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

\_\_\_\_\_  
IN THE MATTER OF )  
HECLA MINING COMPANY - )  
LUCKY FRIDAY MINE )  
NPDES Permit No. ID-000017-5 )  
\_\_\_\_\_ )

NPDES Appeal \_\_\_\_\_

MEMORANDUM IN SUPPORT OF  
HECLA MINING COMPANY'S  
PETITION FOR REVIEW

**MEMORANDUM IN SUPPORT OF HECLA MINING COMPANY'S PETITION FOR  
REVIEW OF NATIONAL POLLUTANT DISCHARGE  
ELIMINATION SYSTEM PERMIT**

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## I. INTRODUCTION

Hecla Mining Company, Lucky Friday Unit ("Hecla") owns and operates a silver, lead, and zinc mine and mill located in Shoshone County, Idaho, just north of the South Fork Coeur d'Alene ("SFCDA") River, near Mullan, Idaho. Pursuant to 40 CFR § 124.19(a), Hecla petitions for review of certain conditions in the final National Pollutant Discharge Elimination System ("NPDES") Permit No. ID-000017-5 (the "Lucky Friday Permit") issued by the Environmental Protection Agency ("EPA"), Region X (the "Region") on August 12, 2003. A copy of the Lucky Friday Permit is attached hereto as **Exhibit A**. The Lucky Friday Permit governs the discharge of treated waters from the Lucky Friday Mine and Mill into the SFCDA River pursuant to EPA's authority under the Federal Water Pollution Control Act ("CWA").<sup>1</sup> See 33 USC §§ 1311 and 1342. As the holder of the Lucky Friday Permit, Hecla is directly affected by the Lucky Friday Permit and is an interested party entitled to file an appeal under 40 CFR § 124.19(a). Hecla timely submitted written comments on the January 2003 revised draft permit for the Lucky Friday Unit on April 11, 2003 ("2003 Comments"), attached hereto as **Exhibit B**. In addition, Hecla submitted written comments on a earlier March 28, 2001 Draft Permit on August 2, 2001 ("2001 Comments"), attached hereto as **Exhibit C**.

Hecla submits this Petition for Review, appealing the Lucky Friday Permit on the grounds that certain conditions in the permit are based on clearly erroneous findings of fact and conclusions of law, or involve an exercise of discretion or important public policy consideration that warrants review by the Environmental Appeals Board ("EAB"). Specifically, Hecla seeks review of the following:

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<sup>1</sup> Because the state of Idaho has not received authorization to implement its own NPDES permit program, the Region issues NPDES permits in Idaho.

A. Mercury effluent limits and mercury testing as conditions in Part I.A. of the Permit are clearly erroneous because (1) the mercury effluent limits are based on unsupported factual assumptions, (2) mercury testing is unnecessary, and (3) the Region failed to adequately respond to specific and substantiated comments regarding mercury limits, testing, and economic impacts on the Lucky Friday Mine.

B. The seepage study and hydrological analysis in Part I.C. of the Permit is not legally or technically justified.

C. The Region unlawfully failed to act on Hecla's variance request and failed to respond to or consider Hecla's specific and substantiated concerns regarding the cost of compliance with the Lucky Friday Permit.

D. The Region abused its discretion by failing to authorize dissolved metals instead of total recoverable analyses in Part I.A. of the Permit to comply with the water quality criteria in Idaho's Water Quality Standards.

E. The Region failed to include a compliance schedule or implementation period for flow-proportioned composite sampling, continuous effluent flow monitoring and in-stream flow monitoring in Part I.D. of the Permit.

F. The method detection limit for zinc in Part I.D. of the Permit is excessively stringent.

G. The interim limits for certain metals in Part I.A., Table 5, of the Permit are erroneous because they are not based on actual past performance at the Lucky Friday Mine.

H. Hecla has demonstrated an alternative pH upper limit should have been included in the Lucky Friday Permit. EPA regulations allow for such pH adjustment and the Region has authorized an alternative pH adjustment for another Mine which discharges to the SFCDA River.

I. The whole effluent toxicity sampling requirements are not justified.

Hecla, respectfully requests that the EAB grant review of the Lucky Friday Permit and set aside, modify, and/or remand the unlawful conditions in the permit.

## II. FACTUAL BACKGROUND

The Lucky Friday Mine is a silver, lead, and zinc mine and mill located in Shoshone County, Idaho, near Mullan, Idaho, north of the SFCDA River. Ore has been mined from the Lucky Friday deposit since 1942. The mill began operation in 1959.

At the site, several components of the Lucky Friday Unit generate wastewater, which discharges through two outfalls. Outfall 001 is adjacent to the SFCDA River which receives flows from Tailings Pond No. 1. Tailings Pond No. 1 receives sources from cooling water, sanitary wastewater and mine water from the Lucky Friday Mine. Outfall 001 discharges continuously with flows over the last five years ranging from 0.43 to 2.88 million gallons per day ("mgd"). Outfall 003 receives flows from Tailings Pond No. 3 and discharges into the SFCDA river approximately 3.1 miles east (upriver) of Outfall 1. Tailings Pond No. 3 receives sources from the tailings from the mill and stormwater. Outfall 003 discharges continuously with flows over the last five years ranging from 0.23 to 2.28 mgd. Outfall 002 receives flows from Tailings Pond No. 2, which is adjacent to the SFCDA River and would discharge to the river approximately 0.8 miles east (upriver) of Outfall 001.<sup>2</sup> Approximately eight miles down river from the outfalls, Canyon Creek flows into the lower SFCDA River. The SFCDA River below Canyon Creek is listed on Idaho's list of impaired waters compiled under section 303(d) of the CWA for not meeting standards for metals.

