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Minnesota Pollution Control Agency
520 Lafayette Road
St. Paul, MN 55155-4194

RE: Cliffs Erie: Reissuance of Permit for Tailings Basin

Dear Mr. Neblett:

Thank you for meeting with Rob Beranek and me a few weeks ago. As you requested, this letter elaborates on the points we made at that meeting. It presents the legal, technical, and policy reasons that support the regulation of seepage to groundwater from the Cliffs Erie Tailings Basin under a Minnesota State Disposal System (SDS) permit alone, rather than under a National Pollution Discharge Elimination System (NPDES) permit. The federal Clean Water Act (CWA or Act) requires an NPDES permit for the discharge of pollutants from a "point source" into "waters of the United States." Specifically, you have asked us whether seepage from the Tailings Basin should be subject to an NPDES permit if there is a "direct hydrologic connection," through groundwater, between the Basin and surface waters that are waters of the United States.

As discussed more fully below, we do not believe that the law requires the Minnesota Pollution Control Agency (MPCA) to regulate deep seepage from the Tailings Basin under an NPDES permit even if a direct subsurface hydrologic connection can be demonstrated. (Indeed, for the past many decades during which the Tailings Basin has been subject to a water discharge permit from the MPCA, deep seepage has not been regulated by an NPDES permit.) Though courts have taken varying positions on the "hydrologic connection" theory over the last few decades, the better reasoned opinions, in accord with recent Supreme Court pronouncements on CWA jurisdiction, suggest that the regulation of *any* discharges to groundwater falls outside the jurisdiction of the CWA.

Indeed, in the water-rich state of Minnesota, there will likely be direct subsurface hydrologic connections between most discharges to groundwater and nearby surface waters. Expanding the scope of the NPDES program to cover such discharges—not only from tailings basins but from ponds and other activities—would represent a major policy change for the MPCA and one likely to reduce its ability to fashion appropriate and site-specific remedies addressing exceedances of surface water quality standards to which groundwater discharges may be contributing. In addition, treating facilities such as a 3,000-acre tailings basin as "point sources" and applying the NPDES permit program to groundwater discharges from such facilities will raise a host of difficult technical problems and novel legal issues that the MPCA will need to resolve. Following is a more detailed discussion of these issues.

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   A. The text and legislative history of the CWA indicate that it was never intended to regulate discharges to groundwater.

B. The U.S. EPA has never adopted any formal position interpreting the CWA to require an NPDES permit for the discharge of pollutants to groundwater that is hydrologically connected to surface water.

C. Though case law is divided, the better reasoned decisions and those most consistent with recent Supreme Court precedent, hold that the Clean Water Act does not govern discharges to groundwater even if there is a direct subsurface hydrologic connection with surface water.

1. The "Broad View."

2. The "Narrow View."

3. The "Narrow View" is the more defensible position under current CWA jurisprudence.

III. FOR BOTH LEGAL AND POLICY REASONS, THE MPCA SHOULD NOT REGULATE GROUNDWATER SEEPAGE FROM THE CLIFFS ERIE TAILINGS BASIN UNDER AN NPDES PERMIT.

A. Characterizing the 3,034-acre Tailings Basin as a single "point source" stretches that statutory definition beyond recognition; the Tailings Basin is more logically regulated as a nonpoint source.

1. The Cliffs Erie Tailing Basin does not meet the definition of "point source."

2. Court decisions finding mining areas to be "point sources" are distinguishable.

3. Groundwater discharges to the Tailings Basin are more logically regulated as nonpoint source discharges under MPCA's SDS program.

B. If the MPCA regulates groundwater seepage from the Cliffs Erie Tailings Basin under its NPDES program, it will have no legal justification for not applying the same NPDES requirements to groundwater seepage from other basins, ponds, or defined sources.

C. There is no clear legal or policy basis for identifying a "direct" subsurface hydrologic connection between the Tailings Basin and nearby surface waters.

D. Expanding the NPDES program to include tailings basins and similar sources will create technical, financial, and staffing issues for the MPCA and the demand for clear guidance from regulated parties.

E. The State Disposal System program provides the MPCA with more tools and more discretion to address the complex technical issues associated with groundwater discharges that affect surface waters than the NPDES program.

1. SDS permits require only MPCA approval and oversight.

2. SDS schedules of compliance are not subject to CWA deadlines.

3. SDS permits can set more appropriate points of compliance.

IV. OTHER STATES DO NOT REGULATE TAILINGS BASINS OR OTHER PONDS THAT DISCHARGE ONLY TO GROUNDWATER UNDER NPDES PERMITS.

FACTUAL BACKGROUND

Cliff Erie, L.L.C. (Cliffs Erie) is a Minnesota company and a subsidiary of Cliffs Natural Resources, an Ohio corporation. Cliffs Erie owns and operates a number of mining facilities in Minnesota, including a facility known as the Hoyt Lakes Tailings Basin (Tailings Basin, or Basin). The Tailings Basin is subject to NPDES/SDS Permit No. MN0054089, which MPCA issued to the Basin's prior owner, the LTV Steel Mining Company (LTVSMC), on May 4, 2001.[1] Following LTVSMC's bankruptcy in January 2001, Cliffs Erie purchased the facility and on October 30, 2001, MPCA modified the permit to identify Cliffs Erie as the Permittee.

The former LTVSMC facility includes the taconite processing facility: crushers, concentrator, pellet plant and associated equipment shops, haul roads, and the Tailings Basin. Constructed beginning in the 1950s atop wetlands and other natural low-lying features, the Basin covers approximately 3,034 acres with an 11.28-mile perimeter.[2] The perimeter dams are built of graded rock fill, till and clay starter dams, and consolidated lifts of coarse taconite tailings with horizontal gravel filter drains at the base of the dams. When the LTVSCM mine was still in operation, pumps from the processing facility pumped fine tailings slurry to the Tailings Basin. However, the facility has been inactive since LTVSCM's bankruptcy and no process water or tailings have been added to the Basin since 2001.

The Tailings Basin consists of three main cells—1E, 2E and 2W, with approximate fill heights of 60, 95, and 200 feet, respectively. Currently, Cells 1E and 2E contain ponds of approximately 340 acres and 150 acres, respectively. Cell 2W, the largest of the three cells comprising approximately 50 percent of the total Basin area, contains a small pool of water only following snow melt. Natural grasses cover the remainder of the land surface of the Basin.

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[1] The permit includes an expiration date of November 30, 2005. Cliffs Erie submitted a timely application for renewal on May 27, 2005. The MPCA has yet to reissue the permit and the permit is being administratively continued by the Agency.

[2] *See* Exhibit A.

Historically, the Basin discharged water both to groundwater in the underlying aquifer and to surface waters surrounding the Basin. The Basin permit requires Cliffs Erie to monitor eight groundwater monitoring wells as well as five surface discharge stations.[3] Water pumped into the ponds as well as precipitation falling across the Basin soaks into the underlying earth and slowly—over a period of ten to twenty years—descends to the glacial materials comprising the underlying groundwater aquifer.[4] After entering the groundwater, some of the water from the Tailings Basin is transported by the slow-moving aquifer and eventually reappears at the surface, seeping into area wetlands and stream headwaters. The time it takes for the water to move from the underlying aquifer to these surface waters ranges from years to decades, depending on the distance involved and the hydrologic conditions. Exactly what paths the water takes to reach these surface waters is unclear.

In addition to these discharges to groundwater, the Basin also formerly discharged directly into surface waters. These discharges consisted of seepage from the bottom of the Basin that emerged directly onto land, creating creek-like flows that traveled directly into surrounding surface waters. However, these discharges ceased following an April 2010 consent decree between the MPCA and Cliffs Erie (Consent Decree, or Decree) to resolve alleged violations of the NPDES/SDS permit for the Basin.[5] Pursuant to the Decree, Cliffs Erie installed mitigation systems that included intercepting all discharges at the surface discharge points and pumping the water back into the Tailings Basin. These measures have been very effective, and for several years now there have been *zero discharges* from the Tailings Basin directly into surface water. It is for this reason, as more fully explained, below, that it is no longer necessary or appropriate to regulate the Tailings Basin under an NPDES permit.

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[3] Four of the eight groundwater monitoring wells are downgradient of the Tailings Basin (GW001, GW006 - GW008) and have instantaneous maximum limits for boron, fluoride, manganese and molybdenum. The permit lists five surface discharge stations (SD001, SD002, SD004, SD005, and SD006) and requires monitoring for, among other parameters, conductivity, hardness and bicarbonates. Cliffs Erie's NPDES/SDS permit for the Hoyt Lakes Mining Area associated with the Tailings Basin includes outfall SD-026 at the Second Creek headwaters, which, while located in the mine area, consisted primarily of seepage flow from the south side of the Tailings Basin.

[4] The ponds on cells 1E and 2E no longer contain any process water; enough time has passed that all remaining process water would have seeped into the earth and the water presently in the ponds consists solely of precipitation (although some surface water discharges are also being pumped back into the Basin as part of Cliffs Erie's mitigation systems, discussed *infra*).

[5] Consent Decree, *MPCA v. Cliffs Erie L.L.C.*, No. 62CV-10-2807 (Apr. 6, 2010).

DISCUSSION

I. THE MPCA HAS BROAD AUTHORITY UNDER STATE LAW TO REGULATE DISCHARGES TO GROUNDWATER THAT MAY AFFECT GROUNDWATER, SURFACE WATERS, OR BOTH, AND IT HAS TRADITIONALLY USED THIS AUTHORITY TO REGULATE NUMEROUS TYPES OF DISCHARGES TO GROUNDWATER UNDER SDS PERMITS ALONE.

