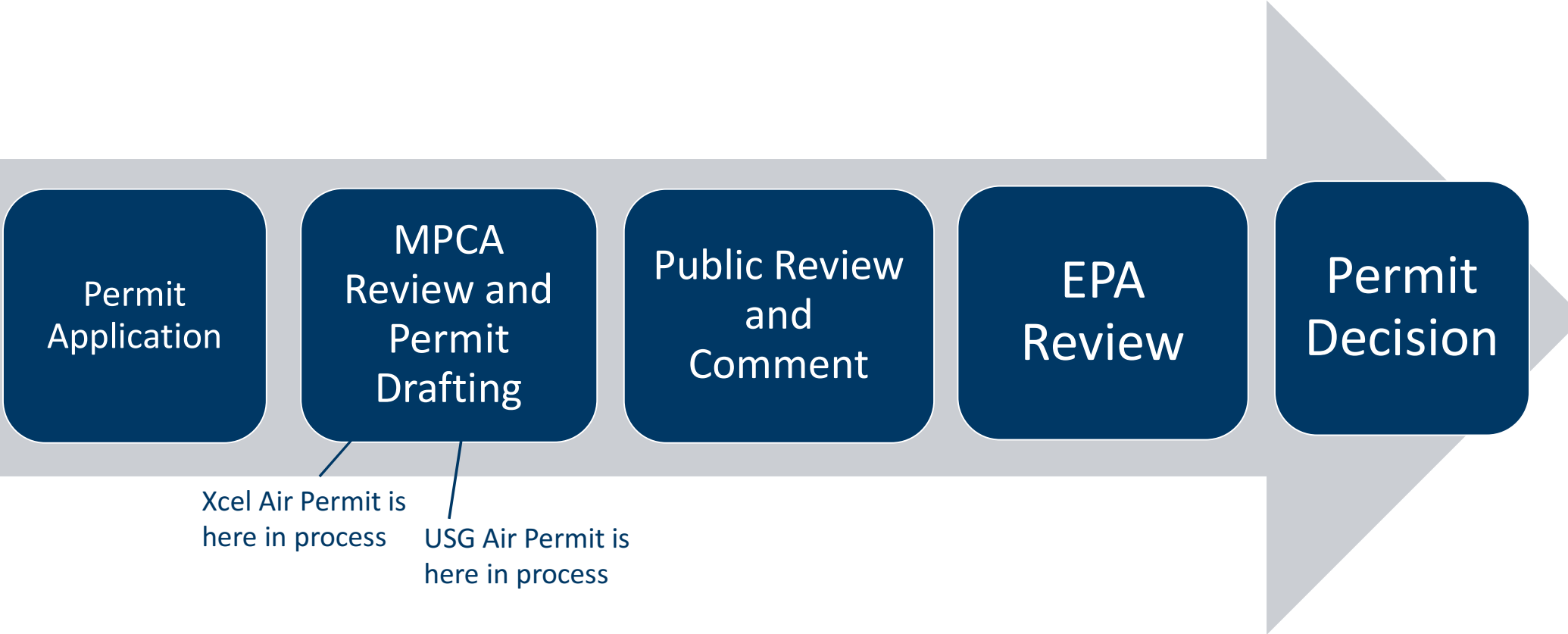
- List of emission sources and equipment related to emission sources (controls, stacks, monitors).
- Requirements from state and federal air quality regulations that apply to the equipment or processes at the facility.
- Limitations on emission rates or operating conditions.
- How the facility shows compliance with limits and regulations.

What is not in an individual air permit?

And air permit does **not** address:

- Land Use/Zoning → Local Government Jurisdiction
- Non-air Environmental Impacts → Other MPCA Permits
- Air Emissions from Mobile Sources → EPA, MPCA
- Indoor Air Pollution → OSHA, MN Dept. of Health, MN Dept. of Labor & Industry
- Odor → Local Government Jurisdiction

