BEFORE THE ENVIRONMENTAL APPEALS BOARD
UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C.

In the Matter of Mesabi Nugget LLC NPDES/SDS Permit No. MN0067687	)	**MINNESOTA CENTER FOR ENVIRONMENTAL ADVOCACY PETITION FOR REVIEW** NPDES Appeal No.: 13-01

INTRODUCTION

The Minnesota Center for Environmental Advocacy ("MCEA") submits this petition for review of the decision of Environmental Protection Agency Region V ("EPA") to grant Mesabi Nugget, LLC a variance from the Class 3C water quality standard for hardness and the Class 4A water quality standards for specific conductance, total dissolved solids and bicarbonates. Mesabi Nugget is a major processing facility of iron ore. Mesabi Nugget purchased the property in 2005 from Cliffs Erie/LTV. The property includes an old mine pit, called the Area 1 Pit, that contains pollutants. The Mesabi Nugget processing facility has been in operation since 2009. Its discharge has never complied with water quality standards. EPA has stated that Mesabi Nugget cannot feasibly treat its discharge to comply with applicable water quality standards because it uses source water from the Area 1 Pit that is already polluted. In addition, EPA has adopted MPCA's proposition that the variance does not affect or remove an existing use.

The issues in this appeal are whether (1) EPA committed an error of law when it granted a variance on the basis that "[h]uman caused conditions or sources of pollution prevent the attainment of the use and cannot be remedied"; and (2) EPA committed an error of law when it adopted MPCA's finding that the variance does not remove an existing use without making any determination as to whether chronic toxicity in Mesabi Nugget's discharge violates Minnesota's Class 2B water quality standards. As to the first, EPA based its determination on existing

pollution at a mine pit on Mesabi Nugget's property; however, neither EPA nor MPCA made any findings as to whether the pollution in the pit *prevents attainment* of water quality standards, or *cannot be remedied*, as required by federal law. Both findings are necessary to justify a variance under this provision. Additionally, Petitioner MCEA submits that, if the permittee owns the "human caused conditions or sources of pollution," this provision does not apply. As to the second, EPA simply adopted MPCA's conclusion that Class 2B water quality standards are not affected without any review of applicable state water quality standards. In particular, Minnesota has water quality standards for chronic toxicity for all Class 2 waters that Mesabi Nugget's discharge may violate. EPA requested that Mesabi Nugget's discharge have a stricter standard based on evidence of chronic toxicity during the public comment period, but never determined whether that chronic toxicity would violate standards for Class 2B waters.

For these reasons, EPA's approval of the variance should be reversed and this matter remanded.

COMMUNICATIONS

Communications regarding this filing should be served upon:

Kathryn M. Hoffman
Minnesota Center for Environmental Advocacy
26 E. Exchange St., Suite 206
Saint Paul, MN 55105
Phone: (651)287-4863
Fax: (651)223-5967
khoffman@mncenter.org

JURISDICTION

The Environmental Appeals Board of the U.S. EPA has the authority to hear this petition pursuant to 40 C.F.R. § 124.19.[1] Federal regulations provide that within 30 days of a final

[1] MCEA is challenging EPA approval of the variance. 40 C.F.R. § 124.64(b) states that "[v]ariance decisions made by EPA may be appealed under the provisions of § 124.19."

decision on an NPDES permit, "any person who filed comments on that draft permit or participated in the public hearing" may petition the EAB to review the permit decision. 40 C.F.R. 124.19(a).

MCEA filed comments on the draft NPDES Permit with the Minnesota Pollution Control Agency ("MPCA") on February 29, 2012. *See* MCEA comment letter dated February 29, 2012, attached as *Exhibit 1*.[2] In Section B.2 of its comment letter, MCEA argued that MPCA improperly relied on 40 C.F.R. Section 131.10(g)(6) for its conclusion that the variance was justified. That provision states that a state may remove a use designation if it can demonstrate that attainment is not feasible because "[c]ontrols more stringent than those required by sections 301(b) and 306 of the Act would result in substantial and widespread economic and social harm."[3] MCEA argued in its comments that MPCA did not offer adequate proof of "substantial and widespread economic and social harm" because it showed no social or economic impacts aside from a vague, unsupported threat from the company that it would go out of business if it was required to invest in more effective water treatment technology. MCEA commented that MPCA also ignored any potential social and economic benefits to be gained by clean water, such as public health and tourism, as well as benefits from investment in reverse osmosis technology. MCEA provided testimony at the public hearing of the MPCA Citizens Board on October 23, 2012. Finally, although EPA did not hold a public comment period separate from MPCA's on the variance, MCEA submitted materials directly to EPA on the question of whether the requirements of Section 131.10(g) were met.[4] Because MCEA participated in the public comment period, MCEA has standing in this matter. 40 C.F.R. 124.19(a).