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<sup>2</sup> There has been no discharge from Outfall 002 over the past five years, however, Hecla applied to discharge from Outfall 002 for emergency use when flows from Outfalls 001 or 003 need to be diverted.

The history of the Lucky Friday Mine's NPDES permit is lengthy and complex. A NPDES permit was first issued to Hecla for the Lucky Friday Unit in 1973. In 1976, Hecla timely applied to EPA for reissuance of its NPDES permit. This timely application ensured that the 1973 permit remained in effect after its expiration date of June 30, 1977.<sup>3</sup> On September 28, 1990 a draft NPDES permit for the Lucky Friday Unit was issued for public notice, but was never finalized. Hecla submitted applications to discharge from Outfalls 001, 002, and 003 and additional information related to the applications over the intervening years. In addition, in response to a CWA § 308 information request from EPA, Hecla submitted updated information on August 2, 1999 and November 20, 2000. Also Hecla submitted a variance request to the Region in February, 2001.

In 1993, EPA and the IDEQ recognized that the criteria for certain metals in the upper SFCDA River where the Lucky Friday Mine discharges were not appropriate because the upper SFCDA River supported a healthy aquatic community even though the water quality periodically exceeded applicable criteria established in Idaho's water quality standards. Accordingly, EPA and IDEQ, along with Hecla, agreed to fund studies to develop scientifically supportable "site-specific criteria" for certain metals as authorized by federal law. *See* 40 CFR § 131.11. In 1997, EPA promulgated a federal water quality standard for the SFCDA River. *See* 40 CFR § 131.33 (b). The affect of the new federal standard was that more stringent criteria for metals would apply to NPDES permittees discharging into the SFCDA River. In recognition of the affect, and the potential economic impact on permittees discharging to the SFCPA River, EPA authorized a federal variance from compliance with federal water quality standards under specified conditions. *See* 40 CFR § 131.33(d).

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<sup>3</sup> The Region reissued a NPDES Permit to Hecla in 1977 which was stayed due to an appeal.



In 1998, IDEQ adopted site-specific criteria for the upper SFCDA River, however, EPA could not approve or disapprove Idaho's site-specific criteria for the upper SFCDA River because EPA had not yet taken action on other portions of Idaho's Water Quality Standards.

On February 21, 2001, Hecla timely requested a water quality variance from EPA prior to the Region issuing a draft Permit. The variance is attached as **Exhibit D**. *See also* 40 CFR § 131.33(d). The Region took nearly two years before responding to Hecla's variance request. Pursuant to a request from EPA, Hecla renewed its variance request on July 11, 2003, attached as **Exhibit E**. The Region did not act on the variance request prior to issuance of the Lucky Friday Permit.

A draft NPDES permit and supporting Fact Sheet for the Lucky Friday Unit was issued for public notice on March 28, 2001 ("2001 Draft Permit"). Hecla timely submitted comments on the 2001 Draft Permit on August 2, 2001. *See Exhibit C*.

In 2001, IDEQ again duly adopted, pursuant to state law, site-specific criteria for the upper SFCDA River and for the lower SFCDA River in Idaho's water quality standards. IDEQ submitted the site-specific criteria to EPA for approval on August 6, 2002 pursuant to 33 USC § 1313. EPA subsequently approved Idaho's site specific water quality criteria for the SFCDA River on February 28, 2003.

EPA issued a revised draft permit ("2003 Revised Draft Permit"), **Exhibit F**, and revised supporting Fact Sheet ("2003 Fact Sheet"), **Exhibit G**, for public notice on January 6, 2003 because "additional information has become [sic] available to warrant revisions to the effluent limits in the draft permit." *Id.* The public notice initiated a 50-day public comment period, which was extended on February 21, 2003 to end on April 11, 2003. A public meeting was held

on February 6, 2003. Hecla timely submitted written comments on the 2003 Revised Draft Permit on April 11, 2003 ("2003 Comments").

On June 17, 2003 the state of Idaho issued its final 401 Certification of the Lucky Friday Permit. *See Exhibit H*. Hecla timely appealed certain conditions in the state 401 Certification. *See Exhibit I*. That matter is presently pending before the Idaho Board of Environmental Quality.

The Region issued its "Response to Comments," *Exhibit J*, which included responses to comments submitted on the 2001 Draft Permit, and issued the Lucky Friday Permit, *Exhibit A*, on August 12, 2003.

### III. STANDARD OF REVIEW

Under 40 CFR § 124.19(a), the EAB should grant review of a permitting decision when it is based on clearly erroneous findings of fact or conclusions of law or involves an exercise of discretion or an important policy matter which warrants EAB review. *In re Puerto Rico Elec. Power Authority*, 6 EAD 253, 255 (EAB 1995). According to EPA, "[t]he power of review (under CFR § 124.19) should only be "sparingly exercised" as "most permit conditions should be finally determined at the Regional level." *See* 45 Fed Reg. 33,290, 33,412 (May 19, 1980). To preserve an issue for appeal, the regulations require "any petitioner who believes that a permit condition is inappropriate to have first raised 'all reasonably ascertainable issues and ... all reasonably available arguments supporting [that petitioner's] position' during the public comment period on the draft permit." *See In re Westborough and Westborough Treatment Plant Board*, 2002 WL 202356 (EPA 2002)(quoting 40 CFR § 124.13). The burden of demonstrating that review is warranted rests with the petitioner, "who must state any objections to the permit and explain why the permit issuer's previous response to those objections is clearly erroneous, an abuse of discretion, or otherwise warrants review." 40 CFR § 124.19(a); *New England Plating*

Co., NPDES Appeal No. 00-7, 9 E.A.D.726 (EAB 2001); *In re Haw. Elec. Light Co.*, 8 E.A.D. 66 71-72 (EAB 1998).

