2018 Fourth Quarter Mining Report

Facility Name:	**Poly Met Mining, Inc. (PolyMet) NorthMet Mining Project**
Current Actions:	Construction Stormwater General Permit Coverage
Project Supervisor:	Jeff Udd, Ryan Anderson
Project Manager:	Jim Robin
Lead Staff:	Mike Findorff (Construction Stormwater)
Lead Agencies:	MPCA

Accomplishments during this reporting period:

- On December 20, 2018, the MPCA made final regulatory decisions to issue the PolyMet air emission permit, water quality permit, and 401 certification. The decisions were reached after comprehensive regulatory and technical analysis, extensive public participation, and review by other state/federal agencies and independent third-party experts. (Note – these projects have been moved to the Completed Mining Projects section in this report)
- Coverage under the Construction Stormwater General Permit for mine site geotechnical investigations and well installation work became effective on December 7, 2017. This coverage is still in effect and geotechnical investigation and well installation is in progress.

Plans for the next reporting period:

- None

Facility Name:	**US Steel (USS) - Minntac**
Current actions:	U.S. Steel request for site specific water quality standards and/or use removal
Project Supervisor:	Jeff Udd
Project Manager:	Jim Robin
Lead Staff:	Erik Smith, John Thomas
Lead Agency:	MPCA

Accomplishments during this reporting period:

- MPCA reissued the NPDES/SDS permit after revising the 2016 Draft Permit based on comments received. Concurrently, MPCA denied U.S. Steel's variance request and the contested case hearing requests on the 2016 draft permit and preliminary decision to deny the variance. (Note – these projects have been moved to the Completed Mining Projects section in this report)
- MPCA watershed staff assisted U.S. Steel in performing biological surveys in streams downgradient of the tailings basin as part of the effort to evaluate U.S. Steels request for site specific standards and/or use removal.

Plans for the next reporting period:

- Ongoing implementation of the groundwater Sulfate Reduction Plan at monitoring well GW 012.
- Continue to evaluate U.S. Steel's request for site specific standards and use removal.

Facility Name:	**US Steel (USS) - Keetac**
Current actions:	Air permit major amendment application to replace wet scrubber CE002 (for Primary Gyratory Crusher No. 2 (EU002)) with a dry cartridge collector venting to a HEPA filter exhausting inside the building (Draft Air Emission Permit No. 13700063-006)
Project Supervisor:	Steve Pak
Project Manager:	none
Lead Staff:	Andrew Luberda (AQ)
Lead Agency:	MPCA

Accomplishments during this reporting period:

- The MPCA has reviewed the permit application for the major permit amendment and determined the project scope. The permit action will include the major amendment, the Title V Reissuance, and all the administrative amendments and permit reopenings.

Plans for the next reporting period:

- Review and address the elements of the air permit application and Title V Reissuance.

Facility Name:	**Cliffs Erie LLC – Hoyt Lakes Mining Area**
Current actions:	Reissuance of NPDES/SDS Permit No. MN0042536
Project Supervisor:	Jeff Udd
Project Manager:	Jim Robin
Lead Staff:	Richard Clark, Stephanie Handeland
Lead Agency:	MPCA

Accomplishments during this reporting period:

- Continued discussions with the company to acquire necessary information for permitting and to assure continued progress on Consent Decree requirements.

Plans for the next reporting period:

- Continue limited internal discussion with the goal of refining the permitting approach and continuing progress on the schedules for the various mining areas/discharges.
- Continue technical review of the updated long-term mitigation plans with follow-up discussions with Cliffs Erie as needed.