[2] MCEA's Comment Letter is included in Appendix A of the official submittal from MPCA to EPA.
[3] *See* MPCA Findings of Fact, paragraphs 50-52, 54.
[4] *See* Email from Kathryn M. Hoffman to Linda Holst, dated November 2, 2012, attached as *Exhibit 2.* This document was included in the EPA's record on p. 3 of its Approval Letter.

This Board has jurisdiction to review the EPA's application of 40 C.F.R. § 131.10(g)(3) because it was raised for the first time by EPA in its Approval Letter, dated December 27, 2012, which is the subject of this appeal.[5] In addition, MCEA, as well as other groups, challenged the applicability of 40 C.F.R. § 131.10(g) during the public comment period.[6] When approving the proposed variance, EPA relied on Subdivision 3 of Section 131.10(g), rather than the provision relied on by MPCA, Subdivision 6. Subdivision 3 allows a state to grant a variance if it can demonstrate that attainment is not feasible because "[h]uman caused conditions or sources of pollution prevent the attainment of the use and cannot be remedied or would cause more environmental damage to correct than to leave in place." 40 C.F.R. 131.10(g)(3). Subdivision 3 was not addressed nor even mentioned by MPCA in its Findings of Fact.

This Board has jurisdiction to review the question of whether the chronic toxicity caused by Mesabi Nugget's discharge violates Class 2B standards because it was raised during the public comment period. *See, e.g., WaterLegacy Comments, p. 11*; Comments of Jane Reyer, included with Sierra Club Comments, p. 5; Comments of Fond du Lac Band, p. 3-4.[7] These comments more than adequately fulfill the broad purpose of providing "notice to the EPA so that it can address issues in the early stages of the administrative process." *Adams v. U.S. E.P.A.*, 38 F.3d 43, 52 (5th Cir. 1994).

EPA approved the variance in a letter to MPCA dated December 27, 2012. The 30-day period to petition the EAB for review expires on January 28th, at the earliest. This petition has been filed with the EAB electronically on Monday, January 28th, 2012. Because (1) a final

[5] MCEA commented, but even if it had not, any person may petition for administrative review related to changes from the draft to final permit. 40 C.F.R. § 124.19(a).
[6] *See* MCEA Comment Letter, Exhibit 1, Section B.2.
[7] MCEA did not raise this specific issue, but "[t]he person filing the petition for review, however, does not necessarily have to be the individual who raised the issue during the comment period." *Adams v. U.S. E.P.A.*, 38 F.3d 43, n. 7 (5th Cir. 1994).

permit decision was issued; (2) the petitioning party submitted comments on the proposed variance during the public comment period; (3) the issues raised are either in response to a new provision raised by EPA in its final permit decision or were raised during the public comment period; and (4) the petitioning party has submitted its petition in a timely manner, EAB has jurisdiction over this matter and review of EPA's approval of a variance for Permit No. MN0067687 is proper.

STATEMENT OF THE ISSUE

(1) Did EPA commit an error of law when it found that "[h]uman caused conditions or sources of pollution prevent the attainment of the use and cannot be remedied" based on existing pollution at a mine pit on Mesabi Nugget's property, where neither EPA nor MPCA made any findings supporting the conclusion that the pollution in the Area 1 Pit prevents attainment of the use or cannot be remedied?

(2) Did EPA commit an error of law when it determined that the variance did not remove an existing use for Class 2B waters despite evidence of chronic toxicity in Mesabi Nugget's discharge?

REQUEST FOR ORAL ARGUMENT

Petitioner MCEA believes that oral argument would assist the EAB in its decision-making in this case, and respectfully requests the opportunity for oral argument.

STATEMENT OF FACTS

The Mesabi Nugget facility is located in St. Louis County, Minnesota. It produces iron nuggets from iron ore concentrate. The facility consists of manufacturing, conveyance and storage facilities, the Area 1 Pit, and non-sewage wastewater treatment systems. For its manufacturing processes, Mesabi Nugget appropriates water from the Area 1 Pit. The water is

used for process temperature control, and for process water, including the wet scrubber system. Mesabi Nugget may also take water from the Area 2WX Pit or Area 9 pits, if necessary.

The wastewater treatment system uses chemical coagulation and precipitation to remove sulfate, fluoride, solids, and metals. In addition, Mesabi Nugget has developed its own patented filtration system, the MNC Mercury Filter, for enhanced mercury removal "if needed to meet permit limits."[8] The effluent from the chemical precipitation system is discharged into the Area 1 Pit. Water from the east end of the Area 1 Pit can be routed into one of the MNC Mercury Filter units before it is discharged to surface water.

The final treated effluent is discharged from Area 1 Pit through Outfall SD001 into Second Creek at an average of 1.5 million gallons per day (MGD), with a maximum of 5.8 MGD. Second Creek is a Class 2B, 3C, 4A, 5 and 6 water under Minn. R. 7050.0430 and, as a surface water in the Lake Superior water basin, it is an Outstanding International Resource Water ("OIRW") under Minn. R. Ch. 7052. Second Creek flows into the Partridge River, which ultimately flows into the St. Louis River. The St. Louis River is impaired for mercury, PCB's, and persistent bioaccumulative toxins.

