

**STATE OF MINNESOTA**  
**DEPARTMENT OF NATURAL RESOURCES**  
**RECORD OF DECISION**

**In the Matter of the Determination of the  
Need for a Supplemental Environmental  
Impact Statement for the NewRange  
NorthMet Mining Project, St. Louis County,  
Minnesota**

**FINDINGS OF FACT,  
CONCLUSIONS,  
AND ORDER**

**FINDINGS OF FACT**

1. On July 29, 2026, NewRange Copper Nickel LLC (NewRange) submitted to the Minnesota Department of Natural Resources (DNR) a request for preparation of a supplement (2026 Supplemental Environmental Impact Statement [SEIS] Request) to the joint state and federal Final Environmental Impact Statement (2016 FEIS) for the PolyMet Mining, Inc. (PolyMet) NorthMet Mining Project and Land Exchange in St. Louis County, Minnesota. (PolyMet NorthMet Project). *See Attachment 1: NewRange SEIS Request at pg.1. See generally Attachment 2: 2016 FEIS.*

**A. Initial Proposed Project and 2016 FEIS**

2. In 2004, PolyMet submitted a proposal to DNR for the development of the PolyMet NorthMet Project, a copper-nickel-platinum group elements (PGE) mine and associated facilities located in St. Louis County, Minnesota. As proposed, construction would last for approximately 18 months and would include land clearing, tailings basin improvements, building renovation and construction, stockpile preparation, and utility upgrades. Mining would involve open-pit surface methods for approximately 20 years, resulting in a production rate of approximately 32,000 standard tons per day (stpd) of ore and 41,000 stpd of waste rock. The mine site is proposed at a previously undisturbed site. The processing site is proposed at a previously developed taconite processing site. Ore would be transported by an upgraded existing railway to a refurbished taconite facility for processing. Processing wastes, including tailings and hydrometallurgical residues, would be deposited in an upgraded existing tailings basin and new hydrometallurgical residue facility respectively. Final land reclamation, closure, and post-closure maintenance would occur after mining and would include infrastructure removal, site grading, revegetation, long-term water treatment, maintenance, and monitoring. *See Attachment 3: 2016 PolyMet Adequacy*

*Determination at Paragraph 1.* The PolyMet NorthMet Project with proposed surface facilities is depicted below in Figure 1:

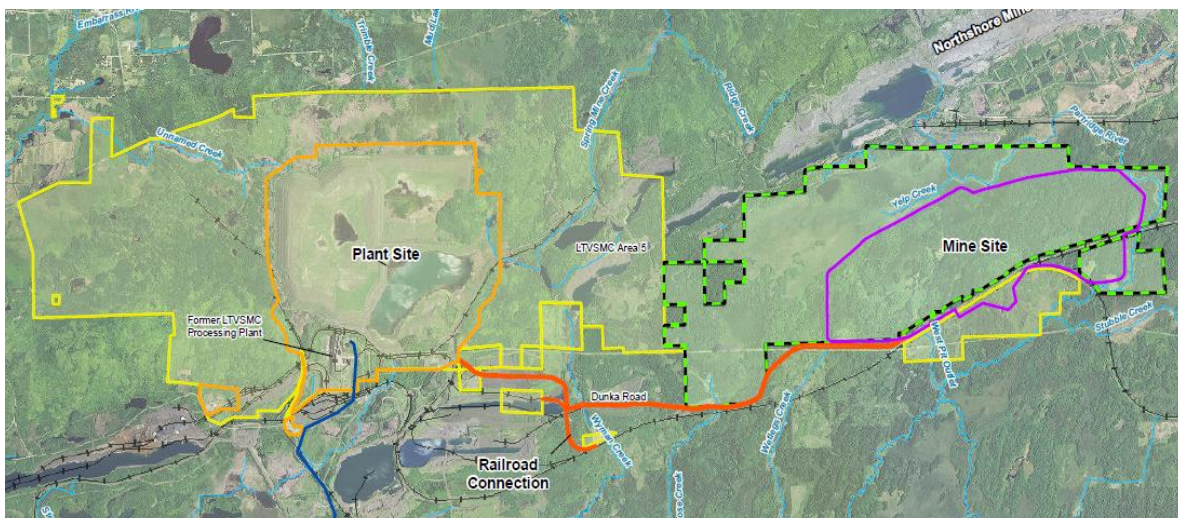


Figure 1: PolyMet NorthMet Project boundaries and proposed surface facilities. See *Attachment 11: 2016 FEIS Chapter 3 at pg. 3-9.*

3. Because the mineral resources proposed to be mined in the PolyMet NorthMet Project are located on National Forest System lands within the Superior National Forest (SNF), PolyMet proposed a land exchange involving the United States Forest Service (USFS) conveying federal land at the NorthMet site to PolyMet in exchange for land of at least equal value in northeastern Minnesota that would become part of the SNF. *Id. at Paragraph 113.*
4. The DNR is the Responsible Governmental Unit (RGU) for preparation and review of environmental documents related to the PolyMet NorthMet Project. Minn. R. 4410.0500, subp. 1, and 4410.4400, subp. 8, item B.
5. The DNR, United States Army Corps of Engineers (USACE), and USFS (Co-Lead Agencies) prepared the NorthMet Mining Project and Land Exchange Environmental Impact Statement (EIS), a joint state and federal EIS, for the PolyMet NorthMet Project. *Id. at Paragraphs 53-54.*
6. The Co-Lead Agencies distributed the Final EIS for comments on November 6, 2015, to all governmental units with authority to permit or approve the PolyMet NorthMet Project, to the Proposer, to all parties on the Environmental Quality Board's (EQB's) Draft EIS distribution list, to all parties submitting substantive comments on the EIS, and to all parties requesting a copy. *Id. at Paragraph 174.*

7. The 2016 FEIS discussed in depth the impacts, necessary permitting, and mitigation that could result from the Proposed Project, which included:

- Water Resources: water quality; contact water; sulfate; groundwater seepage; water flows; mercury; methylmercury; protected areas; north flow path.
- Wetlands: direct effects; indirect effects.
- Vegetation: vegetative cover; biodiversity significance; listed species.
- Wildlife: federal listed species; state listed species.
- Fish and Macroinvertebrates: habitat; water quality.
- Air Quality: air pollutants; greenhouse gases (GHGs); human health; visibility.
- Cultural Resources: historic properties; traditional cultural properties.
- Socioeconomics: employment; taxes; infrastructure.
- Geotechnical Stability: factors of safety.
- Cumulative Effects: additive effects; reduced effects from the project.

The 2016 FEIS also discussed in depth the impacts, necessary permitting, and mitigation for the proposed Land Exchange, which included:

- Land Use: federal ownership.
- Water Resources: public waters; wild rice.
- Wetlands: additional acreage; floodplains; waterways.
- Vegetation: cover type; landscape; listed species.
- Wildlife: habitat; Canada lynx; gray wolf; northern long-eared bat; state listed species – increase; state listed species – decrease; state listed species – unchanged.
- Aquatic Species: connectivity; fish; Species of Greatest Conservation Need.
- Socioeconomics: economic effects; environmental justice.
- Recreation and Visual Resources: recreational opportunities; scenic integrity.
- Wilderness and Other Special Designation Areas: wilderness designation; candidate research natural areas.

*Id. at Paragraph 163.*

8. Pursuant to Minn. R. 4410.2800, subp. 4, after completing all required procedural steps and substantive review, the DNR determined that the NorthMet Mining Project and Land Exchange Project Final EIS (i.e., 2016 FEIS) was adequate on March 3, 2016. *Id. at pg. 85.* A final EIS is determined to be adequate if it:

- addresses the potentially significant issues and alternatives raised in scoping so that all significant issues for which information can be reasonably obtained have been analyzed in conformance with part 4410.2300, items G and H;
- provides responses to the substantive comments received during the draft EIS review concerning issues raised in scoping; and
- was prepared in compliance with the procedures of the act and parts 4410.0200 to 4410.6500.

Minn. R. 4410.2800, subp. 4.

9. Subsequent to DNR's adequacy determination, the prohibition on the issuance of final decisions was lifted. Minn. R. 4410.3100, subp. 1. The DNR issued the Permit to Mine and other DNR permits (i.e., Water Appropriations Permits, Dam Safety Permits, Public Waters Work Permit, sensitive plant Takings Permits) for the PolyMet NorthMet Project on November 1, 2018. The Minnesota Pollution Control Agency (MPCA) completed issuance of its permits on December 20, 2018. While not subject to the cited rule, the USACE issued its Clean Water Act Section 404 Permit on March 21, 2019. *See Attachment 4: Query 7 at .pdf pgs. 3-4.* The USFS issued its Final Record of Decision on the NorthMet Project Land Exchange on January 9, 2017. *See generally Attachment 5: 2017 USFS Land Exchange ROD.*
10. The PolyMet NorthMet Project became exempt from Environmental Review on March 21, 2019, because all governmental decisions had been made pursuant to Minn. R. 4410.4600, subp. 2, item B. *Id.*
11. Subsequently, on April 28, 2019, the PolyMet NorthMet Project became no longer exempt from Environmental Review pursuant to Minn. R. 4410.4600, subp. 2, item B, when the Minnesota Supreme Court remanded the Permit to Mine back to DNR to hold a contested case hearing on the effectiveness of the proposed bentonite amendment for the proposed tailings basin and to determine the appropriate fixed term for the permit to mine. *See generally Attachment 6: 2021 MN Supreme Court Remand.*
12. The USACE revoked the 404 Wetland Permit for the PolyMet NorthMet Project on June 6, 2023. *See generally Attachment 7: 2023 USACE 404 Revocation.*
13. The Minnesota Supreme Court remanded the NPDES/SDS permit for the PolyMet NorthMet Project back to MPCA on August 2, 2023. *See generally Attachment 8: 2023 MN Supreme Court Remand.*

## B. 2026 SEIS Request

14. Following a conversion and name change under Minn. Stat. §§ 302A.682-692 in February 2023, Poly Met Mining, Inc. is now NewRange Copper Nickel LLC (NewRange). NewRange is “for all purposes the same entity that existed before the conversion.” Minn. Stat. § 302A.691, subd. 1. Thereafter, on February 15, 2023, Teck American Inc. and PolyMet US, Inc., a wholly owned subsidiary of PolyMet Mining Corp., formed an independent joint venture, each owning 50% of NewRange. On November 7, 2023, PolyMet Mining Corp. became a wholly owned subsidiary of Glencore. *See Attachment 1: NewRange SEIS Request at pg. 1.*
15. As described in the 2026 SEIS Request, NewRange proposes to modify the PolyMet NorthMet Project through a revised mine plan (NewRange NorthMet Project). NewRange identified the following key changes:
  - A. Relocation and redesign of the tailings management facilities, which includes:
    - i. removal of the Flotation Tailings Basin (FTB) from the project;
    - ii. removal of the Hydrometallurgical Plant and the Hydrometallurgical Residue Facility (HRF) from the project;
    - iii. addition of a surface Tailings Storage Facility (TSF);
    - iv. addition of an In-Pit Tailings Storage Facility (In-Pit TSF); and
    - v. addition of a Lined Tailings Storage Facility (LTSF).
  - B. Updates to the water management and water treatment programs, which include:
    - i. removal of the Plant Site wastewater treatment system (WWTS)
    - ii. storing Mine Site contact water in an equalization basin;
    - iii. addition of Pit 3 to the water management system, as a source of make-up water for managing WWTP flows;
    - iv. use of TSF decant water and collected seepage to supply the processing plant.
  - C. A change in ore conveyance from rail to conveyor between Mine Site and Plant Site.
  - D. Revisions to the Mine Site layout, including:
    - i. construction of two mine pits instead of three;
    - ii. stockpiling of Category 2/3/4 waste rock in a single Temporary Rock Storage Facility (TRSF);
    - iii. relocating the Overburden Storage and Laydown Area (OSLA) and Ore Surge Pile (OSP).
  - E. Increase in production capacity from 32,000 stpd to 40,000 stpd, reducing mine life from 20 years to 16 years.
  - F. Relocation of certain mine support facilities from the Plant Site to the Mine Site.