A. Statutory Authority and Scope of the SDS Program.

Chapter 115 of the Minnesota Statutes vests in the MPCA authority to administer and enforce all laws regarding the pollution of "waters of the state" (WOS). Minn. Stat. 115.03, § subd. 1(a). The definition of "waters of the state"—and the scope of the MPCA's authority—is broad, encompassing all surface water, ground water, wetlands, streams, lakes, ponds, and generally "all other bodies or accumulations of water, surface or underground, natural or artificial, public or private, which are contained within, flow through, or border upon the state or any portion thereof." Minn. Stat. § 115.01, subd. 22. State law prohibits the discharge or "addition" of pollutants to such waters without a written permit from the MPCA. Minn. Stat. § 115.07, subd. 1(a). The MPCA issues these permits under its "state disposal system" program.[6]

The MPCA also administers the federal Clean Water Act's NPDES program in Minnesota. Like the SDS program, the NPDES program prohibits the discharge of pollutants into Minnesota waters without an NPDES permit. However, the scope of the NPDES program is much narrower. The NPDES program applies only to "waters of the United States" (WOUS), a subset of WOS that excludes groundwater and many types of surface waters. In addition, whereas "discharges" subject to the SDS program include *any* kind of "addition" of pollutants to Minnesota waters, "discharges" subject to the NPDES program are limited to "additions" that come from a "point source." *See* 33 U.S.C. § 1311, 1362.

B. Types of Discharges Regulated by SDS-Only Permits.

When permitting discharges to WOUS, the MPCA typically issues NPDES permits in combination with an SDS permit. Doing so allows the MPCA to assert not only its CWA authority over WOUS but also to utilize the agency's broader authority over WOS—for example, to regulate not only the principal surface water discharge but also any ancillary effects upon non-WOUS, such as groundwater. However, in situations where an activity may add pollutants to WOS but does not involve a discharge to surface waters from a point source, there is no need, or legal basis, for an NPDES permit. In these situations, the MPCA issues SDS-only permits. Examples include, but are not limited to, the following:

1. Land Application Activities.

The MPCA issues SDS-only permits for various types of land application activities, including industrial land discharges of process wastewater, spray irrigation, and subsurface

[6] So called because chapter 115 also requires permits for the construction or operation of a "disposal system," defined as "a system for disposing of sewage, industrial waste and other wastes," which includes "sewer systems and treatment works." Minn. Stat. § 115.01, subd. 5.

treatment systems (i.e., septic tanks).[7] In these situations, the pollution risk comes from contaminated water soaking through the underlying earth and entering groundwater. The discharge of pollutants to groundwater, which is not a WOUS under the CWA, is beyond the jurisdictional reach of the NPDES program. But the MPCA still has statutory authority to regulate groundwater pollution in these situations, and it does so under its SDS program.

2. Wastewater Treatment Facilities.

Similarly, the MPCA regulates municipal wastewater treatment facilities under SDS-only permits where the facility does not discharge directly to surface waters. For example, the MPCA recently noticed an SDS permit for the Clearwater Harbor Wastewater Treatment Facility.[8] The facility, which is located in Stearns County, is a system of septic tanks, filters, pumps, and drainfields designed to treat the wastewater of approximately 113 homes. According to the public notice, the facility will involve no point-source discharges to surface water; thus, no NPDES permit is required.[9] However, the facility clearly has implications for WOS: the drainfields will "drain" waste water into the underlying groundwater, and the facility is located very near Grass Lake, suggesting the possibility of surface water quality impacts as well.[10] The draft permit addresses these pollution risks by imposing groundwater monitoring requirements and parameter limits, requiring a compliance schedule and mitigation plan for elevated groundwater nitrogen levels, and establishing numerous operational procedures to minimize water pollution.

3. Tailings Basins.

Most relevant to the matter at hand, the MPCA has taken a similar approach to mine tailings basins, regulating the basins under the agency's SDS program if they do not involve direct discharges to surface waters. A good example is Magnetation LLC's scram mining and processing operation near Bovey, Minnesota (Magnetation Plant 2), which is regulated under an SDS-only permit.[11] Scram mining involves the production of iron ore from previously developed stockpiles, basins, underground workings, or open pits. Magnetation's Plant 2 operation is focused on mining the 430-acre former Holman tailings basin site. The basin is contained by earthen dikes and Magnetation's operation is designed so that all process water, as well as runoff from snow melt

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[7] *See generally*, MPCA's website regarding "Water Quality Permit Application and Miscellaneous Forms" (e.g., the permit application forms for Land Application of Wastewater permits are titled as SDS permit programs).

[8] *See* Clearwater Harbor WWTF Draft SDS Permit MN0065226 (Public Notice April 28, 2014).

[9] Compare, for example, the recently noticed draft NPDES/SDS permit for the Two Harbors waste water treatment facility (Permit MN0022250). This facility has "a continuous discharge to Lake Superior"—clearly a point source discharge to a WOUS—and thus requires an NPDES permit in addition to an SDS permit.

[10] *See* Exhibit B (map showing close proximity of Clearwater Harbor WWTF to surface waters). Many facilities for which MPCA issues SDS-only permits are similarly situated very close to surface waters. *See, e.g.*, Exhibit C (map from Pucks Point Draft WWTF SDS Permit MN0070530 (Public Notice May 12, 2104)).

[11] *See* Magnetation LLC's Final Modified SDS Permit No. MN0069868 (April 4, 2012).

and rainfall, is contained within the site and recirculated. There are no direct discharges to surface waters from the basin. However, some water naturally seeps through the basin, carrying constitutents of concern into the groundwater below. The basins are located very close to Holman Lake and the Swan River, which again suggests the possibility of surface water quality impacts.

To address these risks, Magnetation's SDS permit requires annual evaluations of "seepage zones" from the perimeter dikes as well as ongoing monitoring of both groundwater and nearby surface water. If the monitoring indicates "impacts to the environment," the MPCA retains the ability to reopen the permit. The permit also requires that Magnetation operate and maintain the facility to prevent the exceedance of surface and groundwater quality standards specified in Minn. R. chs. 7050 and 7060. In this way, through the SDS permit, the MPCA has the ability to protect not only the groundwater receiving seepage from the basin but also nearby surface waters affected by the discharges to groundwater.

The MPCA has taken a similar permitting approach to other tailings basins. For example, the MPCA regulates tailings basins at the two other scram mining operations in the state—Magnetation's Mesabi Chief Tailings Basin 3 near Keewatin, and Mining Resources LLC's scram mining operation near Hoyt Lakes[12]—under SDS-only permits. In both cases, water is contained and recirculated within the site such that there are no discharges directly to surface waters. And as with the Magnetation Plant 2 SDS permit, the SDS permits for these facilities require monitoring of both groundwater and surface water and impose similar operational requirements to protect water quality.

Even where a tailings basin is permitted as part of a larger mining operation under a combined NPDES/SDS permit, if there is no surface water discharge from the tailings basin, The MPCA still regulates the basin itself as an SDS-only facility. For example, in the NPDES/SDS permit issued to Minnesota Steel Industries, LLC in August 2007 for the company's taconite mine near Nashwauk, the MPCA expressly distinguished the NPDES part of the permit (which was required for dewatering discharges to surface waters) from the SDS part of the permit (which covered the tailings basin), stating:

> This NPDES/SDS Permit incorporates an SDS Permit authorizing the operation of the tailings basin and an NPDES Permit authorizing a discharge of stormwater and mine pit dewatering to the Ann and Sullivan Pits…[13]

In sum, when an activity will discharge pollutants directly to surface waters in Minnesota, the MPCA issues combined NPDES/SDS permits; however, when an activity will add pollutants to waters of the state—groundwater or surface water—but will not involve direct discharges to surface water, such as the operation of a tailings basin, the MPCA regulates the activity solely under its SDS permit program.

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[12] *See* Magnetation Inc.'s Final Modified SDS Permit No. MN0069221 (May 25, 2011) and Mining Resources, LLC's Final Issued SDS Permit No. MN0070050 (November 23, 2011).

[13] *See* Minnesota Steel Industries, LLC's NPDES/SDS Permit No. MN0068241 (August 21, 2007) p. 3.

C. SDS-only permits provide robust protection for affected waters, including surface waters.

An SDS permit provides the MPCA with many regulatory tools to protect affected waters, including permit limitations, monitoring requirements, schedules of compliance, and operational mandates such as storm water pollution prevention plans. And even though an activity permitted under an SDS-only permit does not involve direct discharges to surface waters, the MPCA can nonetheless impose SDS permit requirements necessary to protect surface waters that could be adversely affected. Section 115.03 of the Minnesota Statutes empowers the MPCA to issue SDS permits "under *such conditions as it may prescribe*, in order to prevent, control, or abate water pollution" (emphasis added). Consistent with this broad grant of authority, the MPCA could, for example, require permittees to monitor groundwater that could reach area surface waters or require direct monitoring of surface water quality, as in the tailings basin permits discussed above. The MPCA could also establish limitations for specific parameters in surface or groundwater, with compliance schedules as appropriate, or order a variety of measures designed to implement long-term mitigation goals. In short, the MPCA's SDS permitting authority is not only fully sufficient to protect the state's ground and surface waters from discharges, but it is broad enough to allow the agency to fashion appropriate site-specific mitigation or remedial measures. The only reason for the MPCA to insist upon an NPDES permit in addition to an SDS permit for a particular facility is if the CWA requires it. In the case of the Tailings Basin, no NPDES permit is required.

II. THE CLEAN WATER ACT DOES NOT REQUIRE THE MPCA TO REGULATE GROUNDWATER DISCHARGES FROM THE TAILINGS BASIN UNDER AN NPDES PERMIT EVEN IF A SUBSURFACE HYDROLOGIC CONNECTION BETWEEN THE GROUNDWATER AND SURFACE WATERS CAN BE DEMONSTRATED.

A. The text and legislative history of the CWA indicate that it was never intended to regulate discharges to groundwater.