#### IV. ARGUMENT

##### A. Mercury Limits And Monitoring

The Lucky Friday Permit includes a water quality based-effluent limit for mercury. The Region's reasonable potential to exceed ("RPE") analysis for mercury is erroneously based on the assumption that the Lucky Friday Mine is discharging at technology-based effluent limits, even though past data demonstrates all samples are non-detect for mercury.<sup>4</sup> The data to determine RPE and to subsequently develop effluent limits for mercury is therefore erroneous. The Region compounded this error by including onerous mercury testing requirements in the Permit. The Lucky Friday Permit provides a Method Detection Limit ("MDL") for total mercury at .001 ug/l. *See* Part I.D., Table 7. The MDL condition for mercury in the Lucky Friday Permit, and test procedures approved under 40 CFR § 136, require the use of the ultra-clean 1631 method for mercury analysis. *See* Lucky Friday Permit, **Exhibit A**. The inclusion of low level mercury monitoring in the permit is clearly erroneous and an abuse of discretion in light of all data demonstrating that mercury is not an issue in the SFCDA River. In addition, the increased costs associated with the administration of the Lucky Friday Permit due to the monitoring and analysis for mercury using the 1600 series are unwarranted and unsupported in light of numerous studies in the Coeur d' Alene basin that do not identify mercury as a concern. Hecla seeks modification of the permit and removal of these requirements.

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<sup>4</sup> Technology-based Effluent Limits for the Lucky Friday Mine are 2.0 ug/l daily maximum and 1.0 ug/l monthly average. *See* 40 CFR § 440.103. Hecla's monitoring has demonstrated that the mercury in its effluent is always below the detection levels of .2 ug/l. In fact, Hecla does not use mercury in its mine and mill operations. *See* Affidavit of Mike Dexter in Support of Hecla Mining Company's Petition for Review ("Dexter Affidavit"), attached hereto as **Exhibit K**, at ¶ 4.

(1) *The Region's Use of Technology-Based Limits is Clearly Erroneous*

The factual basis provided by EPA for inclusion of the low level mercury monitoring is clearly erroneous. Mercury discharge from the Lucky Friday Mine has been non-detect. The Region's sole response in support of the mercury requirement is that: "the method detection limits (MDLs) reported by Hecla in past mercury monitoring are greater than the chronic aquatic life water quality criterion for mercury, therefore, there is no proof that mercury in the discharges do not exceed the chronic water quality criterion." See **Exhibit J**, § IV, Comment 30.

Despite this data, and Hecla's request for use of actual monitoring data to develop the effluent permit limits, the Region improperly used technology-based effluent limitations to determine whether there is a reasonable potential for the discharge to exceed the criteria in the receiving water. See 2003 Fact Sheet, **Exhibit G**. See also, 2003 Comments, **Exhibit B** at pp. 6-7. The 2003 Fact Sheet outlines the Region's procedure for development of the effluent limitations for mercury in the Lucky Friday Permit. See **Exhibit G**, Appendix A. The water quality based analysis followed four steps: (1) determine the appropriate water quality criteria; (2) determine if there is "reasonable potential" for the discharge to exceed the criteria in the receiving water<sup>5</sup>; (3) if there is a "reasonable potential," develop a wasteload allocation ("WLA"); (4) develop effluent limitations based on the WLA. *Id.* at A-3. To determine if there is a "reasonable potential" to exceed the maximum projected receiving water concentration is compared with the criteria for that pollutant. *Id.* If the projected receiving water concentration exceeds the criteria, there is a "reasonable potential" and a limit must be included in the permit. *Id.* at A-9. The maximum projected receiving water concentration is developed through a mass

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<sup>5</sup> The regulations implementing section 301(b)(1)(C) of the CWA require permits to include limits for all pollutants or parameters which "are or may be discharged at a level which will cause, have

balance equation which takes into account receiving water concentrations of the pollutants, receiving water flow, and the “maximum projected effluent concentrations.” *Id.* at A-3. In its formula, the Region determined the “maximum projected effluent concentration” for mercury by using the guideline technology-based effluent limit. *Id.* at A-10. *See also*, 40 CFR § 440. The “maximum effluent concentration used to determine RP is the technology-based maximum daily limitation.” *Id.* at A-13. According to Table A-1, the technology-based effluent limitations for mine drainage and mill process waters from mercury equals daily maximum of 2 ug/l and a monthly average of 1 ug/l. *Id.* at A-2. Based on this data, the Region determined there was reasonable potential to exceed the mercury criteria, and established effluent limitations for mercury based on this finding. *Id.* at A-12 – A-14.

The use of the technology-based effluent limitations to represent the maximum projected effluent concentration is clearly erroneous. In reviewing technical issues, the E.A.B. determines “whether the approach ultimately adopted by the [permit issuer] is rational in light of all the information in the record.” *In re Tallmadge Generating Station*, 2003 WL 21500414 (EPA May 22, 2003). The Region’s use of technology-based limits, in light of extensive data in the record to support that the Lucky Friday Unit is discharging at below detection levels, and in light of the EPA’s guidance regarding computation of the maximum projected effluent concentration, is not rational.

