Overview of Silica Sand in Minnesota

- Regulatory framework
- Distribution of resources and mines
- Legislative actions
- Rulemaking update
Regulatory oversight of silica sand

- Local governments (*MN Stat. § 394.25*)
  - Develop “forms of control” for nonmetallic reclamation
    - Permit to mine (CUP/IUP)
    - Ordinance
    - Environmental review

- State/Federal Permits
  - Minnesota Pollution Control Agency (MPCA): storm water and air permits
  - MN DNR: Water appropriation, dam safety, and endangered species takings, working in the bed of public waters
  - Army Corp of Engineers – wetlands
Water Quality Permitted Facilities

Silicasand mines, processing, and/or transloadsites

Note: 6 facilities permitted prior to 2011. These numbers are an estimate.
Distribution of silica sand in Minnesota
Types of silica sand mines – large producer
Types of silica sand mines – small producer
Types of silica sand mines – other
• In 2014 – 5 large producing mines
• In 2017 - 3 large producing mines
• ~ 11 small producing mines
• An unknown quantity of quarries/pits that also produce silica sand.
Distribution of silica sand in Minnesota
MN River Valley

(1) Accessibility
- Deposit
- Transportation
- Community

(2) History
Distribution of silica sand in Minnesota
Paleozoic Plateau

(1) Accessibility
- Deposit
- Transportation
- Community

(2) History
Paleozoic Plateau

(1) Accessibility
- Deposit
- Transportation
- Community

(2) History
2013 Silica Sand Legislation

DNR
- Trout Stream Setback Permit

EQBOARD
- Ordinance Library
- Technical Assistance Team
- Standards and Criteria

MPCA
- Silica Sand Rulemaking – In Progress
  - Reclamation
  - Environmental Review
  - Particulate Emissions

MDH
- Health Base Value
- Air Quality
- Health Base Value and New Testing Methodology
  - Polyacrylamide
DNR Trout Stream Setback Permit
MN Statutes, 103G.217

Pertains to silica sand operations within 1 mile of a designated trout stream/class 2 A waters in the Paleozoic Plateau.
Mn Law 2013, Chapter 114, Article 4; Sec. 105

**RULES SILICA SAND**

- MPCA – “shall adopt rules pertaining to the control of particulate emissions from silica sand projects”
- DNR – “shall adopt rules pertaining to reclamation of silica sand mines”
- EQB – “shall amend its rules for environmental review...and whether they should be different for different geographic regions of the state”
Public Input is Important

• Fall of 2013 – Advisory panel request
• 2014 – 2015: Joint Silica Sand Rulemaking Advisory Panel (SSRAP)
• Summer of 2014: EQB and DNR toured and met with LGUs
• June 2016: Feedback period
• Fall 2016: More LGU outreach
• SONAR: Statement of Need and Reasonableness
• Going to submit to the Gov. Office in July.
High Points of Reclamation Rulemaking

• Definition of reclamation - looked to Federal (SMCRA) and MN Mineland Reclamation Policy

• WI NR 135 as a guide and platform of discussion with SSRAP

• What is different in preliminary draft of the MN reclamation rule
  • Temporary shutdowns
  • Included blasting provisions - looked to Federal (SMCRA) and MN Mineland Reclamation Policy
  • No DNR oversight of LGUs
MnPAC – “shall adopt rules pertaining to the control of particulate emissions from silica sand projects”

DNR – “shall adopt rules pertaining to reclamation of silica sand mines”

EQB – “shall amend its rules for environmental review...and whether they should be different for different geographic regions of the state”
MN Agency Silica Sand Websites

Googling “MN Silica Sand”

DNR: www.dnr.state.mn.us/silicasand/index.html

MPCA: www.pca.state.mn.us/air/silica-sand-mining

EQB: www.eqb.state.mn.us/content/silica-sand-projects

MHD: www.health.state.mn.us/divs/eh/hazardous/topics/silica/index.html
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