There is little dispute that groundwater is outside the scope of the CWA. Although discharges to groundwater may be, and in Minnesota are, appropriately regulated by other means, they are not subject to the CWA's NPDES permit requirement. The CWA makes it unlawful for any person or entity to "discharge any pollutant" without an NPDES permit. 33 U.S.C. § 1311(a) & § 1342(a).[14] The Act defines "discharge of any pollutant" as "any addition of any pollutant to *navigable waters* from a point source," 33 U.S.C. § 1362(12)(A) (emphasis added), and simply defines ''navigable waters'' as "waters of the United States." 33 U.S.C. 1362(7).

The United States Environmental Protection Agency (EPA) has long considered groundwater beyond the reach of the CWA.[15] The agency's current regulatory definition of

[14] The MPCA administers the NPDES program in Minnesota pursuant to EPA's 1974 approval of Minnesota's program.

[15] *See* Opinion, Office of General Counsel, EPA (December 13, 1973) ("[T]he term 'discharge of a pollutant' is defined so as to include only discharges into navigable waters . . . . Discharges into ground water are not included.").

WOUS, although written broadly, does not include groundwater.[16] And the agency's recently proposed revision to its definition of WOUS goes a step further by expressly *excluding* groundwater from the definition.[17]

Courts that have considered the issue have also agreed that Congress did not intend "waters of the United States" to include groundwater and that discharges of pollutants into groundwater are not subject to regulation under the Act. *See, e.g., Idaho Rural Council v. Bosma*, 143 F. Supp. 2d 1169, 1179 (D. Idaho 2001); *Sierra Club v. Col. Refining Co.*, 838 F. Supp. 1428, 1432 (D. Col. 1993). *See also, Umatilla Waterquality Protect v. Smith Frozen*, 962 F. Supp. 1312 (D. Or. 1997) (discussing the legislative history of the CWA and noting that "both the Senate and the House specifically rejected attempts to require permits for discharges to groundwater under the NPDES program").[18]

Furthermore, excluding groundwater from the CWA accords with Congressional policy to "recognize, preserve, and protect the primary responsibilities and rights of States to prevent, reduce, and eliminate pollution" and to "plan the development and use ... of land and water resources." 33 U.S.C. § 1251(b). In the preamble to their Proposed Jurisdictional Rule, the EPA and the U.S. Army Corps of Engineers (Corps) emphasized that states and tribes "retain full authority to implement their own programs to more broadly or more fully protect the waters in their state," noting that "[m]any states and tribes, for example, protect groundwater..."[19] In short, discharges to groundwater are not subject to the CWA.

Accordingly, the discharges at issue from the Cliffs Erie Tailings Basin—which are undisputedly discharges to groundwater, not surface water—fall outside the scope of the CWA. They should be regulated not by an NPDES permit but by an SDS permit alone.

B. The EPA has never adopted any formal position interpreting the CWA to require an NPDES permit for the discharge of pollutants to groundwater that is hydrologically connected to surface water.

Whether the CWA can be applied to discharges of pollutants that only arrive in "waters of the United States" after percolating through "hydrologically connected" bodies of groundwater has been the subject of some discussion and dispute for several decades. Though the EPA has from time to time expressed an opinion on the issue, it has never translated its informal opinion

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[16] 40 C.F.R. 122.2.

[17] U.S. Corps of Engineers & EPA, Proposed Rule, *Definition of "Waters of the United States"*, 79 Fed. Reg. 22188, 22268 (Mon. Apr. 21, 2014) ("Proposed Jurisdictional Rule") (proposed 122.2(b)(vi)). *See also id.* at 22218 (stating, "The agencies have never interpreted ''waters of the United States'' to include groundwater and the proposed rule explicitly excludes groundwater...").

[18] *See also Tri-Realty Co.*, 2013 WL 6164092 at *9, 10 (noting that the Supreme Court in *SWANCC* and *Rapanos* repeatedly described the "navigable waters" covered by the CWA as "open water" and "open waters," and that groundwater "is even less fairly described as 'open water'...than any wetland").

[19] Proposed Jurisdictional Rule, *supra* at 22194.

into a formal agency position. It has never promulgated regulations on the subject. It has never even published guidance on the subject.[20]

The agency expressed its opinion, as well as a rationale for that opinion, most clearly in a preamble to certain proposed rules governing concentrated animal feeding operations (CAFOs). 66 Fed. Reg. 2960, 3015-3018 (Jan. 12, 2001). "As a legal and factual matter, EPA has made a determination that, in general, collected or channeled pollutants conveyed to surface waters via ground water can constitute a discharge subject to the Clean Water Act." *Id.* at 3017. The proposed rule would have imposed explicit national requirements on certain CAFOs to address possible discharges to surface water through groundwater with a direct subsurface hydrologic connection to surface waters.

In its final CAFO rule, however, the EPA chose not to establish such requirements. 68 Fed. Reg. 7176, 7216 (Feb. 12, 2003). In part, the EPA rejected the imposition of national effluent limitation guidelines because "discharges from CAFOs to surface water via a groundwater pathway are highly dependent on site specific variables, such as topography, climate, distance to surface water, and geologic factors such as depth of groundwater, soil porosity and permeability, and subsurface structure." *Id.* However, in rejecting the proposed requirements, the EPA "also recognize[d] there are conflicting legal precedents on this issue." *Id.*

Though more than a decade has now passed since the promulgation of the final CAFO regulation in 2003, the EPA has never clarified further, in guidance or otherwise, precisely how site- specific factors should be considered or applied in identifying a direct subsurface hydrologic connection between groundwater and surface waters. An obvious opportunity for the agency to have outlined its view regarding the appropriate use of site-specific factors was in its recent Proposed Jurisdictional Rule. EPA declined to do so. Rather, in the Proposed Rule, the EPA states that the Act does *not* cover groundwater.

C. Though case law is divided, the better reasoned decisions and those most consistent with recent Supreme Court precedent, hold that the Clean Water Act does not govern discharges to groundwater even if there is a direct subsurface hydrologic connection with surface water.

As the EPA aptly observed in the preamble to the 2003 final CAFO rule, there are indeed "conflicting legal precedents" on the question whether discharges of pollutants to groundwater that has a direct subsurface hydrologic connection to surface waters are subject to the CWA.[21] The

[20] Over the past several decades, as discussed below, numerous courts have addressed the issue of discharges to groundwater that may affect surface waters and have come to conflicting conclusions. However, in spite of occasionally opining that it has jurisdiction over discharges to hydrologically connected groundwater, the EPA has been reticent to assert that position in litigation. The agency has apparently participated in only one of the relevant cases, and that case was decided almost thirty years ago. *Quivira Mining Co. v. U.S. Environmental Protection Agency*, 765 F.2d 126 (10th Cir. 1985). In all other relevant cases, the hydrologic connection theory was raised and litigated by parties other than the EPA.

[21] The CWA itself does not address the issue of jurisdiction over discharges to hydrologically connected groundwater.

twenty-some federal court decisions that have addressed the issue have generally fallen into two camps: (1) those espousing a "broad view" of the jurisdictional scope of the CWA, concluding the Act confers regulatory authority over discharges to groundwater hydrologically connected to surface waters; and (2) those espousing a "narrow view," concluding that the CWA does not support such a broad assertion of authority and that regulation of groundwater discharges should be left to the states.

No Minnesota court has addressed the issue, nor has the Eighth Circuit Court of Appeals or the U.S. Supreme Court. Two district court decisions from other states within the Eighth Circuit—Iowa and South Dakota—have reached opposite conclusions.[22] Thus, if and when a United States District Court in Minnesota is faced with deciding the scope of CWA jurisdiction over discharges to hydrologically connected groundwaters, it will have no binding precedent to guide its interpretation. The court would instead conduct its own statutory interpretation and look to case law from other jurisdictions from both the "broad" and "narrow" camps. An analysis of the two bodies of case law indicates that the better reasoned decisions, and those most in accord with recent Supreme Court precedent, adopt the narrow view.

1. The "Broad View."

Courts embracing a broad view of jurisdiction often look no further than the purposes of the statute. Some note that the CWA is a remedial statute and therefore should be construed broadly. *See, e.g., Association Concerned Over Resources and Nature, Inc. v. Tenn. Aluminum Processors, Inc.*, No. 1:10-00084, 2011 WL 1357690 (M.D. Tenn. April 11, 2011) at *17 (citing remedial purpose as reason to follow courts adopting broad view). To find that the CWA governs discharges to hydrologically connected groundwater, courts look to "the goal of the CWA [ ] to protect the quality of surface waters," as well as precedent characterizing CWA jurisdiction as reaching the outermost boundaries of that permitted under the Commerce Clause. They conclude summarily that "any pollutant which enters such waters, whether directly or through groundwater, is subject to regulation[.]" *Washington Wilderness Coalition v. Hecla Mining Co.*, 870 F. Supp. 983, 990 (E.D. Wash. 1994).[23] This logic has led some courts to describe the scope of the CWA as including groundwater that is "tributary" to navigable waters. *Sierra Club*, 838 F. Supp. at 1432. Courts accepting the broad view of CWA jurisdiction also typically maximize the import of EPA's expressions of opinion, discussed above, touching upon groundwater discharges. *See, e.g., Northwest Environmental Defense Center*, 2009 WL 3672895, at *10-*11 (deferring to the

[22] *Williams Pipe Line Co. v. Bayer Corp.*, 964 F. Supp. 1300 (S.D. Iowa 1997) (broad view), and *Patterson Farm, Inc. v. City of Britton*, 22 F. Supp. 2d 1085 (D.S.D. 1998) (narrow view).