EPA’s technical guidance recommends using a maximum projected effluent concentration based on available effluent data calculated to a statistically projected worst-case value. *See*, USEPA (1991) *Technical Support Document for Water Quality-Based Toxics*

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(...continued)

the reasonable potential to cause, or contribute to an excursion above any State water quality standard, including State narrative criteria for water quality.” 40 CFR § 122.44(d)(1)(i).

*Control.* EPA-505/2-90-001. *See also,* EPA, NPDES Permit Writers' Manual, Chapter 6. The Region's use of technology-based effluent limits numbers, rather than actual monitoring data which has been non-detect, assumed effluent concentrations up to two orders of magnitude higher than actual effluent monitoring data for mercury. Based on this erroneous assumption, EPA determined there was a reasonable potential to exceed the mercury criteria. Absent actual effluent data for mercury demonstrating a potential to exceed criteria it is arbitrary for the Region to establish a mercury limit. Hecla requests that the Board remand this condition and remove the mercury limits in the permit because there is no evidence that mercury is being discharged from the Lucky Friday Mine or that mercury is a water quality concern in the SFCDA River.

The Region's only explanation to justify use of technology based effluent limits in the RPE rings hollow. The Region opines that if the RPE analysis "used existing effluent concentration . . . then there is the risk of giving the facility limits that authorize . . . an excursion of water quality standards." *See Exhibit J*, § III, Comment 45. This explanation flies in the face of the TSD which directs EPA to use actual effluent data. Also there is nothing in the record to suggest that Hecla could/would discharge mercury at technology-based levels or at any level. *See Dexter Affidavit, Exhibit K*, at ¶ 4. The explanation is also inconsistent with the Region's own RPE analysis which assumed that background concentrations of mercury in the SFCDA were zero (based on non-detect values). If non-detect values for mercury in effluent and in receiving waters are sufficient to justify water-quality based effluent limits, then all NPDES permits in the United States must include mercury limits and associated mercury monitoring. Finally, if the Region had any legitimate concern about Hecla discharging up to technology-

based effluent limits, they could have required a final mercury limit at current non-detect values (.2 ug/l) as they did in the interim limits section in the Permit.

(2) *The Costly Condition Requiring Low Level Mercury Monitoring is Unsupported.*

Hecla submitted specific and substantiated comments in response to both the 2001 Draft Permit and 2003 Revised Draft permit objecting to the mercury limits and monitoring conditions in the proposed permit. *See Exhibits B, C.* These comments directed the Region to the history of EPA's superfund activities in the basin and tens of millions of dollars of study, which have only identified particulate lead, dissolved zinc, and cadmium, as metals of concern in the basin – not mercury. *See Exhibit B* at pp. 4-5 (referencing Remedial Investigation Report – Coeur d'Alene Basin Remedial Investigation/Feasibility Study ("RI/FS Study")).<sup>6</sup> These studies were directed at trying to justify natural resource damages, and no problem relative to mercury has been identified. *Id.* Indeed the mercury criteria are developed to address human health via fish consumption and any fish tissue analysis presented in the superfund studies show total mercury in fish an order of magnitude below the 0.3 mg/kg cutoff for methylmercury. *Id.* This superfund fish tissue data includes analysis of single target organs and whole fish, whereas the 0.3 mg/kg applies to fish tissue fillets only. *Id.*

The extensive data collected on the SFCDA River clearly demonstrates that 1600 series mercury sampling and analysis is not warranted. Therefore, the considerable costs associated with requiring low level mercury monitoring in the Lucky Friday Permit are not justified. Costs of the permit are increased significantly by the requirement of low level mercury monitoring due

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<sup>6</sup> The RI/FS Study contains a compilation of extensive instream monitoring for the entire Coeur d'Alene basin, with analysis of both total and dissolved metals, including the SFCDA River above Wallace. *Id.* (Because of the voluminous size of the report a hard copy was not provided. The RI/FS study is available at <http://yosemite.epa.gov/r10/cleanup.nsf/basin/Rcmedial+Investigation>).

to the limited laboratory availability for such mercury analysis and the necessity for Hecla to request the fastest possible turn-around-time (TAT) from the laboratory. *See* 2003 Comments, **Exhibit B** at pp. 4-5. Furthermore, Section 9 (Quality Assurance/Quality Control) of EPA-1669 documents minimum requirements of the QA/QC program, including field sample, field blank and field replicate (or duplicate). *Id.* Equipment blanks, blind QC samples, matrix spike samples and matrix spike duplicates are periodically necessary to complete the comprehensive QA/QC program. *Id.* Two field samples (Outfall 001 and Outfall 003), two field blanks (Outfall 001 and Outfall 003), and one field replicate is the minimum requirement to monitor two outfalls. *Id.* These requirements result in analytical costs for sampling two outfalls at \$750.00 per sampling event. *Id.* These costs are significantly excessive where mercury has not been identified as a concern.

