

APPROVED JURISDICTIONAL DETERMINATION FORM
U.S. Army Corps of Engineers

This form should be completed by following the instructions provided in Section IV of the JD Form Instructional Guidebook.

SECTION I: BACKGROUND INFORMATION

A. REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD): December 12, 2013

B. ST PAUL, MN DISTRICT OFFICE, FILE NAME, AND NUMBER: Hibbing Taconite Company, 2008-02566-DWW, Area 4

C. PROJECT LOCATION AND BACKGROUND INFORMATION:

State: Minnesota County/parish/borough: St. Louis County City: Hibbing
Center coordinates of site (lat/long in degree decimal format): Lat. 47.4343261° N, Long. -93035067° W.
Universal Transverse Mercator: 15

Name of nearest waterbody: unnamed tributary system to Welcome Creek

Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Mississippi River

Name of watershed or Hydrologic Unit Code (HUC): Prairie-Willow, Minnesota (07010103)

- Check if map/diagram of review area and/or potential jurisdictional areas is/are available upon request.
 Check if other sites (e.g., offsite mitigation sites, disposal sites, etc...) are associated with this action and are recorded on a different JD form.

D. REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY):

- Office (Desk) Determination. Date: March 19, 2013
 Field Determination. Date(s): May 17, 2012 with St. Paul OP-R staff

SECTION II: SUMMARY OF FINDINGS

A. RHA SECTION 10 DETERMINATION OF JURISDICTION.

There **Are no** "navigable waters of the U.S." within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the review area. [Required]

- Waters subject to the ebb and flow of the tide.
 Waters are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce.
Explain: .

B. CWA SECTION 404 DETERMINATION OF JURISDICTION.

There **Are** "waters of the U.S." within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the review area. [Required]

1. Waters of the U.S.

a. Indicate presence of waters of U.S. in review area (check all that apply):¹

- TNWs, including territorial seas
 Wetlands adjacent to TNWs
 Relatively permanent waters² (RPWs) that flow directly or indirectly into TNWs
 Non-RPWs that flow directly or indirectly into TNWs
 Wetlands directly abutting RPWs that flow directly or indirectly into TNWs
 Wetlands adjacent to but not directly abutting RPWs that flow directly or indirectly into TNWs
 Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs
 Impoundments of jurisdictional waters
 Isolated (interstate or intrastate) waters, including isolated wetlands

b. Identify (estimate) size of waters of the U.S. in the review area:

Non-wetland waters: linear feet: width (ft) and/or acres.
Wetlands: W-2 and W-8.5 = 7.59 acres.

c. Limits (boundaries) of jurisdiction based on: 1987 Delineation Manual

Elevation of established OHWM (if known): .

¹ Boxes checked below shall be supported by completing the appropriate sections in Section III below.

² For purposes of this form, an RPW is defined as a tributary that is not a TNW and that typically flows year-round or has continuous flow at least "seasonally" (e.g., typically 3 months).

2. **Non-regulated waters/wetlands (check if applicable):**³

- Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional.
Explain: .

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

The agencies will assert jurisdiction over TNWs and wetlands adjacent to TNWs. If the aquatic resource is a TNW, complete Section III.A.1 and Section III.D.1. only; if the aquatic resource is a wetland adjacent to a TNW, complete Sections III.A.1 and 2 and Section III.D.1.; otherwise, see Section III.B below.

1. **TNW**

Identify TNW: .

Summarize rationale supporting determination: .

2. **Wetland adjacent to TNW**

Summarize rationale supporting conclusion that wetland is “adjacent”:

B. CHARACTERISTICS OF TRIBUTARY (THAT IS NOT A TNW) AND ITS ADJACENT WETLANDS (IF ANY):

This section summarizes information regarding characteristics of the tributary and its adjacent wetlands, if any, and it helps determine whether or not the standards for jurisdiction established under *Rapanos* have been met.

The agencies will assert jurisdiction over non-navigable tributaries of TNWs where the tributaries are “relatively permanent waters” (RPWs), i.e. tributaries that typically flow year-round or have continuous flow at least seasonally (e.g., typically 3 months). A wetland that directly abuts an RPW is also jurisdictional. If the aquatic resource is not a TNW, but has year-round (perennial) flow, skip to Section III.D.2. If the aquatic resource is a wetland directly abutting a tributary with perennial flow, skip to Section III.D.4.