[23] *See also, Sierra Club v. Colorado Ref. Co.,* 838 F. Supp. 1428, 1434 (D. Colo. 1993) (reading Tenth Circuit cases as instruction to "interpret the terminology of the [CWA] broadly to give full effect to Congress' declared goal and policy"); *Friends of Santa Fe County v. LAC Minerals, Inc.,* 892 F. Supp. 1333, 1358 (D.N.M. 1995) (stating in dicta that "the Tenth Circuit's expansive construction of the [CWA's] jurisdictional reach[ ] foreclose[s] any argument that the CWA does not protect groundwater with some connection to surface water"); *Idaho Rural Council v. Bosma,* 143 F. Supp. 2d 1169, 1178 (D. Idaho 2001) ("The Ninth Circuit defines waters of the United States broadly."); *Mutual Life Ins. Co. v. Mobil Corp.,* No. Civ. A. 96–CV1781, 1998 WL 160820 (N.D.N.Y. 1998) at *2 (denying motion to dismiss action based on broad theory "[g]iven the broad interpretation of navigable waters under the CWA, the general policy of the act to protect the quality of surface waters, and the preliminary stage of this litigation").

EPA position despite contrary indications in legislative history and structure of statute and discussing at length the *Umatilla* court's refusal to defer to EPA).

2. The "Narrow View."

Courts espousing the "narrow view" rely on the text and structure of the CWA. Their most powerful argument is that "when Congress wanted certain provisions of the CWA to apply to groundwater, it said so explicitly." *Umatilla Waterquality Protective Ass'n v. Smith Frozen Foods, Inc.*, 962 F. Supp. 1312, 1318 (D. Or. 1997). To illustrate Congress' knowing reference to groundwater, the *Umatilla* court pointed to 33 U.S.C. § 1252(a), which instructs the EPA to "develop comprehensive programs for preventing . . . pollution of the navigable waters and ground waters . . ." and to 33 U.S.C. § 1254(a)(5), which discusses "monitoring the quality of the navigable waters and ground waters and the contiguous zone and the oceans." The NPDES permitting provisions of the CWA, of course, make no reference to groundwater and, thus, some courts find such silence determinative when contrasted with express references to groundwater elsewhere in the Act. *Id.; see also Kelley v. United States,* 618 F. Supp. 1103, 1105 (W.D. Mich. 1985) (discussing Congress' inclusion of groundwater in research provisions of CWA and choice not to include groundwater in regulatory provisions). The *Umatilla* court also noted that, of the four categories of water described throughout the CWA—navigable waters, groundwater, the contiguous zone and oceans—only groundwater is excluded as a proper object in the definition of "discharge of a pollutant." 962 F. Supp. at 1318 (citing 33 U.S.C. § 1362(12)).

Courts that adopt the narrow view also tend to place great weight on clear indications from Congress that it did not intend to regulate groundwater in enacting the CWA. *See Tri-Realty Co.*, at *9 (holding that "Congress did not intend either the CWA or the OPA to extend federal regulatory authority over groundwater, regardless of whether that groundwater is eventually or somehow 'hydrologically connected' to navigable surface waters"). *See also Village of Oconomowoc Lake v. Dayton Hudson Corp.*, 24 F.3d 962, 965 (7th Cir. 1994); *Umatilla Waterquality*, 962 F. Supp. at 1318-19; *Kelley*, 618 F. Supp. at 1105-06. For example, the Senate report that accompanied the CWA described the rejection of several bills that included regulation of groundwater because "jurisdiction regarding groundwaters is so complex." S. Rep. No. 414, 92d Congress, 1st Sess. 73 (1972), U.S. Code Cong. & Admin. News 1972, pp. 3668, 3749 (cited in *Village of Oconomowoc Lake*, 24 F.3d at 965; *Umatilla Waterquality*, 962 F. Supp. at 1319; *Kelley*, 618 F. Supp. at 1105-06).[24]

Narrow-view courts also reject EPA's position that it can assert CWA jurisdiction over hydrologically connected groundwater. These courts point out, as discussed above, that the agency has never subjected its broad interpretation to notice-and-comment rulemaking or even squarely addressed the question in its policy pronouncements. *See Umatilla Waterquality*, 962 F. Supp. at

[24] *See also* 118 Cong. Rec. 10,667 (1972 Leg. Hist. 590-91 (remarks of Rep. Clausen) (cited in *Umatilla Waterquality*, 962 F. Supp. at 1319) (noting that the House rejected the so-called Aspin Amendment, which sought to include groundwater within the ambit of the CWA, based on the committee's determination "that there was not sufficient information on ground waters to justify the types of controls that are required for navigable waters").

1317 ("EPA itself has never promulgated a formal regulation nor issued formal guidance interpreting the CWA to include regulation of groundwater."). As the Seventh Circuit put it:

> Collateral reference to a problem is not a satisfactory substitute for focused attention in rule-making or adjudication. By amending its regulations, the EPA could pose a harder question. As the statute and regulations stand, however, the federal government has not asserted a claim of authority over artificial ponds that drain into ground waters.

Village of Oconomowoc Lake, 24 F.3d at 966 (in reference to statement in 1990 storm water regulations and similar conclusory assertions of EPA authority).

3. The "Narrow View" is the more defensible position under current CWA jurisprudence.

After many of the "broad view" cases endorsing the "hydrologic connection" theory had been decided—including every such appellate court decision—the Supreme Court issued its opinion in *Solid Waste Agency of Northern Cook County v. U.S. Army Corps of Engineers* (SWANCC), 531 U.S. 159 (2001). Although the case did not involve discharges to groundwater, the Court's opinion nonetheless undercut the two principal arguments in favor of the "broad view"—that the CWA should be interpreted as expansively as possible and that courts should defer to the EPA's unofficial position on hydrologically connected groundwater—making the broad view an increasingly untenable position.

At issue in *SWANCC* was the validity of the Corps' 1986 interpretive rule known as the Migratory Bird Rule (MBR).[25] By asserting CWA jurisdiction over waters used by migratory birds, the MBR cast a remarkably wide jurisdictional net, capturing even isolated, intrastate, and non-navigable waters within the scope of the CWA. This broad understanding of the Act's scope was firmly in place during the 1990s when many of the key "broad view" hydrologic-connection cases were decided, including *Hecla* (1994) and *Williams Pipe Line Co. v. Bayer Corp.*, 964 F. Supp. 1300 (S.D. Iowa 1997). However, in 2001, the Supreme Court in *SWANCC* struck down the MBR, holding that the Corps' interpretation of the CWA scope, as expressed in the MBR, was too broad: even though the CWA was not limited to traditionally "navigable" waters, the Court concluded, the Corps' understanding of the Act's jurisdiction was so broad that it impermissibly gave the term "navigable" "no effect whatever."[26] With *SWANCC*, the high Court significantly narrowed the jurisdiction of the CWA and in the process removed a fundamental underpinning of the hydrologic-connection "broad view": that the Act should be interpreted as expansively as possible.

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[25] 51 Fed. Reg. 41206, 41217 (Nov. 13, 1986) (clarifying that the Corps deemed WOUS to include waters which "are or would be used as habitat by birds protected by Migratory Bird Treaties; [or]… by other migratory birds which cross state lines; [or]...[w]hich are or would be used as habitat for endangered species…").

[26] *SWANCC* at 172. *See also Rapanos v. United States*, 547 U.S. 715, 734 (2006) (affirming that the term "navigable waters must carry "*some* of its original substance" (emphasis in original)).

SWANCC also brought sharply into question a second conclusion underpinnng the broad-view courts' opinions—i.e., that courts should defer to the EPA's unofficial interpretation that it has power to regulate discharges of pollutants to hydrologically connected groundwater. In *SWANCC*, the Corps had argued that the Court should accord "*Chevron*" deference to the Corps' interpretation, in the MBR, of the meaning of "waters of the United States" under the CWA, because it involved a statute administered by the Corps.[27] The Court disagreed. First, the Court did not find section 404(a)'s reference to "navigable waters" to be ambiguous. However, even if section 404(a) was ambiguous, the Court held, it would still not extend *Chevron* deference to the MBR. The Court invoked a longstanding rule of statutory construction that a court should show no deference to an agency's statutory interpretation in cases where the interpretation "invokes the outer limit of Congress' power" unless there is a "clear indication that Congress intended that result."[28] This is particularly so when the agency's interpretation "alters the federal-state framework by permitting federal encroachment upon a traditional state power."[29]

In *SWANCC*, the Court concluded that the MBR raised significant Constitutional issues regarding the scope of Congress's Commerce Clause authority to regulate waters based on the presence of migratory birds.[30] Moreover, the MBR would result in "a significant impingement of the States' traditional and primary power over land and water use."[31] Accordingly, the Court rejected the Corps' request for deference. In essence, the issue in *SWANCC* was not whether the MBR exceeded the Corps' *statutory* authority under the CWA but rather whether the rule exceeded Congress's *constitutional* authority under the Commerce Clause.[32] *Chevron* deference was simply not applicable.[33]

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[27] *Chevron U.S.A. Inc. v. Nat. Res. Defense Council, Inc.*, 467 U.S. 837 (1984).

[28] *SWANCC* at 172, *citing Edward J. DeBartolo Corp. v. Florida Gulf Coast Building & Constr. Trades Council*, 485 U.S. 568, 575 (1988) ("[W]here an otherwise acceptable construction of a statute would raise serious constitutional problems, the Court will construe the statute to avoid such problems unless such construction is plainly contrary to the intent of Congress."). This requirement stems from the Court's "prudential desire not to needlessly reach constitutional issues" and its "assumption that Congress does not casually authorize administrative agencies to interpret a statute to push the limit of congressional authority." *SWANCC* at 172.

[29] *Id.*

[30] *Id.* (noting the difficulty of evaluating "the precise object or activity that, in the aggregate, substantially affects interstate commerce").

[31] *Id.*

[32] *Cf. City of Arlington, Tex. v. F.C.C.*, -- U.S. --, 133 S.Ct. 1863 (2013) (addressing a court's obligation to give *Chevron* deference to an agency's interpretation of an ambiguous *statutory* provision, even if the interpretation concerns the scope of the agency's jurisdiction).