See Attachment 1: NewRange SEIS Request at pg. 2, .pdf pgs. 6-8.

The NewRange NorthMet Project area is depicted in Figure 2 below:

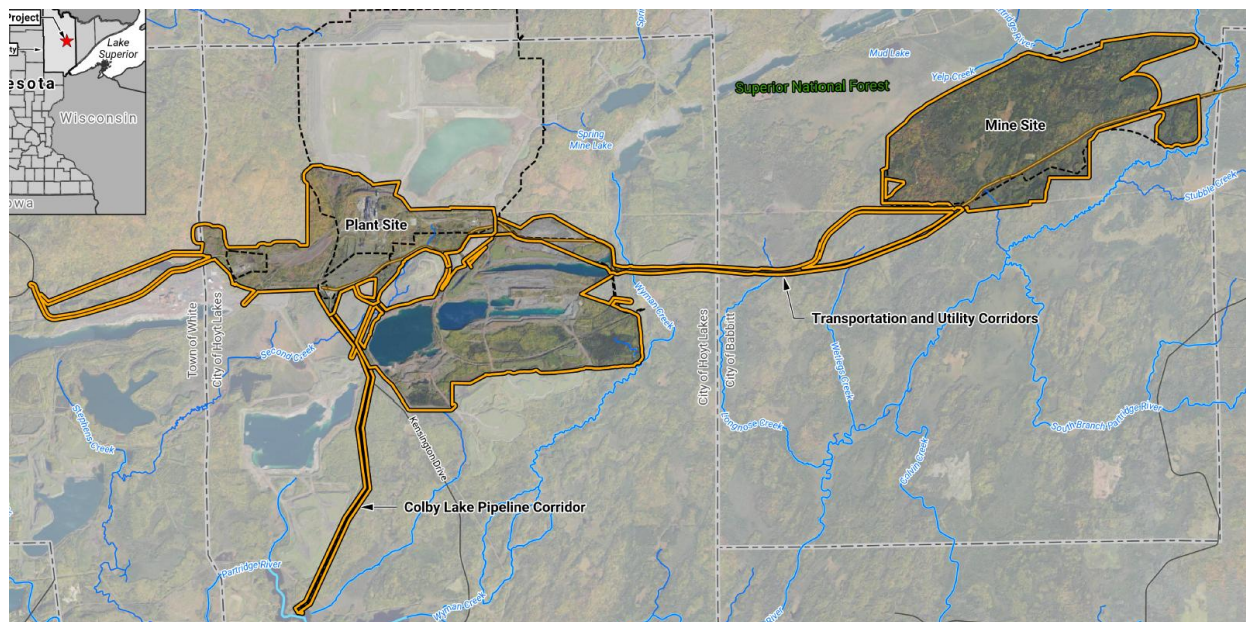


Figure 2: NewRange NorthMet Project boundaries and proposed project areas. See Attachment 1: NewRange SEIS Request at .pdf pg. 8.

### C. SEIS Legal Requirements

16. The DNR remains the RGU for the preparation and review of environmental documents related to the NewRange NorthMet Project. Minn. R. 4410, subp. 8, item B.
17. Pursuant to Minn. R. 4410.3000, subp. 4, any person may request preparation of a supplement to an EIS by submitting a written request to the RGU containing material evidence that a supplement is required under subpart 3. A copy of the request must be sent to the EQB. The RGU shall make the decision on the need for a supplement within 30 days of receipt of the request and shall notify the requesting person and EQB of its decision within five days. If the RGU denies the request, the notice must explain the basis for its decision and respond to the issues raised by the requesting person. If the RGU orders a supplement, its basis for the decision must be incorporated into the supplement preparation notice. Minn. R. 4410.3000, subp. 4.
18. On July 29, 2026, NewRange submitted its 2026 SEIS Request to DNR pursuant to Minn. R. 4410.3000, subp. 4. See Attachment 1: NewRange SEIS Request at pg. 1.

19. On July 29, 2026, NewRange reported to DNR that it provided a copy of its SEIS request to the EQB. *See Attachment 1: NewRange SEIS Request at pg. 1.*
20. Pursuant to Minn. R. 4410.3000, subp. 3, an RGU shall prepare a supplement to an EIS under any of the following circumstances:
  - A. Whenever after a final EIS has been determined adequate, but before the project becomes exempt under part 4410.4600, item B or D, the RGU determines that either:
    - (1) substantial changes have been made in the proposed project that affect the potential significant adverse environmental effects of the project; or
    - (2) there is substantial new information or new circumstances that significantly affect the potential environmental effects from the proposed project that have not been considered in the final EIS or that significantly affect the availability of prudent and feasible alternatives with lesser environmental effects;
  - B. Whenever an EIS has been prepared for an ongoing governmental action and the RGU determines that the conditions of item A, subitem (1) or (2), are met with respect to the action; or
  - C. Whenever an EIS has been prepared for one or more phases of a phased action or one or more components of a connected action and a later phase or another component is proposed for approval or implementation that was not evaluated in the initial EIS.
21. Pursuant to Minn. R. 4410.3000, subp. 4, any person requesting preparation of a supplement to an EIS must provide material evidence, in writing, that a supplement is required under subp. 3.
22. In its 2026 SEIS Request, NewRange included the document titled “NewRange Copper Nickel LLC NorthMet Mining Project Supplement to Final Environmental Impact Statement Preparation Notice – July 2026” as material evidence to support its request.

Preparation Notice – July 2026:

- Title of Environmental Impact Statement Being Supplemented and Dates of Completion.
- Description of Situation Necessitating Preparation of the Supplement.
- Scope of Supplement: Alternatives, Issues, and Studies.
- Proposed Time Schedule.

Table 1: Primary Project Changes.

Figure 1: Overall NorthMet Project Area Comparison.

Figure 2: NorthMet Mine Site Project Area Comparison.

Figure 3: NorthMet Plant Site Project Area Comparison.

23. The DNR reviewed all documents submitted in the 2026 SEIS Request in its evaluation of the applicability of Minn. R. 4410.3000, subp. 3, to the request.

**D. Applicability of Minn. R. 4410.3000, subp. 3, item A**

24. As set forth in Paragraph 8, the DNR determined the 2016 FEIS to be adequate.
25. Minnesota Rules part 4410.4600, subp. 2, item B, exempts from environmental review projects for which all governmental decisions have been made.
26. NewRange reports the following status for USFS approvals for the PolyMet NorthMet Project:

| Type of USFS Permit/Approval | Identification Number | Date Applied | Date Approved | Date Denied | Status |
|------------------------------|-----------------------|--------------|---------------|-------------|--------|
| FEIS Record of Decision      | Not applicable        | 2/23/2005    | 3/3/2016      |             | Active |

*See Attachment 4: Query 7 at .pdf pgs. 3-4.*

27. NewRange reports the following status for USACE approvals for the PolyMet NorthMet Project:

| Type of USACE Permit/Approval    | Identification Number | Date Applied | Date Approved | Date Denied | Status  |
|----------------------------------|-----------------------|--------------|---------------|-------------|---------|
| 404 Wetland Permit               | MVP-1999-05528-JKA    | 7/16/2004    | 3/21/2019     | 6/6/2023    | Revoked |
| FEIS Record of Decision          | Not Applicable        | 6/10/2005    | 3/21/2019     |             | Active  |
| Section 7 Endangered Species Act | MVP-1999-05528-JKA    | 8/24/2015    | 2/5/2016      |             | Active  |
| Section 106 Consultation         | MVP-1999-05528-JKA    | 2007         | 12/15/2016    |             | Active  |

*Id.*

28. NewRange reports the following status for DNR approvals for the PolyMet NorthMet Project:

| Type of DNR Permit/Approval                             | Identification Number | Date Applied | Date Approved | Status                |
|---------------------------------------------------------|-----------------------|--------------|---------------|-----------------------|
| FEIS Adequacy Decision                                  | Not applicable        | 2/23/2005    | 3/3/2016      | Active                |
| Permit to Mine (NonFerrous)                             | Not applicable        | 11/3/2016    | 11/1/2016     | Remanded<br>4/28/2021 |
| Wetland Conservation Act Decision                       | Not applicable        | 12/13/2017   | 11/1/2018     | Active                |
| Water Appropriations Permit (West Pit)                  | 2016-1365             | 4/14/2017    | 11/1/2018     | Active                |
| Water Appropriations Permit (Central Pit)               | 2015-1364             | 4/14/2017    | 11/1/2018     | Active                |
| Water Appropriations Permit (East Pit)                  | 2016-1363             | 4/14/2017    | 11/1/2018     | Active                |
| Water Appropriations Permit (Mine Site)                 | 2016-1367             | 4/14/2017    | 11/1/2018     | Active                |
| Water Appropriations Permit (Plant Site)                | 2016-1369             | 4/14/2017    | 11/1/2018     | Active                |
| Water Appropriations Permit (Colby Lake)                | 2016-1369             | 4/14/2017    | 11/1/2018     | Active                |
| Dam Safety Permit (Flotation Tailings Basin)            | 2016-1380             | 7/11/2016    | 11/1/2018     | Active                |
| Dam Safety Permit (Hydrometallurgical Residue Facility) | 2016-1383             | 7/11/2016    | 11/1/2018     | Active                |
| Public Waters Work Permit                               | 2017-2077             | 5/16/2017    | 11/1/2018     | Active                |
| Takings Permit                                          | 23235                 | 9/1/2018     | 11/1/2018     | Active                |