The draft permit grants variances from water quality standards for four pollutants—bicarbonate, hardness, specific conductance, and total dissolved solids. Mesabi Nugget was granted a variance for the same four pollutants in 2005. Mesabi Nugget did not begin operating until 2009. MPCA Findings of Fact, Conclusions of Law and Order, ¶ 5 (hereinafter "Findings of Fact"). In June of 2010, the previous variance expired. Findings of Fact, ¶ 6. Unable to meet final effluent limits, Mesabi Nugget began discharging into Area 1 Pit, no doubt making the water in the pit more polluted in the process. *Id.* In February 2011, it began discharging into Area 2WX

[8] Draft Permit p. 4.

Pit. *Id.* Both of these pits are inactive mine pits. *Id.* According to the MPCA, they are not "waters of the state" as defined by Minnesota Rule 7050.0130. *Id.*

MPCA held a public comment period on the proposed variance for Mesabi Nugget from January 30, 2012 to February 29, 2012. In addition to MCEA, tribal governments, citizen groups and individual citizens, EPA submitted comments. EPA stated, among other concerns, that "[d]ata available to EPA indicates that the Mesabi discharge has reasonable potential to cause or contribute to chronic toxicity in the receiving waters."[9] EPA requested that a whole effluent toxicity or "WET" limit be imposed "unless the permit includes water quality-based limits for pollutants that cause WET." EPA specifically noted the relationship between the variance and aquatic life, stating that total dissolved solids (one of the parameters from which Mesabi Nugget seeks a variance) contribute to toxicity, and "it appears that the interim limits proposed to complete the variance would not protect existing aquatic life uses." Exhibit 3, p. 4.

On October 24, 2012, MPCA approved the requested variance, stating that it met both state and federal requirements. MPCA noted specifically that "Mesabi Nugget is NOT requesting a variance from any Class 2B water quality standards in place for the existing designated use of protection of aquatic life and recreation." Findings of Fact, ¶ 15 (emphasis in original). Thus, MPCA acknowledged that aquatic life is an "existing use" but did not make any determinations or calculations under Class 2B standards to support its conclusion that the variance would not affect that existing use.

Under state law, MPCA stated that Mesabi Nugget meets the "exceptional circumstance" requirement under Minnesota Rule 7050.0190, subpart 1 because of the "pre-existing water quality of the Area 1 Pit and unanticipated delay in construction and operation of" the facility. *Id.*

[9] Letter from Kevin Peirard, EPA NPDES Program Branch, to Jeff Stollenwerk, MPCA Industrial Water Qualtiy Permits, dated February 29, 2012, attached as Exhibit 3.

at ¶ 23. In particular, MPCA asserted that reverse osmosis might be available to meet water quality standards in the future, but not at this time, as it would require additional engineering design and testing. *Id.* at ¶ 24. MPCA additionally asserted that additional wastewater treatment would be an "undue hardship" because it would be expensive. *Id.* at ¶¶ 33-34. MPCA argued that the cost of wastewater treatment would imperil the future of the facility. *Id.* at ¶ 37. However, Mesabi Nugget never offered "financial statements prepared or approved by a certified public accountant, or other person acceptable to the agency" to support its variance on the grounds of economic burden, as required by state law.[10] Minnesota Rule 7000.7000, subp. 2.

MPCA cited pre-existing pollution at Area 1 Pit as an "exceptional circumstance" meriting a variance under state law, but not because of any role that the pre-existing pollution plays in Mesabi Nugget's inability to meet water quality standards in its discharges. Instead, MPCA stated that if the Mesabi Nugget plant had to shut down because of the economic cost of water treatment, the Area 1 Pit would continue to discharge to the receiving waters without the benefit of the treatment currently provided by Mesabi Nugget. Findings of Fact ¶ 40. Because total inflows to the pit exceed losses to groundwater and evaporation, the Pit would overflow and the discharge would exceed effluent limitations. *Id*. at ¶ 41. It would do so year-round, rather than seasonally as permitted by Mesabi Nugget's proposed NPDES permit. *Id*. The pit overflowed in 2005, prior to the permitting of the Mesabi Nugget facility, and the discharges did not meet water quality standards at that time. *Id*. MPCA never related the pre-existing pollution problem back to Mesabi Nugget's discharge. It did not make any findings of fact related to what role, if any, the polluted source water plays in Mesabi Nugget's lack of compliance with effluent limits. Nor did it mention that Mesabi Nugget contributed to the poor water quality in Area 1 Pit

[10] When Mesabi Nugget first applied for a variance, it did so only on the basis of technological infeasibility. *See* Mesabi Nugget Variance Application, attached as Exhibit 4. Only later, apparently, did the argument about economic hardship surface without proper support as required by Minnesota Rule 7000.7000.

when it discharged into the Pit in 2010 and 2011 because it was unable to meet effluent limitations consistent with water quality standards.