[33] *See also Rapanos* at 738 (reaching the same conclusion regarding deference to the Corps' CWA interpretation asserting jurisdiction over saturated lands located 11-20 miles away from the nearest body of "navigable water," and holding that "[e]ven if the term 'the waters of the United States' were ambiguous as applied to channels that sometimes host ephemeral flows of water (which it is not), we would expect a clearer statement from Congress to authorize an agency theory of jurisdiction that presses the envelope of constitutional validity").

For the same reasons, the Court would be unlikely to defer to any interpretation by the EPA that it has CWA jurisdiction over hydrologically connected groundwater. Intrastate groundwater, even more so than intrastate surface waters used by migratory birds, has at best a tenuous connection to interstate commerce, and groundwater is unquestionably an area of traditional state regulation. Like the MBR, then, the EPA's assertion of jurisdiction over discharges to groundwater "invokes the outer limit of Congress' power." And, as discussed above, Congress, in the CWA, made no statement, let alone provided a "clear indication," that its Constitutional authority should extend to hydrologically connected groundwater.

In short, the primary bases for the "broad view" are no longer in place, and the "narrow view" is the more defensible position. As summarized by a 2005 law review article:

> In the wake of *SWANCC*, the EPA's assertion of hydrologically connected groundwater authority will likely have difficulty surviving a challenge to the Supreme Court . . . [T]he specter of a challenge in the Supreme Court may have been a persuasive but unstated reason for the EPA's omission of groundwater regulation from the final CAFO rule . . . The regulation of groundwater belongs at the regional, state, or local level. And for the most part, states . . . administer groundwater regulation with a reasonable level of sophistication. Just because EPA may not regulate pollutant discharges to groundwater under the CWA, regardless of hydrological connection to surface water, does not mean such discharges go unregulated . . .[34]

III. FOR BOTH LEGAL AND POLICY REASONS, THE MPCA SHOULD NOT REGULATE GROUNDWATER SEEPAGE FROM THE CLIFFS ERIE TAILINGS BASIN UNDER AN NPDES PERMIT.

A. Characterizing the 3,034-acre Tailings Basin as a single "point source" stretches the statutory definition beyond recognition; the Tailings Basin is more logically regulated as a nonpoint source.

1. The Cliffs Erie Tailing Basin does not meet the definition of "point source."

To establish a CWA violation based on a discharge to groundwater, a plaintiff or regulatory body must establish not only that the defendant discharged pollutants to waters of the United States but also that the discharge originated from a "point source." 33 U.S.C. §1362(12)(A). The Act defines "point source" as:

> [A]ny discernible, confined and discrete conveyance, including but not limited to any pipe, ditch, channel, tunnel, conduit, well, discrete

[34] Comment, *Regulating Point-Source Discharges to Groundwater Hydrologically Connected to Navigable Waters: An Unresolved Question of Environmental Protection Authority under the Clean Water Act*, 5 BARRY LAW REV. 95, 125-126 (2005).

> fissure, container, rolling stock, concentrated animal feeding operation, or vessel or other floating craft, from which pollutants are or may be discharged.

33 U.S.C. § 1362(14).[35]

It stretches credulity to view the Tailings Basin as falling within this definition. As described above, the Basin is enormous—a 3,034-acre land mass with an 11.28-mile perimeter—hardly a "confined and discrete conveyance." Most of the Basin area, including all of Cell 2W, and approximately half of Cells 1E and 2E, has been reclaimed and is covered with natural grasses. Because the LTVSCM mining operation has been inactive since 2001, no new process water or tailings are being introduced to the Basin. Rather, the only current source of water at the Basin (other than the former surface water discharges being pumped back to the Basin pursuant to Cliffs Erie's mitigation system, described above) is precipitation—rain and snow falling onto the Basin grasslands and into its ponds. There is no manmade or natural feature such as a pipe, ditch, channel, tunnel, or conduit conveying or channeling the water to a particular location. Rather the precipitation falls evenly across the Basin, soaking into the earth below the grasslands and ponds and then slowly, over a period of ten to twenty years, making its way to the underlying groundwater, if at all, in accordance with the natural geological features—more like water soaking through a carpet than water being directed down a drain. Only the most tortured interpretation of the CWA "point source" definition could encompass the Tailings Basin.

2. Court decisions finding mining areas to be "point sources" are distinguishable.

Notwithstanding the apparently narrow definition of "point source," some courts have interpreted the term broadly.[36] In the mining context, numerous courts have concluded that mining areas or features can constitute "point sources." However, these decisions are distinguishable from the facts here because each case involved some sort channeling or conveyance of contaminated water. *See e.g.*, *Sierra Club v. El Paso Gold Mines*, 421 F.3d 1133 (10th Cir. 2005) (precipitation falling on inactive gold mining area funneled to groundwater via abandoned mineshaft on property); *United States v. Earth Sciences, Inc.*, 599 F.2d 368, 370 (10th Cir. 1979) (process water overflowed closed circulating system of sumps, ditches, hoses and pumps at gold leaching operation, escaping into nearby surface waters); *Sierra Club v. Abston Const. Co., Inc.*, 620 F.2d 41 (5th Cir. 1980) (precipitation falling on spoil piles at coal mine created ditches and gullies in the piles that channeled the water and conveyed it to surface waters); *Trustees for Alaska v. E.P.A.*, 749 F.2d 549, 557 -558 (9th Cir. 1984) (wastewater at gold placer mines collected and released to surface waters from "sluice boxes").[37]

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[35] *See also* the almost identical definition of "point source" in the EPA's regulations and Minnesota Statutes, 40 C.F.R. § 122.2, Minn. Stat. § 115.01, subd. 11.

[36] *See, e.g.*, *Peconic Baykeeper, Inc. v. Suffolk County*, 600 F.3d 180, 189 (2d Cir. 2010) (stating that the "point source" definition is to be "broadly interpreted" and "embraces the broadest possible definition of any identifiable conveyance from which pollutants might enter waters of the United States").

[37] *Cf.*, *Hecla* at 988 (holding that tailing ponds at active gold and silver place mine from which wastewater escaped into the soil and groundwater constituted "point sources" and citing the "touchstone" of being able

3. Groundwater discharges to the Tailings Basin are more logically regulated as nonpoint source discharges under MPCA's SDS program.

Whereas the Cliffs Erie Tailings Basin does not naturally fit within the definition of "point source," Minnesota's definition of "nonpoint source" is directly applicable:

> a land management or land use activity that contributes or may contribute to ground and surface water pollution as a result of runoff, seepage, or percolation and that is not defined as a point source...[38]

The Basin is a land management or use activity (land disposal of tailings), it may contribute to both groundwater and surface water discharges, it does so through seepage, or percolation, and, as discussed above, it is not clearly defined as a "point source."[39] In short, the Tailings Basin is a nonpoint source.

This conclusion is supported by the Tenth Circuit's opinion in *El Paso Gold Mines*, 421 F.3d 1133 (10th Cir. 2005). The case involved an inactive mining area from which rainfall was funneled down an abandoned mine shaft and ultimately to a nearby river. Because of the abandoned mine shaft, the court had no trouble concluding that the mining area was a "point source" under the Act. However, the court was also clear that "absent the El Paso shaft, which is undoubtedly a point source, this case would implicate a different set of issues altogether." Without the mineshaft collecting and conveying precipitation to WOUS, waters from the site would simply be "groundwater seepage that travels through fractured rock." This, the court opined, "would be nonpoint source pollution, which is not subject to NPDES permitting." Because the Cliffs Erie Basin contains no artificial or natural feature like the El Paso mineshaft that would collect and convey water from the Basin, it essentially involves "groundwater seepage that travels through fractured rock," i.e., it is a nonpoint source discharge.

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to identify the "discrete facility" from which pollutants have escaped (i.e., the tailings ponds)). The precise facts of this case are not clear from the decision and it is thus difficult to know how similar the tailings basins were to the Cliffs Erie Basin. However, to the extent *Hecla* holds that mine tailings basins in general can constitute "point sources,' the case is an outlier. As explained above, in most cases where courts have found mining areas to constitute "point sources," there was some sort of manmade or natural feature that channeled or conveyed pollutants to navigable waters.

[38] Minn. R. 7050.0130, subp. 5.

[39] Although there is no federal definition of "nonpoint source" pollution — the EPA describes it on the Agency's website as any source of water pollution that does not meet the legal definition of "point source," www.water.epa.gov --- the Tailings Basin also fits within various agency descriptions of nonpoint source pollution. *See, e.g.*, EPA "Tribal Handbook for Developing and Managing Tribal Nonpoint Source Pollution Programs Under Section 319 of the Clean Water Act" (Feb. 2010) ("NPS pollution—polluted runoff—occurs when rainfall, snowmelt, or irrigation water runs over land or *through the ground*, picks up pollutants, and transports them into surface waters or ground water." (emphasis added)).

B. If the MPCA regulates groundwater seepage from the Cliffs Erie Tailings Basin under its NPDES program, it will have no legal justification for not applying the same NPDES requirements to groundwater seepage from other basins, ponds, or defined sources.

The MPCA's SDS program, as outlined above, regulates many types of discharges to groundwater besides seepage to groundwater from the Tailings Basin. The agency issues SDS permits for other tailings basins, including inactive basins that are being used for scram mining; for land application of wastewater; and for septic tanks. Many of these discharges occur in close proximity to surface waters.

If the MPCA characterizes a 3,034-acre tailings basin as a "point source"—as a "discernible, confined and discrete conveyance"—it will have no principled basis for not characterizing wastewater ponds, land spreading locations, and septic tanks as point sources also.[40] Those other sources will all be far smaller and even more "discernible, confined, and discrete" than the Tailings Basin. And if the MPCA takes the position that a direct subsurface hydrologic connection between a discharge to groundwater from the Basin and nearby surface water triggers the need for an NPDES permit, it will have no principled basis for not bringing those other sources of groundwater discharges within the scope of the federal program also.