Air Permitting Process - Overview



Permit Application

MPCA Review and Permit Drafting

Public Review and Comment

EPA Review

Permit Decision

Xcel Air Permit is here in process

USG Air Permit is here in process

Type of permits for Xcel and USG

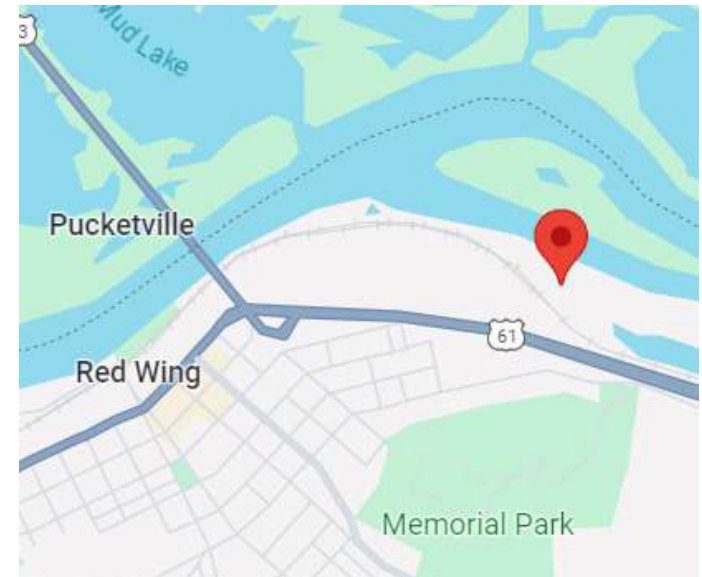
- Both facilities have federal operating permits.
- Federal operating permits have an expiration date of five years after the previous one is issued.
- The facility must apply for the renewal before the expiration date.
 - Both Xcel Energy and USG Interiors applied for their respective renewals on time.
- If they apply on time, then they can continue to operate under their current permit until the next renewal is issued.

The background of the slide features a close-up, slightly blurred view of industrial machinery. On the left side, there is a stack of large, dark-colored pipes or tubes, with their circular openings clearly visible. To the right, there are more complex mechanical components, possibly part of a conveyor system or a processing line, with various metal surfaces and structural elements. The overall color palette is dominated by dark blues, greys, and metallic tones, creating a professional and industrial atmosphere.

Facility Overviews

Xcel Red Wing Facility Overview

- Xcel Red Wing is a waste combustor electric power generating station.
- Xcel has applied to the Minnesota Pollution Control Agency (MPCA) to renew their existing air quality permit.
 - The permit will include additional monitoring and recordkeeping requirements.
 - No construction and no emission increases are associated with this project.



801 5th St. in Red Wing, MN

Xcel Red Wing Facility Overview

- The main sources of emissions at this facility are:
 - Two traveling grate boilers.
 - These boilers primarily burn refuse-derived fuel but can also use wood, waste oil, and natural gas.
 - The main pollutants released during combustion are nitrogen oxide compounds (NO_x), carbon monoxide (CO), and sulfur dioxide (SO₂).

Emissions controls and monitoring:

- Each boiler has its own pollution control equipment.
- Continuous monitoring of each boiler includes carbon monoxide (CO), sulfur dioxide (SO₂), nitrogen oxides (NO_x), opacity, and oxygen (O₂) levels.
- Control equipment inlet temperature and steam flow rate for each boiler are also monitored continuously.

Xcel Red Wing Facility Overview

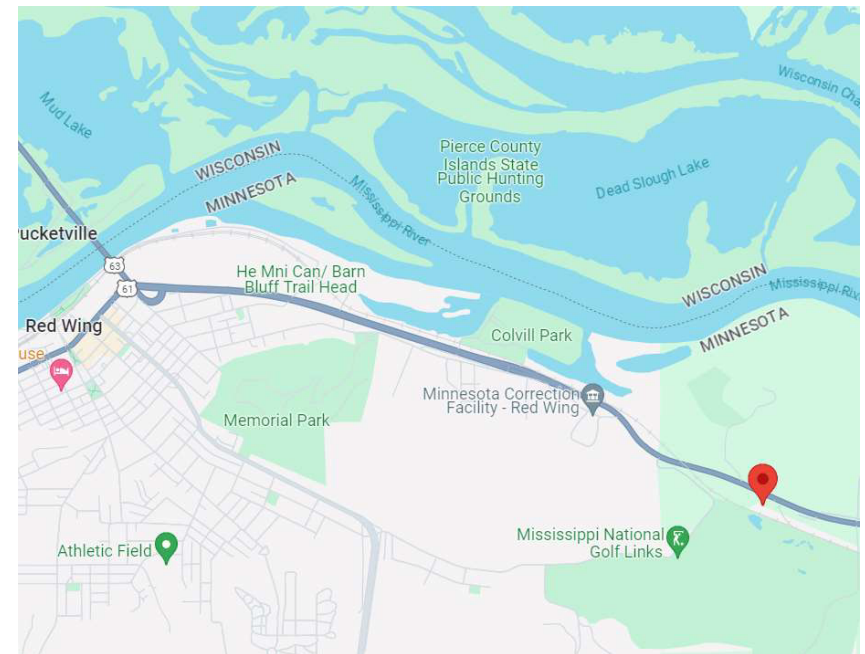
	Particulate Matter (PM) Tons per year (tpy)	Particulate Matter less than 10 Microns (PM ₁₀) tpy	Particulate Matter less than 2.5 Microns (PM _{2.5}) tpy	Sulfur Dioxide (SO ₂) tpy	Nitrogen Oxides (NO _x) tpy	Carbon Monoxide (CO) tpy	Carbon Dioxide Equivalents (CO ₂ e) tpy	Volatile Organic Compounds (VOC) tpy	Single Hazardous Air Pollutant (Single HAP) tpy	Total Hazardous Air Pollutants (All HAPs) tpy
Total facility limited potential emissions (2024)	72.0	72.0	72.0	120	747	365	357,391	24.4	55.0	56.1
Total facility limited potential emissions (Permit No. 04900005-001)	71.2	71.2	71.2	110	745	363	No data available	68.0	81.6	116
Total facility actual emissions (2022)	2.00	2.00	1.62	102	524	130	290,305	0.08	42.8*	43.2*

*Reported in 2020

Differences in the limited potential to emit between permits are related to calculation methodology changes based on an added fuel usage limit and applicable limits.

