2015 Second Quarter Mining Report

Facility Name:	**PolyMet Mining's NorthMet Mining Project**
Current actions:	1) Support DNR on a joint state/federal Environmental Impact Statement for a proposed copper/nickel mining and processing operation 2) 401 Certification discussions in parallel with 404 permit preparation
Project Supervisor	Ann Foss
Project Manager:	Jim Robin
Lead Staff:	Sarah Seelen (AQ), Richard Clark (WQ), Jim Brist (401)
Lead Agencies:	EIS: DNR, Army Corps of Engineers, US Forest Service AQ and WQ permits, 401 Certification: MPCA

Accomplishments during this reporting period:

- MPCA staff continued to participate with the Co-lead Agencies in the process of preparing the Final EIS.
- MPCA staff assisted DNR in managing comments received during the SDEIS comment period.

Plans for the next reporting period:

- MPCA will assist the Co-lead Agencies in preparing to execute the Final EIS process.

Facility Name:	**US Steel (USS) - Minntac**
Current actions:	1) Water quality permit reissuance (NPDES/SDS Permit No. MN0057207) for the tailings basin 2) Air permit major modification (Draft Permit No. 13700005-007) for the Dry Controls Project (removal of the existing wet scrubber and installation of dry controls, including fluidized bed dry scrubber/gas suspension absorber, baghouse, and activated carbon injection on line 6) 3) Multi-media Schedule of Compliance (SOC) 4) 404 permit/401 certification application for installation of a Seep Collection and Return System on the Dark River (west side) of the tailings basin 5) 404 permit/401 certification for the mine extension
Project Supervisor:	Suzanne Baumann
Project Manager:	Steve Sommer
Lead Staff:	Erik Smith (WQ), Sarah Seelen (AQ), John Thomas (WQ)
Lead Agency:	MPCA

Accomplishments during this reporting period:

- Public notice of the draft tailings basin water permit is on hold. We are waiting to get more feedback on the Agency's current draft proposal to revise the sulfate water quality standard related to protecting wild rice. In addition, the Agency needs to consider the implications of the recently enacted legislation related to sulfate and wild rice. We will consider our options once we have more clarity on both of these issues.
- On June 18, 2015, USS provided a response to MPCA's March 20, 2015, letter which requested information on predicted tailings basin sulfate concentrations to better understand the effect of USS' proposal not to implement the Dry Control Project.
- On April 3, 2015, MPCA sent a review letter to USS regarding Addendum #1 which is USS' groundwater sulfate reduction plan to address groundwater sulfate concentrations at MW13.
- On May 28, 2015, MPCA received a redesign of the Dark River Seep Collection and Return System from USS.
- On April 24, 2015, MPCA received a groundwater sulfate reduction plan progress update (microcosm study) from USS.

- On May 29, 2015, the MPCA issued a revised 401 certification for the Minntac mine pit extension to include the changes to the stream mitigation option.
- On June 30, 2015, MPCA received a semi-annual groundwater sulfate reduction plan update for MW12.
- MPCA has reviewed the Rosgen Level II report on the potential stream mitigation of site of Spider Creek report and provided comments to USS. MPCA comments were also shared with the United States Army Corps of Engineers.

Plans for the next reporting period:

- Continue reviewing the application and additional information provided for a 404 permit/401 certification for installation of the Dark River Seep Collection and Return System.
- Review and respond as needed to USS submittals and the data requested (predicted basin sulfate concentrations).
- Review and respond as needed to USS submittals about the stream mitigation.