*Id.*

29. NewRange reports the following status for MPCA approvals for the PolyMet NorthMet Project:

| Type of MPCA Permit/Approval                    | Identification Number | Date Applied | Date Approved | Status               |
|-------------------------------------------------|-----------------------|--------------|---------------|----------------------|
| NPDES/SDS Permit                                | MN0071013             | 7/11/2016    | 12/20/2018    | Remanded<br>8/2/2023 |
| Air Quality Permit                              | 12700345-101          | 8/1/2016     | 12/20/2018    | Active               |
| 401 Certification                               | 1999-5528-JKA         | 8/2/2018     | 12/20/2018    | Inactive             |
| Construction Stormwater Permit (Mine)           | C00053253             | 4/2/2019     | 6/12/2019     | Active               |
| Construction Stormwater Permit (Plant)          | C00053251             | 4/2/2019     | 5/14/2019     | Active               |
| Construction Stormwater Permit (Tailings Basin) | C00053252             | 4/2/2019     | 5/14/2019     | Active               |

|                                      |           |           |            |        |
|--------------------------------------|-----------|-----------|------------|--------|
| Construction Stormwater Permit (TUC) | C00053254 | 4/2/2019  | 11/24/2019 | Active |
| Industrial Stormwater Permit (Mine)  | MNR053DNH | 8/24/2018 | 8/31/2018  | Active |
| Industrial Stormwater Permit (Plant) | MNR053DNJ | 8/24/2018 | 8/31/2018  | Active |
| Industrial Stormwater Permit (TUC)   | MNR053DMJ | 8/24/2018 | 8/31/2018  | Active |

*Id.*

30. As set forth in Paragraphs 10 through 13, multiple governmental decisions remain for the PolyMet NorthMet Project.
31. NewRange reports the following new USACE approvals would be required for the NewRange NorthMet Project:

| Type of USACE Permit/Approval    | Permit Action           |
|----------------------------------|-------------------------|
| 404 Wetland Permit               | New Permit              |
| Section 7 Endangered Species Act | Additional Consultation |
| Section 106 Consultation         | Additional Consultation |

*Id. at .pdf pgs. 3-4.*

32. NewRange reports the following new DNR approvals would be required for the NewRange NorthMet Project:

| Type of DNR Permit/Approval              | Permit Action |
|------------------------------------------|---------------|
| Permit to Mine                           | Amendment     |
| Wetland Conservation Act                 | Amendment     |
| Water Appropriations Permit (West Pit)   | Amendment     |
| Water Appropriations Permit (East Pit)   | Amendment     |
| Water Appropriations Permit (Mine Site)  | Amendment     |
| Water Appropriations Permit (Plant Site) | Amendment     |
| Water Appropriations Permit (TSF)        | New Permit    |
| Dam Safety Permit (TSF)                  | New Permit    |
| Dam Safety Permit (LTSF)                 | Amendment     |
| Public Waters Work Permit                | Amendment     |
| Takings Permit                           | Amendment     |

*Id.*

33. NewRange reports the following new MPCA permits/approvals would be required for the NewRange NorthMet Project:

| Type of MPCA Permit/Approval                    | Permit Action     |
|-------------------------------------------------|-------------------|
| NPDES/SDS Permit                                | Amendment         |
| Air Quality Permit                              | Amendment         |
| 401 Certification                               | New Certification |
| Construction Stormwater Permit (Mine)           | Revised SWPPP     |
| Construction Stormwater Permit (Plant)          | Revised SWPPP     |
| Construction Stormwater Permit (Tailings Basin) | Revised SWPPP     |
| Construction Stormwater Permit (TUC)            | Revised SWPPP     |
| Industrial Stormwater Permit (Mine)             | Revised SWPPP     |
| Industrial Stormwater Permit (Plant)            | Revised SWPPP     |
| Industrial Stormwater Permit (TUC)              | Revised SWPPP     |

*Id.*

34. As set forth in Paragraphs 25-30, the NewRange NorthMet Project remains subject to governmental decisions and the project has not been completed, thus it is not exempt from environmental review under Minn. R. 4410.4600, subp. 2, items B and D.
35. As set forth in Paragraphs 10 and 31, the NewRange NorthMet Project meets the threshold criteria of Minn. R. 4410.3000, subp. 3, item A, because a final EIS has been determined adequate and the project is not exempt under Minn. R. 4410.4600, subp. 2, items B and D.
36. Minn. R. 4410.3000, subp. 3, item A, applies to the 2026 SEIS Request for the reasons set forth in Paragraph 35, therefore DNR must make a determination whether the criteria in Minn. R. 4410.3000, subp. 3, item A, subitems (1) or (2) apply.

**E. Applicability of Minn. R. 4410.3000, subp. 3, items B and C**

37. As set forth in Paragraphs 27-29, because the USACE 404 Permit, the DNR Permit to Mine, and the MPCA NPDES/SDS Permits are inactive, and the project has not been constructed, the NewRange NorthMet Project is not an ongoing governmental action pursuant to Minn. R. 4410.3000, subp. 3, item B.
38. Because the PolyMet NorthMet Project was not identified as one or more phases of a phased action, and the NewRange NorthMet Project is not a later phase of the project evaluated in the 2016 FEIS, the provisions of Minn. R. 4410.3000, subp. 3, item C, do not

apply to the proposed NewRange NorthMet Project. *See Attachment 9: 2005 Final Scoping Decision at pgs. 40-41.*

39. The Proposed Land Exchange between the USFS and PolyMet was identified as a connected action to the Proposed NorthMet Project that would be fully assessed in the EIS in accordance with state and federal law. *See generally Attachment 10: Notice of Amendment to EIS Final Scoping Decision.*
40. Because the NorthMet Mining Project and Land Exchange are two projects that constitute a connected action, these were considered together in the Supplemental Draft EIS. *See Attachment 3: 2016 PolyMet Adequacy Determination at Paragraph 112.*
41. The 2016 FEIS assessed the potentially significant impacts of the proposed project, defined as the NorthMet Mining Project and Land Exchange (i.e., connected actions), in terms of its associated environmental and socioeconomic effects. *Id. at Paragraph 161.*
42. As set forth in Paragraph 26, the USFS completed the Land Exchange with PolyMet on March 3, 2016.
43. As set forth in Paragraphs 39 through 42, because the Proposed NorthMet Mining Project and Land Exchange were identified as connected actions and evaluated in the 2016 FEIS, with the Land Exchange subsequently executed between the USFS and PolyMet, the provisions of Minn. R. 4410.3000, subp. 3, item C, do not apply to the NewRange NorthMet Project.

#### **F. Applicability of Mandatory Environmental Review Categories**

44. Minnesota Rules part 4410.4300, Mandatory Environmental Assessment Worksheet (EAW), is not applicable to a project subject to Minn. R. 4410.3000, subp. 3, item A.
45. As set forth in Paragraphs 34 and 35, DNR is not required to consider whether preparation of an EAW is mandatory for the NewRange NorthMet Project because Minn. R. 4410.3000, subp. 3, item A, is applicable to the project.
46. Minnesota Rules part 4410.4400, Mandatory EIS, is not applicable to a project subject to Minn. R. 4410.3000, subp. 3, item A.

47. As set forth in Paragraphs 34 and 35, DNR is not required to consider whether preparation of an EIS is mandatory for the NewRange NorthMet Project because Minn. R. 4410.3000, subp. 3, item A, is applicable to the project.

**G. Application of Minn. R. 4410.3000, subp.3, item A, subitem (1)**

48. Minnesota Rules part 4410.3000, subp. 3, item A (1), requires DNR to compare PolyMet NorthMet Project features to the NewRange NorthMet Project features to determine if substantial changes have been made in the proposed project that affect the potential significant adverse environmental effects of the project.

*Original Features of the PolyMet NorthMet Project*

49. The following paragraphs describe the PolyMet NorthMet Project features evaluated in the 2016 FEIS that are proposed to be changed in the NewRange NorthMet Project.

- A. Unlined Tailings Storage. Tailings disposal under the PolyMet NorthMet Project would be accomplished using the existing LTV Steel Mining Company (LTVSMC) Tailings Facility as the base of the future tailings basin. The existing LTVSMC Tailings Facility consists of three areas: Cell 1E; Cell 2E; and Cell 2W. The most built-up cell is Cell 2W, which is located on the western half of the existing facility and was not proposed to be used in the PolyMet NorthMet Project. Cells 1E and 2E would receive tailings over the life of the project where a containment system would be installed around the northern, western, and portions of the eastern side of the Tailings Basin. To enhance stability of the existing tailings prior to the placement of the PolyMet NorthMet Project tailings, cement pillars would be installed, which employ cement deep soil mixing (CDSM), into the existing tailings and peat layers in the northern dams of the existing facility. Additionally, the northern embankment of Cell 2E and the southern embankments of Cell 1E would be reinforced with a rock buttress. *See Attachment 11: 2016 FEIS Chapter 3 at pgs. 3-3 through 3-4.* The FTB is depicted in Figure 3 below:



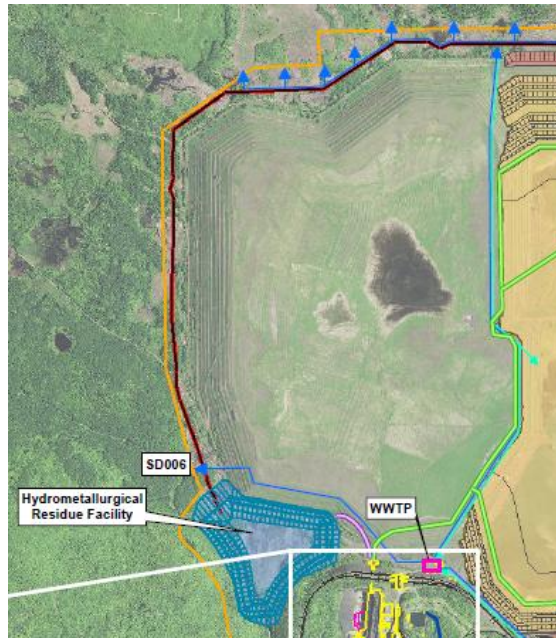


Figure 4: PolyMet NorthMet Project Hydrometallurgical Residue Facility. *Id. at pg. 3-95.*