Facility Name:	**Northshore Mining Company**
Current actions:	1) Water quality permit reissuance for Silver Bay Plant and Mile Post 7 (MP7) Tailings Basin (NPDES/SDS Permit No. MN0055301) 2) Air permit major amendment application from Northshore to change how fibers are regulated (Draft Air Emission Permit No. 07500003-101) 3) 401 Certification decision for West Ridge Railroad Relocation and Tailings Basin Progression
Project Supervisor:	Jeff Udd (WQ) TBD (AQ)
Project Manager:	None
Lead Staff:	Brandon Smith (WQ reissuance of plant site permit), Jen Oknich (401 Certification)
Lead Agency:	MPCA for AQ and WQ Permits and 401 Certification

Accomplishments during this reporting period:

- A pre-public notice draft air permit was shared with the bands and Northshore for their review. Multiple comments were received.

Plans for the next reporting period:

- Staff are considering the comments received on the draft air permit and determining whether/how the draft permit should be modified to address the comments.
- Staff will continue evaluating pre-public notice feedback on the NPDES/SDS permit.
- Determine what revisions are needed to the draft NPDES/SDS permit and a plan for public notice.
- Staff will continue evaluating 401/404 application.

Facility Name:	**ERP Iron Ore Plant 1 formerly Magnetation Plant 1**
Current Actions:	1) Water quality permit reissuance (SDS Permit No. MN0069221)
	2) Air quality initial permit issuance (Draft Permit No. 06100076-001)
Project Supervisor:	Richard Clark
Project Manager:	None
Lead Staff:	Erik Smith (WQ)
Lead Agency:	MPCA

Accomplishments during this reporting period:

- No MPCA activity during this reporting period.
- The facility is idled.

Plans for next reporting period:

- None at this time.

Facility Name:	**ERP Iron Ore Plant 4 formerly Magnetation Plant 4**
Current Actions:	Water quality permit reissuance (SDS Permit No. MN0070378)
Project Supervisor:	Richard Clark
Project Manager:	None
Lead Staff:	Erik Smith (WQ)
Lead Agency:	MPCA

Accomplishments during this reporting period:

No MPCA activity during this reporting period.

Plans for next reporting period:

- None at this time.
- The facility is idled.

Facility Name:	**Mining Resources, LLC**
Current Actions:	1) Air quality initial permit issuance (Draft Permit No. 13700341-001)
	2) Water quality permit reissuance (SDS Permit No. MN0070050)
Project Supervisor:	Richard Clark
Project Manager:	None
Lead Staff:	Sarah Seelen (AQ), Stephanie Handeland (WQ)
Lead Agency:	MPCA

Accomplishments during this reporting period:

- No activity during this reporting period.
- The facility is idled.

Plans for next reporting period:

- The MPCA will continue working on a draft air quality permit, as time allows.
- Begin work on draft water quality permit.

Facility Name:	**Mesabi Metallics Company LLC (Mesabi Metallics) fka Essar Steel Minnesota**
Current Actions:	1) Part 70 permit reissuance and major amendment for final engineering updates (Draft Permit No. 06100067-005) 2) Water quality permit reissuance (NPDES/SDS permit MN0068241)

Project Supervisor:	Richard Clark
Project Manager:	None
Lead Staff:	Ben Wenkel (AQ)
Lead Agency:	MPCA

Accomplishments during this reporting period:

- MPCA continues to review the other air modeling reports and elements of the air permit application.
- On November 6, 2018, the MPCA sent Mesabi Metallics approval of the air dispersion modeling results.

Plans for next reporting period:

- Continue to review the other air modeling reports and elements of the air permit application.

MAJOR PERMIT APPLICATIONS RECEIVED THIS QUARTER

- No major permit applications were received during this quarter; however, an application for a transfer of ownership for the Cliffs Erie Tailings Basin NPDES/SDS permit and a request for 401 certification for the Northshore Mining Company West Ridge Railroad Relocation and Tailings Basin Progression project were received by MPCA – see Completed Mining Projects section and discussion items above.