Facility Name:	**US Steel - Keetac**
Current actions:	1) Water quality permit compliance schedule (NPDES/SDS Permit No. MN0031879) 2) Water quality permit modification to modify turbidity limits (NPDES/SDS Permit No. MN0031879) 3) USS-filed appeal related to air dispersion re-modeling requirements contained in Air Emission Permit No. 13700063-005
Project Supervisor:	Suzanne Baumann
Project Manager:	Steve Sommer
Lead Staff:	Owen Seltz (AQ), Brandon Smith (WQ), John Thomas (WQ)
Lead Agency:	MPCA

Accomplishments during this reporting period:

- Continued supporting the Attorney General's Office in its response to a USS-filed appeal to the Minnesota Court of Appeals regarding the Keetac air permit issued on September 17, 2014. The appeal relates to air dispersion re-modeling requirements contained in the permit. Minnesota Court of Appeals oral arguments occurred May 20, 2015.
- A draft water quality permit modification which removes Keetac's turbidity limits in NPDES/SDS Permit MN0031879 in response to changes to the state's water quality standards for that parameter is currently on public notice through July 16, 2015.
- On February 19, 2015, MPCA received from USS a sulfate reduction plan progress report as required by its approved sulfate reduction plan.

Plans for the next reporting period:

- Respond to comments on NPDES/SDS Permit MN0031879 (if any are received), and issue modified permit if appropriate.
- Minnesota Court of Appeals has 90 days from oral arguments (May 20, 2015) to file a decision on the case.

Facility Name:	**Cliffs Erie LLC – Hoyt Lakes Mining Area and Tailings Basin Area**
Current actions:	Reissuance of combined water quality permits (NPDES/SDS Permit Nos. MN0042536 & MN0054089)
Project Supervisor:	Ann Foss
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.

Plans for the next reporting period:

- Continue internal discussion with the goal of refining the permitting approach and schedules for the various mining areas/discharges.

Facility Name:	**Northshore Mining Company**
Current actions:	1) Water quality permit reissuance for Silver Bay Plant and Mile Post 7 Tailings Basin (NPDES/SDS Permit No. MN0055301) 2) Air permit major amendment application from Northshore to remove the Control City Standard and MPCA initiated permit action to clarify the Control City Standard (Draft Permit No. TBD) 3) EAW and 404 permit/401 certification for Peter Mitchell Pit Progression
Project Supervisor:	Jeff Udd (WQ) Suzanne Baumann (AQ)
Project Manager:	None
Lead Staff:	Brandon Smith (WQ reissuance of plant site permit); Richard Clark (EAW);
Lead Agency:	MPCA for AQ and WQ Permits; DNR for EAW

Accomplishments during this reporting period:

- Continued work on the reissuance of the MP7 water quality permit (NPDES/SDS Permit No. MN0055301).

Plans for the next reporting period:

- Receive supplemental fluoride concentration data from the company and subsequently proceed with pre-public notice of the MP7 water quality permit.
- Continue to support DNR in the EAW process for the Pit Progression project.
- Continue to develop responses to comments received on the 404 permit/401 certification for the Pit Progression and continue work on the 401 certification.
- Begin work on the fiber-related air permit amendment.

Facility Name:	**Hibbing Taconite Company**
Current actions:	Water quality reissuance of tailings basin NPDES/SDS permit No. MN0049760
Project Supervisor:	Richard Clark
Project Manager:	
Lead Staff:	Ben Underhill (WQ)
Lead Agency:	MPCA

Accomplishments during this reporting period:

- Sent request for information for Tailings Basin water quality permit reissuance.

Plans for the next reporting period:

- Review submitted information from request (due August 30th) for Tailings Basin NPDES/SDS permit.
- Close and combine Mine Area water quality permit with Tailings Basin water quality permit (no longer any discharges from Mine Area).

Facility Name:	**Magnetation Plant 1**
Actions:	1) Water quality permit reissuance (SDS Permit No. MN0069221)
	2) Air quality initial permit issuance (Draft Permit No. 06100076-001)
Project Supervisor:	Suzanne Baumann
Project Manager:	None
Lead Staff:	Erik Smith (WQ), Owen Seltz (AQ)
Lead Agency:	MPCA

Accomplishments during this reporting period:

- Continued work on the draft SDS permit reissuance for Magnetation Plant 1.
- Begin work on draft air quality permit.
- Notification to stakeholders and interested parties of work start on draft air quality permit.

