

Metallic Mining: Minnesota's Regulatory Process

Mining in the Western Lake Superior Region Conference



**Minnesota
Pollution
Control
Agency**

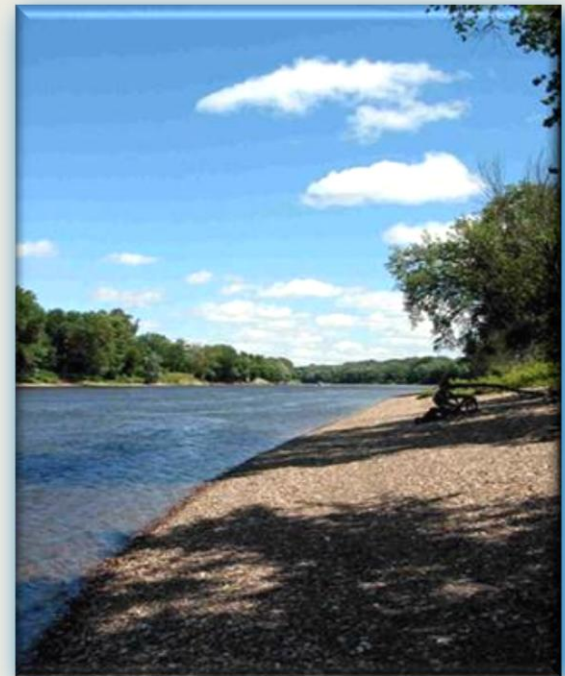
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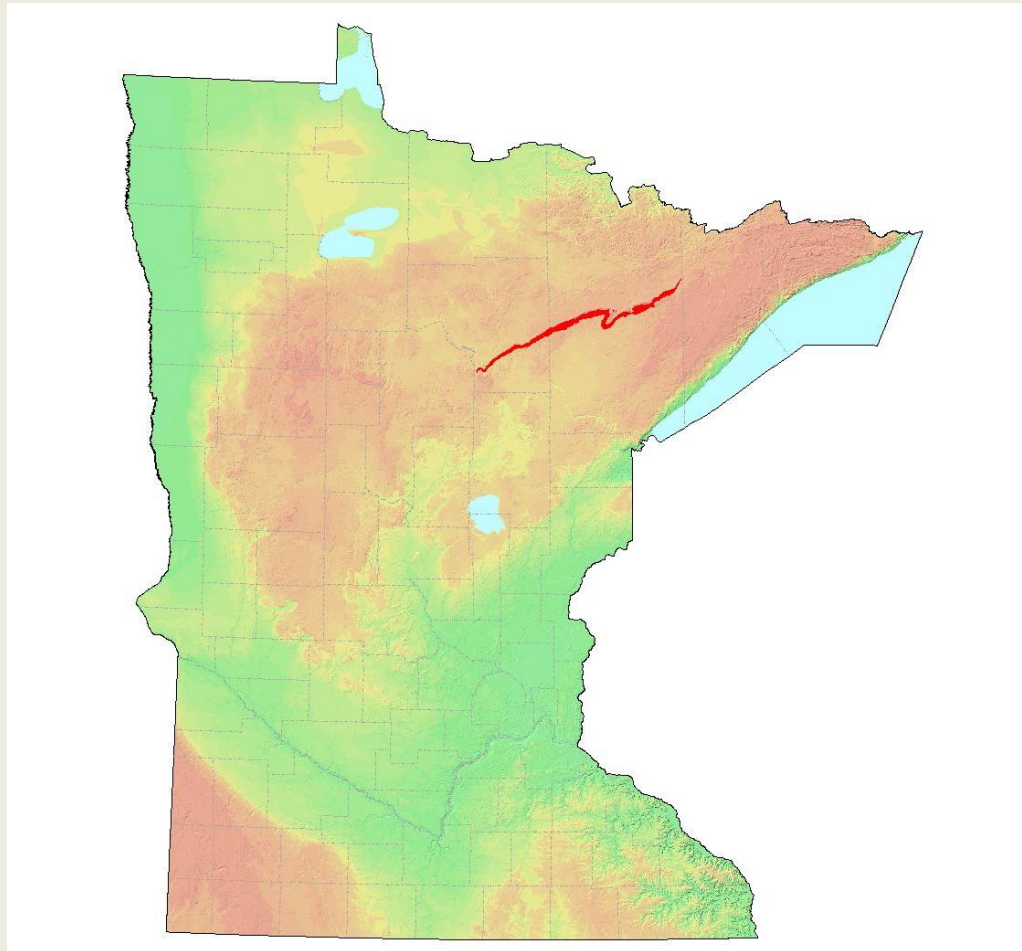
September 13, 2011