MPCA also found that the proposed variance met the requirements of federal law. When analyzing whether the proposed variance met the requirements of 40 C.F.R. § 131.10(g), MPCA focused on Subdivision 6, requiring the state to demonstrate that attainment of a use is not feasible because "controls more stringent than those required by sections 301(b) and 306 of the [Clean Water] Act would result in substantial and widespread economic and social impact." MPCA relied on the same unsupported statement from Mesabi Nugget—that its business was in peril—to conclude that enforcement of water quality standards would result in "substantial and widespread economic and social impact." Findings of Fact ¶ 51.

MPCA asserted that EPA staff agreed with its finding of "substantial and widespread economic and social impact." *Id.* at ¶ 52. But, it seems, MPCA was mistaken.[11] Perhaps recognizing the deficiencies in Mesabi Nugget's offered proof that its business would be imperiled and the impacts would be substantial and widespread, EPA declined to address that subdivision. On December 27, 2012, in a letter to MPCA, EPA stated that it approved the variance on the basis of 40 C.F.R. 131.10(g), Subdivision 3, which requires that the state show that attaining an existing use is not feasible because "'[h]uman caused conditions or sources of pollution prevent the attainment of the use and cannot be remedied' for the period of time required to complete air controls and design and construct waste water treatment." *EPA Review of the Minnesota Pollution Control Agency (MPCA) Request for Approval of a Variance from Water Quality Standards Mesabi Nugget Delaware, LLC – Hoyt Lakes, Minnesota* at 17

[11] See EPA's Comments to MPCA (February, 29 2012), attached as Exhibit 3, (stating that "Documentation submitted to date by the state of Minnesota for Mesabi Nugget is not sufficient to demonstrate that controls more stringent than those required by sections 301(b) and 306 of the Clean Water Act would result in substantial and widespread economic and social impacts.").

(December, 27 2012) (hereinafter "EPA Approval Letter"). EPA cited the same facts used by MPCA: that Mesabi Nugget used the Area 1 Pit water as source water for its operations; that the water quality in the Pit does not meet water quality standards; and that if the Mesabi Nugget facility was not present or operating, the Pit would overflow and discharge to surface waters year-round. *Id*. Moreover, EPA stated that there is uncertainty surrounding any potential wastewater treatment systems because this is a "demonstration plant" and the air pollution technology will have a "significant effect" on the design of the wastewater treatment facility. *Id*. at 18.

The EPA also adopted MPCA's finding that "this variance does not affect aquatic life use protection under Minnesota's water quality standards," despite the concerns raised in its earlier letter regarding total dissolved solids and aquatic life uses. EPA Approval Letter, p. 11. The EPA made no additional findings or calculations related to Class 2B water quality standards.

ARGUMENT

I. STANDARD OF REVIEW

The EAB will review a permit decision if the decision is based on a clearly erroneous finding of fact or conclusion of law, or if it involves an important matter of policy or exercise of discretion that warrants review. 40 C.F.R. § 124.19(a). The petitioner bears the burden of demonstrating that the EAB should review the EPA's decision. *Id.*

II. FEDERAL REQUIREMENTS FOR A VARIANCE UNDER THE CLEAN WATER ACT

The goal of the Clean Water Act is to "restore and maintain the chemical, physical, and biological integrity of the Nation's waters." 33 U.S.C. § 1251(a). Under the Clean Water Act, states may adopt water quality standards that are subject to EPA review. 33 U.S.C. 1313(a). New or revised water quality standards are also subject to EPA review. 33 U.S.C. § 1313(c)(2)(A); 40

C.F.R. § 131.21. New or revised water quality standards must "protect the public health or welfare" and "enhance the quality of water," taking into account "their use and value for public water supplies, propagation of fish and wildlife, recreational purposes, and agricultural, industrial, and other purposes." *Id.*

When a state grants a variance, it temporarily removes a designated use from a water body. The state may not remove a variance if it is from an existing use. 40 C.F.R. § 131.10(h). EPA reviews a state-approved variance as a change-in-use designation under 40 C.F.R. § 131.10. *See* U.S. ENVIRONMENTAL PROTECTION AGENCY, EPA-823-B-12-002, WATER QUALITY HANDBOOK, chapter 5.3. A state may remove a designated use "which is not an existing use" if the State can demonstrate that attaining the designated use is not feasible for one of six reasons:

> (1) Naturally occurring pollutant concentrations prevent attainment the of the use;
>
> (2) Natural, ephemeral, intermittent or low flow conditions or water levels prevent the attainment of the use….;
>
> (3) Human caused conditions or sources of pollution prevent attainment of the use and they cannot be remedied or would cause more environmental damage to correct than to leave in place;
>
> (4) Dams, diversions, or other types of hydrologic modifications….;
>
> (5) Physical conditions related to natural features…..; and
>
> (6) Controls more stringent than those required by sections 301(b) and 306 of the [Clean Water] Act would result in substantial and widespread economic and social impact.