COMPLETED MINING PROJECTS

Project Name:	**Poly Met Mining, Inc. (PolyMet) NorthMet Mining Project**
Completed:	On December 20, 2018, MPCA issued the following permits and certifications for the NorthMet Mining Project: • NPDES/SDS Permit (Permit No. MN0071013) • Part 70 Air Emission Permit (Permit No. 13700345-101) • 401 Certification (Certification No. 1999-5528-JKA)
Lead Staff:	Stephanie Handeland (NPDES/SDS Permit), Sarah Seelen (Air Emission Permit), Jen Oknich (401 Certification)

Project Name:	**US Steel (USS) – Minntac Tailings Basin Water Quality Permit Reissuance**
Completed:	On December 1, 2018, MPCA reissued the water quality permit for the tailings basin (NPDES/SDS Permit No. MN0057207). MPCA also concurrently denied U.S. Steel's variance request and the contested case hearing requests on the 2016 draft permit and preliminary decision to deny the variance.
Lead Staff:	Erik Smith

Project Name:	**Poly Met Mining, Inc. (PolyMet) Tailings Basin Area**
Completed:	On November 1, 2018, MPCA completed ownership transfer of the former Cliffs Erie Tailings Basin Area Permit (NPDES/SDS Permit No. MN0054089) from Cliffs Erie to Poly Met Mining Inc.
Lead Staff:	Stephanie Handeland

Project Name:	**United Taconite LLC – Thunderbird Rouchleau TH-53 Progression 401 Certification**
Completed:	MPCA waived the 401 Certification (No. 2017-01089-DWW) on February 16, 2018
Lead Staff:	Jen Oknich

Project Name:	**United Taconite LLC - Fairlane Plant Moderate Air Quality Permit Amendment**
Completed:	Moderate air quality permit amendment for higher flux pellet production was issued January 9, 2017 (Permit No. 13700113-007)
Lead Staff:	Hassan Bouchareb

Project Name: **Mag Mining LLC Plant 4 – Initial Air Quality Permit Issuance**
Completed: Part 70 major air quality permit was issued March 15, 2016 (Permit No. 06100079-001)
Lead Staff: Sarah Seelen

Project Name: **Magnetation Plant 2 Water Permit**
Completed: Water quality permit reissued on October 10, 2015
Project Coordinator: Suzanne Baumann
Lead Staff: Erik Smith, Ben Underhill

Project Name: **US Steel – Keetac – Water Quality Permit Modification**
Completed: Water quality permit modification to modify turbidity limits (NPDES/SDS Permit No. MN0031879) was issued on September 4, 2015, with an effective date of October 1, 2015
Lead Staff: Brandon Smith

Project Name: **Magnetation Plant 2 – Initial Air Quality Permit Issuance**
Completed: Part 70 major air quality permit was issued August 18, 2015 (Permit No. 06100078-001)
Lead Staff: Hassan Bouchareb

Project Name: **United Taconite – Wet to Dry Particulate Control Change and Modify Scrubber Solids Wasting Requirements**
Completed: Major air permit amendment to replace 22 wet scrubbers with baghouses that control particulate emissions from material handling operations and modify the scrubber solids wasting requirements. Issued on May 19, 2015 (Permit No. 13700113-006).
Lead Staff: Owen Seltz

Project Name: **Hibbing Taconite Company – Wet to Dry Particulate Control Change and Modify Scrubber Solids Wasting Requirements**
Completed: Air permit major modification (Permit No. 1370006-007) to update GP 019: In-Pit Crushing and Cobbing (IPCC) for increased flexibility. Issued on June 1, 2015.
Lead Staff: Sarah Seelen

Project Name: **Northshore Mining Company – Material Handling Equipment Project**
Completed: Moderate air permit amendment to install additional material handling equipment in the finished pellet yard was issued on February 5, 2015 (Permit No. 07500003-010).
Lead Staff: Cindy Schafer

Project Name:	**Northshore Mining Company – Low NOx Burner Project**
Completed:	Major air permit amendment was issued on January 26, 2015 for the installation of low NOx burners (Permit No. 07500003-009).
Lead Staff:	Hassan Bouchareb