Plans for next reporting period:

- Continue work on the draft permits.

Facility Name:	**Magnetation Plant 2**
Actions:	1) Air quality initial permit issuance (Draft Permit No. 06100078-001)
	2) Water quality permit reissuance (SDS Permit No. MN0069868)
Project Supervisor:	Suzanne Baumann
Project Manager:	None
Lead Staff:	Hassan Bouchareb (AQ), Ben Underhill (WQ), Erik Smith (WQ)
Lead Agency:	MPCA

Accomplishments during this reporting period:

- Continued work on the draft air permit issuance for Magnetation Plant 2.
- Received application for water quality permit reissuance.
- MPCA placed the water quality permit reissuance on a 30-day public notice May 28, 2015 (comment period ended June 29, 2015).

Plans for next reporting period:

- Begin 30-day public comment period on draft air permit on July 3, 2015.
- Hold public meeting on draft air permit on July 21, 2015 at Taconite Community Center.
- Review and respond to comments on the draft water quality permit reissuance received during the public notice.
- Issue the updated SDS water quality permit.

Facility Name:	**Magnetation Plant 4**
Actions:	Air quality initial permit issuance (Draft Permit No. 06100079-001)
Project Supervisor:	Suzanne Baumann
Project Manager:	None
Lead Staff:	Owen Seltz (AQ)
Lead Agency:	MPCA

Accomplishments during this reporting period:

- Begin work on draft permit.
- Notification to stakeholders and interested parties of work start on draft permit.

Plans for next reporting period:

- Continue work on draft permit.

Facility Name:	**Mining Resources LLC**
Actions:	Water quality permit major modification (SDS Permit No. MN0070050)
Project Supervisor:	Suzanne Baumann
Project Manager:	None
Lead Staff:	Stephanie Handeland
Lead Agency:	MPCA

Accomplishments during this reporting period:

- Continued work on the draft SDS permit modification for addition of the Sherman Basin at Mining Resources LLC.

Plans for next reporting period:

- Continue work on the draft SDS permit modification.

Facility Name:	**Mesabi Nugget**
Current actions:	Submittal review for reissued water quality permit
Project Supervisor:	Ann Foss
Project Manager:	Vacant
Lead Staff:	Cindy Schafer (AQ), Richard Clark (WQ)
Lead Agency:	MPCA

Accomplishments during this reporting period:

- Mesabi Nugget ceased discharge for the season on March 31, 2015.

Plans for the next reporting period:

- Continue review of water permit submittals.

Facility Name:	**Twin Metals**
Current actions:	Support DNR on an Environmental Assessment Worksheet for a proposed bulk sample
Project Supervisor:	Suzanne Baumann
Project Manager:	Ann Foss
Lead Staff:	Vacant
Lead Agency:	DNR

Accomplishments during this reporting period:

- Participate, as needed, in early coordination regarding environmental review roles.

Plans for the next reporting period:

- Continue to assist DNR as needed.

MAJOR PERMIT APPLICATIONS RECEIVED THIS QUARTER

- No metallic mining major permit applications were received during the second calendar quarter of 2015.

COMPLETED MINING PROJECTS

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

Project Name: **Magnetation Plant 4 Water Permit**
Completed: Major water permit amendment was issued on November 12, 2014
Lead Staff: Erik Smith

Project Name: **USS – Minntac Air Permit**
Completed: Major air permit amendment to replace existing main burners on lines 4 and 5 with low NOx burners, December 5, 2013
Lead Staff: Sarah Seelen

Project Name: **Northshore Mining Company – Peter Mitchell Mine Water Permit**
Completed: NPDES/SDS Major Permit Modification, June 14, 2013
Lead Staff: Stephanie Handeland

Project Name: **Magnetation Plant 4 Water Permit**
Completed: SDS Permit Approved by MPCA Board, May 21, 2013
Project Coordinator: Suzanne Baumann
Lead Staff: Erik Smith