40 C.F.R. § 131.10(g). In this case, EPA has relied on the third provision – "human caused conditions or sources of pollution prevent attainment of the use and they cannot remedied or would cause more environmental damage to correct than to leave in place." EPA Approval Letter, p. 18. EPA approved removal of the Class 3C water quality standard for hardness and the

Class 4A water quality standards for specific conductance, total dissolved solids and bicarbonates from the receiving waters. EPA found that the variance had no effect on aquatic life use protection under Minnesota's water quality standards. *Id.*, p. 11.

III. EPA COMMITTED AN ERROR OF LAW WHEN IT FAILED TO FIND A RATIONAL, SUPPORTABLE BASIS FOR ITS CONCLUSION THAT THE HUMAN CAUSED CONDITIONS OR SOURCES OF POLLUTION *PREVENT ATTAINMENT OF THE USE* AND *CANNOT BE REMEDIED*.

The EAB must reverse and remand the EPA's decision to grant a variance because EPA committed an error of law in applying 40 C.F.R. § 131.10(g)(3). EPA failed to find a rational, supportable basis for applying those provisions.

EPA erred in applying 40 C.F.R. § 131.10(g)(3). First, EPA did not show how human caused conditions or sources of pollution *prevent attainment of the use*. Nothing in the record supports EPA's determination that the pollution in Area 1 Pit prevented Mesabi Nugget from attaining effluent limits consistent with the Class 3 and 4A uses. Second, EPA failed to show that those conditions or sources of pollution *cannot be remedied* or would cause more environmental damage to correct than to leave in place. There is no evidence in the record to support EPA's conclusion that the pollution in the Area 1 Pit cannot be remedied. Both provisions must be proven for the rule to apply, as indicated by the connector "and." If the EAB agrees that EPA lacked a basis for either conclusion, it must reverse and remand to the EPA.

EPA attempted to adapt MPCA's conclusion regarding Mesabi Nugget into its analysis of 40 C.F.R. § 131.10(g)(3); however, the fit is poor. The EPA's chosen provision, Subdivision 3, focuses on *why* the facility cannot meet water quality standards, and whether it can be remedied—not what the impacts would be if it were forced to do so. In contrast, MPCA analyzed whether requiring Mesabi Nugget to adopt proper water treatment technology would result in "substantial and widespread social and economic impacts" under Subdivision 6. MPCA stated

that if Mesabi Nugget had to shut down its operation, the pit would overflow and the polluted contents would discharge, untreated and year-round, into neighboring surface waters; however this analysis is not relevant to Subdivision 3. In fact, MPCA failed to analyze any relevant Subdivision 3 factors: it failed to analyze whether the problems caused at Area 1 Pit could be remedied, or whether the pre-existing pollution in Area 1 Pit was the reason that Mesabi Nugget could not meet effluent limits. The EPA adopted MPCA's factual findings and tried to use them to support a different legal conclusion, and it did not work.

A. EPA committed an error of law because it failed to find a rational, supportable basis for its conclusion that the "human caused conditions or sources of pollution *prevent the attainment of the use."*

EPA committed an error of law when it failed to find a rational, supportable basis as to whether "human caused conditions or sources of pollution *prevent the attainment* of the use." 40 C.F.R. 131.10(g)(3). If the record does not support the EPA's determination, then this Board should not uphold the EPA's determination. *See, e.g., In re: Government of the District of Columbia Municipal Separate Storm Sewer System*, 10 E.A.D. 323, *17 (2002) (Where "additional record support for the Region's determination is needed, and finding such support altogether absent from the record," the EAB remanded to the Region to provide or develop support). The record contains no evidence as to whether the use of the polluted Area 1 Pit water prevents the attainment of the Class 3 and 4A uses. EPA never determined whether, if Mesabi Nugget were to use unpolluted source water, it could achieve effluent limits. Put simply, if the polluted Area 1 Pit water is not the cause of Mesabi Nugget's problems, then Subdivision 3 does not apply. Because neither EPA nor MPCA have made any findings of fact regarding the cause of Mesabi Nugget's pollution, Subdivision 3 cannot apply.

B. EPA committed an error of law because it failed to find a rational, supportable basis for its conclusion that the "human caused conditions or sources of pollution *cannot be remedied."*

EPA committed an error of law because it failed to provide a rational, supportable basis for its conclusion that the pollution in Area 1 Pit prevents attainment of the use. EPA relied on facts alleged by MPCA in relation to the pollution in Area 1 Pit. MPCA stated that the Pit is already polluted; that Mesabi Nugget uses it for source water; and absent Mesabi Nugget's water treatment, the Pit would overflow and pollute nearby surface waters.[12] However, EPA never examined whether, consistent with 40 C.F.R. § 131.10(g)(3), the pollution at Area 1 Pit "cannot be remedied." Nothing in the record suggests that the pollution in Area Pit 1 "cannot be remedied." For instance, there is nothing in the record demonstrating whether the mine pit itself could be cleaned up—perhaps by pumping water out and treating it, or pumping water out and backfilling the pit. EPA failed to make any determination about whether Mesabi Nugget could make alterations at the site that prevent the polluted water from discharging by building up the sides, or through collection systems. No doubt there are other strategies commonly used at polluted mine sites across the nation. Nothing in the record demonstrates that EPA or MPCA investigated, let alone rejected, these strategies to remedy the pollution at the site.