- C. Mine Site Contact Water Management. Subsequent to the 2016 FEIS, the PolyMet NorthMet Project was modified such that Mine Site contact water generated from the waste rock stockpiles, ancillary mine features, OSLA, construction mine water, and mine pits would be directed to the Plant Site WWTS. *See Attachment 12: 2017 WWTS Relocations Memo at pgs. 22-24.* Untreated water would be transferred in three Mine To Plant Pipelines designated as: Construction Mine Water Pipeline; Low Concentration Mine Water Pipeline; and High Concentration Mine Water Pipeline. *Id. at Table 1.* These pipelines would have flow meters at both ends of each pipe for leak detection. *Id. at pg. 3.*
- D. Tailing Basin Seepage and Decant Water Management. Under the PolyMet NorthMet Project, the containment system around the western, northern, and portions of the eastern sides of the FTB and the southern seepage management system are collectively referred to as the “FTB seepage containment systems.” All groundwater and surface water seepage collected in the containment system around the FTB would be pumped back into the FTB pond or to the WWTP under the PolyMet NorthMet Project. *See Attachment 11: 2016 FEIS Chapter 3 at pg. 3-120.* In addition, tailings delivered to the FTB would settle out of the slurry and the decanted water would be allowed to pond on the surface. This decanted water would be collected using a barge pump-back system that would pump water back for use at the Beneficiation Plant. *Id. at pg. 3-105.* Decant water collected from the FTB would be used along with raw water from Colby Lake as a source of potential water demand for the Beneficiation Plant. *Id. at pg. 3-104.*

- E. Ore Conveyance to the Plant Site. The PolyMet NorthMet Project proposed to use an existing rail line located in the Transportation Utility Corridor (TUC) to transport ore from the Mine Site to the Plant Site. Construction of a connecting rail spur would be required at the Plant Site. Transport itself was to be accomplished using three to four trains, each consisting of sixteen to twenty 100-ton, side-dumping ore cars and one 2,100-hp (approximate), six-axle diesel-electric “Gen-Set” or “Multi-Engine” locomotive. The side-dump cars would have two hinged doors that act as the sides of the car and drop down when the cars are tipped at the coarse-crusher for unloading. PolyMet proposed to use an existing but currently decommissioned fleet of LTVSMC side-dump ore cars. The refurbished sidecars would only be used to haul ore. *Id. at pg. 3-85.*
- F. Mine Site Pit Configuration. The PolyMet NorthMet Project proposed three pits over the mine’s life designated as: East Pit; Central Pit; and West Pit. Mining would start in the East Pit/West Pit from Years 1-11. Mining of the West Pit/Central Pit was planned from Years 11-16. The Central Pit would eventually combine with the East Pit. Mining would occur in the West Pit only in Years 16-20. *Id. at pg. 3-17.* The East Pit would be backfilled with all Category 2/3/4 waste rock stockpiles along with all waste rock from ongoing mining in the Central Pit and West Pit. The West Pit would be flooded in reclamation. *Id.* The Mine Site in Year 20 is depicted in Figure 5 below:

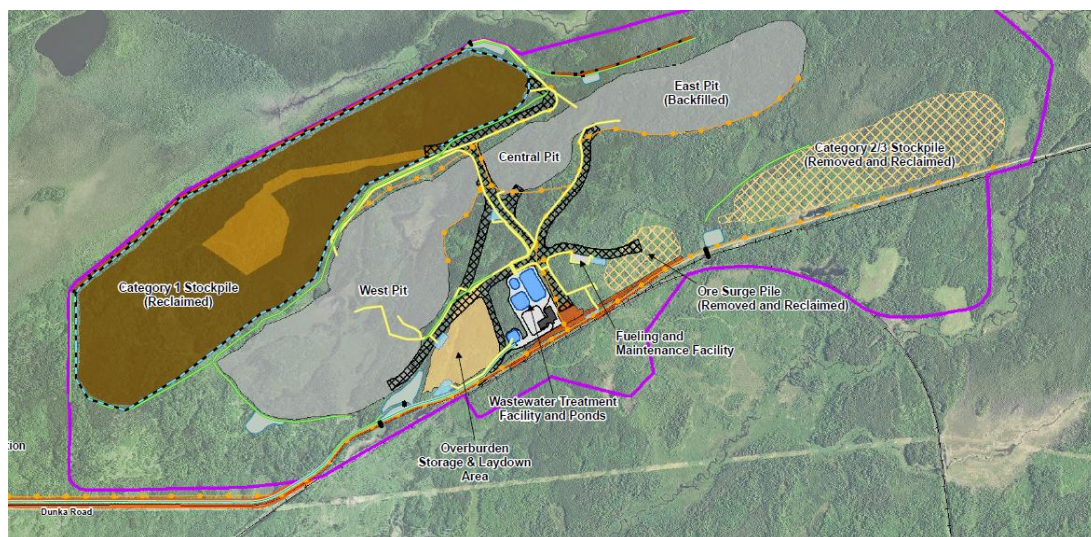


Figure 5: PolyMet NorthMet Project Mine Site in Year 20. *Id. at pg. 3-29.*

- G. Waste Rock Stockpiles. Mining under the PolyMet NorthMet Project would produce waste rock of varying reactivity classified as Category 1, Category 2, Category 3, and Category 4 waste rock. Category 1 was the least reactive with Category 4 the most

reactive. Once overburden was removed and mining of the East and West Pits commenced, stockpiling of non-acid-generating waste rock (i.e., Category 1) would occur over operational years 1-11 into a permanent stockpile; potentially acid-generating Category 2/3 waste rock would be in a temporary stockpile with Category 4 waste rock in a separate temporary stockpile. During operational years 11-16, all of the Category 4 stockpile would be removed to the East Pit and the Category 2/3 stockpile would begin to be removed to the East Pit. The remaining balance of Category 2/3 waste rock present in the temporary stockpile would be emptied to the East Pit during operational years 16-20. Progressive reclamation of the Category 1 permanent stockpile would commence in operational year 11 and be completed with cessation of mining. *Id. at pg. 3-17.* The Mine Site Category 1 stockpile in Year 20 is depicted in Figure 6 below:

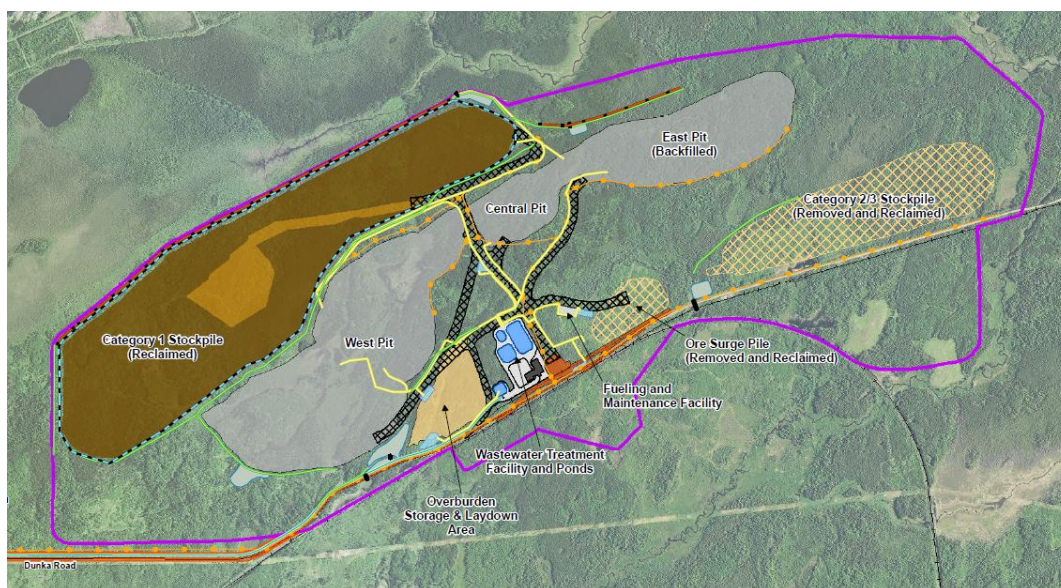


Figure 6: PolyMet NorthMet Project Waste Rock Stockpiles in Year 20. *Id. at pg. 3-29.*

- H. Overburden Storage Laydown Area Location. Site preparation under the PolyMet NorthMet Project would disturb mineral soil materials that have been above the natural water table at the Mine Site; this material is termed unsaturated overburden. Because unsaturated overburden occurs above the water table, it generally would be exposed to air (i.e., oxygen) long enough for chemical reactions to have taken place. This material would be used for on-site construction purposes. Peat (i.e., organic soils) and unsaturated overburden that exceed immediate construction and reclamation needs would be stored in unlined overburden stockpiles at the OSLA. *Id. at pg. 3-45.* The OSLA would be a temporary facility proposed to be centrally located on the south-southeast

side of the West Pit adjacent to the waste water treatment facility (WWTF). *Id. at pgs. 3-23 to 3-31.*

- I. Ore Surge Pile Location. An OSP would be constructed near the Rail Transfer Hopper under the PolyMet NorthMet Project to allow for temporary storage of ore until it could be processed, or as required by rail haulage delays. Use of the OSP would allow for a steady annual flow of rock and would assist in providing a uniform grade of ore to the processing plant. Ore would flow into and out of this pile as needed to meet mine and plant operating conditions. A lined foundation would be constructed with drainage collected and routed to the WWTF. The OSP would be removed at the completion of mining activities. *Id. at pg. 3-3.*
- J. Rate of Ore and Waste Rock Production. The PolyMet NorthMet Project used an estimated production rate of 32,000 stpd as the value for targeting size reduction and the values the company intended to use to design plant piping and equipment. This entailed ore crushing, grinding, and flotation. Waste rock production was an estimated rate of 41,000 stpd. The pre-production mine development would be followed by a gradual ramp-up of mining and ore output over 6 to 12 months to reach the planned rate of mining, which would be an annual average of 32,000 stpd. Because the processing plant feed rate would progressively increase as plant operations ramped up, mining would be scheduled so that the excavated area in the mine pits would also increase to provide an adequate supply of ore and ensure continuity of plant feed. *Id. at pgs. 3-41, 3-103.*
- K. Mine Services Facilities Location. The PolyMet NorthMet Project proposed to use two existing former LTVSMC service facilities at the Plant Site; these were the Area 1 Shop and Area 2 Shop. Major equipment maintenance (e.g., dozers; front-end loaders; haul trucks) was to be completed at the Area 1 Shop following established routes using existing gravel and black-topped roads through parts of the previously disturbed mining areas. The Area 2 Shop would provide mine offices, change-houses, and rail-related support facilities (e.g., Locomotive Fueling Station; Locomotive Service Building) also located at the Plant Site. *Id. at pg. 3-118.*

#### *Revised Features of the NewRange Northmet Project*

- 50. The following paragraphs describe the NewRange NorthMet Project project features proposed to be changed from the NewRange NorthMet Project.