The MPCA cannot take the position that it need only require NPDES permits in cases like Cliffs Erie, where the agency happens to acquire information establishing some type of subsurface hydrologic connection, such as the information developed by the PolyMet EIS. Representatives of Cliffs and PolyMet have already described to the agency why the information developed for the PolyMet EIS is relevant only to the proposed PolyMet project. The hydrologic information collected for the PolyMet EIS was intended to assess the impacts of the PolyMet Project and was premised on the unique design and specifications of that Project, which will include the installation of a hydraulic barrier to capture and contain groundwater seepage from the Tailings Basin. A great deal more study and technical analysis will be necessary to define the specific nature of any hydrologic connection or connections between the existing Tailings Basin and nearby surface waters, as well as to trace the course of specific pollutants from the Basin to those waters and to define the duration of their travel time.

In water-rich Minnesota, whenever any discharge to groundwater occurs in reasonable proximity to surface waters, it can probably be assumed that there is some type of subsurface hydrologic connection between the two. It would be unfair of the MPCA to willfully turn a blind eye to that fact simply because it does not already have in its possession information about the nature of that connection.

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[40] As one Seventh Circuit Judge put it, a "natural consequence" of applying the "hydrological connection" theory is to explode the universe of potential permittees, providing a basis for "collateral attacks against parking lots, septic tanks and sprinkler systems." *Village of Oconomowoc Lake*, 24 F.3d at 966 (Manion, J., concurring).

Similarly the agency cannot justify the selective NPDES-permitting of a limited number of sources on the grounds of "enforcement discretion." Certainly, in choosing whether to bring an enforcement action with respect to one, but not another, violation of law, the MPCA maintains the discretion to allocate its enforcement resources as it sees fit. *See, e.g., Heckler v. Chaney*, 470 U.S. 821, 831 (D. Col. 1985).[41] But the issuance of permits is not "enforcement."[42] The agency cannot decide that NPDES permits are necessary wherever there is a direct subsurface hydrologic connection between groundwater discharges and surface water, but then choose to ignore most situations where such connections are probable. It cannot require permits only for tailings basins or for the mining industry. Such an approach to permitting would clearly be arbitrary and capricious.

When the MPCA chose to apply the wild rice sulfate standard to the mining industry but not to municipal dischargers of sulfate, it was sued by the Minnesota Chamber of Commerce on equal protection grounds. The equal protection claim was dropped when the agency began to require municipal dischargers to study their sulfate discharges. Selective application of the hydrologic connection theory in the permitting of groundwater discharges would be almost certain to result in the same sort of legal challenge.

C. There is no clear legal or policy basis for identifying a "direct" subsurface hydrologic connection between the Tailings Basin and nearby surface waters.

Even under the broadest interpretation of the CWA, there must be a "direct" subsurface hydrologic connection through groundwater between a source and surface waters to justify the requirement of an NPDES permit. *See,* EPA Preamble, *supra,* 66 Fed. Reg. at 3017. *See also, Hecla Mining Company, supra,* 870 F. Supp. At 990 ("It is not sufficient to allege groundwater pollution, and then assert a general hydrologic connection between all waters. Rather, pollutants must be traced from their source to surface waters, in order to come within the purview of the CWA.").

But where the Tailings Basin has a perimeter more than eleven miles long, groundwater escaping from that perimeter will presumably enter into nearby surface waters across a broad range of different locations and over a broad range of different time periods. Spatially, is a "direct" connection a factual situation where groundwater enters surface waters within 100 feet of the tailings basin perimeter? Within 1000 feet? Within a mile? Temporally, is a "direct" connection a factual situation where the groundwater enters surface waters within days after it escapes the perimeter of the Tailings Basin? Within months? Within years? And if the spatial or temporal factors vary along different portions of the 11.28-mile long perimeter, as they surely will, is only *some* of the groundwater seepage from the Tailings Basin subject to the CWA? There are at present no answers to these questions, and more importantly there are no clear, non-arbitrary legal

[41] In *Heckler*, the Court stated, "This Court has recognized on several occasions over many years that an agency's decision not to prosecute or enforce, whether through civil or criminal process, is a decision generally committed to an agency's absolute discretion."

[42] This distinction is made clear in the structure of the CWA, which address enforcement and permitting in different chapters. *Compare* 33 USC chapter 26 subchapter III ("Standards and Enforcement") *with* subchapter IV ("Permits and Licenses").

or policy bases for arriving at answers—for drawing lines in some places but not in others. Equally important, as discussed below, the inevitable murkiness of the facts of groundwater seepage will render it problematic to regulate that seepage using the traditional provisions of an NPDES permit.

D. Expanding the NPDES program to include tailings basins and similar sources will create technical, financial, and staffing issues for the MPCA and the demand for clear guidance from regulated parties.

Regulating a tailings basin, a land spreading site, a septic system, or other such groundwater discharge sources as though they were "point sources" will raise a host of technical tasks for MPCA staff that will need to be undertaken even before permits can be written. These tasks include identifying, at a minimum, the specific sources and flow paths of groundwater discharges, the locations and time periods at which they enter surface waters, the nature and fate of any pollutants that may be carried by those waters, and the specific controls that can be applied at the source to bring discharges within effluent limits. The MPCA should be aware that expanding the scope of the NPDES program to include numerous new categories of sources will undoubtedly require more staff members and higher budgets. Moreover, MPCA will need to develop—and regulated parties will demand—guidance on what constitutes a direct subsurface hydrologic connection requiring an NPDES permit. It is one thing for a court to espouse the hydrologic connection theory. It is quite another matter for an administrative agency to put that theory into practice and bear the burden of addressing these daunting and expensive practical questions in everyday decisions and disputes related to permitting programs.

E. The State Disposal System program provides the MPCA with more tools and more discretion to address the complex technical issues associated with groundwater discharges that affect surface waters than the NPDES program.

When compared to the NPDES permit requirements, the SDS program is much better suited to regulating the unique aspects of tailings basins. Although both types of permits are subject to the MPCA's general permitting rules in Minn. R. 7001.0010 to 7001.0210, NPDES permits must also meet the requirements of the MPCA's NPDES-specific rules, Minn. R. 7001.1000 to 7001.1150, and federal requirements under the CWA and EPA regulations applicable to NPDES permits. *See, e.g.*, 40 CFR pts. 122, 123, 125. In addition, NPDES permits in Minnesota are subject to various procedural requirements set forth the Memorandum of Agreement between MPCA and EPA regarding implementation of Minnesota's NPDES program.

Many aspects of the SDS and NPDES program are very similar. For instance, both have maximum permit terms of five years,[43] and both are subject to the same requirements for permit modification[44] and for mixing zones.[45] However, there are significant differences as well,

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[43] Minn. R. 7001.0150, subp. 1, 40 C.F.R. § 122.46 (a).

[44] Minn. R. 7001.0170 (NPDES permits are also subject to additional modification requirements in Minn. R. 7001.1150, but these relate primarily to POTWs).

[45] Minnesota's rules on mixing zones are set forth in 7050.0210, subp. 5 (general standards) and 7052.0210 (more detailed requirements for Lake Superior Basin). There are no additional state or federal provisions

including stricter penalties for NPDES violations,[46] more specific NPDES monitoring requirements,[47] and industry-specific technology-based effluent limitations that must be included in NPDES permits.[48] Three aspects of the SDS permit program in particular offer MPCA significant advantages over the NPDES programs when permitting tailings basins:

1. SDS permits require only MPCA approval and oversight.

Because the NPDES program, although administered by the MPCA, is a federal program, the EPA retains oversight authority. In addition to adding an extra layer of administration to the permitting process, the EPA can slow or even veto the MPCA's permitting plans. Under federal regulations and the MPCA-EPA memorandum of Understanding, before issuing a proposed NPDES permit, the MPCA must provide the EPA an opportunity to review and object to the permit.[49] Third parties can petition the EPA to object and in certain circumstances obtain an administrative hearing. If the EPA has objections to the permit, the MPCA cannot issue the permit

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applicable to NPDES permits. Mixing-zone regulation is a matter of state law, EPA Water Quality Handbook, Chapter 5. *See also* 40 C.F.R. § 131.13 (giving states discretion adopt provisions implementing water quality standards, such as mixing zones, low flows and variances, subject to EPA review and approval).

[46] Compare Minn. Stat. 115.071 (up to $10,000 per day per negligent violation) with 33 U.S.C. § 1319 as modified by 78 Fed. Reg. 66643 (Nov. 6, 2013) (up to $37,000 per day per negligent violation). Minnesota's NPDES rules also include a specific penalty provision for disabling or tampering with monitoring devices. Minn. 7001.1090, subp. 1(G).

[47] Both SDS and NPDES must comply with MPCA's general monitoring provisions of Minn. R. 7001.0150, subp. 2(B), but the state NPDES rules set forth certain additional NPDES-specific monitoring requirements, including the volume of effluent discharged from each outfall, specification of test procedures that differ from those set forth in the CFR, and specification of the appropriate measurement to be reported for each pollutant limited in the permit. Minn. R. 7001.1080, subp. 5. NPDES permits must include "more frequent monitoring" requirements. Minn. R. 7001.1090, subp. 1(E). The NPDES program also offers permittees certain defenses that are not expressly applicable to SDS permittees, including a limited defenses against liability for bypasses and upsets. Minn. R. 7001.1090, subp. 1(K) and Minn. R. 7001.1090, subp. 1(L) (providing an "affirmative defense" that a permittee can make against agency enforcement action regarding temporary noncompliance with an effluent limitation resulting from an "upset" due to factors beyond the permittee's control).