A wetland that is adjacent to but that does not directly abut an RPW requires a significant nexus evaluation. Corps districts and EPA regions will include in the record any available information that documents the existence of a significant nexus between a relatively permanent tributary that is not perennial (and its adjacent wetlands if any) and a traditional navigable water, even though a significant nexus finding is not required as a matter of law.

If the waterbody⁴ is not an RPW, or a wetland directly abutting an RPW, a JD will require additional data to determine if the waterbody has a significant nexus with a TNW. If the tributary has adjacent wetlands, the significant nexus evaluation must consider the tributary in combination with all of its adjacent wetlands. This significant nexus evaluation that combines, for analytical purposes, the tributary and all of its adjacent wetlands is used whether the review area identified in the JD request is the tributary, or its adjacent wetlands, or both. If the JD covers a tributary with adjacent wetlands, complete Section III.B.1 for the tributary, Section III.B.2 for any onsite wetlands, and Section III.B.3 for all wetlands adjacent to that tributary, both onsite and offsite. The determination whether a significant nexus exists is determined in Section III.C below.

1. **Characteristics of non-TNWs that flow directly or indirectly into TNW**

(i) **General Area Conditions:**

Watershed size: 58.16 square miles
Drainage area: 5.8 approx square miles
Average annual rainfall: 25.3 inches
Average annual snowfall: 60.3 inches

(ii) **Physical Characteristics:**

(a) **Relationship with TNW:**

- Tributary flows directly into TNW.
 Tributary flows through 5 tributaries before entering TNW.

Project waters are 30 (or more) river miles from TNW.
Project waters are 1 (or less) river miles from RPW.
Project waters are 30 (or more) aerial (straight) miles from TNW.

³ Supporting documentation is presented in Section III.F.

⁴ Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid West.

Project waters are **1 (or less)** aerial (straight) miles from RPW.
Project waters cross or serve as state boundaries. Explain: .

Identify flow route to TNW⁵: The unnamed tributary flows southwest 0.72 mile and connects with a 71.84-acre unnamed lake (Reservoir 5). Reservoir 5 outlets into the unnamed tributary (Diversion Ditch System), maintained as a series of sedimentation basins and a conveyance channel that flows 2.32 miles into Welcome Creek.

Welcome Creek flows south 1.5 miles into a 60.5-acre unnamed lake (Reservoir Two North). The creek continues from the outlet of this reservoir and flows 0.32 mile into a 166-acre unnamed lake (Reservoir Six). The creek continues from the outlet of this reservoir and flows 0.03 mile into a 437 acre unnamed lake (Reservoir Two). The creek continues from the outlet of this reservoir and flows 0.1 mile into a 18.6-acre (unnamed open water area) before connecting to O-Brian Diversion Channel. The channel flows 3.49 miles and connects with Hay Creek. Hay Creek flows 1.59 miles and connects to a 27.0-acre open water pond (marsh) that is heavily vegetated with aquatic vegetation. The creek continues from the outlet of the pond and flows 4.96 miles and connects to Swan Lake (surface area 2,467.39 acres). The outlet of the lake is the Swan River that flows 70.98 miles before connecting to the Mississippi River. The Mississippi River is a Navigable water of the United States (TNW). The confluence of the two rivers is in a rural area (Sec. 9, 23N., R. 23W.).

Tributary stream order, if known: **first**.

(b) General Tributary Characteristics (check all that apply):

Tributary is: Natural
 Artificial (man-made). Explain: .
 Manipulated (man-altered). Explain: **The unnamed tributary has been channelized**

and the alignment has been altered as the result of mine activities and dewatering activities at the HTC and Keetac mine facilities.

Tributary properties with respect to top of bank (estimate):

Average width: **9.7** feet

Average depth: **2.6** feet

Average side slopes: **3:1**.

Primary tributary substrate composition (check all that apply):

Silts Sands Concrete
 Cobbles Gravel Muck
 Bedrock Vegetation. Type/% cover:
 Other. Explain: .

Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain: **The bank would be stable with grassy and scrub/shrub vegetation on top of dredged material disposal areas from maintenance dredging/excavation in years past.**

Presence of run/riffle/pool complexes. Explain: **unknown**.