- A. Unlined Tailings Storage. Tailings would be managed in a new TSF located south of the processing plant within a reconfigured plant site. Proposed tailings management would include disposal using four former Area 2/3 mine pits that would be dewatered prior to tailings deposition. See *Attachment 13: NewRange Section 404 Application at pg. 18*. These pits are designated as Pit A, Pit B, Pit C, and Pit D and depicted in Figure 7 below:

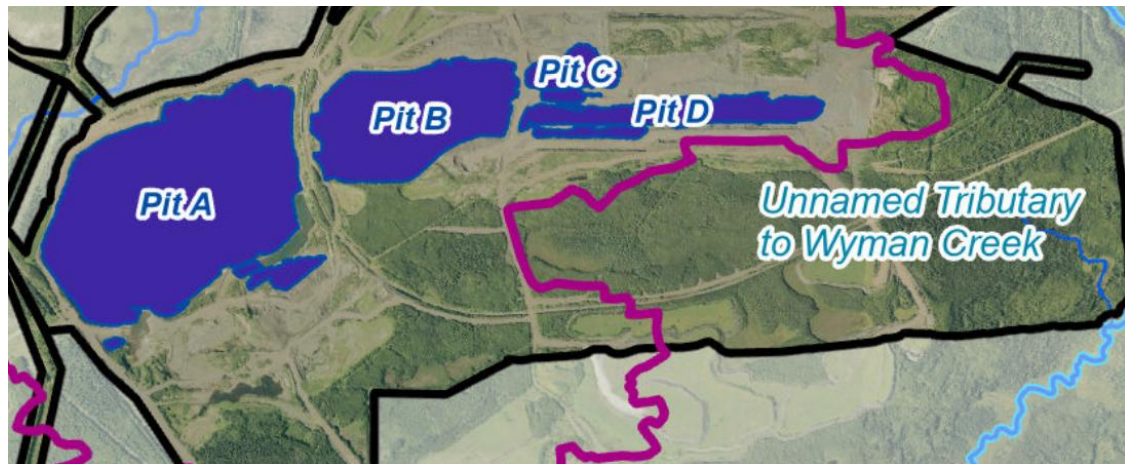


Figure 7: Area 2/3 Mine Pits. *Id. at pg. 19.*

The proposed TSF is designed to provide for: 1) in-pit disposal at Pit A (i.e., In-Pit TSF); and 2) surface disposal at the TSF with raised embankments to contain tailings over former minelands and a former railroad embankment. Centerline dam construction would be used at the TSF with dams constructed of coarse tailings produced from cycloning. See *Attachment 1: NewRange SEIS Request at .pdf pgs. 4, 6*. See also *Attachment 13: NewRange Section 404 Application at pg. 18*. Upon closure, a coarse tailings cap would be placed on the TSF to promote surface runoff and dry closure conditions. *Id.* The In-Pit TSF and TSF are depicted in Figure 8 below:

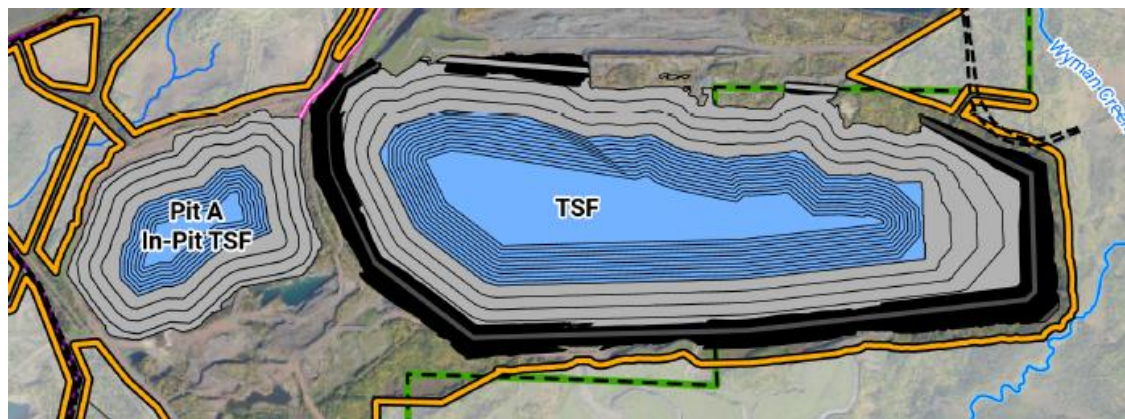


Figure 8: NewRange NorthMet Project In-Pit TSF and TSF. *See Attachment 1: NewRange SEIS Request at .pdf pg. 10.*

- B. Lined Tailings Storage. Construction of the Hydrometallurgical Plant and HRF would be eliminated under the NewRange NorthMet Project. While there would be no hydrometallurgical residue production, the NewRange NorthMet Project proposes to blend high sulfur tailings into the copper concentrate product for market. Any unused excess high sulfur tailings are proposed to be stored in a separate LTSF constructed over the existing LTVSMC Emergency Basin. The proposed facility would utilize the same design of the originally proposed HRF. Also similar to the HRF, the proposed facility would be drained, covered, and reclaimed during closure. *Id. at .pdf pg. 6. Also see Attachment 13: NewRange Section 404 Application at pg. 17.* The LTSF is depicted in Figure 9 below:



Figure 9: NewRange NorthMet Project LTSF. *See Attachment 13: NewRange Section 404 Application at .pdf pg. 104.*

- C. Mine Site Contact Water Management. The WWTS would be eliminated under the NewRange NorthMet Project and Mine Site contact water would no longer be directed to the Plant Site for treatment. *See Attachment 14: Query 8.* Under the NewRange NorthMet Project, Mine Site contact water would be collected from the mine pits, rock storage facilities, OSP, and ancillary mine features and be managed in a Mine Site equalization basin located within the West Pit. Rather than being treated, water stored

within the equalization basin would be used as process water and pumped via a pit-to-plant pipeline located within the TUC to the Plant Site. *Id. at .pdf pg. 7. Also see Attachment 13: NewRange Section 404 Application at 3.* This unlined basin would be similar to an unlined sump, which maintains an inward gradient of flow. *See Attachment 18: Query 1.* The equalization basin is depicted in Figure 10 below:



Figure 10: NewRange NorthMet Project Equalization Basin. *See Attachment 1: NewRange SEIS Request at .pdf pg. 9.*

- D. Tailings Basin Seepage and Decant Water Management. Seepage would no longer be generated at the FTB and routed to the Plant Site WWTP for treatment under the NewRange Project. Rather, Pit 3 would be added to the project water management system and seepage collected from the TSF would be pumped to the processing plant and/or discharged to Pit 3 for storage for future reuse. Pit 3 would also receive TSF decant water. When present, excess water within Pit 3 would be routed to the WWTP for treatment and discharge to the environment. Water within Pit 3 would also be used as make-up water during times water obtained from the TSF decant pond is insufficient to satisfy processing plant water demand. *See Attachment 1: NewRange SEIS Request at .pdf pg. 7. Also see Attachment 13: NewRange Section 404 Application at 4.* While additional make-up water may still be obtained from Colby Lake on a contingency basis, Pit 3 is proposed to replace use of FTB decant water because doing so would provide water management flexibility in terms of providing: 1) excess storage capacity during times of surplus water conditions; 2) make-up water during periods of water shortage; and 3) the potential to attenuate flows to the WWTP. *Id.* Pit 3 is at the Plant Site is depicted in Figure 11 below:

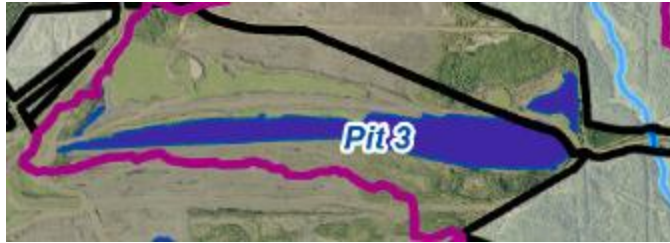


Figure 11: Pit 3 at the Plant Site. See Attachment 13: NewRange Section 404 Application at .pdf pg. 96.

- E. Ore Conveyance to the Plant Site. Ore would no longer be conveyed by use of existing rail connecting the Mine Site to the Plant Site within the TUC under the NewRange NorthMet Project. There would also be no need to construct a new rail connection track at the Plant Site. Ore conveyance would instead rely on use of a covered overland conveyor system within the TUC for the NewRange NorthMet Project. The conveyor would run from the new crusher at the Mine Site using approximately 3.5 miles along the existing LTVSMC railroad corridor before running adjacent (and generally following) the Dunka Road corridor to the Plant Site. Construction would in part include an adjacent maintenance road. This would include construction of an adjacent maintenance road when not located along Dunka Road and wildlife crossings. *Id at .pdf pgs. 4, 7. See also Attachment 13: NewRange Section 404 Application at pg. 3.*
  
- F. Mine Site Pit Configuration. Developing the Mine Site through construction of three open pits (West; Central; East) would not be pursued under the modified project. NewRange now proposes to develop two open pits (West; East) through closure under the modified proposal. The West Pit would be backfilled with waste rock and saturated mineral overburden from the TRSF and flooded in closure. The East Pit void would be flooded to form a pit lake in closure. *See Attachment 1: NewRange SEIS Request at .pdf pg. 6. See also Attachment 16: Query 12. See also Attachment 13: NewRange Section 404 Application at pg. 3.*
  
- G. Waste Rock Stockpiles. Stockpiling of Category 2, 3, and 4 waste rock would change under the NewRange NorthMet Project. Rather than storing Category 2/3 and Category 4 waste rock in separate locations and temporary facilities under the PolyMet NorthMet Project, the NewRange NorthMet Project proposes to combine storage of Category 2/3/4 waste rock into one temporary facility (i.e., TRSF) that would also store saturated mineral overburden and ore on an engineered, geomembrane-lined foundation. The location of the facility shifts under the proposed project away from the Partridge River and would be centrally located, immediately south of the mine pits. *See Attachment 1:*

*NewRange SEIS Request at .pdf pg. 6. Also see Attachment 13: NewRange Section 404 Application at pg. 3. The layout of the Mine Site pits and stockpiles at Year 16 is depicted in Figure 12 below:*

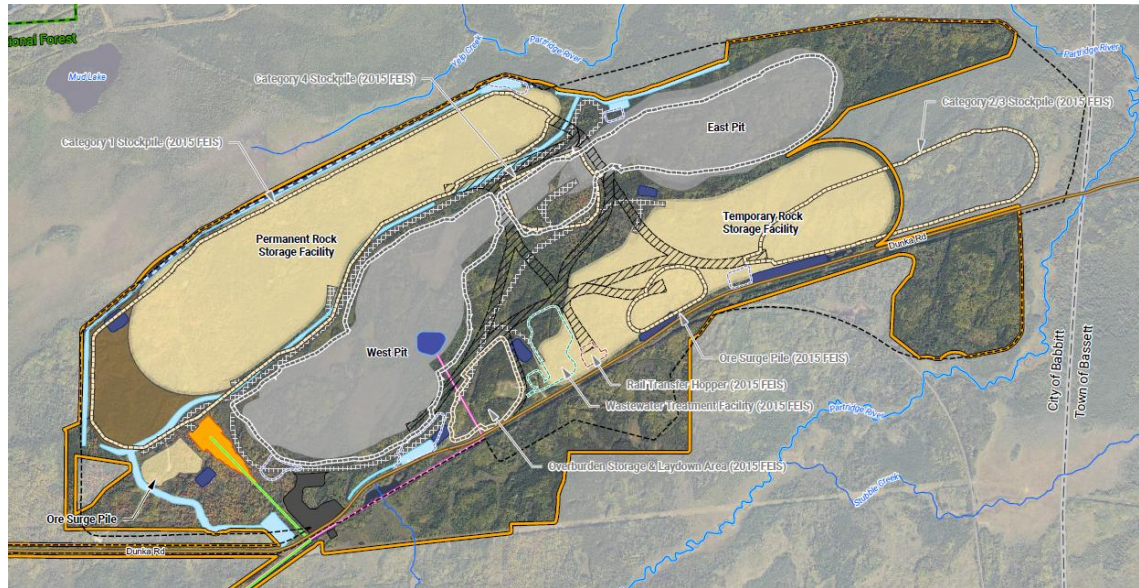


Figure 12: NewRange NorthMet Project Mine Pits and Waste Rock Stockpiles at Year 16. See Attachment 15: Query 3 – Clarification on Figure 2 at pdf. pg. 6.