[48] The EPA develops national regulations or "guidelines" for specific categories of industrial wastewater dischargers that set technology-based numerical limitations for specific pollutants at several levels of control (e.g., New Source Performance Standards (NSPS) for new direct dischargers or Best Conventional Pollutant Control Technology (BCT) for existing direct dischargers). *See* EPA's online overview at http://water.epa.gov/scitech/wastetech/guide/questions_index.cfm#imp. The EPA has published effluent guidelines for a wide variety of industries that could involve groundwater discharges, including mineral mining and processing, nonferrous metals manufacturing, ore mining and dressing, and landfills. *See* http://water.epa.gov/scitech/wastetech/guide/industry.cfm. If a permittee falls into one of the industrial categories, the permitting agency must incorporate the appropriate technology-based standards into the NPDES permit. SDS permits may, but are not required to, incorporate these technology-based effluent limitations.

[49] *See* the 1974 memorandum of agreement (and amendments) between the EPA and the MPCA regarding Minnesota's implementation of its authorized state NPDES permit (MOA), pp. 9-11, and 40 CFR § 123.44.

until the objections are resolved to the EPA's satisfaction. And if the objections cannot be resolved, the EPA may supplant the MPCA's permitting authority and issue the permit itself.

By contrast, SDS permits are exclusively a creature of state law. The EPA has no authority to veto or even comment upon SDS permits, which allows the MPCA to proceed at its own permitting pace.

2. SDS schedules of compliance are not subject to CWA deadlines.

Both SDS and NPDES permits can include a schedule of compliance (SOC), defined as "a schedule of remedial measures including an enforceable sequence of actions or operations leading to compliance with an effluent limitation, other limitation, prohibition, or standard."[50] For both types of permits, the SOC must require compliance in the "shortest reasonable period of time" or by a specified deadline if required by state or federal law.

One of the environmental issues associated with the Cliffs Erie Tailings Basin is that decades of mining and operation of the Tailings Basin have contributed to levels of various parameters—specifically sulfate, bicarbonate, TDS, conductivity, and hardness[51]—exceeding state water quality standards in surrounding surface waters. Although this impairment was likely caused in part by direct surface-water discharges from the Basin—discharges that have now ceased pursuant to the Consent Decree—it is also likely that the impairment has resulted in part from contaminated groundwater that seeped and continues to seep into the surface waters.

Whereas addressing the direct surface water discharges from the Basin was relatively straightforward (Cliffs installed systems to pump the discharges back into the Tailings Basin), addressing the contaminated groundwater seepage is much more complicated and will take time. If the MPCA treats the groundwater seepage as a point source discharge from the Basin, through a direct subsurface hydrologic connection, these "discharges" will likely not be able to immediately meet NPDES permit effluent limitations based on the relevant water quality standards. That is, the Basin, which is currently in compliance with its NPDES permit, would be rendered out of compliance.

To provide time for measures to be put into place allowing the Basin to come into compliance, the obvious solution would be for the MPCA to include appropriate SOCs in the Basin's permit for the parameters of concern. However, this is not an option under the NPDES program. The MPCA adopted these particular water quality standards prior to 1977, and pursuant to a longstanding EPA interpretation of section 301(b) of the CWA, NPDES permits may not

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[50] Minn. Stat. § 115.01; see also Minn. R. 7000.0100, subd. 11 (same) and 40 CFR § 122.2 (similar federal definition).

[51] These standards were adopted solely to protect agricultural and industrial "uses" that do not now exist at the site and are not likely to ever exist there. With the exception of sulfate, these standards are also undergoing a Triennial Water Quality Standard Review currently. If the MPCA adopts the revisions to the standards recommended in 2010, the topic of this letter will become almost entirely moot. The recommended standards have been attained at the site. Only the bicarbonate standard would not be met.

include SOCs for permit effluent limitations based on water quality standards adopted prior to July 1, 1977.[52]

There is no such restriction on SOCs in SDS permits because the CWA applies only to point source discharges to WOUS. An SDS permit for the Cliffs Erie Tailings Basin would regulate the Basin's discharges to groundwater, which is not a WOUS and not subject to the CWA section 301(b) deadline. If the MPCA deemed it necessary to protect groundwater and surface water, the agency could establish levels for the parameters of concern that must be achieved in the groundwater surrounding the Tailings Basin. If immediate compliance is not feasible, state law would allow the MPCA to include one or more SOCs in the SDS permit, requiring Cliffs Erie to come into compliance in the "shortest reasonable period of time."[53]

3. SDS permits allow for more appropriate points of compliance.

Minnesota and federal rules require that NPDES permit effluent limitations must be established (and compliance determined) at "the point of discharge" or at "outfalls."[54] Only in exceptional circumstances can the MPCA establish alternate effluent limitations "in internal waste streams at the point prior to mixing with other waste streams or cooling water streams."[55] This presents significant logistical issues when regulating a tailings basin such as Cliffs Erie's, not the least of which is finding a "point of discharge" where the Basin has a 11.28-mile perimeter and the alleged "discharge" involves nothing more than widespread groundwater seepage.

The SDS program is not tied to "discharge points" or "outfalls" and is thus better suited to regulate discharges from nonpoint sources such as a tailings basin. The MPCA can determine groundwater levels necessary to protect ground and surface waters potentially affected by seepage from the Tailings Basin and establish appropriate monitoring wells where the levels must be met. There is no need to artificially create a "discharge point" where none exists.

The reality of solving longstanding exceedances of water quality standards resulting from nonpoint source discharges, as exists around the Tailings Basin and at many similar sites across the Iron Range, is that it is a complex process requiring significant time and adaptability. Water from the LTVSCM facility took decades to reach the groundwater beneath the Tailings Basin and will take decades more to reach surface waters. Concentrations of constituents in that water which exceed surface water quality standards will not be eliminated simply by adding "end of pipe" controls or permit effluent limitations to a permit. The process of determining when, where, and

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[52] *See In the Matter of Star-Kist Caribe, Inc. Petitioner*, 3 E.A.D. 172 (E.A.B. 1990) (explaining EPA's interpretation of section 301(b)).

[53] For an example of how this could work, see the MPCA's Draft SDS Permit MN0065226 (Public Notice April 28, 2014) for the Clearwater Harbor wastewater Treatment Facility. Page 11 of the draft permit includes a schedule of compliance for nitrogen. It requires the permittee to meet a total nitrate level of 10 mg/L in groundwater monitoring wells prior to permit expiration, and includes various related requirements such as additional treatment units and disposal techniques.

[54] Minn. R. 7001.1080, subp. 2.

[55] *Id.*

how the groundwater may reach surface waters, let alone deciding upon an effective mitigation plan, could take years of research. In many cases, schedules of compliance will be necessary, particularly for surface water quality standards that predate CWA deadlines, but they would not be available for an NPDES permit. And the ultimate solution is likely to involve long-term, regional, adaptive mitigation strategies implemented through diverse, broad-ranging permit requirements—i.e., those available under the SDS program. In sum, an SDS permit is not only the legally correct means of regulating the Tailings Basin, it is also the best, offering the MPCA the ability to appropriately regulate the Tailings Basin in ways not available under the NPDES program.

IV. OTHER STATES DO NOT REGULATE TAILINGS BASINS OR OTHER PONDS THAT DISCHARGE ONLY TO GROUNDWATER UNDER NPDES PERMITS.

A survey of states in EPA Region 5 indicates that most if not all of these states do not adopt the hydrologic connection theory of NPDES jurisdiction. Three of the six states in Region 5—Illinois, Indiana, and Wisconsin—fall within the jurisdiction of the United States Court of Appeals for the Seventh Circuit. District courts in these states are bound by the Seventh Circuit's holding in *Village of Oconomowoc Lake*, which precludes any assertion of CWA jurisdiction over groundwater discharges on the basis of a direct subsurface hydrologic connection. 24 F.3d at 965 ("Neither the Clean Water Act nor the EPA's definition asserts authority over ground waters, just because these may be hydrologically connected with surface waters").

Of the remaining three Region 5 states, Michigan and Minnesota take a very similar approach, regulating tailings basins under state groundwater discharge permits where the facility does not discharge directly to surface water. The Michigan Department of Environmental Quality (MDEQ) distinguishes between a "direct discharge to surface waters of the state," which is regulated under the DEQ's NPDES permit program, and a "direct discharge to land that enters groundwater of the state,"[56] which is regulated under the state groundwater discharge permit program. For example, the MDEQ is proposing to regulate the Eagle Mine tailings basin — a nickel/copper mine in Marquette County very similar to the proposed NorthMet project --- solely under its state groundwater discharge permit program. The Eagle Mine's wastewater treatment system will discharge 504,000 gallons of wastewater per day to groundwater via infiltration basins.[57] Although the facility's only direct discharges will be to groundwater, MDEQ emphasizes that its groundwater permit program "requires standards that are protective of surface water when groundwater is known to vent to a surface water" and that the proposed permit "is designed so that surface water quality standards will be met at the ground water surface water interface."[58]

The sixth Region 5 state, Ohio, also handles NPDES permitted discharges to surface waters separately from groundwater discharges. Groundwater discharges are handled under the state's Underground Injection Control program,[59] which encompasses a variety of discharge activities

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[56] *See* MDEQ "Frequently Asked Questions," *available at* http://www.michigan.gov/deq.

[57] *See* MDEQ Fact Sheet for Groundwater Discharge Permit No. GW1810162 (2013), *available at* http://www.michigan.gov/deq.

[58] *Id.*

[59] *See* Ohio Rev. Code 6111.043 and Ohio Admin. Code Ch. 3745-34.

including surface-runoff drainage wells, septic tank systems, agricultural drainage wells, and industrial disposal wells. While it seems likely that Ohio, like Minnesota and Michigan, would regulate tailings basin discharges to hydrologically connected groundwater under its groundwater permitting program, and not its NPDES program, we have so far been unable to find any specific examples.[60]

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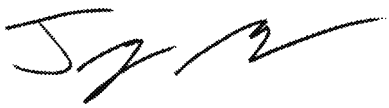
For all of the reasons set forth above, we do not believe that it is either appropriate or legally necessary to regulate groundwater seepage from the Cliffs Erie Tailings Basin under an NPDES permit. Rather a State Disposal System permit will provide the MPCA will all appropriate and necessary tools to protect both groundwater and surface waters impacted by the Basin.