Tributary geometry: **Relatively straight**

Tributary gradient (approximate average slope): **.0003 %**

(c) Flow:

Tributary provides for: **Perennial**

Estimate average number of flow events in review area/year: **20 (or greater)**

Describe flow regime: **The identified unnamed tributary is identified as a perennial waterway in the National Hydrograph Data set (NHD). The perennial flow throughout past years is evident from aerial photographs and surface hydrology during site visit. Flow in unnamed tributary would**

⁵ Flow route can be described by identifying, e.g., tributary a, which flows through the review area, to flow into tributary b, which then flows into TNW.

persist throughout much of the year as the result of storm runoff from the remaining upland and wetland areas, and the Keetac mine dewatering activity. This would also include groundwater infiltration. A significant portion of the of the tributary is proposed to be removed for the Keetac East Mine Pit Expansion.

Other information on duration and volume: The dewatering activities at the Keetac mine would overall increase the volume of flow in the unnamed tributary. The weir outfall (SD002 monitoring station) within the unnamed tributary located near the confluence of Welcome Creek has an average rate of 2.3 million gallons per day (MGD) (2011 MPCA Permit No. MN 0031879). This would include storm runoff and some groundwater infiltration. The volume of flow in the overall tributary system across both mine sites should be constant throughout the year with the dewatering activities for the Keetac East Pit Expansion.

Surface flow is: **Discrete and confined**. Characteristics: The unnamed tributary system has well defined bed and banks from being channeled and maintained for mining purposes.

Subsurface flow: **Unknown**. Explain findings: The local groundwater divides would underlie and approximately coincide with topographic highs and generally delineate local groundwater flow systems. The bedrock and low permeability till could disrupt the flow through surficial deposits in some areas. The groundwater drainage roughly would mimic surface water drainage, and would locally be directed towards nearby surface water features (unnamed tributaries) with relatively short flow paths. The groundwater movement would be expected to be towards the remaining wetlands and the unnamed tributaries. It would be estimated that the groundwater inflow into the existing pits at the Keetac mine site is small relative to the current dewatering rates and would be unlikely to have a measurable impact on nearby groundwater resources.

Dye (or other) test performed: .

Tributary has (check all that apply):

- Bed and banks
 - OHWM⁶ (check all indicators that apply):
 - clear, natural line impressed on the bank
 - changes in the character of soil
 - shelving
 - vegetation matted down, bent, or absent
 - leaf litter disturbed or washed away
 - sediment deposition
 - water staining
 - other (list):
 - the presence of litter and debris
 - destruction of terrestrial vegetation
 - the presence of wrack line
 - sediment sorting
 - scour
 - multiple observed or predicted flow events
 - abrupt change in plant community
- Discontinuous OHWM.⁷ Explain: .

If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction (check all that apply):

- High Tide Line indicated by:
 - oil or scum line along shore objects
 - fine shell or debris deposits (foreshore)
 - physical markings/characteristics
 - tidal gauges
 - other (list):
- Mean High Water Mark indicated by:
 - survey to available datum;
 - physical markings;
 - vegetation lines/changes in vegetation types.

(iii) Chemical Characteristics:

Characterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.).

Explain: The unnamed tributary is discolored from erosion and mine dewatering activities. Continued mining operations at the Keetac facility would result in an increase in sulfate concentrations (Keetac EIS pg. 4-21) in this unnamed tributary. It would be assumed that water quality parameters such as Total Suspended Solids, dissolved oxygen, and water

⁶A natural or man-made discontinuity in the OHWM does not necessarily sever jurisdiction (e.g., where the stream temporarily flows underground, or where the OHWM has been removed by development or agricultural practices). Where there is a break in the OHWM that is unrelated to the waterbody's flow regime (e.g., flow over a rock outcrop or through a culvert), the agencies will look for indicators of flow above and below the break.

⁷Ibid.

temperature would be affected in the channel by dewatering activities from the Keetac mine site.

Identify specific pollutants, if known: Approximate sulfate effluent limits in the most downstream portion of the tributary system would be 14mg/L calendar month average and 24mg/L daily maximum (2011 MPCA Permit No. MN 0031879).