- H. Overburden Laydown and Storage Area Location. Material disturbed during site preparation would still need to be stored for the NewRange NorthMet Project. The temporary OSLA would no longer be located on the south side of the West Pit, immediately west of the WWTF at the Mine Site, for the NewRange NorthMet Project. Instead, the temporary OSLA would be located at the far western end of the PRSF for Category 1 waste rock, immediately northwest of the western extent of the West Pit and north-northwest of the primary crusher and ore surge pile. All material would be used and/or removed in reclamation. See Attachment 17: Query 5.
- I. Ore Surge Pile Location. The OSP would no longer be centrally located south of the (former) Central and East Pits for the NewRange NorthMet Project. The OSP would be located immediately west of the crusher and western extent of the West Pit under the proposed project. *Id.* See also Attachment 13: NewRange Section 404 Application at 3. Contact water generated from the OSP would be managed in an equalization basin located in the West Pit. See Attachment 18: Query 1.
- J. Rate of Ore and Waste Rock Production. The design processing parameters for ore crushing, ore grinding, and flotation would no longer be the design capacity of 32,000

stpd under the NewRange NorthMet Project. This would change to 40,000 stpd under the proposed project. NewRange reports this would shorten the project life from estimated 20 years to 16 years of mining. *See Attachment 1: NewRange SEIS Request at pg. 1. See also Attachment 13: NewRange Section 404 Application at pg. 2.* Waste rock generation would increase to an annual average of 66,000 stpd. *See Attachment 19: Query 14.*

- K. Mine Services Facilities Location. The truck shop, offices, and mine support facilities would no longer be located at the Plant Site under the NewRange NorthMet Project. These would be relocated to the Mine Site under the proposed project. The existing Area 1 and Area 2 Shops would be used during construction for laydown areas, parking and busing, and contractor workshop areas. *See Attachment 20: Query 13.*

### *Substantial Change Considerations*

51. Minnesota Rules part 4410.3000, subp. 3, item A (1), requires DNR to determine whether substantial changes have been made to the proposed project that affect the potential significant adverse environmental effects evaluated in the 2016 FEIS.
52. The term “substantial change” is not defined in Minn. R. ch. 4410 so we look to common usage of the term. Minn. Stat. § 645.08. For common usage we rely on the Meriam-Webster dictionary. The term “change” is defined by Merriam-Webster as: “to make something different, to shift from one to another, or to replace one with another.” The term “substantial” is defined by Merriam-Webster as: “significantly great or large in amount.” Thus, a substantial change means to make something significantly different.
53. The following paragraphs present DNR’s consideration of whether substantial changes, as that term is defined in Paragraph 52, have been made to select features of the PolyMet NorthMet Project under the revised NewRange NorthMet Project.
- A. Unlined Tailings Storage. Shifting tailings management under the NewRange NorthMet Project from Cells 1E and 2E of the FTB to a new location at the Area 2/3 mine pits represents a substantial change in the proposed project. Not only is a new site being proposed that was not considered in the PolyMet NorthMet Project, in-pit disposal was not a part of the original project. In-pit disposal is a completely different type of tailings management from surface disposal with tailings contained by dams as was proposed in the PolyMet NorthMet Project. While the proposed TSF may have a similar purpose compared to the PolyMet NorthMet Project FTB, it represents a substantial change in

location, and uses the centerline dam construction method for the FTB, that is distinct from the PolyMet NorthMet Project.

- B. Lined Tailings Storage. The LTSF location, design, management, and environmental controls applied in operations are the same as the HRF for the PolyMet NorthMet Project. The proposed closure condition is also the same. The materials proposed to be stored in the LTSF (i.e., unused excess high sulfur tailings) differ significantly from those previously proposed to be stored in the HRF (i.e., hydrometallurgical residue) and present a substantial change in the proposed project.
- C. Mine Site Contact Water Management. The NewRange NorthMet Project changes the treatment of Mine Site contact water from the Plant Site WWTS to the Mine Site equalization basins. Treatment of Mine Site contact water at the Plant Site WWTS differs from the level of treatment in the Mine Site equalization basins and presents a substantial change in the proposed project.
- D. Tailings Basin Seepage and Decant Water Management. The addition of Pit 3 to the Plant Site water management infrastructure represents a substantial change in the NewRange NorthMet Project because there was no proposed use for Pit 3 under the PolyMet NorthMet Project. Pit 3 offers water management flexibility by consolidating several project water management needs into one existing site feature. Water management options available by using Pit 3 include providing: 1) excess storage capacity during times of surplus water conditions; 2) a source of make-up water during periods of water shortage; and 3) the opportunity to attenuate flows to the WWTP. While Colby Lake may still be used as a source of make-up water, Pit 3 would be the main source. As a completely new project feature, it would play a central role in Plant Site water management.
- E. Ore Conveyance to the Plant Site. Modifying the method of conveying ore between the Mine Site and Plant Site from side-car railcars to a covered conveyor system under the NewRange NorthMet Project constitutes a substantial change from the PolyMet NorthMet Project. While both methods would rely in whole or in part on the rail and/or Dunka Road corridors, the proposed conveyor system requires new construction along the entirety of a route not present with the original rail-based proposal.
- F. Mine Site Pit Configuration. The proposed reconfiguration of mine pits and waste rock in-pit backfilling under the proposed NewRange NorthMet Project constitutes a substantial change from the proposed PolyMet NorthMet Project. While both proposed

configurations involved in-pit waste rock disposal and creation of end-use pit lakes, the changes across the PolyMet versus NewRange proposed actions result in major differences in mine sequencing, rock movement, and associated mining activities from the original proposal.

- G. Waste Rock Stockpiles. Modifying reactive waste rock management from two temporary facilities under the PolyMet NorthMet Project into one temporary facility under the NewRange NorthMet Project constitutes a substantial change from the original project design. While the Category 1 waste rock would be similarly stockpiled across both proposed actions, management of the Category 2/3/4 waste rock differs in terms of facility location at the site and what reactive materials are combined at the TRSF, including ore and saturated mineral overburden.
- H. Overburden Laydown and Storage Area Location. The proposed relocation of the temporary overburden storage facilities across the PolyMet and NewRange proposals does not constitute a substantial change in the proposed project. Both proposed locations require similar infrastructure and materials management that does not present major operational concerns and all material would be used or removed in reclamation.
- I. Ore Surge Pile Location. Relocation of the OSP from south of the Central and East Pits under the PolyMet NewRange Project to the west side of the West Pit is not a substantial change in the proposed project. The overall design remains the same, changing its location at the Mine Site can be done under similar operating conditions compared to the original proposal.
- J. Rate of Ore and Waste Rock Production. The increase in the rate of mining under the NewRange NorthMet Project constitutes a substantial change in the proposed action from the PolyMet NorthMet Project. While the total amount of mined material is not proposed to change across either potential action, the new rate of mining represents an increase in throughput compared to the original action. Accordingly, this could result in an increase in mining and rock movement and likely other variables under the NewRange NorthMet Project.
- K. Mine Services Facilities Location. Relocating the truck shop, offices, and mine support facilities to the Mine Site from the Plant Site would not constitute a substantial change from the PolyMet NorthMet Project. These operations represent a very small part of the overall project infrastructure, and transportation is more efficient by maintaining the

mining fleet and equipment at the Mine Site as proposed under the NewRange NorthMet Project.

54. The following NewRange NorthMet Project features constitute substantial changes to the PolyMet NorthMet Project evaluated in the 2016 FEIS:

- A. Unlined Tailings Storage
- B. Lined Tailings Storage
- C. Mine Site Contact Water Management
- D. Tailings Basin Seepage and Decant Water Management
- E. Ore Conveyance to the Plant Site
- F. Mine Pit Configuration
- G. Waste Rock Stockpiles
- H. Rate of Ore and Waste Rock Production

*Consideration of Potential Significant Adverse Environmental Effects*

55. DNR must determine whether the substantial changes identified in Paragraph 54 affect the potential significant adverse environmental effects of the project to satisfy the second condition of Minn. R. 4410.3000, subp. 3, item A (1). The potential significant adverse environmental effects associated with construction and/or operation of the NewRange NorthMet Project features listed in Paragraph 54 are considered below. *See Attachment 1: NewRange SEIS Request at .pdf pgs. 3-4.*

- A. Unlined Tailings Storage. Surface and in-pit tailings management and storage have the potential to significantly adversely affect:
- surface water quantity and quality (2016 FEIS Chapter 5.2.2);
  - groundwater quantity and quality (2016 FEIS Chapter 5.2.2);
  - wetlands (2016 FEIS Chapter 5.2.3);
  - vegetation (2016 FEIS Chapter 5.2.4);
  - aquatic species (2016 FEIS Chapter 5.2.6);
  - air resources (2016 FEIS Chapter 5.2.7);
  - noise and vibration (2016 FEIS Chapter 5.2.8);
  - recreation and visual resources (2016 FEIS Chapter 5.2.11); and
  - human health considerations (2016 FEIS Chapter 7.3.4).

*See generally: Attachment 21: 2016 FEIS Chapter 5; Attachment 22: 2016 FEIS Chapter 7.*

B. Lined Tailings Storage. Permanent storage of high sulfur tailings has the potential to significantly adversely affect:

- groundwater quantity and quality (2016 FEIS Chapter 5.2.2).

*See generally Attachment: 2016 FEIS Chapter 5.2.2.*

C. Mine Site Contact Water Management. Relying on an equalization basin to manage Mine Site contact water has the potential to significantly adversely affect:

- groundwater quantity and quality (2016 FEIS Chapter 5.2.2).

*Id.*

D. Tailings Basin Seepage and Decant Water Management. Plant Site contact water management has the potential to significantly adversely affect:

- surface water quantity and quality (2016 FEIS Chapter 5.2.2); and
- groundwater quantity and quality (2016 FEIS Chapter 5.2.2).