Please do not hesitate to contact us if you wish to discuss this letter, or if you have any questions or would like further information.

Sincerely yours,

James A. Payne



Jeremy P. Greenhouse

Attachments

c: Rob Beranek, Cliffs Natural Resources

[60] While we have not conducted a nationwide search regarding the circumstances under which state agencies outside of Region 5 have (or have not) regulated tailings basin groundwater discharges through NPDES permits, we were able to learn, from 2013 conversations between Rob Beranek of Cliffs Erie and staff at Washington State's Department of Ecology, that because of changed circumstances the DOE did not finally require an NPDES permit for the tailings ponds at the heart of the motion to dismiss in the *Hecla* case, 870 F. Supp. 983 (E.D. Wash. 1994).

Barr Footer: ArcGIS 10.2.1, 2014-05-20 15:32 File: I:\Client\PolyMet_Mining\Work_Orders\Confidential_Task_04\Maps\Reports\LetterToMPCA\Existing Tailings Basin.mxd User: arm2

Public Water Inventory (PWI) Watercourses

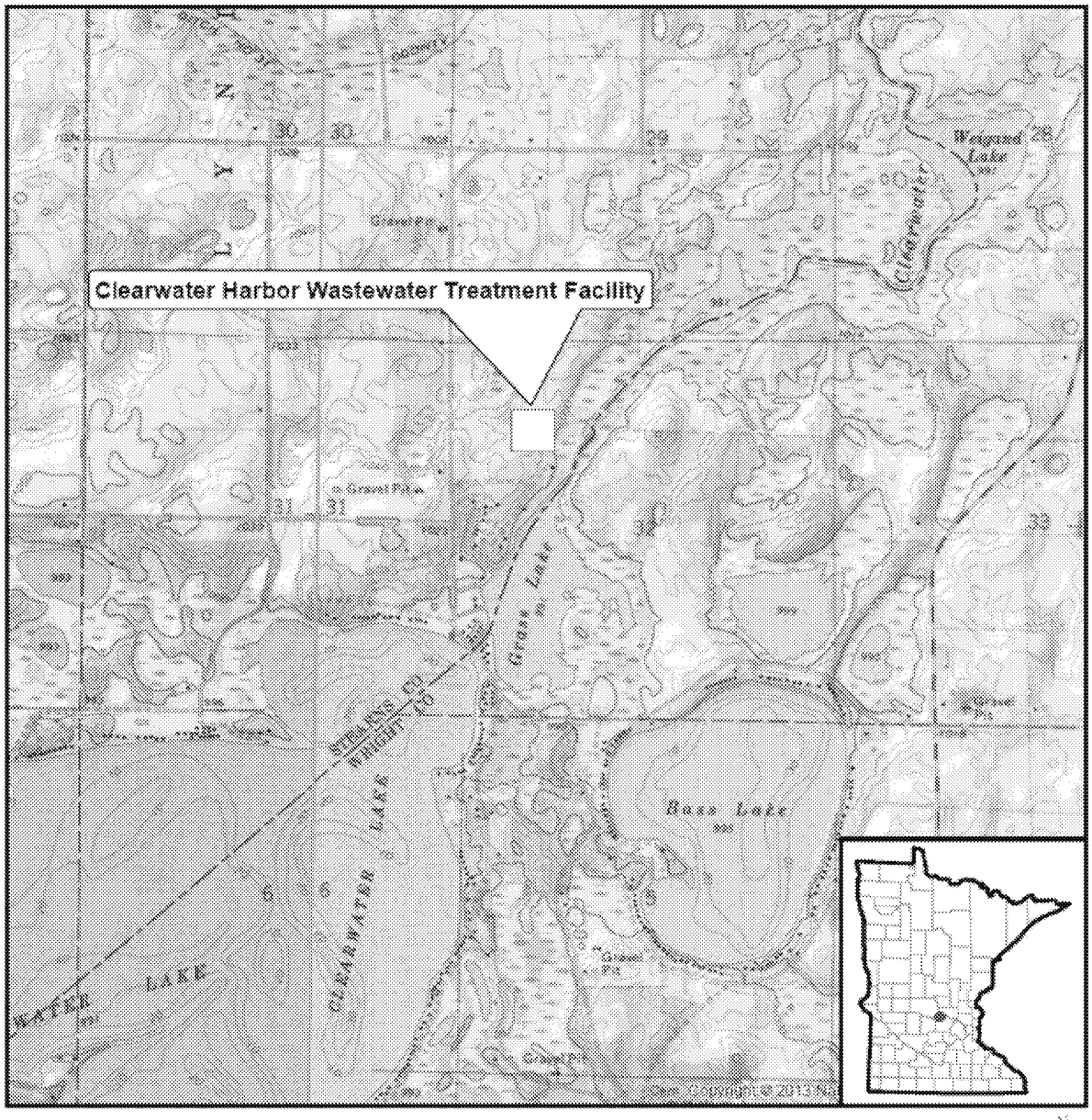
0 4,000 8,000
Feet

EXISTING TAILINGS BASIN
NorthMet Project
Poly Met Mining Inc.
Hoyt Lakes, MN

EXHIBIT B

Topographic Map of Permitted Facility

MN0065226: Clearwater Harbor Wastewater Treatment Facility
T122N, R27W, Section 32
Lynden Township, Stearns County, Minnesota



Map produced by: MPCA Staff, 2/4/2014
Source: USGS Quad, Clearwater Harbor WWTF
Scale: 1:24,000

0 0.25 0.5 1 Miles

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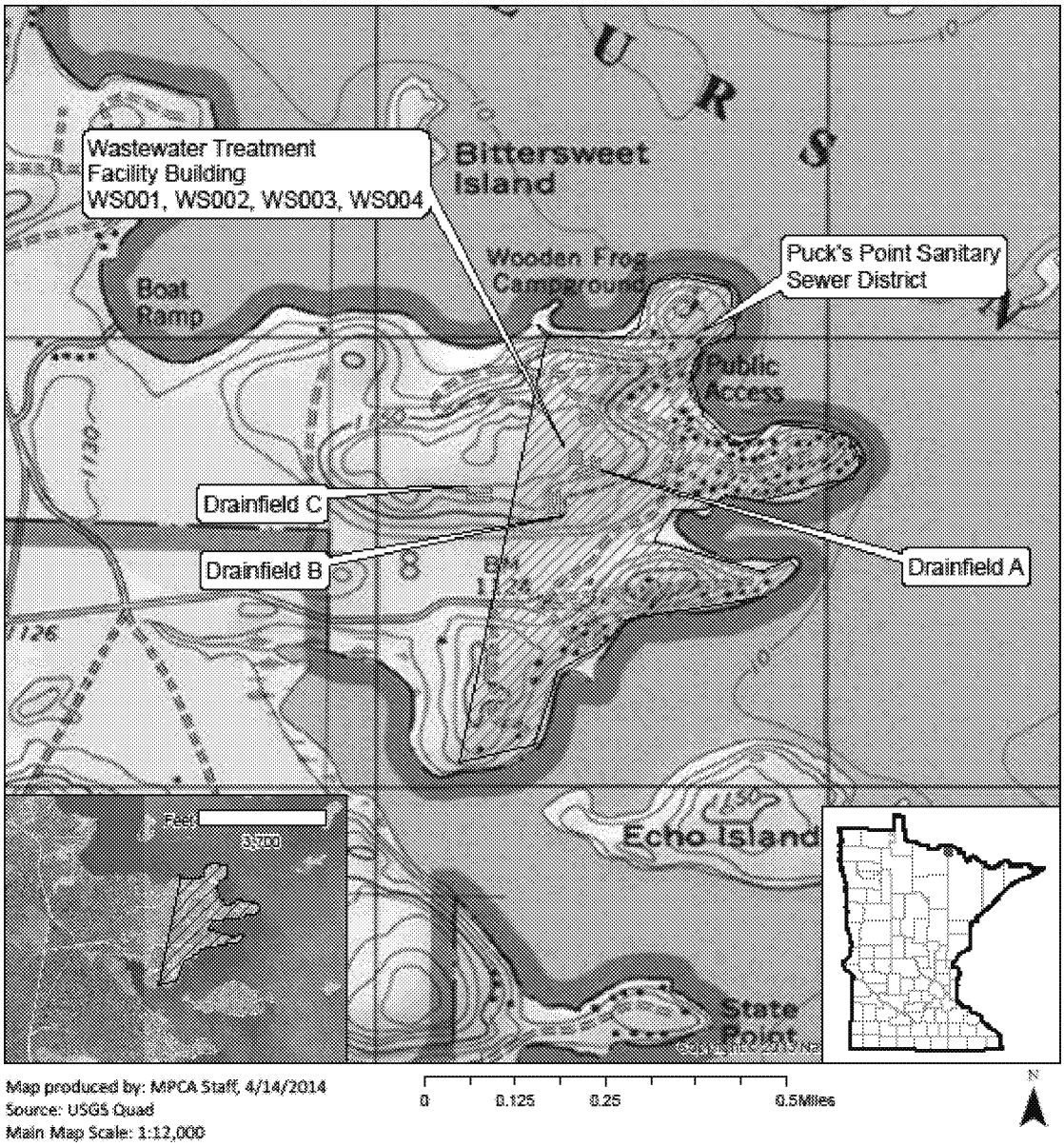
EXHIBIT C

Topographic Map of Permitted Facility

MN0070530 Puck's PointSanitary Sewer District
T69N, R21W, Section 8, Kabetogama, St. Louis County, Minnesota



Map produced by: MPCA Staff, 4/14/2014
Source: USGS Quad
Main Map Scale: 1:12,000

0 0.125 0.25 0.5Miles

N