In response to Hecla's comments on mercury monitoring, the Region responded to two of the underlying concerns regarding the costs associated with low level mercury monitoring, specifically, by replacing the requirement for 24-hour composite sampling for mercury with grab sampling and reducing the sampling frequency from weekly to twice a month. *See* Response to Comments, **Exhibit J**, § IV, Comment 30. In addition, the Region noted that the compliance schedule for mercury is 5 years, which will allow Hecla time to gather information to apply for an alternative mercury procedure. *Id.*

This response is wholly insufficient and fails to address Hecla's main concern regarding the mercury condition – that the 1600 series mercury sampling and analysis should be waived as inapplicable due to the extensive studies already undertaken by EPA, which do not identify mercury as a concern. The Region did not adequately explain why it chose to retain the requirement for low level mercury monitoring in light of its own studies and in light of all data



which demonstrates that mercury levels are below non-detect and that mercury in the SFCDA River is not an issue. Despite EPA and the state of Idaho's position to limit monitoring costs, EPA arbitrarily included mercury monitoring. Pursuant to 40 CFR § 124.17(a)(2), permitting agencies must "briefly describe and respond to all significant comments on the draft permit." See *In re Steel Dynamics, Inc.*, PSD Appeal Nos. 99-4 and 99-5, 9 E.A.D. 165, n. 31 (EAB 2000). See also *In re Ash Grove Cement Co.*, 7 E.A.D. 387, 417-18 (EAB 1997) (remanding RCRA permit because permitting authority's rationale for certain permit limits was not clear and therefore did not reflect considered judgment required by regulations); *In re Austin Powder Co.*, 6 E.A.D. 713, 720 (EAB 1997) (remand due to lack of clarity in permitting authority's explanation). Specifically, a permit issuer must "articulate with reasonable clarity the reasons for [its] conclusions and the significance of the crucial facts in reaching those conclusions." See *In re Tallmadge Generating Station*, PSD Appeal No. 02-12, 2003 WL 21500414 (EAB, May 22, 2003). The Region's response to comments does not address the numerous studies conducted in the basin, nor does it articulate why low level mercury monitoring requirements are justified in spite of all the evidence and studies demonstrating that mercury is neither a concern in the SFCDA River nor in Hecla's effluent.

**B. Seepage Study as Permit Condition.**

The Lucky Friday Permit requires Hecla to "conduct a seepage study and hydrological analysis to determine if there are unmonitored discharges of pollutants from the Lucky Friday facility Tailings Pond No. 1 and Tailings Pond No. 3 into the SFCDA River." See Condition I.C. Lucky Friday Permit, **Exhibit A**. If there is discharge from outfall 002 for more than 6 months, a seepage study will also be required for tailings pond no. 2. *Id.* The Region justifies the gathering of data through the seepage study in order to determine a hydrological connection between groundwater seepage from the tailings pond and the SFCDA River and to determine

whether such seepage is violating water quality standards. See Response to Comments, Exhibit J, § IV, Comment 38. The Permit condition will not accomplish this result.

Hecla commented in response to both the 2001 and 2003 draft permits that the seepage study requirements are not legally or technically justified. See Exhibits B, C. Hecla specifically commented that the Idaho Department of Water Resources has exclusive jurisdiction over the construction of mine tailings impoundment structures and the NPDES permit cannot intrude on this authority. See Exhibit C at pp. 19-20. Furthermore, the EPA rules do not authorize this type of seepage study. *Id.* See also, Exhibit B at 8. Under the CWA, the EPA may only regulate point sources that discharge to waters of the United States. There is insufficient evidence in the record to support a finding that the tailings ponds are discharging into the South Fork, except at the outfalls. See *American Iron & Steel Institute v. EPA*, 115 F.3d 979, 996 (D.C. Cir. 1997)(stating that effluent limits set on internal waste streams are not justified and the CWA “does not permit this sort of meddling inside a facility”). Internal waste stream monitoring is authorized under EPA rules only when “effluent limitations or standards imposed at the point of discharge are impractical or infeasible.” 40 CFR § 122.45(i). Nothing in the record supports that the limits imposed in the permit to protect water quality in the SFCDA River are impractical or infeasible to protect water quality; therefore, the additional burden placed on Hecla to conduct a seepage study is unjustified.

Hecla further commented that even knowing the estimates of the seepage, it would be technologically impossible to determine what percentage of the seepage, if any, enters the surface water and the impact of such seepage on water quality in the SFCDA River. See Exhibit C at p. 20. Given the uncertainties of numerous flow measurements and error inherent in measuring evapotranspiration rates, measurement errors likely renders any results meaningless.

Even if some unquantifiable seepage is occurring, instream water quality is already accounted for in permit limit derivation calculations. *Id.* Furthermore, the cold water biota use is currently supported in the SFCDA River and immediately downstream of the Outfalls.

The Region's response to comments on the 2001 Draft Permit acknowledges that they "do not intend to assert authority over IDWR's approval of the tailings impoundment." *See* Response to Comments, **Exhibit J**, § III, Comment 75. The Region asserts, however, that because the tailings ponds are near the SFCDA River, it is "reasonable to assume that there is a hydrologic connection" and where there is such connection, the seepage would be considered a point source subject to an NPDES permit." *Id.* The purpose of the study, according to the Region, is to establish such a connection. *Id.*

In response to Hecla's comment that the results of the study would be inconclusive, the Region "agrees that it is difficult to determine the quantity of seepage and what percentage of the seepage enters the surface water. However, we believe these quantities can be estimated and should be estimated in order to determine what extent the seepage might impact the receiving water." *Id.* The Region is therefore requiring the seepage study to determine if there is seepage from the ponds, but admits that the studies may be inconclusive to establish such a connection. This requirement is unsupported and unreasonable and adds an additional, unjustified, costs to the permit implementation. *See* Dexter Affidavit, **Exhibit K**, at ¶ 6. Furthermore, the Region provides no response to Hecla's concern that even if they undertake the costly seepage study, "the results of any such analysis would not in any way quantify alleged 'unmonitored discharges' to the South Fork." *See* 2003 Comments, **Exhibit B** at p. 8.

Because the beneficial use is currently protected in the receiving water, the design and approval of impoundments is under state jurisdiction and the seepage study would be

inconclusive, the inclusion of the seepage study is arbitrary and capricious and an abuse of discretion.