Project Name: **Magnetation Plant 2 Water Permit**
Completed: Water Permit Modified October 26, 2012
Project Coordinator: Katie Koelfgen
Lead Staff: Stephanie Handeland

Project Name: **Essar Steel Minnesota Water Permit**
Completed: Water Permit Issued October 1, 2012
Project Coordinator: Joe Henderson
Lead Staff: Stephanie Handeland

Project Name: **Essar Steel Minnesota Supplemental EIS, Air Permit**
Completed: SEIS Deemed Adequate December 29, 2011
Air Construction Permit, May 10, 2012
Project Coordinator: Joe Henderson
Lead Staff: Trevor Shearen

Project Name: **BART Determinations for Mines**
Completed: May 2012 (MPCA work complete. EPA work may remain.)
Project Coordinator: None
Lead Staff: Hongming Jiang

Project Name: **Magnetation (Pellet Plant and associated "Scram" Mining)**
Completed: Cancelled by the Project Proposer
Project Coordinator: Brian Timerson
Lead Staff: Owen Seltz

Project Name: **USS – Keewatin Taconite Expansion Air and Water Permits**
Completed: Air Construction, October 19, 2011

Air Final, December 6, 2011
Water Construction and Final November 15, 2011
Project Coordinator: Brian Timerson
Lead Staff: Owen Seltz, David Beil, Brandon Smith

Project Name: **Cliffs Erie Title V Air Permit Reissuance**
Completed: December 14, 2011
Project Coordinator: Suzanne Baumann
Lead Staff: Sarah Seelen

Project Name: **Mining Resources (Steel Dynamics/Magnetation partnership)**
(Separation of iron from natural ore tailings) Permitted as Scram Mining
SDS Water Permit
Completed: November 23, 2011
Project Manager: Joe Henderson
Project Coordinator: Brian Timerson
Lead Staff: Kate Frantz

Project Name: **Hibbing Taconite Company**
Major AQ Permit Amendment for In-Pit Crushing and Cobbing
Completed: November 16, 2011
Lead Staff: Sarah Seelen

Project Name: **Midland Standard, Inc.**
Water Permit
Completed: August 10, 2011.
Project Manager: Chris Nelson
Lead Staff: Stephanie Handeland

Project Name: **Magnetation Mesabi Chief Tailings Basin 3** (Separation of iron from natural ore tailings)
Water Permit
Completed: March 29, 2012.
Project Manager: Chris Nelson
Lead Staff: Stephanie Handeland

Project Name: **ArcelorMittal Minorca Mine** (Major amendment related to the Taconite MACT)
Air Permit
Completed: March 1, 2011
Project Manager: Carolina Schutt
Lead Staff: Steve Gorg

Project Name: **U of M Coleraine Minerals Research Laboratory**
WQ Permit
Completed: February 1, 2011
Project Manager: Chris Nelson
Lead Staff: Stephanie Handeland

Project Name: **Magnetation Plant #2** (separation of natural ore tailings)
WQ (SDS) Permit (New)
Completed: October 28, 2010
Project Manager: Chris Nelson
Lead Staff: Stephanie Handeland

Project Name: **United Taconite** - Company proposed to burn solid fuels
AQ Permit Amendment
Completed: August 19, 2010
Project Manager: Chris Nelson
Lead Staff: Dick Cordes

Project Name: **Northshore Mining Company** - major amendment to insert Nugget Pilot Plant operating conditions and limits back into the current operating permit
AQ Permit Amendment
Completed: On hold
Project Manager: Ann Foss
Lead Staff: Suzanne Baumann

Project Name: **Northshore Mining Company** - MPCA-initiated permit reopening to clarify the Control City Standard
AQ Permit Amendment
Completed: On hold
Project Manager: Ann Foss
Lead Staff: Suzanne Baumann

Project Name: **USS – Keewatin Taconite** – Permit to allow dewatering of the Perry Pit
WQ Permit Amendment
Completed: June 17, 2010
Project Manager: Jeff Udd
Lead Staff: Brandon Smith