Overview

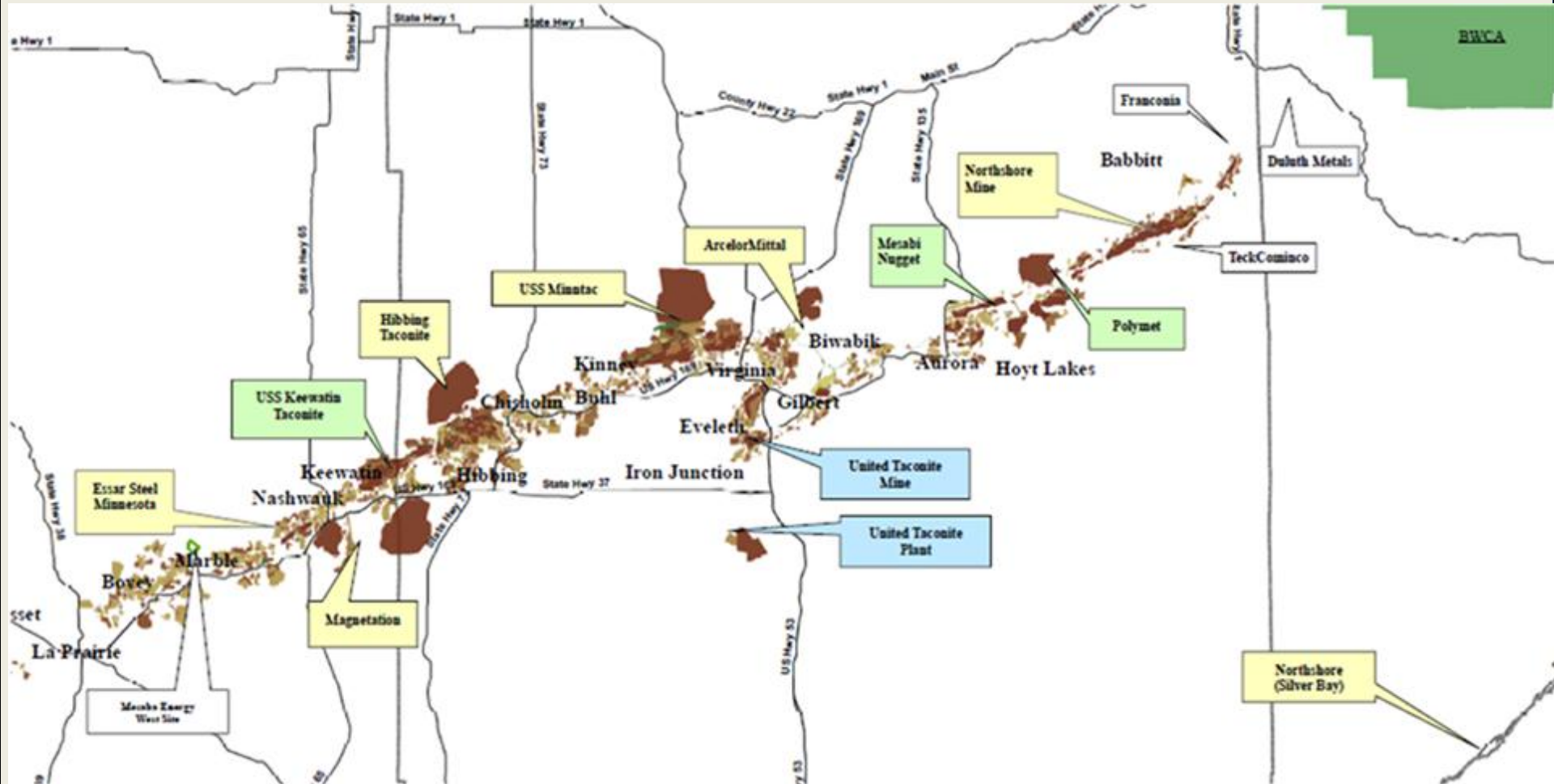
- ❑ Background
- ❑ Environmental Review and Permitting
 - Department of Natural Resources (DNR)
 - Pollution Control Agency (PCA)
- ❑ Current Projects
- ❑ Summary



Mesabi Iron Range



Current and Proposed Mines



Environmental Review and Permitting

January 2011 Executive Order:

“The Commissioners shall establish a goal for each of their agencies to decide, within 150 days after the agency determines that an environmental natural resources permit application is complete, whether to issue the permit.”