### **C. Variance Request**

EPA failed to act on Hecla's variance request prior to issuance of the permit. Hecla submitted a request for variance for the Lucky Friday permit from lead and zinc water quality criteria on February 21, 2001 prior to issuance of a draft Permit. *See Exhibit D.* Hecla needed a decision from the Region on the variance request prior to Permit issuance in order to make long-term capital investments to the Mine and to evaluate closure of the Lucky Friday Mine due to the economic impacts of compliance. *See Dexter Affidavit, Exhibit K* at ¶ 10. Rather than act on Hecla's variance request, the Region chose not to act on the variance, yet imposed a final permit that will impose increasing annual costs to the Mine. Hecla faces costs of up to approximately \$7 million at the end of the compliance schedule. *Id.* at ¶ 9. *See also*, 2003 Comments, **Exhibit B** at 6 and Exhibit A to comments (attaching worksheets requested by EPA in a February 3, 2003 letter to Hecla's Mike Dexter).

Hecla's comments to the 2003 Revised Draft Permit outlined Hecla's intention to keep the 2001 variance request active and specifically asked that the permit not be finalized until EPA and/or DEQ act upon Hecla's request. *Id.* Hecla has timely responded to all Region requests for additional information. *See Dexter Affidavit, Exhibit K* at ¶ 9. In a letter dated June 9, 2003, over two years after submittal of Hecla's variance request, EPA requested that Hecla formally renew their request for a variance. *See Exhibit L.* Pursuant to the Region's request, Hecla submitted a renewed request for variance on July 11, 2003 requesting a variance from

application of cadmium, lead, zinc and mercury<sup>7</sup> water quality standards that are the basis for the cadmium, lead, mercury, and zinc limits in the Lucky Friday Permit. *See Exhibit E.*

EPA has not acted on the variance request. The Region's response to comments states that "EPA is reviewing this new variance request, including supporting information submitted by Hecla in their July 11, 2003 letter and a June 9, 2003 letter. If EPA approves the variance, then the permit will be modified to incorporate the variance. A proposed variance, and modified permit would be subject to public notice prior to finalization." *See Response to Comments, Exhibit J, § IV, Comment 14.* EPA's inclusion of the effluent limitations for cadmium, zinc and lead without acting on the variance request is unlawful.

The variance process was developed because of a recognition that on certain water bodies affected by EPA 1997 Water Quality Standard, which established a cold water biota designated use for the entire SFCDA River, there were significant questions whether the criteria was attainable. 62 Fed. Reg. 23015 (April 28, 1997). When promulgating the variance proposal, EPA committed to act "expeditiously" on variance requests. 62 Fed. Reg. 41162, 41179 (July 31, 1997). Where an applicant for a variance demonstrates that attaining the water quality standard is not feasible for one of the reasons specified in the regulations, "EPA will incorporate into the permittee's NPDES permit all conditions needed to implement the variance." 40 CFR § 131.33(d). "The practical effect of such a variance is to allow a permit to be written using less stringent criteria, while encouraging ultimate attainment of the underlying standard." 62 Fed. Reg. at 23015. The variance provision is designated to provide relief to the permittee from certain unattainable requirements *before* the permit is issued.

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<sup>7</sup> As noted, there is no data to suggest that mercury is even an issue in the SFCDA yet EPA (fully aware of this data) has requested specific information from Hecla to prove that mercury criteria is not attainable in the SFCDA. *See Exhibit M, August 22, 2003 letter.*

Hecla's variance request has been pending since 2001. The Region did not even respond to Hecla's variance request until nearly two (2) years after it was filed. The Region's characterization of Hecla's "new" variance request in the Response to Comments is disingenuous. The bases for Hecla's variance request are identical to the 2001 variance request, the economic burdens of compliance are the same. Hecla noted in its 2001 variance request that it would commit the capital improvements necessary for water recycling and metals reductions in exchange for a variance on any more stringent requirements. *See Exhibit D*. Rather than act on the variance request, the Region instead made no decision, but nevertheless imposed wastewater recycling. Ultimately Hecla faces the prospect of additional wastewater treatment that will be prohibitively expensive for Hecla to comply. *See Dexter Affidavit, Exhibit K at ¶ 10*. Hecla's variance request clearly demonstrates that Hecla's existing discharge is not adversely affecting aquatic species, that aquatic species in the area of the SFCDA River are fully protected, standards further downstream in the SFCDA River are unattainable and therefore additional limits are not necessary or supportable. *See Exhibits D, E*. The delay in ruling on the variance request and finalizing of the Lucky Friday Permit prior to a determination of the request is an abuse of discretion.

If EPA was unable to act on the request because it was still reviewing information it requested in June 2003, and timely received on July 11, 2003, it should have delayed issuance of the final permit. The variance process, and underlying purpose, is completely undermined by issuing the Lucky Friday Permit without determining and incorporating the variance request. EPA's own rules envision that the agency will act on variance requests filed before issuance of a draft permit prior to final permitting actions. *See e.g., 40 CFR § 124.63(a)*. The very nature of the variance request is to incorporate less stringent standards into the permit, because they are

unattainable or to otherwise inform a facility of its long term obligations. The variance process should not be used as a delay tactic by the Region. The Region's failure to act here, in light of looming permit compliance deadlines is tantamount to a denial of the variance without explanation and without any ability to challenge the decision. Such a delay violates Hecla's due process rights to challenge the Region decisions as authorized by federal law and EPA rules at 40 CFR § 124. It is unreasonable, and an abuse of discretion, to proceed with the issuance of a final permit while reviewing and delaying a decision on a fully documented variance request that has been pending for over thirty (30) months.