USG Interiors Inc - Red Wing Facility Overview

- USG Interiors Inc – Red Wing is a mineral wool manufacturer.
- USG has applied to the MPCA to renew and amend their existing air quality permit.
 - The permit will include additional monitoring, testing, and recordkeeping requirements.
 - This project authorizes the construction of newer, more efficient cupolas.



27384 Highway 61 in Red Wing, MN

USG Interiors Inc - Red Wing Facility Overview

- The primary emission sources for this facility are:
 - Two coke-fired cupolas burn processed coal and slag from metal reforming.
 - Two blow chambers make mineral wool by spinning.
 - The main pollutants released are sulfur dioxide (SO₂), carbon monoxide (CO), and particles.

USG Interiors Inc - Red Wing Facility Overview

Changes to allowable emissions

	PM tpy	PM ₁₀ tpy	PM _{2.5} tpy	SO ₂ tpy	NO _x tpy	CO tpy	CO _{2e} tpy	VOC tpy	Single HAP tpy	All HAPs tpy
Total facility limited potential emissions	399	140	280	1014	169	25.9	84,400	88.4	1.4	5.3
Total facility limited potential emissions (Permit No. 04900007-003)	368	402	402	1709	265	255	No data available	90	9.0	13.6
Total Facility Actual Emissions (2022)	38.7	40.6	36.9	392	64.7	99.6	3,900	30.7	0.38*	0.75*

*These emissions are 2020 data, as that is the most recent HAP reporting year

A photograph of a person's hands typing on a laptop keyboard. The scene is brightly lit, likely by natural light from a window in the background, which shows a blurred view of green foliage. The laptop is silver and open. The person is wearing a green and white striped shirt. The overall atmosphere is professional and focused.

Effective Public Comments

Commenting on a draft permit

Enter public comments at the QR code or link below!



<https://mnpca.info/3POBWzK>

Materials on notice

- **The materials on notice are:**
 - The public notice summary.
 - The draft air quality permit.
 - The technical support document.



Materials on notice: Public Notice Summary

- The public notice summary includes the following information:
 - The dates of the public notice period.
 - The contact information for permit writer who worked on the permit.
 - Instructions on how to comment.
 - A brief description of the facility and what the permit change is for.
 - A summary table of emissions.
 - Total facility emissions or the change in emissions if the permit is an amendment.

Tips for effective comments

- Tell the agency who you are and what your interest is in the permit.
- Offer specific criticisms of the permit.
- If you offer criticisms of the facility's operation, be sure to have details to support your points.
- Offer alternatives to items you don't agree with.
- Attach related health information.
- Discuss other sources in the area.
- Provide your contact information.
- Carbon copy anyone you think should see the comments.

Comments received during public notice

What do MPCA staff do with my comment?

- Reads all comments.
- Evaluates each concern raised.
- Every comment becomes part of the permit record.
- Formal response – either individual or grouped by topic.
- Comments may or may not result in permit revisions.
- Errors or gaps in draft permit are fixed.
- All comments and responses are included in the technical support document (TSD).

Comments received during public notice

What is next for the draft permit?

When a comment results in a permit change:

- MPCA revises draft permit and TSD to include comment and response.
- A new public comment period may be held on the revised draft permit.

When a comment does **not** result in a permit change:

- MPCA revises TSD to include comment and response.

Thank you!

Project Contact:

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Resources

- **Main MPCA number** 651-296-6300
- **MPCA air permit commenting training recordings** www.pca.state.mn.us/air-permit-commenting
- **Complaints** www.pca.state.mn.us/about-mpca/citizen-complaints
- **Air permit applications received** <https://www.pca.state.mn.us/air-permit-applications>
- **Air permits issued in Minnesota** <https://www.pca.state.mn.us/air/air-permits-issued-minnesota>
- **Air toxics emissions reporting** <https://www.pca.state.mn.us/get-engaged/air-toxics-emissions-reporting>
- **Air toxics rulemaking** <https://www.pca.state.mn.us/get-engaged/air-toxics-regulations>
- **Cumulative impacts rulemaking** <https://www.pca.state.mn.us/get-engaged/cumulative-impacts>