(iv) **Biological Characteristics. Channel supports (check all that apply):**

Riparian corridor. Characteristics (type, average width): The overall unnamed tributary system was converted to a slow moving Diversion Ditch System. Sedimentation basins were excavated in the main unnamed tributary that begins at Reservoir 5 and flows 2.32 miles into Welcome Creek. The upper segments of the relevant reach are buffered by riparian corridors comprised of shrub carr and alder thicket vegetation. The downstream segments of the relevant reach are buffered by upland vegetation comprised of grasses and young poplar trees. The width of the riparian corridors are relatively narrow because of the alterations and maintenance of the channel for mining purposes. The land use along the relevant reach is undeveloped, however, heavily disturbed with roads and cleared areas.

Wetland fringe. Characteristics:

Habitat for:

Federally Listed species. Explain findings:

Fish/spawn areas. Explain findings: The MnDNR surveyed the fish populations of Welcome Creek (downstream of the confluence of the drainage channel feature within this review) in 1986, collecting 13 total species; five of these species included: northern pike, white sucker, brown bullhead, rock bass, and yellow perch. It is unknown what the current fish populations are in the creek and/or channel and what fish species still thrive.

Other environmentally-sensitive species. Explain findings:

Aquatic/wildlife diversity. Explain findings:

2. **Characteristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW**

(i) **Physical Characteristics:**

(a) General Wetland Characteristics:

Properties:

Wetland size: W2 (2.67 acres) and W8.5 (4.92 acres) for a total of 7.59 acres

Wetland type. Explain: W2 is a 2.67-acre, Type 2/6 (PEM/SSB) wet meadow and alder thicket. Vegetation in this wetland is dominated by reed canary grass and speckled alder with Canada bluejoint grass, woolgrass and red osier dogwood also present. W8.5 is a 4.92-acre, Type 2/1 (PEMB/FOA) wet meadow and seasonally flooded woodland wetland. Vegetation in this wetland was dominated by reed canary grass, Canada bluejoint grass, and quaking aspen.

Wetland quality. Explain: W2 and 8.5 were natural in origin, however were removed by hard rock mining.

Project wetlands cross or serve as state boundaries. Explain:

(b) General Flow Relationship with Non-TNW:

Flow is: **Intermittent flow**. Explain: W2 and W8.5 were located in a flatter area within an area mapped as primarily Eveleth, Eaglesnest, Conic, Soudan, and Babbitt bouldery upland soils. The intermittent flows would be the result of above average precipitation during the growing season and large snowmelts during the spring season.

Surface flow is: **Discrete and confined**

Characteristics: The flow would have been described as sheetflow across the wetlands, and then outlets into and through a confined drainage point with visible drainage pattern downslope to the downstream waters and wetlands. The surface flow characteristics would be best described as seasonal and intermittent with saturated soils at the surface during the growing season. This would be characteristic of wetlands at the headwaters of a stream; flows that are not continuous and located at

interface of landscape where groundwater and surface water sources change phases to a fluvial environment.

Subsurface flow: **Unknown**. Explain findings: There has been no formal investigation of the subsurface flow from the wetlands.

Dye (or other) test performed: .

(c) Wetland Adjacency Determination with Non-TNW:

Directly abutting

Not directly abutting

Discrete wetland hydrologic connection. Explain: W2 and W 8.5 were directly adjacent to the unnamed tributary that was converted (channelized) to a drainage channel feature that flows southwest 0.72-mile and connects with a 71.84-acre unnamed lake (Reservoir 5). These wetlands had hydrologic connections to the unnamed tributary through drainage features that were evident during the wetland delineation.

Ecological connection. Explain: .

Separated by berm/barrier. Explain: .

(d) Proximity (Relationship) to TNW

Project wetlands are **30 (or more)** river miles from TNW.

Project waters are **30 (or more)** aerial (straight) miles from TNW.

Flow is from: **Wetland to navigable waters**.

Estimate approximate location of wetland as within the **Pick List** floodplain.

(ii) **Chemical Characteristics:**

Characterize wetland system (e.g., water color is clear, brown, oil film on surface; water quality; general watershed characteristics; etc.). Explain: **The chemical characteristics of the wetlands were not directly assessed.**

Identify specific pollutants, if known: **Sediment deposition from land clearing activities (indirect water quality impairments).**

(iii) **Biological Characteristics. Wetland supports (check all that apply):**

Riparian buffer. Characteristics (type, average width): .