*Id.*

E. Ore Conveyance to the Plant Site. Transferring ore to the Plant Site by using a conveyor has the potential to significantly adversely affect:

- wetlands (2016 FEIS Chapter 5.2.3); and
- wildlife and wildlife crossings (2016 FEIS Chapter 5.2.5).

*Id.*

F. Mine Pit Configuration. Revising the location, sequencing, and development of the mine pits has the potential to significantly adversely affect:

- surface water quantity and quality (2016 FEIS Chapter 5.2.2);
- groundwater quantity and quality (2016 FEIS Chapter 5.2.2);
- wetlands (2016 FEIS Chapter 5.2.3); and
- air quality (2016 FEIS Chapter 5.2.7).

*Id.*

G. Waste Rock Stockpiles. Changing the configuration and management of waste rock stockpiles has the potential to significantly adversely affect:

- surface water quantity and quality (2016 FEIS Chapter 5.2.2);
- groundwater quantity and quality (2016 FEIS Chapter 5.2.2); and
- air quality (2016 FEIS Chapter 5.2.7).

*Id.*

H. Rate of Ore and Waste Rock Production. Increasing the mining rate has the potential to significantly adversely affect:

- air quality (2016 FEIS Chapter 5.2.7); and
- noise and vibration (2016 FEIS Chapter 5.2.8)

*Id.*

56. Pursuant to Minn. R. 4410.3000, subp. 3, item A (1), the following NewRange NorthMet Project features constitute a substantial change in the proposed project that affect the potential significant adverse environmental effects of the project:

- A. Unlined Tailings Storage
- B. Lined Tailings Storage
- C. Mine Site Contact Water Management
- D. Tailings Basin Seepage and Decant Water Management
- E. Ore Conveyance to the Plant Site
- F. Mine Pit Configuration
- G. Waste Rock Stockpiles
- H. Rate of Ore and Waste Rock Production

**H. Application of Minn. R. 4410.3000, subp.3, item A, subitem (2)**

57. Minnesota Rules part 4410.3000, subp. 3, item A (2), requires DNR to determine whether “there is substantial new information or new circumstances that significantly affect the potential environmental effects from the proposed project that have not been considered in the final EIS or that significantly affect the availability of prudent and feasible alternatives with lesser environmental effects.”

58. For the purposes of making the determination required by Minn. R. 4410.3000, subp. 3, item A (2), the 2016 FEIS is the final EIS.

59. Minn. R. 4410.3000, subp. 4, requires the DNR as RGU to consider the material evidence provided by the requestor and other information known to DNR in making its determination whether a supplement to the 2016 FEIS is required. Material evidence provided by the requestor and other information known to DNR that was thoroughly considered is listed in Paragraphs 22, 70, and 71.

60. The 2026 SEIS Request provides a draft preparation notice to DNR listing NewRange’s view on potential environmental effects from the proposed project that were not considered in the 2026 FEIS. *See Attachment 1: NewRange SEIS Request at pgs. 2-5.*

61. Following is the list of potential environmental effects identified by NewRange in the 2026 SEIS Request:

Compatibility with Land Use Plans and Regulations  
Water Resources  
Wetlands  
Vegetation  
Wildlife  
Aquatic Species  
Air Quality  
Noise and Vibration  
Cultural Resources  
Socioeconomics  
Recreation and Visual Resources  
Wilderness and Other Special Designation Areas  
Hazardous Materials  
Geotechnical Stability  
Human Health Considerations

*Id. at pgs. 2-3.*

62. The items below in this paragraph set forth DNR's consideration of substantial new information or new circumstances that significantly affect the potential environmental effects from the proposed project that have not been considered in the final EIS.
- A. Compatibility with land use plans and regulations. The proposed new tailings sites and new ore conveyance corridor represent substantial new information or new circumstances that significantly affect the proposed project's compatibility with land use plans and regulations that have not been considered in the 2016 FEIS. Incompatibility with land use plans and regulations can result in conflicting uses, strain on infrastructure, or induced development into undeveloped areas. These potential environmental effects have not been addressed.
- B. Water resources. The proposed new tailings sites, including dewatering of former mine pits, and reconfiguration of water management, supply, and water treatment represent substantial new information or new circumstances that significantly affect the impacts

to water resources (e.g., surface water; groundwater) that have not been considered in the 2016 FEIS. These potential environmental effects have not been addressed.

- C. Wetlands. The proposed new configuration of mining infrastructure, ore conveyance, and tailings siting represent substantial new information or new circumstances that significantly affect the impacts to wetland resources that have not been considered in the 2016 FEIS. These potential environmental effects have not been addressed.
- D. Vegetation. The proposed new tailings sites where baseline data and impact assessments did not occur represent substantial new information or new circumstances that significantly affect the impacts to vegetation that have not been considered in the 2016 FEIS. These potential environmental effects have not been addressed.
- E. Wildlife. The proposed new tailings site and use of an overland conveyor along a route with wildlife crossings represents substantial new information or new circumstances that significantly affect the impacts to wildlife that have not been considered in the 2016 FEIS. These potential environmental effects have not been addressed.
- F. Aquatic species. The proposed new tailings sites adjacent to and over water resources where aquatic species baseline data and impact assessments did not occur represent substantial new information or new circumstances that significantly affect the impacts to aquatic species that have not been considered in the 2016 FEIS. These potential environmental effects have not been addressed.
- G. Air quality. Changes proposed to decrease the mine life, increase ore processing rates, alter Mine Site traffic patterns, modify the tailings sites and designs, use a new ore conveyance system between the Mine Site and Plant Site, and relocate the crusher to the Mine Site represent substantial new information or new circumstances that significantly affect the impacts to air quality that have not been considered in the 2016 FEIS. These potential environmental effects have not been addressed.
- H. Noise and vibration. Changes due to increased ore processing rates, use of a new ore conveyance system between the Mine Site and Plant Site, and relocation of the TSF represent substantial new information or new circumstances that significantly affect the impacts of noise and vibration that have not been considered in the 2016 FEIS. These potential environmental effects have not been addressed.

- I. Cultural resources. The modifications in land use, primarily at the TSF location, represent substantial new information or circumstances that significantly affect the impacts to cultural resources that have not been considered in the 2016 FEIS. These potential environmental effects have not been addressed.
- J. Socioeconomics. Updates to previous information for the new proposed project represent substantial new information or new circumstances that significantly affect the socioeconomic impacts that have not been considered in the 2016 FEIS. These potential environmental effects have not been addressed.
- K. Recreation and visual resources. Modifications in land use, primarily associated with the new TSF location and design and changes in stockpile design, represent substantial new information or new circumstances that significantly affect the impacts to recreation and visual resources that have not been considered in the 2016 FEIS. These potential environmental effects have not been addressed.
- L. Geotechnical stability. Changes to the waste rock stockpile design, TSF design, and LTSF design represent substantial new information or new circumstances that significantly affect geotechnical stability that has not been considered in the 2016 FEIS. These potential environmental effects have not been addressed.
- M. Human health considerations. Modifications to the NorthMet Project design, including in-pit tailings disposal within the TSF, represent substantial new information or new circumstances that significantly affect previously assessed human health considerations that have not been considered in the 2016 FEIS. These potential environmental effects have not been addressed.

*Id.*

- 63. Pursuant to Minn. R. 4410.3000, subp.3, item A (2), the following list of issues associated with the NewRange NorthMet Project constitute substantial new information or new circumstances that significantly affect the environmental effects of the proposed project that have not been considered in the final EIS:

- A. Compatibility with land use plans and regulations;
- B. Water resources;
- C. Wetlands;
- D. Vegetation;
- E. Wildlife;

- F. Aquatic species;
  - G. Air quality;
  - H. Noise and vibration;
  - I. Cultural resources;
  - J. Socioeconomics;
  - K. Recreation and visual resources;
  - L. Geotechnical stability; and
  - M. Human health considerations.
64. DNR must determine whether there is substantial new information or new circumstances that significantly affect the availability of prudent and feasible alternatives with lesser environmental effects. Minn. R. 4410.3000, subp. 3, item A (2).
65. An EIS must address one or more of the following types of alternatives or provide a concise explanation of why no alternative of a particular type is included in the EIS: alternative sites; alternative technologies; modified designs or layouts; modified scale or magnitude; and alternatives incorporating reasonable mitigation measures identified through comments received during the comment periods for EIS scoping or for the draft EIS. Minn. R. 4410.2300, subp. G.
66. The RGU must always consider alternative sites when scoping the EIS and evaluate site alternatives in the EIS unless they can be excluded based on the exclusion criteria in Minn. R. 4410.2300, subp. G. *See Attachment 23: 2010 EQB Guide to the Rules at pg. 28.* One factor that an RGU should consider is “whether the proposer owns the proposed site[?]” *Id.*
67. NewRange reports that in 2026 it entered into purchase agreements with Cleveland-Cliffs to expand its ownership and/or control of the surface estate adjacent to the proposed NewRange NorthMet Project. *See Attachment 24: NewRange Communication to DNR on Changes in Land Ownership and-or Control.*
68. DNR determines the expanded ownership and/or control of the surface estate located adjacent to the NewRange NorthMet Project could be considered as a factor in development of any potential site alternative(s) in any future Environmental Review.

#### **I. Information Compiled by the RGU**

69. The Project Proposer supplied the following information in its request for DNR to supplement the joint state and federal EIS prepared for the PolyMet Mining, Inc. NorthMet Project and Land Exchange in St. Louis County, Minnesota. The information included:
- A. Correspondence from NewRange Copper Nickel to DNR. *Request to Supplement a Final Environmental Impact Statement*. July 29, 2026. [**Attachment 1**: NewRange SEIS Request]
70. The DNR requested additional information from the Project Proposer in relation to the request to supplement the EIS on or about August 4, 2026, through August 11, 2026. This additional information included:
- A. Email from the Proposer's Representative to the DNR: Query 1 (August 4, 2026). [**Attachment 18**: Query 1]
  - B. Email from the Proposer's Representative to the DNR: Query 2 – Closure Condition of the TRSF (August 4, 2026).
  - C. Email from the Proposer's Representative to the DNR: Query 3 – Clarification on Figure 2 (August 4, 2026).
  - D. Email from the Proposer's Representative to the DNR: Query 4 – Primary Crusher (August 4, 2026).
  - E. Email from the Proposer's Representative to the DNR: Query 5 – Closure Condition for the OSP and OSLA (August 4, 2026). [**Attachment 17**: Query 5]
  - F. Email from the Proposer's Representative to the DNR: Query 7 – Permits and Approvals with attachment (August 4, 2026). [**Attachment 4**: Query 7]
  - G. Email from the Proposer's Representative to the DNR: Query 3 – Clarification on Figure 2 with attachments (August 5, 2026). [**Attachment 15**: Query 3 – Clarification on Figure 3]
  - H. Email from the Proposer's Representative to the DNR: Query 6 – Plant Site Change in Mining Area of Disturbance (August 7, 2026).