Absent remand and a ruling on Hecla's variance request, the cost of implementation of the Lucky Friday Permit will likely be prohibitive and result in closure of the Lucky Friday Mine. Hecla deserves an answer now whether it will be necessary to close the Mine. Many people's livelihood are at stake and should not be subject to the whim of the Region that it will get around to the variance at some unstated time in the future. Hecla raised this concern regarding various conditions in the draft permit, specifically regarding numerous conditions that will be imposed absent a favorable ruling on the variance request. *See* 2003 Comments, **Exhibit B** at p. 4.

Hecla's comments specifically raised the concern that absent a favorable ruling on the variance request, costs associated with permit administration (monitoring, sampling, sample analysis, records) could increase from 5 to 6 times current costs. *See* **Exhibit B** at 6. The permit limits for metals, absent relief from the permit limit derivation process, could impose treatment costs as high as \$5.0 million for capital expenditures. *Id.* Annual operation and maintenance costs, without considering labor, are generally 4% of the capital expenditures. *Id.* Hecla acknowledges that even under the most optimistic permit scenario, both aggressive water

management and additional treatment costs will be incurred. Hecla merely requests certainty with respect to such costs.

In response to these concerns, the Region simply stated that they were in the process of reviewing the variance request. *See Exhibit J*, § IV, Comment 14. The Region provided no explanation or discussion regarding Hecla's concerns over the costs associated with the permit as has currently been issued. Although the Region may ultimately consider these costs and provide some relief by granting the variance request, in the interim, the Region must respond to all significant comments on the permit. *See In re Steel Dynamics, Inc.*, PSD Appeal Nos. 99-4 and 99-5, 9 E.A.D. 165, n. 31 (EAB 2000)(Region must briefly describe and respond to all significant comments on the draft permit). The Region's response that they are reviewing the variance request is insufficient considering that the permit currently imposes unnecessary costs that have not been explained or justified and that the Region had over two years to review the variance request.

The increased costs due to the final Permit, which includes costly and unnecessary conditions given the case-specific factors, could effectively cause the cessation of operations at the Lucky Friday Unit unless reasonable relief from excessive requirements, as allowed in the permitting and regulatory process, is granted. It is unreasonable, and an abuse of discretion for EPA to proceed with issuance of the permit without acting on the variance request.

**D. The Effluent Limits for Metals Should be Expressed as Dissolved Metals.**

The Lucky Friday Permit expresses the effluent limits for metals as "total recoverable metal." *See Exhibit A*. Hecla objects to the use of "total recoverable metal" in the effluent limits and specifically requested in its comments to the 2001 draft permit that the metal limits be expressed as "dissolved" metals. *See 2001 Comments, Exhibit C* at pp. 13-14. The Region has the discretion to express the effluent limits as dissolved rather than total metals. *See 40 CFR §*



122.45. The Region's refusal to exercise its discretion to express effluent limits as "dissolved" is unwarranted where both the site specific criteria and instream standards under Idaho's water quality criteria are expressed in terms of dissolved metals.

Federal regulations provide that permit limits be based on "total recoverable metals." 40 CFR § 122.45(c). However, regulatory language at 122.45(c)(1) provides an exception where "an applicable effluent standard or limitation has been promulgated under the CWA and specifies the limitation for the metal in the dissolved or valent or total form." *Id.* at 122.45(c)(1). Water quality criteria, based on dissolved metals, were promulgated for Idaho under the National Toxics Rule at 40 CFR § 131.36(b)(1) and subsequently incorporated in Idaho regulations at IDAPA 58.01.02-120 and approved by EPA. Because Idaho's effluent standards, promulgated pursuant to the CWA, are expressed in dissolved form, the EPA should exercise its discretion to express the effluent limitations in the permit in dissolved form.

The Region's response to comments argues the exception asserted by Hecla is inapplicable because the "Idaho water quality criteria is not an 'effluent standard or limitation' developed under 301(b)(1)(B). *See* 33 USC § 1311(b)(1)(B). Therefore the expression of metal limits as total recoverable is retained in the final permit." *See* Response to Comments, **Exhibit J**, § III, Comment 38. The Region does not provide the requisite explanation or authority for such a narrow reading of this exception. *See, In re Austin Powder Co.*, 6 E.A.D. 713, 720 (EAB 1997) (remand due to lack of clarity in permitting authority's explanation). Contrary to the Region's response to comments, the Rule is not limited to "standards and limitations" developed under "§ 301(b)(1)(B)." 40 CFR § 122.45(c)(1) applies to all standards and limitations "promulgated under the Clean Water Act." Additionally, the definition of "effluent limitation" under the Clean Water Act is broad and includes restrictions established by the "state" or "EPA".

33 USC § 1362(11). The adoption of the NTR by EPA, and the state's incorporation of the NTR by reference into state rules along with EPA's subsequent approval, clearly falls within a "limitation" promulgated under the CWA within the meaning of 40 CFR § 122.45(c). The Region has failed to provide explanation and justification for refusal to exercise its discretion to express effluent limits in dissolved rather than total metals; therefore, this condition should be remanded.