Vegetation type/percent cover. Explain:

W2 is a 2.67-acre, Type 2/6 (PEM/SSB) wet meadow and alder thicket; W8.5 is a 4.92-acre, Type 2/1 (PEMB/FOA) wet meadow and seasonally flooded woodland wetland.

Habitat for:

Federally Listed species. Explain findings: .

Fish/spawn areas. Explain findings: .

Other environmentally-sensitive species. Explain findings: .

Aquatic/wildlife diversity. Explain findings: .

3. **Characteristics of all wetlands adjacent to the tributary (if any)**

All wetland(s) being considered in the cumulative analysis: **5**

Approximately (**157.88**) acres in total are being considered in the cumulative analysis.

For each wetland, specify the following:

<u>Directly abuts? (Y/N)</u>	<u>Size (in acres)</u>	<u>Directly abuts? (Y/N)</u>	<u>Size (in acres)</u>
W1 - Y	2.43		
W2 - N	2.67		
W5 - N	3.35		
W8.5 - N	4.92		
W9.5 - N	144.51		

See discussion below.

Summarize overall biological, chemical and physical functions being performed: The district has determined, based on a 2008 wetland delineation and Minnesota National Wetland Inventory, that there are 157.88 acres of wetlands (not including wetlands in Section II, B2.) that would be adjacent to the beginning relevant reach, including those within the review area. The wetland types (overall) would be Type 6/2 (PEM/SSB) wet meadow and alder thicket wetland.

For permit to mine boundary purposes: W2 (2.67); and W8.5 (4.92) are adjacent to an unnamed tributary that was converted (channelized) to a drainage channel feature that flows to Welcome Creek. The drainage area and wetlands within it that are adjacent to the unnamed tributary have either been directly impacted (excavated) and/or removed from the landscape and/or will be removed from the landscape because of the mine and stockpile expansion projects at the Hibbing Taconite Company and Keetac mine facilities.

C. SIGNIFICANT NEXUS DETERMINATION

A significant nexus analysis will assess the flow characteristics and functions of the tributary itself and the functions performed by any wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical, and biological integrity of a TNW. For each of the following situations, a significant nexus exists if the tributary, in combination with all of its adjacent wetlands, has more than a speculative or insubstantial effect on the chemical, physical and/or biological integrity of a TNW. Considerations when evaluating significant nexus include, but are not limited to the volume, duration, and frequency of the flow of water in the tributary and its proximity to a TNW, and the functions performed by the tributary and all its adjacent wetlands. It is not appropriate to determine significant nexus based solely on any specific threshold of distance (e.g. between a tributary and its adjacent wetland or between a tributary and the TNW). Similarly, the fact an adjacent wetland lies within or outside of a floodplain is not solely determinative of significant nexus.

Draw connections between the features documented and the effects on the TNW, as identified in the *Rapanos* Guidance and discussed in the Instructional Guidebook. Factors to consider include, for example:

- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to carry pollutants or flood waters to TNWs, or to reduce the amount of pollutants or flood waters reaching a TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), provide habitat and lifecycle support functions for fish and other species, such as feeding, nesting, spawning, or rearing young for species that are present in the TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to transfer nutrients and organic carbon that support downstream foodwebs?
- Does the tributary, in combination with its adjacent wetlands (if any), have other relationships to the physical, chemical, or biological integrity of the TNW?

Note: the above list of considerations is not inclusive and other functions observed or known to occur should be documented below:

1. **Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNWs.** Explain findings of presence or absence of significant nexus below, based on the tributary itself, then go to Section III.D: .
2. **Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNWs.** Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D: .
3. **Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW.** Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D: The overall unnamed tributary system has the capacity to carry nutrients and pollutants downstream and have a cumulatively affect to the TNW. The review area contained 7.59 acres of wetlands within the headwaters of the relevant reach of the tributary system that are subject to hard rock mining activities. It is estimated that an additional 150.29 acres of wetlands "currently remain" adjacent to the tributary. These wetlands could also receive direct overland flow, and stormwater and spring runoff as a primary source of hydrology. The surrounding land use would deliver nutrients and a larger percentage of pollutants into the wetlands within the relevant reach because of the surrounding mining activity. The wetlands, therefore in the overall relevant reach, provide assimilation and uptake of nutrients and pollutants, and provide stormwater treatment

