

Environmental Regulations

Minnesota Pollution Control Agency
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Overview

- Introduction
- Air Regulation
- Water Regulations
- Contact Info

How does MN regulate air quality for sand operations?

- **Registration, General, or Individual Air Permit**
 - Designed to house all applicable requirements
 - Covers 'total facility'
 - Permit type dependant upon equipment type, scale, regional attainment status, outcome of environmental review
- **Federal Performance Standards**
 - **Nonmetallic Mineral Processing Plants** (40 CFR pt. 60, subp. 000)
 - Crushers, Grinding Mills, Screens, Transfer points, Bins, + more
 - Limits: Stack particulate concentrations, opacity
 - Performance testing
 - **Calciners and Dryers in Mineral Industries** (40 CFR pt. 60, subp. UUU)
 - Limits: Stack particulate concentration, opacity
 - Performance testing

How are permits monitored?

- Annual Compliance Certification
- Annual Emission Inventory
- Semi-annual Deviation Reporting
- Monthly Emission Calculations
- ~Daily: Control Equipment Parameter Checks, Fuel Usage Logs, Throughput Data

Is there an inexpensive way for existing operations to monitor air quality?

- NAAQS / MAAQS compliance:
 - Deployment time: 1-3 yrs
 - Laboratory Analysis
 - Equipment Standards
- Cost factors:
 - Sampling Frequency (continuous, “1 in 6”)
 - Number of instruments (upwind, downwind)
 - \$ basis: $TSP < PM_{10} < PM_{2.5}$

What is involved in monitoring and enforcement?

- Periodic Inspections
- Complaint-driven inspections
- Enforcement can require ambient monitoring to confirm compliance

How is non-compliance dealt with?

- Enforcement response tailored to extent / severity of the non-compliance
 - Environmental impact
 - Repeat offense
 - How quickly problem is corrected
- Appx. 20 different enforcement tools
 - Monetary penalties
 - Stipulation Agreement
 - Supplemental Environmental Project

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MPCA water quality(WQ) regulations for sand operations, past to present

● General and Individual Permits

- 1970- 1980's Individual permits relating to sand operations issued
- 2000's General permits covering a range of sand, gravel, stone, concrete, and asphalt issued

● NPDES/ SDS MNG490000

- Industrial sand mining (SIC code 1446)

● Permits for processing or transportation facilities

● Water appropriation permits regulated through DNR

How does the MPCA regulate sand operations for water quality?

- To qualify for general permit a facility has to meet conditions within the permit
 - Nonmetallic Mining & Associated Activities Application
 - A pollution prevention plan must be prepared and submitted before the site is covered
 - Control measures or best management practices- sediment or infiltration basins, stabilization ponds, vegetative swales
 - Effluent monitoring- (pH, total suspended solids and flow)
- Facilities that require environmental review or operations that do not meet the applicability requirements of MNG49 must apply for an individual permit.

How are permits monitored and what type of reporting is required?

- Quarterly discharge monitoring reporting for dewatering activities to surface water
 - Calendar Quarter Total in million gallons (MG)
 - Calendar Quarter Average in million gallons per day (mgd)
 - TSS – 25 mg/L monthly average, monitored quarterly
 - TSS – 45 mg/L daily maximum, monitored quarterly
 - pH – between 6.5 and 8.5, monitored quarterly

How are permits monitored and what type of reporting is required?

- **Stormwater sampled twice annually**
 - Monitor two runoff events, preferable spring and fall
 - Samples shall be taken in the first 30 minutes of a measurable event . Sampling events shall be at least 72 hours apart, if feasible.
 - Monitoring intervention limits. Total Suspended Solids (TSS) – 100 mg/L daily maximum
 - Submit results 21 days after the end of each calendar year
- **Facilities develop and implement an inspection schedule**
 - Must have a minimum of one inspector per calendar month
 - Minimum of one inspection per year during runoff event
 - Minimum of one inspection per year during snowmelt event
 - Record and retain with the Pollution Prevention Plan

How is non-compliance dealt with?

- MPCA expects compliance with all permits it issues
- Case specific
 - Environmental impact (quantity and toxicity)
 - Permit deviation (how far and how long)
- Non-penalty and penalty actions

How do I File a Complaint?

- Phone: (651) 296-6300 or 800-657-3864
- Web Form

Web Form

The image shows a screenshot of a web browser window displaying the Minnesota Pollution Control Agency website. The browser title is "Minnesota Pollution Control Agency - Windows Internet Explorer". The address bar shows the URL "http://www.pca.state.mn.us/". The browser's menu bar includes "File", "Edit", "View", "Favorites", "Tools", and "Help". A "Favorites" bar shows a link to "Minnesota Pollution Control Agency".

The website header features the MPCA logo, the text "Minnesota Pollution Control Agency", and an "e-Services" button. A search box with the text "Search" and a "GO" button is present. Below the search box, a navigation menu includes links for "Home", "Air", "Water", "Waste", "Regulations", "Living Green", "Quick Links", "Data", and "About MPCA". A red arrow points to the "Assistance" link, which is circled in red. Other links in the top right include "Login", "Feedback", "Site Map", and "Glossary".

Web Form

The screenshot shows the Minnesota Pollution Control Agency (MPCA) website. The browser's address bar displays "About MPCA - Assistance - Minnesota Pollution Contro...". The website header includes the MPCA logo, the text "Minnesota Pollution Control Agency", and a search bar. A navigation menu contains links for Home, Air, Water, Waste, Regulations, Living Green, and Quick Link. Below this, a secondary menu highlights "Assistance" among other options like MPCA Overview, News and Media, and Legislative Resources. The main content area is titled "Assistance" and contains a paragraph explaining the agency's programs. A "General Assistance" section lists several resources: MPCA General Information, Staff Directories, and Financial Assistance Opportunities. A red arrow points to the "Citizen Complaints" link, which is highlighted with a red box. The "Citizen Complaints" link is located in the "General Assistance" section, below the "Staff Directories" list.

Assistance

The MPCA offers a variety of programs and resources designed to help businesses comply with environmental regulations. Resources are also available to help them go above and beyond compliance, and to become outstanding environmental performers. Resources are also available to help local governments operate their solid waste programs efficiently and effectively. Listed below are MPCA contacts and phone numbers, and links to frequently requested information.

General Assistance

MPCA General Information
651-296-6300 or toll free: 800-677-3864

Staff Directories

- Searchable MPCA Staff Directory - search by staff name
- Staff Phone Directory (updated monthly)
- Staff Directory by Topic (updated monthly) - who to call by topic/issue.

Citizen Complaints

If you have information about a pollution problem that you've seen, you can submit it to the MPCA using the form available on the Citizen Complaints page.

Financial Assistance Opportunities — Grants and Loans

The Minnesota Pollution Control Agency has various opportunities available for receiving grants and other financial assistance for environmental projects in Minnesota.

Ask MPCA

Find the right program or staff person to contact with your questions on specific environmental topics.

Student Guide to Environmental Information

Answers questions commonly requested for school homework. Examples include: what is pollution, ways to prevent pollution,

Questions?

- MPCA Public Information Office
 - Ralph Pribble
 - 651-757-2657
 - ralph.pribble@state.mn.us