



# MPCA permitting of metallic mining facilities

**Mining & Forestry Policy Committee**  
**February 22, 2022**



Our mission  
Protect and improve the  
environment and human health.

# MPCA implements both state and federal environmental laws in Minnesota

Mining facilities need same types of permits as other industry sectors

- Must comply with the same standards and administrative processes as other sectors
- May contain certain requirements specific to mining



## Types of permits required for mining facilities include:

- Air emissions (PSD, Title V)
- Wastewater discharge (NPDES, SDS)
- Stormwater discharge (Construction & Industrial)
- Wetlands impacts (401 Certification)
- Solid waste
- Hazardous waste
- Storage tanks



# Key air issues at mining facilities

- Updated National Ambient Air Quality Standards (NAAQS)
- Regional haze, visibility
- Fugitive dust
- Climate change, greenhouse gases
- Mercury



# Air Quality Permits

- MPCA has a joint construction and operating permitting program
- **Federal Title V (or Part 70) permit**
  - Federal operating permit required by Clean Air Act – issued by MPCA
  - Sets requirements on operation, monitoring and reporting
  - 5-year permit term – must be reissued thereafter
- **Construction permit (NSR/PSD) permit**
  - Required under federal Clean Air Act – issued by MPCA
  - Required when project involves construction
  - Assesses whether the proposed project will comply with applicable standards



# Air Quality Permits

- **‘State only’ Construction and Operating Air Permit**
  - Applies to smaller operations
  - Authorized by Minnesota Rules
  - May be applicable to projects with lower air emissions (such as scam mining)
  - ‘Individual’ permit -or- ‘registration’ permit (for smallest emitters)
  - Permits do not expire

## Process

- Must obtain permit prior to construction
- Application review and permit drafting - 6 to 12 months, varies
- Pre-public notice review by Tribes and permittee – 2 weeks
- Public Notice / Public Comment Period – 30 days
- Respond to public comments – varies
- Permit sent to EPA for review – 45 days
- Issue permit – decision open to legal challenge within 60 days



# Key wastewater issues at mining facilities

## Sulfate

Wild Rice – current 10 mg/L standard  
Impaired water listings and implementation

## ‘Functional Equivalent’ Analyses

Outcome of US Supreme Court ‘Maui’ case  
No clear EPA guidance on implementation