functions as well as water quality functions. The vegetative types of the wetlands outside of Area 4 are fresh wet-meadow and provide vegetative cover which attributes to better water quality and maintenance of the hydrologic regime; absence of these wetlands could potentially carry increased flows of overland and stormwater runoff from the mining areas resulting in increased nutrient and pollutant loading to the Mississippi River. Therefore, it has been determined that the unnamed tributary system and its adjacent wetlands have a significant nexus to the Mississippi River, a TNW.

D. DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE (CHECK ALL THAT APPLY):

1. TNWs and Adjacent Wetlands. Check all that apply and provide size estimates in review area:

- TNWs: linear feet width (ft), Or, acres.
- Wetlands adjacent to TNWs: acres.

2. RPWs that flow directly or indirectly into TNWs.

- Tributaries of TNWs where tributaries typically flow year-round are jurisdictional. Provide data and rationale indicating that tributary is perennial: .
- Tributaries of TNW where tributaries have continuous flow “seasonally” (e.g., typically three months each year) are jurisdictional. Data supporting this conclusion is provided at Section III.B. Provide rationale indicating that tributary flows seasonally: .

Provide estimates for jurisdictional waters in the review area (check all that apply):

- Tributary waters: linear feet width (ft).
 - Other non-wetland waters: acres.
- Identify type(s) of waters: .

3. Non-RPWs⁸ that flow directly or indirectly into TNWs.

- Waterbody that is not a TNW or an RPW, but flows directly or indirectly into a TNW, and it has a significant nexus with a TNW is jurisdictional. Data supporting this conclusion is provided at Section III.C.

Provide estimates for jurisdictional waters within the review area (check all that apply):

- Tributary waters: linear feet width (ft).
 - Other non-wetland waters: acres.
- Identify type(s) of waters: .

4. Wetlands directly abutting an RPW that flow directly or indirectly into TNWs.

- Wetlands directly abut RPW and thus are jurisdictional as adjacent wetlands.
- Wetlands directly abutting an RPW where tributaries typically flow year-round. Provide data and rationale indicating that tributary is perennial in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW: .
- Wetlands directly abutting an RPW where tributaries typically flow “seasonally.” Provide data indicating that tributary is seasonal in Section III.B and rationale in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW: .

Provide acreage estimates for jurisdictional wetlands in the review area: acres.

5. Wetlands adjacent to but not directly abutting an RPW that flow directly or indirectly into TNWs.

- Wetlands that do not directly abut an RPW, but when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting this conclusion is provided at Section III.C.

Provide acreage estimates for jurisdictional wetlands in the review area: **7.59** acres.

6. Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs.

⁸See Footnote # 3.

- Wetlands adjacent to such waters, and have when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting this conclusion is provided at Section III.C.

Provide estimates for jurisdictional wetlands in the review area: _____ acres.

7. Impoundments of jurisdictional waters.⁹

As a general rule, the impoundment of a jurisdictional tributary remains jurisdictional.

- Demonstrate that impoundment was created from “waters of the U.S.,” or
- Demonstrate that water meets the criteria for one of the categories presented above (1-6), or
- Demonstrate that water is isolated with a nexus to commerce (see E below).

E. ISOLATED [INTERSTATE OR INTRA-STATE] WATERS, INCLUDING ISOLATED WETLANDS, THE USE, DEGRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE, INCLUDING ANY SUCH WATERS (CHECK ALL THAT APPLY):¹⁰

- which are or could be used by interstate or foreign travelers for recreational or other purposes.
- from which fish or shellfish are or could be taken and sold in interstate or foreign commerce.
- which are or could be used for industrial purposes by industries in interstate commerce.
- Interstate isolated waters. Explain: _____.
- Other factors. Explain: _____.

Identify water body and summarize rationale supporting determination: _____

Provide estimates for jurisdictional waters in the review area (check all that apply):

- Tributary waters: _____ linear feet _____ width (ft).
- Other non-wetland waters: _____ acres.
Identify type(s) of waters: _____.
- Wetlands: _____ acres.