Department of Natural Resources

- Environmental Review
 - State Responsible Government Unit (RGU)
- Permit to Mine
 - Financial Assurance
- Water Appropriations
- Mineral Research

Environmental Review

- ❑ Purpose: Evaluate the impacts of a proposed project
- ❑ DNR is the state lead for mines
- ❑ State/Federal EISs
 - Increased efficiency, reduces total time and costs
 - Increased complexity:
 - Multiple lead agencies
 - Different regulations, procedures
 - Federal staffing limitations
 - EPA role
 - Federal cooperating agencies
 - Tribal Trust responsibilities

Permit to Mine

- ❑ Mining and reclamation permit
- ❑ Covers the life of the mine
- ❑ Wetland mitigation plans
- ❑ Financial assurance
- ❑ Components
 - Geology
 - Stockpiles, Tailings Basin Design
 - Forest & Soil Inventories

Permit to Mine

- ❑ Specific Rules for Nonferrous Operations Promulgated in 1990s
- ❑ Financial Assurance
 - Reviewed Annually
 - Based on Third Party Costs
 - Corrective Action Plan, If Needed
 - Funds Must Be Available, Even After Bankruptcy

Pollution Control Agency

- Air Emissions (PSD, Title V)
- Water Discharge (NPDES, SDS)
- Stormwater (Construction & Industrial)
- Wetlands Impacts (401 Certification)
- Solid Waste
- Hazardous Waste
- Storage Tanks

Air Permitting

- ❑ Combined construction (PSD) and operating (Title V) permitting program
 - Limits, monitoring, recordkeeping
 - Air quality impact assessment
 - Risk assessment
- ❑ MPCA Citizens Board
 - Final Agency approval

Key Air Issues

- ❑ Regional Haze, Visibility
- ❑ Updated National Ambient Air Quality Standards (NAAQS)
- ❑ Climate Change, Greenhouse Gases
- ❑ Mercury
- ❑ Fibers



Key Water Issues

- ❑ Sulfate
- ❑ Mercury
- ❑ Wetland Impacts



Wild Rice Sulfate Standard

- Culturally important
- Also food source and habitat for wildlife
- Past studies have shown that elevated levels of sulfate were detrimental to the growth of wild rice
- 10 mg/liter sulfate for water used for production of wild rice during periods when the rice may be susceptible to damage by high sulfate levels.

Big Question

Can we manage all this from a multi-pollutant perspective?

CURRENT MINING PROJECTS

US Steel – Keetac Expansion

- ❑ Environmental Review complete in Dec 2010
- ❑ Air Permit
 - ❑ MPCA Citizen's Board TODAY
- ❑ Water Permit
 - ❑ MPCA Citizen's Board in October

Essar Steel Mining

- ❑ Formerly Minnesota Steel
- ❑ Draft Supplemental EIS in progress

RGUs: MN DNR, US Forest Service, and Army Corps of Engineers

- Preparing a Supplemental Draft EIS

Mesabi Nugget Phase II

RGUs: MN DNR and Army Corps of Engineers

- Currently:
 - Preparing a draft EIS

Others

- ❑ Scram Mining (Magnetation)
- ❑ Pit “Extensions” at Minntac, Northshore, Utac
- ❑ Twin Metals (Antofagasta, Duluth Metals, Franconia)
- ❑ Cooperative Mineral Resources
- ❑ Legacy Sites
 - Soudan Mine
 - Dunka Pit
 - INCO
 - Cliffs Erie

Common Project Challenges

- ❑ Project Complexity
- ❑ Process Complexity
- ❑ Project Design & Modifications
- ❑ Technical Data Limitations
- ❑ Communication & Coordination
- ❑ Evolving Regulations & Policies
- ❑ Public Controversy

Improvement Efforts

- ❑ Pre-Application Meetings
 - Anticipate Technical or Controversial Issues
 - Collaborate on Study Designs
 - Complete Project Design Before EIS Scoping
- ❑ Organizational Structures
 - PCA: Assigned Manager, Project Coordinator
 - DNR: Assigned EIS Project Manager
- ❑ Regular Communication & Coordination
- ❑ Decision Making

Summary

- ❑ Existing Rules, Regulations Make Permitting (Appropriately) Difficult
- ❑ New Regulations, Issues Arise
- ❑ New Projects Proposed
- ❑ PCA (and DNR) Working on Creative Solutions

Thank You



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