## Class 3 and 4 Standards

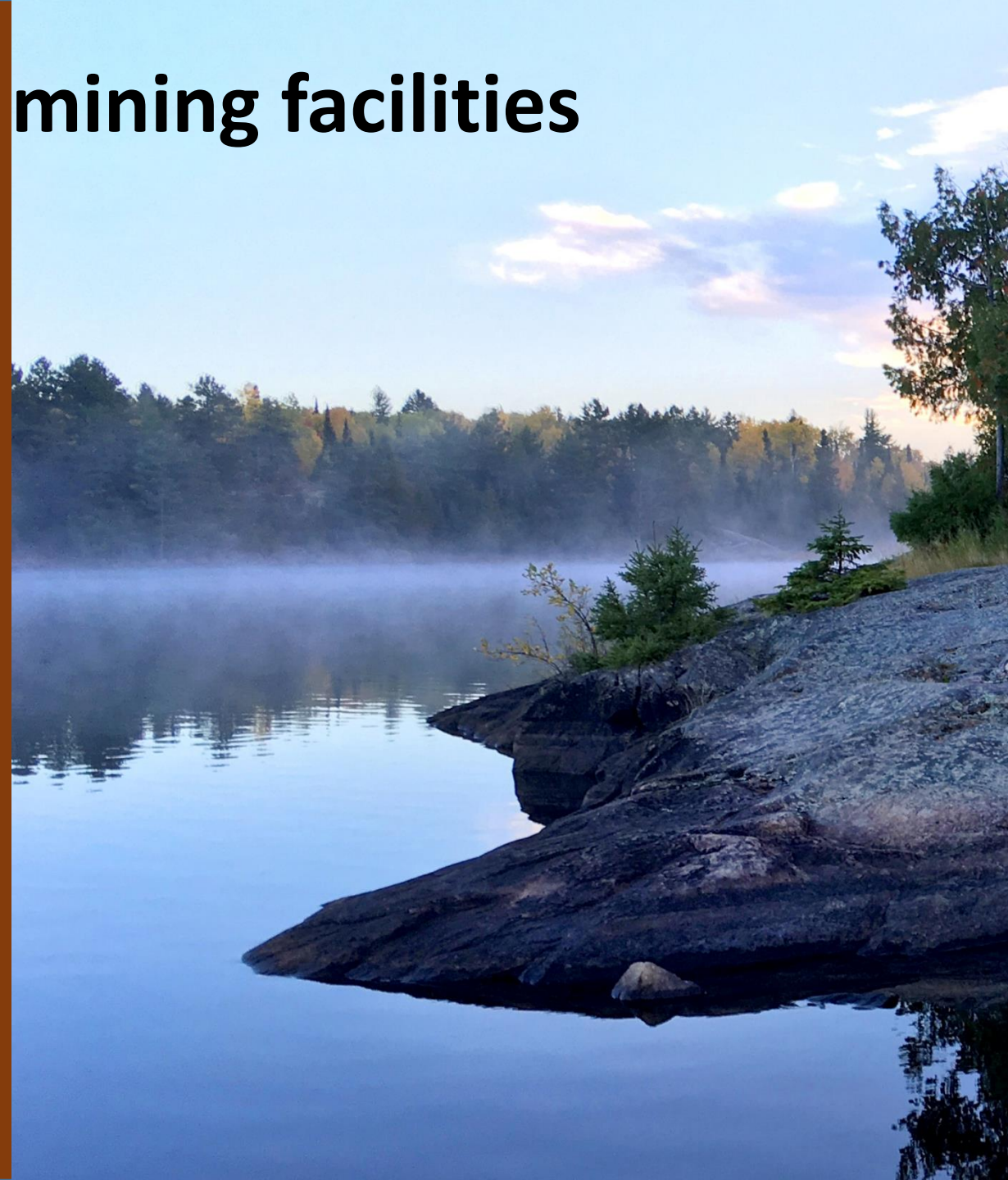
Implementation of revised standards (translator)

## Mercury

Mercury methylation / sulfate  
TMDL, fish consumption advisories

## Antidegradation

Protects existing water quality for new and expanded discharges



# Wastewater Discharge Permits

## **National Pollutant Discharge Elimination System (NPDES) Permit**

- Federal permit required by Clean Water Act – issued by MPCA
- Authorizes wastewater discharges to surface waters
- Includes discharge limits and other requirements to protect water quality standards
- 5-year permit term – must be reissued thereafter

## **State Disposal System (SDS) Permit**

- State permit required by Minnesota rules
- Authorizes operation of wastewater disposal systems and discharges to groundwater
- Usually issued together with the NPDES permit
- 5- or 10-year permit term – must be reissued thereafter

# Wastewater Discharge Permits

## Process

- Submittal of permit application – 180 days prior to expiration or new discharge
- Application review and permit drafting – 3 – 12 months, varies
- Pre-public notice review by Tribes and permittee – 2 weeks
- Public Notice / Public Comment Period – 30 days
- Respond to public comments – variable
- EPA review throughout the entire process
- Issue permit – decision open to legal challenge within 30 days

## Industrial Stormwater Multi-sector General Permit

- Required under federal Clean Air Act – issued by MPCA
- Regulates stormwater by industry sector
- Requires benchmark monitoring and stormwater pollution prevention plans (SWPPPs)
- Stormwater requirements can be included in individual NPDES permit, negating need for general permit coverage
- Coverage effective <3 days after submittal of complete application

## Construction Stormwater General Permit

- Required when project involves construction >1 acre
- Regulates stormwater from construction activities
- General permit with requirements applicable to all facilities
- Requires best management practices and SWPPPs
- Coverage effective <3 days after submittal of complete application  
(May be up to 30 days for larger or more complex projects)

## Additional Permits That May Be Needed

- Solid waste
- Hazardous waste
- Tanks

# 401 Certification (wetlands)

- Required for projects needing a US Army Corps of Engineers Section 404 permit
- Is a state certification to the US Army Corps that the project does not cause a violation of state water quality standards
- Typically addresses wetland and stream impacts
- May require mitigation (replacement, compensation) and/or monitoring
- Typically 10 to 30 day public comment period prior to issuance of certification



# QUESTIONS?