Project Name: **Hibbing Taconite** – Major Amendment for In-Pit Crushing and Cobbing
AQ Permit Amendment
Completed: June 25, 2010
Project Manager: Brian Timerson
Lead Staff: Sarah Seelen

Project Name: **United Taconite** - administrative amendment for Greenball transfer project, permit not needed for construction authorization
AQ Permit
Completed: June 22, 2010
Project Manager: Brian Timerson
Lead staff: Dick Cordes

Project Name: **Cooperative Mineral Resources (CMR)**
WQ Permit
Completed: June 2, 2010
Project Manager: Chris Nelson
Lead Staff: Stephanie Handeland

Project Name: **Northshore Mining Company** – Major Air Permit Amendment to extend stack test deadline.
Completed: January 20, 2010
Project Manager: Ann Foss
Lead Staff: Trevor Shearen (Expedited)

Project Name: **Hibbing Taconite** - Title V Permit Reissuance, Burner Replacement
AQ Permit Amendment
Completed: January 14, 2010
Project Manager: Chris Nelson
Lead Staff: Owen Seltz, Dick Cordes

Project Name: **Mesabi Nugget Phase I** – Major Permit Amendment, changes associated with final design and construction.
AQ Permit Amendment
Completed: January 8, 2010
Project Manager: Chris Nelson
Lead Staff: Joe Miller, Brian Timerson

Project Name: **Northshore Mining Company** – Peter Mitchell Mine Permit Reissuance
WQ Permit
Completed: August 11, 2009
Project Manager: Chris Nelson
Lead staff: Stephanie Handeland

Project Name: **Fugitive Dust Emission Factor** – MPCA provided input on fugitive dust emission factor being developed by the EPA.
Completed: February 12, 2009
Project Manager: Brian Timerson
Lead staff: Hongming Jiang

Project Name: **USS Minntac** - Backward-looking PSD permit for indurating process modification
AQ Permit
Completed: December 16, 2008
Project Manager: Chris Nelson
Lead staff: Hongming Jiang, Suzanne Venem

Project Name: **Northshore Mining Company** - administrative amendment to remove Control City Standard from air permit
AQ Permit
Completed: May 20, 2008
Project Manager: Ann Foss
Lead staff: Suzanne Venem

Project Name: **Hibbing Taconite Company** – Mining Area Permit Reissuance
WQ Permit
Completed: June 24, 2008
Project Manager: Jeff Udd
Lead Staff: Jeff Udd

Project Name: **Minnesota Steel Industries** AQ Permit Amendment
AQ Permit
Completed: May 30, 2008
Project Manager: Chris Nelson
Lead staff: Dick Cordes

Project Name: **Cliffs Erie / SDI** – Transfer of Permits
AQ Permit
WQ Permit
SW Permit
Completed: December 30, 2007
Project Manager: Jess Richards
Lead staff: Steve Gorg, Richard Clark, Julie Henderson

Project Name: **USS Minntac** – Permit Modification for Line 3 Scrubber Wastewater Treatment
WQ Permit
Completed: September 13, 2007 (permit modification issued)
Project Manager: Jeff Udd
Lead Staff: Jeff Udd

Project Name: **Essar Steel Minnesota LLC** (formerly known as Minnesota Steel Industries)
AQ Permit
WQ Permit
Environmental Review – joint state/federal EIS with DNR the RGU
Completed: August 2007 (EIS approval, water permits issuance), October 11, 2007 (air permit issued)
Project Manager: Jeff Udd
Lead Staff: Katrina Kessler, Mike Mondloch, Jim Sullivan, Richard Cordes

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Project Name: **Cliffs Erie LLC** - Hoyt Lakes Plant, Pellet Yard Upgrade
AQ Permit
MACT Applicability
WQ Permit
Completed: October 10, 2005 (permits issued)
Project Manager: Ann Foss
Lead staff: Richard Clark, Mike Mondloch