F. NON-JURISDICTIONAL WATERS, INCLUDING WETLANDS (CHECK ALL THAT APPLY):

- If potential wetlands were assessed within the review area, these areas did not meet the criteria in the 1987 Corps of Engineers Wetland Delineation Manual and/or appropriate Regional Supplements.
- Review area included isolated waters with no substantial nexus to interstate (or foreign) commerce.
 - Prior to the Jan 2001 Supreme Court decision in “SWANCC,” the review area would have been regulated based solely on the “Migratory Bird Rule” (MBR).
- Waters do not meet the “Significant Nexus” standard, where such a finding is required for jurisdiction. Explain: _____.
- Other: (explain, if not covered above): _____.

Provide acreage estimates for non-jurisdictional waters in the review area, where the sole potential basis of jurisdiction is the MBR factors (i.e., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best professional judgment (check all that apply):

- Non-wetland waters (i.e., rivers, streams): _____ linear feet _____ width (ft).
- Lakes/ponds: _____ acres.
- Other non-wetland waters: _____ acres. List type of aquatic resource: _____.
- Wetlands: _____ acres.

Provide acreage estimates for non-jurisdictional waters in the review area that do not meet the “Significant Nexus” standard, where such a finding is required for jurisdiction (check all that apply):

- Non-wetland waters (i.e., rivers, streams): _____ linear feet, _____ width (ft).
- Lakes/ponds: _____ acres.
- Other non-wetland waters: _____ acres. List type of aquatic resource: _____.
- Wetlands: _____ acres.

SECTION IV: DATA SOURCES.

⁹ To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

¹⁰ Prior to asserting or declining CWA jurisdiction based solely on this category, Corps Districts will elevate the action to Corps and EPA HQ for review consistent with the process described in the Corps/EPA Memorandum Regarding CWA Act Jurisdiction Following Rapanos.

A. SUPPORTING DATA. Data reviewed for JD (check all that apply - checked items shall be included in case file and, where checked and requested, appropriately reference sources below):

- Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: **Barr Engineering, Hibbing Taconite Company.**
- Data sheets prepared/submitted by or on behalf of the applicant/consultant.
 - Office concurs with data sheets/delineation report.
 - Office does not concur with data sheets/delineation report.
- Data sheets prepared by the Corps:
- Corps navigable waters' study:
- U.S. Geological Survey Hydrologic Atlas:
 - USGS NHD data.
 - USGS 8 and 12 digit HUC maps.
- U.S. Geological Survey map(s). Cite scale & quad name: .
- USDA Natural Resources Conservation Service Soil Survey. Citation: .
- National wetlands inventory map(s). Cite name: **Minnesota NWI 2008.**
- State/Local wetland inventory map(s): **Minnesota Department of Natural Resources PWI 2008.**
- FEMA/FIRM maps:
- 100-year Floodplain Elevation is: (National Geodetic Vertical Datum of 1929)
- Photographs: Aerial (Name & Date): **Arc Map aerial imagery 2012.**
or Other (Name & Date): .
- Previous determination(s). File no. and date of response letter: .
- Applicable/supporting case law: **Regulatory Guidance for Significant Nexus.**
- Applicable/supporting scientific literature: .
- Other information (please specify): .

B. ADDITIONAL COMMENTS TO SUPPORT JD: These conclusions are based on the May 17, 2012 field visit to determine hydrologic connections, the information within the Barr Engineering wetland delineation for the wetlands in Area 4, and desktop information from topography mapping and Lidar imaging.

Note: W2 and W8.5 have been removed from the landscape for the purpose of hard-rock mining activities at the Hibbing Taconite Company facility.

The wetland boundaries have been created from field surveys and desktop resources; and the lengths of the reviewed ditches and waterways have been approximated with tools from GIS arcmap 10.1. The wetlands outside the review area have been approximated with NWI and topography maps. The flow patterns and designations of waterways were determined by field work, GIS tools, and mine reports (USS Keetac). The lake dimensions were taken from GIS tools and the Minnesota Department of Natural Resources website with the lake information reports.

It was determined that W3, W4, W6, W7, and W8 within Area 4 are not waters of the United States and are not subject to Corps jurisdiction (jurisdictional determination response letter dated June 28, 2013).