- I. Email from the Proposer's Representative to the DNR: Query 9 – Existing Pits at Proposed TSF with attachment (August 10, 2026).
  - J. Email from the Proposer's Representative to the DNR: Query 10 – Confirming Pit 2 and Figure Component with attachment (August 10, 2026).
  - K. Email from the Proposer's Representative to the DNR: Query 11 – Colby Lake Appropriations (August 10, 2026).
  - L. Email from the Proposer's Representative to the DNR: Query 12 – Mine Site Equalization Basin (August 11, 2026). [**Attachment 16**: Query 12]
  - M. Email from the Proposer's Representative to the DNR: Query 13 – Mine Support Facilities (August 11, 2026). [**Attachment 20**: Query 13]
  - N. Email from the Proposer's Representative to the DNR: Query 14 – Waste Rock Generation (August 11, 2026). [**Attachment 19**: Query 14]
  - O. Email from the Proposer's Representative to the DNR: Query 8 – Status of WWTS (August 11, 2026). [**Attachment 14**: Query 8]
71. In addition to the information provided in the 2026 SEIS Request and from the Project Proposer, the DNR collected and reviewed additional information otherwise known to DNR relevant to its determination on the request to supplement the EIS prepared for the NorthMet Mining Project and Land Exchange. This additional information included:
- A. Barr Engineering. 2017. *Proposed Waste Water Treatment System (WWTS) Relocations (Version 2)*. Memo. April 5, 2017. [**Attachment 12**: 2017 WWTS Relocations Memo]
  - B. Fond du Lac Band of Lake Superior Chippewa. 2026. *Request for Government-to-Government Consultation on NewRange Copper Nickel LLC's Proposed NorthMet Project Design*. Correspondence. September 11, 2026. DNR consulted with Fond du Lac on October 5, 2026.
  - C. Grand Portage Band of Lake Superior Chippewa. 2026. *Formal Request for Government-to-Government Consultation and Objection to Lack of Tribal Notification Regarding Mining-Related Actions in the 1854 Ceded Territory, Including Mile Post 7 (Northshore Mining) EAW and the NorthMet/NewRange Supplemental EIS Determination*.

Correspondence. July 30, 2026. DNR consulted with Grand Portage on September 9, 2026.

- D. Minnesota DNR. 2005. NorthMet Mine and Ore Processing Facilities Project – Final Scoping Decision. Decision. October 25, 2005. [**Attachment 9**: 2005 Final Scoping Decision]
- E. Minnesota DNR. 2016. *Final Environmental Impact Statement: NorthMet Mining Project and Land Exchange*. Document. October 19, 2015. [**Attachment 2**: 2016 FEIS]
  - 1. 2016 FEIS Chapter 3. *Proposed Action and Alternatives*. [**Attachment 11**: 2016 FEIS Chapter 3]
  - 2. 2016 Final EIS Chapter 5. *Environmental Consequences*. [**Attachment 21**: 2016 FEIS Chapter 5]
  - 3. 2016 Final EIS Chapter 7. *Comparison of Alternatives and Other Considerations*. [**Attachment 22**: 2016 FEIS Chapter 7]
- F. Minnesota DNR. 2016. *In the Matter of the Final Environmental Impact Statement for the PolyMet Mining, Inc., NorthMet Mining Project and Land Exchange, St. Louis County, Minnesota, Pursuant to Minnesota Rules, Parts 4410.0200 to 4410.6500*. Record of Decision. March 3, 2016. [**Attachment 3**: 2016 PolyMet Adequacy Determination]
- G. Minnesota DNR. 2026. *NewRange Communications to DNR on Changes in Land Ownership and/or Control*. August 13, 2026. [**Attachment 24**: NewRange Communication to DNR on Changes in Land Ownership and-or Control]
- H. Minnesota DNR. 2026. *Summary Tribal Consultation Notes: DNR-Grand Portage Band (September 9, 2026) and DNR-Fond du Lac Band (October 5, 2026) RE: NewRange Request for Supplemental EIS*. October 8, 2026.
- I. Minnesota EQB. 2010. EQB Monitor – Volume 34, No. 22. Official Notice. November 1, 2010. [**Attachment 10**: Notice of Amendment to EIS Final Scoping Decision]
- J. Minnesota EQB. 2010. *Guide to Minnesota Environmental Review Rules*. Guidance. May 2010. [**Attachment 23**: 2010 EQB Guide to the Rules]
- K. Minnesota Supreme Court. 2021. *In the Matter of the NorthMet Project Permit to Mine Application Dated December 2017 (A18-1952, A18-1958, A18-1959), and In the Matter of the Application for the Dam Safety Permits 2016-1380 and 2016-1383 for the*

*NorthMet Mining Project (A18-1953, A18-1960, A18-1961)*. Decision. April 28, 2021. [Attachment 6: 2021 MN Supreme Court Remand]

- L. Minnesota Supreme Court. 2023. *In the Matter of the Denial of Contested Case Hearing Requests and Issuance of National Pollutant Discharge Elimination System/State Disposal System Permit No. MN0071013 for the Proposed NorthMet Project St. Louis County Hoyt Lakes and Babbitt Minnesota*. Nos. A19-0112, A19-0118, A20-1271, A20-1380, A20-1385. Decision. August 2, 2023. [Attachment 8: 2023 MN Supreme Court Remand]
- M. NewRange Copper Nickel. 2026. *NorthMet Project: 2026 Section 404 Permit Application*. Permit application and attachments. July 29, 2026. [Attachment 13: NewRange Section 404 Application]
- N. US Army Corps of Engineers. 2023. CEMVP RD-1999-05528-TJH. *Revocation of NewRange Copper Nickel Company Clean Water Act Section 404 Permit*. Permit Revocation. June 6, 2023. Executive Summary. [Attachment 7: 2023 USACE 404 Revocation]
- O. US Army Corps of Engineers. 2026. *Public Notice – St. Paul District, Permit Application, No. 1999-05528*. Public Notice. August 13, 2026.
- P. US Forest Service. 2017. *Final Record of Decision – NorthMet Project Land Exchange. Superior National Forest*. January 9, 2017. [Attachment 5: 2017 USFS Land Exchange ROD]
- Q. WaterLegacy; Minnesota Center for Environmental Advocacy; Friends of the Boundary Waters Wilderness; Fond du Lac Band of Lake Superior Chippewa. 2026. *NewRange Project Summary NorthMet Mine – Appropriate Environmental Review*. Letter and attachments. August 24, 2026.

## CONCLUSIONS

1. The DNR is charged with determining the need to supplement the NorthMet Mining Project and Land Exchange EIS by preparing a supplemental EIS document in accordance with Minn. R. 4410.3000.

2. As set forth more fully in Paragraphs 4 and 16, the DNR is the designated RGU for Environmental Review of the NewRange NorthMet Project, including determining whether to supplement the NorthMet Mining Project and Land Exchange EIS.
3. As set forth more fully in Paragraphs 1, 14, 15, 17, 18, 21, and 22, NewRange submitted a written request to supplement NorthMet Mining Project and Land Exchange EIS that contained material evidence that a supplement is required under Minn. R. 4410.3000, subp. 3.
4. As set forth more fully in Paragraphs 5-13 and 23-36, DNR has determined pursuant to Minn. R. 4410.3000, subp. 3, item A, that the final EIS has been determined adequate and the project has not become exempt under Minn. R. 4410.4600, subp. 2, items B or D, thus Minn. R. 4410.3000, subp. 3, item A, is applicable to the NewRange NorthMet Project.
5. As set forth more fully in Paragraphs 37 through 43, the DNR has determined the NewRange NorthMet Project is not an ongoing governmental action nor one or more phases of a phased action, nor is the project one or more components of a connected action, that is proposed for approval or implementation pursuant to Minn. R. 4410.3000, subp. 3, items B and C.
6. As set forth more fully in Paragraphs 44 through 47, the DNR has determined that neither the mandatory EAW preparation categories at Minn. R. 4410.4300, nor the mandatory EIS preparation categories at Minn. R. 4410.4400, apply to a project subject to Minn. R. 4410.3000, subp. A.
7. As set forth more fully in Paragraphs 48 through 54, the DNR has determined that substantial changes have been made to the NewRange NorthMet Project from the PolyMet NorthMet Project that underwent analysis in the NorthMet Mining Project and Land Exchange EIS pursuant to Minn. R. 4410.3000, subp. 3, item A (1).
8. As set forth more fully in Paragraphs 55 and 56, the DNR has determined that substantial changes have been made to the NewRange NorthMet Project that affect the potential significant adverse environmental effects of the project pursuant to Minn. R. 4410.3000, subp. 3, item A (1).
9. As set forth more fully in Paragraphs 57 through 68, the DNR has identified substantial new information or new circumstances that significantly affect the potential environmental effects from the proposed NewRange NorthMet Project that have not been considered in the final EIS or that significantly affect the availability of prudent and feasible alternatives with lesser environmental effects pursuant to Minn. R. 4410.3000, subp. 3, item A (2).

10. Preparation of a supplement to the NorthMet Mining Project and Land Exchange EIS is required because it meets the criteria set forth in Minn. R. 4410.3000, subp. 3, item A, subitems (1) and (2), which provides that a supplement be prepared:
  - A. whenever after a final EIS has been determined adequate, but before the project becomes exempt under part 4410.4600, subpart 2, item B or D, the RGU determines that either:
    - (1) substantial changes have been made in the proposed project that affect the potential significant adverse environmental effects of the project; or
    - (2) there is substantial new information or new circumstances that significantly affect the potential environmental effects from the proposed project that have not been considered in the final EIS or that significantly affect the availability of prudent and feasible alternatives with lesser environmental effects.
11. Upon ordering a SEIS, DNR will follow the procedural steps for preparing a supplement to an EIS as provided for in Minn. R. 4410.3000, subp. 5. In summary form, the procedural steps will include the following:
  - A. Preparation and notice of a scope for the supplement;
  - B. Preparation and notice of a draft supplement to the EIS that conforms to EIS content requirements, including solicitation of comments;
  - C. Preparation and notice of a final supplement to the EIS that conforms to EIS content requirements, including responding to comments; and
  - D. Determination of adequacy of a final supplement to the EIS.
12. Findings that might properly be termed Conclusions and any Conclusions that might properly be termed Findings are hereby adopted as such.

## **ORDER**

Based on the above Findings of Fact and Conclusions:

The Minnesota Department of Natural Resources determines that a supplement to the NorthMet Mining Project and Land Exchange Environmental Impact Statement **is** required for the NewRange NorthMet Project, in St. Louis County, Minnesota.

Dated this 8th day of October 2026.

### **DEPARTMENT OF NATURAL RESOURCES**

**Jess Richards** Digitally signed by Jess Richards  
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Jess Richards

Assistant Commissioner