Project Name: **USS Minntac** – Direct WQ discharge from their tailings basin
Environmental Review – EIS with PCA the RGU
Completed: December 22, 2005 (EIS deemed adequate by MPCA Board)
Project Manager: Ann Foss
Lead staff: John Elling, Richard Clark, Jim Strudell, Jeff Udd

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Project Name: **Birch Lake Exploration Shaft**
EAW
AQ Permit
WQ Permit
Completed: December 12, 2005 (project withdrawn by proposer)
Project Manager: Loren Voigt
Lead staff: Richard Clark, Dick Cordes

Project Name: **Cliffs Erie LLC** - Hoyt Lakes Plant
One Source/Two Source Applicability Determination
Completed: December 2005 (determination completed)
Project Manager: Loren Voigt
Lead staff: Dick Cordes

Project Name: **Northshore Mining** - Start-up of Furnace 5 and associated equipment
AQ Permit
WQ Permit
Environmental Review - EAWAERA
Completed: April 22, 2006 (air permit issued; water permit issued December 2005)
Project Manager: Jeff Stollenwerk
Lead Staff: Dick Cordes, Jeff Udd, Dana Vanderbosch

Project Name: **MN Power/Cliffs Erie -Taconite Harbor** - Permit reissuance with split of permit between MN Power and CCI
WQ Permits
Completed: December 22, 2005 (permits issued)
Project Manager: Jeff Stollenwerk
Lead staff: Katrina Kessler

Project Name: **Taconite MACT/Permitting Integration**
New Rule Implementation Decisions
Completed: February 2006
Project Manager: Jeff Stollenwerk
Lead staff: Mike Mondloch

Project Name: **Hibbing Taconite Company** - various permit amendment applications (misc. administrative amendments and modification of parametric monitoring requirements)
AQ Permit
Completed: February 23, 2006
Project Manager: Jeff Stollenwerk
Lead staff: Hongming Jiang

Project Name: **Northshore Mining** - applicability determination for eliminating visible emission checks
AQ Permit
Completed: April 28, 2006
Project Manager: Jeff Stollenwerk
Lead staff: Dick Cordes

Project Name: **Northshore Mining** - Minor Mod of Mine permit to authorize movement of high sulphur rock
WQ Permit
Completed: April 30, 2006 (permit modified)
Project Manager: Loren Voigt
Lead staff: Richard Clark

Project Name: **USS Minntac** - Major Mod of Permit for Implications from Scrubber Installation
WQ Permit
Completed: July 2006 (permit modified May 21, 2006))
Project Manager: Loren Voigt
Lead staff: Jeff Udd

Project Name: **Northshore Mining** - Major Amendment for Monitoring Parameter Changes
AQ Permit
Completed: July 2006 (permit amended)
Project Manager: Jeff Udd
Lead staff: Mike Mondloch

Project Name: **Hibbing Taconite** – Minor Mod of Mine Permit (change in dust suppressant use)
WQ Permit
Completed: August 29, 2006 (permit modified)
Project Manager: Loren Voigt
Lead staff: Richard Clark

Project Name: **Cliffs Erie** - Land treatment of petroleum contaminated soils generated at former LTV site
Solid Waste Permit
Reporting Period: September 2006 (permit issued)
Project Manager: Loren Voigt
Lead staff: Julie Henderson

Project Name: **Mittal Steel USA** – East Reserve Project
EIS (w/ DNR as the RGU)
WQ and AQ Permits
Reporting Period: February 2007 (EIS completed; air and water permits issued)
Project Manager: Jess Richards
Lead staff: Richard Clark, Mike Mondloch

Project Name: **USS Minntac** - Request for SEIS on EIS Alternative B: Lake Superior Watershed Discharge
Environmental Review
Completed: February 2007 (Response letter denying request)
Project Manager: Jess Richards
Lead staff: Richard Clark, Jim Strudell, Jim Sullivan, Jeff Udd