Nor did EPA make any determination as to whether the impact of Area 1 Pit's pollution on Mesabi Nugget's discharges could be remedied. Mesabi Nugget uses the polluted water from Area 1 Pit as source water, but neither MPCA nor EPA made any determination as to whether it had an alternative. In order to have a rational, supportable basis for its findings, EPA should have determined whether Mesabi Nugget could draw from another source, such as surrounding ground or surface water. EPA should have determined whether Mesabi Nugget could pre-treat the polluted water from the Pit before using it, allowing access to clean source water. EPA

[12] *See* EPA Approval Letter, p. 17.

should have discussed and investigated any and all of these possibilities before any determination was made about the applicability of Subdivision 3.

Furthermore, EPA stated that it is reasonable for Mesabi Nugget to delay implementation of water treatment technology because additional pollutants from its proposed air pollution control technology may affect the water treatment technology. EPA Approval Letter, p. 18. However, under the federal rule, this is irrelevant. The question under the variance rule is not whether Mesabi Nugget can treat its *discharge*; the question is whether it can *remedy the source of pollution*, the polluted Area 1 Pit waters. EPA must determine whether Mesabi Nugget can remedy the pollution at the Pit. If Mesabi Nugget cannot meet effluent limits consistent with water quality standards for Class 3 and 4A waters even with clean source water, than 40 C.F.R. § 131.10(g)(3) simply does not apply.

Finally, it should be noted that even as EPA failed to find the proper facts to prove that Subdivision 3 applied, the facts that were stated contained significant inaccuracies. For instance, EPA stated that if Mesabi Nugget shut down, water treatment at the site would stop and the Area 1 Pit would discharge uncontrolled into surface waters.[13] That is not true. The water treatment would continue because Mesabi Nugget has submitted financial assurance to pay for water treatment after closure. According to the MPCA, Mesabi Nugget has submitted a $5 million irrevocable letter of credit in compliance with its NPDES Permit to "ensure that funding is available to continue operation of relevant portions of the treatment system after closure." Findings of Fact, ¶ 86. This statement is irreconcilable with the MPCA's claim, made just a few pages earlier, that if Mesabi Nugget were to shut down, water treatment would also stop. *Id*. at ¶ 41 ("The Area 1 Pit would continue to discharge through SD001 whether the Mesabi Nugget

[13] EPA Approval Letter, p. 10.

plant is in operation or not, albeit without the wastewater treatment of pit waters that the nugget facility is currently providing.").

IV. EPA COMMITTED A CLEAR ERROR OF LAW WHEN APPLYING 40 C.F.R. § 131.10(G)(3) BECAUSE THIS PROVISION IS INTENDED TO APPLY TO PRE-EXISTING POLLUTION FROM OTHER, UPSTREAM SOURCES, NOT PRE-EXISTING POLLUTION FROM A POINT SOURCE ON THE POLLUTER'S PROPERTY.

EPA committed a clear error of law when it granted a variance because Mesabi Nugget owns and is responsible for the point source discharges from Area 1 Pit, the source of the pre-existing polluted water. According to MPCA, Area 1 Pit is not a "water of the state" but is instead a "treatment facility." *Id.* at ¶ 6.[14] Therefore, if it overflows and discharges to neighboring waters, it is a point source – specifically, Mesabi Nugget's point source. 40 C.F.R. 122.2. Mesabi Nugget needs an NPDES Permit for such discharge, or it is liable for discharge of a pollutant without a permit under the Clean Water Act. 33 U.S.C. § 1311(a).

Thus, EPA is granting a variance for Mesabi Nugget to discharge polluted water that does not meet appropriate effluent standards because Mesabi Nugget has a polluted point source on its property. The Clean Water Act has never been and should not be read to allow a variance in this situation for three reasons.

First, allowing a variance for pollution originating on the discharger's property is circular and turns the Clean Water Act on its head. If Mesabi Nugget's own discharge is the "source of pollution" that cannot be remedied, then the provision would allow a discharger to discharge any pollutants in excess of effluent limits as long as the discharger cites to any barrier to treatment. The provision would now state that a use may be removed "if the state can demonstrate that attaining the existing use is not feasible because…" the polluter cannot clean up its discharge

[14] MCEA does not necessarily agree with this conclusion, but does not contest it for the purposes of this appeal.

sufficiently to attain the use. In other words, it is not feasible to attain the use because it is not feasible to attain the use.

