



NPDES/SDS Water Permits and PolyMet Mining

A NPDES/SDS permit is a document that establishes the terms and conditions that must be met when a facility discharges wastewater to surface or ground waters of the state. The permit is jointly issued under two programs. The National Pollutant Discharge Elimination System (NPDES) is a federal program established under the Clean Water Act, aimed at protecting the nation's waterways from point and nonpoint sources. In Minnesota the NPDES program is administered by the Minnesota Pollution Control Agency (MPCA) under delegation from the U.S. Environmental Protection Agency. The State Disposal System (SDS) is a state program established under Minn. Stat. ch. 115. In Minnesota, when both permits are required they are combined into one NPDES/SDS Permit administered by the state. The permits are issued to permittees discharging to a surface water of the state. Any industrial, municipal, or private-entity point source which proposes to discharge treated wastewater to surface waters of the state must apply for the permit.

PolyMet Mining, Inc. is proposing to develop a mine and processing plant to extract copper, nickel, and platinum group metals from the NorthMet Deposit in northeastern Minnesota. PolyMet's proposed NorthMet project would be located in the St. Louis River watershed on the eastern end of the Mesabi Iron Range, about six miles south of Babbitt and one mile south of the existing Northshore Mining (iron ore) Mine. Processing of the ore would take place at the former LTV taconite plant near Hoyt Lakes.

PolyMet's NorthMet mining project would need a NPDES/SDS permit from the MPCA to construct and operate.

Water Permitting Process

The water permitting process can be quite lengthy. The following summarizes the steps in the process, including opportunities for the public to participate in the water permitting process.

Permit Application

A permittee must submit a NPDES/SDS permit application to the MPCA. The application must include information on design flows of the facility, the route which treated wastewater will travel to a surface water body, and a description of the wastewater treatment system to be built. This information helps the MPCA determine which regulations apply and what requirements must be included in the permit.

Permit Development

A MPCA permit writer develops a draft permit based on information contained in the permit application and any plans, reports, or studies generated during environmental review. The draft permit contains, at a minimum, the following parts:

- Cover Page
- Effluent Limitations
- Monitoring & Reporting Requirements
- Special Conditions (which are facility specific); and
- Standard Conditions

Cover Page

The cover page typically contains the name and location of the permittee, a statement authorizing the discharge, and the specific locations of the authorized discharges.

Effluent Limitations

Effluent limitations are the primary mechanism for controlling discharges of pollutants to receiving waters. The MPCA sets effluent limitations to protect water quality standards and the designated uses of waters of the state. Standards and use classifications are specified in Minn. R. chs. 7050 and 7052.

The MPCA considers a number of factors in developing effluent limits for a particular discharge, including the characteristics of the receiving water (use classification, water-quality standards and flow characteristics) and the discharge (design flow, discharge duration and frequency). Toxic pollutants are also evaluated to ensure protection of humans, aquatic life, and wildlife. For new or expanded discharges, additional submittals and review may be required as specified in the MPCA anti-degradation rules (Minn. R. 7050.0180, 7050.0185, and 7052.0300 to 7052.0330).

Mining discharges are also subject to Federal Categorical Standards 40 CFR Part 440 – Ore Mining and Dressing Point Source Category.

Monitoring & Reporting Requirements

Monitoring requirements typically include sampling at various locations, including ground water, surface water, stormwater, and internal waste streams. The permit specifies the parameters that must be monitored, the frequency that monitoring must occur, and requires that results are reported to the MPCA on a monthly basis.

Special Conditions

Special conditions contained in the draft permit are conditions specific to the facility. Special conditions are developed to supplement effluent limit guidelines. Types of special conditions include; special plans, reports or submittals, best management practices, toxicity testing, or any other requirements necessary to protect water quality.

Standard Conditions

Standard permit conditions are pre-established conditions that apply to all NPDES/SDS permits and delineate the legal, administrative, and procedural requirements of the permit.

Public Participation

After the draft permit is complete, individuals or organizations are notified that a draft permit is available and are invited to comment during a 30-day public notice period. Comments from the public may result in revisions to the draft permit. Comments must be submitted by 4:30 p.m. on the last day of the public notice period.

When the MPCA adequately addresses all comments received during public notice period, it makes a decision whether to issue the permit. If issued, the permit's terms and conditions become effective and enforceable.

There are various actions members of the public can take during the public notice process to ensure their concerns are addressed:

Submit Written Comments

Written comments may be submitted during the public notice period. Written comments must include:

- A statement of your interest in the permit application or draft permit
- A statement of the action you wish the MPCA to take, including specific references to the sections of the draft permit that you believe should be changed
- The reasons supporting your position

Attend a Public Informational Meeting

During the public comment period, the MPCA plans to hold a public meeting to provide information on any draft NPDES/SDS permits for PolyMet's proposed NorthMet project. The notification of any public meeting will be included in the formal public notice documents and via other communication tools in place for the NorthMet permitting effort (i.e., project web site, GovDelivery, etc.).

Contested Case Hearings

Under certain conditions, interested persons may request that the MPCA hold a contested case hearing prior to making its decision whether to issue a permit. The purpose of a contested case hearing is to resolve *disputed material facts* that are both relevant to a MPCA decision and within the MPCA's authority. If requested, the decision whether to hold a contested case hearing is made under the provisions of Minn. R. 7000.1900.

Potential Requirements for PolyMet's NorthMet Mining Project

PolyMet's NorthMet mining project would be required to obtain an NPDES/SDS permit. Permit conditions and monitoring requirements have not yet been determined, but would be expected to address the following:

- Effluent limits for the proposed plant site wastewater treatment plant discharge
- Performance monitoring of facility components, such as stockpile liners and seepage capture systems
- Resource monitoring at both the mine site and plant site, including ground water and surface water locations
- Special Conditions; requirements specific to the facility as informed by the Environmental Review process
- Industrial Stormwater requirements
- Hydrometallurgical Residue Facility (HRF) construction, operational and monitoring requirements
- Required submittals, including monitoring plans, Discharge Monitoring Reports, progress reports, plans and specifications, etc.

Stay Informed

The State launched a web portal dedicated to Minnesota's permitting process for PolyMet's proposed NorthMet project at www.mn.gov/polymet. To stay informed, we encourage those interested to visit the portal and sign up to receive the latest news and updates on the permitting processes as they become available.