In fact, Subdivision 6, the provision originally cited by MPCA, is intended to address the situation where the polluter is unable to treat its own discharge. Under that subdivision, a variance may be permitted only if stricter water quality standards result in "substantial and widespread social and economic harm." This provision is designed to *test* whether the circumstances justify a variance for a polluter who cannot meet water quality standards. It asks whether the collateral impacts, either economic or social, are sufficient to allow an exception to water quality standards. EPA could have applied this provision, but it declined to do so, most likely because MPCA did not meet the evidentiary standard to prove substantial and widespread social and economic harm.

Second, under the Clean Water Act, a polluter is responsible for discharges from point sources on his property. Even when pollutants on a party's property are pre-existing (i.e. the fault of a previous owner), the party is still responsible for discharge and must obtain an NPDES Permit. *U.S. v. Law*, 979 F.2d 977, 979 (4th Cir. 1992). In *Law*, the defendants purchased property that included a water treatment system consisting of a collection pond, a pump, some pipes and two settling ponds that discharged into a nearby creek. *Id.* at 978. The defendants never obtained an NPDES Permit, and were convicted of knowingly violating the Clean Water Act. *Id.* On appeal, the defendants argued that they were wrongly convicted because the waters were polluted before entering their water treatment system and the defendants had no duty to remove preexisting pollutants. *Id.* The Court stated that the defendants were responsible for all discharges because the source of pollution was not a diverted water of the United States, but a point source on their property—the water treatment system. *Id.* at 979. "The origin of the

pollutants in the treatment and collection ponds is therefore irrelevant. The proper focus is upon the discharge from the ponds into" the receiving waters. *Id.*

EPA states that this pollution is "preexisting," implying that it is somehow independent of Mesabi Nugget's facility. But it is improper to call the pollution in the Area 1 Pit "preexisting" for the purposes of Mesabi Nugget's discharge. Mesabi Nugget owns the point source, and they are responsible for it, regardless of whether it overflows or travels through their facility before discharging into surface waters.[15]

Third, a contextual reading of the rule shows that it is intended to address pollution from sources *other than* the discharger seeking a variance.[16] 40 C.F.R. 131.10(g) reads, in full:

> States may remove a designated use which is not an existing use, as defined in § 131.3, or establish sub-categories of a use if the State can demonstrate that attaining the designated use is not feasible because:
>
> (1) Naturally occurring pollutant concentrations prevent the attainment of the use; or
>
> (2) Natural, ephemeral, intermittent or low flow conditions or water levels prevent the attainment of the use, unless these conditions may be compensated for by the discharge of sufficient volume of effluent discharges without violating State water conservation requirements to enable uses to be met; or
>
> (3) Human caused conditions or sources of pollution prevent the attainment of the use and cannot be remedied or would cause more environmental damage to correct than to leave in place; or
>
> (4) Dams, diversions or other types of hydrologic modifications preclude the attainment of the use, and it is not feasible to restore the water body to its original condition or to operate such modification in a way that would result in the attainment of the use; or

[15] Although Mesabi Nugget is responsible for point source discharges from the Pit regardless of whether it caused the pollution or another party did, it should be noted that MPCA and EPA overstate the case when they call the pollution "pre-existing." Mesabi Nugget contributed to pollution in the Pit when it discharged into the Pit in 2010 and 2011.

[16] "The maxim *noscitur a sociis*, that a word is known by the company it keeps, while not an inescapable rule, is often wisely applied where a word is capable of many meanings in order to avoid the giving of unintended breadth to the Acts of Congress." *Jarecki v. G.D. Searle & Co.*, 367 U.S. 303 at 307 (1961).

(5) Physical conditions related to the natural features of the water body, such as the lack of a proper substrate, cover, flow, depth, pools, riffles, and the like, unrelated to water quality, preclude attainment of aquatic life protection uses; or

(6) Controls more stringent than those required by Sections 301(b) and 306 of the Act would result in substantial and widespread economic and social impact.

40 C.F.R. § 131.10. Subdivisions (1) – (5) all refer to problems with attainment created by natural or human sources *other than the user*. Subdivisions (1), (2) and (5) refer to natural causes. Subdivision (4) refers to an upstream physical barrier, such as a dam. It is not an exception written for the dam builder; it is an exception for downstream users. Read in context, subdivision (3) should not be read to refer to "human caused conditions or sources of pollution" for which the discharger seeking the variance is responsible.

V. EPA ERRED WHEN IT CONCLUDED THAT THE VARIANCE DOES NOT AFFECT CLASS 2B AQUATIC LIFE WATER QUALITY STANDARDS UNDER MINNESOTA LAW.

EPA erred when it concluded that the variance does not affect Class 2B aquatic life standards, particular as it relates to chronic toxicity to organisms. In its letter during the public comment period, EPA specifically raised the issue of chronic whole effluent toxicity, noting that the data available to EPA "indicates that the Mesabi discharge has reasonable potential to cause or contribute to chronic toxicity in the receiving waters." EPA Comment Letter, Exh. __, p. 1. EPA stated that the permit must include a whole effluent toxicity (WET) standard unless the permit includes water quality-based limits for pollutants that cause WET. *Id.* EPA also stated that samples for WET analysis must be taken more frequently than once a year. *Id.* at 2.

MPCA noted in its Findings of Fact that Area 1 Pit has been "intermittently chronically toxic to C. *dubia*." Findings of Fact, ¶ 81. In the final permit, it required Mesabi Nugget to conduct monthly chronic WET tests for the discharge, and included a WET limit applicable to surface discharge of 1.0 TUc. *Id.* at ¶¶82-83; Appendix C to MPCA Findings of Fact (Table of

Permit Conditions). The facility may not reduce the level of monitoring until twelve consecutive monthly tests pass the chronic toxicity standard. *Id.* at ¶ 83.

Despite the acknowledged risk of chronic toxicity, EPA adopted MPCA's findings that the variance does not affect Class 2B aquatic life standards in Minnesota. The narrative standard for Class 2B waters require as follows:

> The quality of Class 2B surface waters shall be such as to permit the propagation and maintenance of a healthy community of cool or warm water sport or commercial fish and associated aquatic life, and their habitats. These waters shall be suitable for aquatic recreation of all kinds, including bathing, for which the waters may be usable.[17]

In addition, all Class 2 waters must meet the following standard for chronic toxicity:

> To prevent chronically toxic conditions, concentrations of toxic pollutants must not exceed the applicable CS[18] or MS[19] in surface waters outside allowable mixing ones as described in part 7050.0210, subpart 5.[20] The CS and MS will be averaged over the following durations: the MS will be the one-day average; the CS, based on toxicity to aquatic life, will be a four-day average; and the CS, based on human health or wildlife toxicity, will be a 30-day average.[21]

Toxic pollutants are defined broadly in Minnesota statute:

> "Toxic pollutants" means those pollutants, or combinations of pollutants, including disease-causing agents, which after discharge and upon exposure, ingestion, inhalation or assimilation into any organism, either directly from the environment or indirectly by ingestion through food chains, will, on the basis of information available to the agency, cause death, disease, behavioral abnormalities, cancer, genetic mutations, physiological malfunctions, including malfunctions in reproduction, or physical deformation, in such organisms or their offspring.[22]

MPCA findings specifically note the impact of Mesabi Nugget's discharge on reproduction: "The intermittent chronic toxicity has resulted in a reduction in the number of young per bearing

[17] Minnesota Rule 7050.0222, subp. 4.
[18] Chronic Standard. Minnesota Rule 7050.0222, subpart 1(C).
[19] Maximum Standard. Minnesota Rule 7050.0222, subpart 1(C).
[20] This provision defines how the agency must establish mixing zones, giving "[r]easonable allowance will be made for dilution of the effluents." Minnesota Rule 7050.0210, subp. 5.
[21] Minnesota Rule 7050.0222, subpart 7.
[22] Minnesota Statute 115.01, subd. 20.

female, but not complete reproduction failure." Findings of Fact, ¶ 82. Based on the chronic toxicity data provided by EPA, it is not clear whether Mesabi Nugget's effluent meets this standard. However, it is clear that neither MPCA nor EPA ever made the calculation required by Minnesota Rule 7050.0222, subpart 7. Although MPCA imposed a WET limit, it did not calculate the applicable chronic standard (CS) or maximum standard (MS) outside the mixing zones; at most, it placed a WET limit at the discharge point without reference to mixing zones or the applicable aquatic life toxicity standard defined in Minnesota Rule 7050.0222, subpart 7.

This matter should be remanded so that the EPA can determine whether the chronic toxicity problems with Mesabi Nugget's discharge violate Class 2B standards. If it does, the variance may not be granted because aquatic life is an existing use. 40 C.F.R. § 131.10(h); Findings of Fact ¶ 15 ("Mesabi Nugget is NOT requesting a variance from any Class 2B water quality standards in place for the existing designated use of protection of aquatic life and recreation.").[23]

[23] In addition, if aquatic life water quality standards need to be removed, a Use Attainability Analysis as defined in 40 C.F.R. 131.3(g) would need to be conducted on remand before "fishable/swimmable" uses may be changed. 40 C.F.R. § 131.10(j).

CONCLUSION

Minnesota Center for Environmental Advocacy respectfully petitions the EAB to accept review of Mesabi Nugget LLC Permit No. SDS/NPDES MN0067687 and to reverse and remand EPA's approval of the variance.

RESPECTFULLY SUBMITTED:

Date:_____ By:_____

Kathryn M. Hoffman
Minnesota Center for Environmental Advocacy
26 East Exchange Street, Suite 206
Saint Paul, MN 55101
(651) 287-4863 (telephone)
(651) 223-5967 (facsimile)
ATTORNEY FOR MINNESOTA CENTER
FOR ENVIRONMENTAL ADVOCACY