**E. The Permit Should Include a Compliance Schedule or Implementation Period for Flow-Proportioned Composite Sampling, Continuous Effluent Flow Monitoring and In-Stream Flow Monitoring.**

The permit effluent limitations and monitoring requirements in the Lucky Friday Permit set forth specific requirements for flow-proportioned composite sampling, including continuous effluent monitoring, and instream flow monitoring. *See* Lucky Friday Permit, **Exhibit A**. Hecla specifically requested a compliance schedule in the permit that addressed "*both* effluent limits *and* monitoring (to the extent that ultimate monitoring may require researching, purchasing, installing, implementing/de-bugging newly installed monitoring equipment." *See* 2003 Comments, **Exhibit B** at 9 (emphasis added). No compliance schedule or implementation schedule was granted for flow-proportioned composite sampling, continuous effluent flow monitoring and instream flow monitoring. *See* Lucky Friday Permit, **Exhibit A**. Hecla cannot comply with these requirements at this time. *See* Dexter Affidavit, **Exhibit K** at ¶ 7. Hecla intends to comply with such requirements, but is unable to comply prior to the September 14, 2003 effective date of the Lucky Friday Permit and therefore is forced to appeal the provision on noncompliance with the NPDES Permit. *Id.* at ¶ 7. The flow-proportioned composite sampling, including continuous effluent flow monitoring, will require Hecla to run electricity to the sites, order equipment and storage buildings, and install and de-bug the equipment. *Id.* at ¶ 7. Similarly, the instream flow monitoring requires new equipment and installation. *Id.* at ¶ 7. It is

physically impossible for Hecla to obtain the necessary equipment and install such equipment prior to September 14, 2003. *Id.* The refusal to grant a compliance schedule or implementation period where Hecla is unable to meet these requirements prior to the effective date of the permit is unreasonable. If Hecla is able to acquire and install the necessary monitoring equipment during this appeal, Hecla will notify the EPA and withdraw the appeal of these conditions.

**F. Method Detection for Zinc for Instream Water Quality is Overly Stringent**

The final Lucky Friday Permit sets method detection limits (“MDLs”) for ambient water quality monitoring in the SFCDA river. *See Exhibit A, I.D.2, table 7.* Hecla objects to the MDL for zinc as overly stringent.

Hecla did not previously comment on the MDL for zinc because the addition of the MDLs for ambient water quality monitoring for cadmium, lead and zinc were a change from the draft to final permit. Although generally only those issues and arguments raised during the comment period can form the basis for an appeal, the EAB makes exception for those issues or arguments that “were not reasonably ascertainable at the time of the comment period.” *See In re: MCN Oil & Gas Co. UIC Appeal No. 02-03*, 2002 WL 31030985 (EAB., Sep.4, 2002)(stating that a person who failed to file comments on the draft appeal may nevertheless appeal to the extent that there are changes from the draft to final permit decision). *Citing 40 CFR § 124.13; In re: New England Plating, NPDES Appeal No. 00-7*, 9 E.A.D. 726 (EAB, March 29, 2001). Because the ambient water quality monitoring for zinc was not included in the draft permit, and is included for the first time in the final permit, it was not “reasonably ascertainable” during the comment period and Hecla should be allowed to appeal this previously unknown condition.

The MDL for cadmium and lead are acceptable and easily obtainable at most commercial labs. *See Affidavit of Bob Tridle in Support of Hecla Mining Company’s Petition for Review (“Tridle Affidavit”), Exhibit N at ¶ 5.* However, the final permit set the MDL for zinc at 5 ug/L.

This MDL for zinc is excessively stringent to monitor instream aquatic criteria and therefore is not rational. *See In re Tallmadge Generating Station, supra*, 2003 WL 21500414 (requiring that Region's technical judgment be both rational and supportable). *See also* Tridle Affidavit, **Exhibit N** at ¶ 6. Calculation of the instream aquatic criteria using the site specific criteria and an instream hardness of 25 mg/L results in a instream aquatic criteria of 78 ug/L. *Id.* at ¶ 7. Hardness of 25 mg/L is the lower limit that Idaho uses to calculate hardness based criteria (i.e. if the instream hardness is 20 mg/L then 25 mg/L is used to calculate the criteria). *Id.* The criteria increases as hardness increases (i.e. at hardness of 74 mg/L the instream aquatic criteria for zinc is 160 ug/L). *Id.* The most common method for zinc analysis is EPA method 200.7 which has a MDL for zinc of 10 ug/L. *Id.* at ¶ 8. Therefore, Hecla requests that the EAB remand the Permit to the Region to establish an MDL of 10 ug/L for zinc be substituted in Table 7.

**G. The Interim Limits Are Not Based On Past Performance.**

The Lucky Friday Permit, Table 5, establishes "Interim Effluent Limitations" for cadmium, lead, mercury and zinc. *See Exhibit A*. The inclusion of the interim limitations for lead, cadmium and zinc are erroneous because the limits are not based on actual past performance.

The "Interim Effluent Limitations" were allegedly included in the final permit pursuant to IDEQ's certification under section 401 of the CWA. However, the Region calculated the interim limits and was integrally involved in their development. *See Exhibit O*. IDEQ issued its 401 certification letter on June 17, 2003, which included for the first time the proposed Interim Effluent Limitations. Hecla should be allowed to appeal these interim limits even though Hecla did not previously raise this issue during the comment period because the new interim limits represent a change from the draft to final permit and the issues and arguments "were not reasonably ascertainable at the time of the comment period." *See In re: MCN Oil & Gas Co.*

*UIC Appeal No. 02-03*, 2002 WL 31030985 (EAB., Sep.4, 2002). Further, based on the Region's calculations of interim limits, Hecla does not believe the interim limits are solely "attributable" to the state certification within the meaning of 40 CFR § 124.16.

EPA's establishment of interim limits is erroneous because the limits are not truly based on past performance. Table 5 provides the interim discharge limits for cadmium, lead, zinc and mercury, including the maximum daily limit (MDL) and average monthly limit (AML) for each. See Lucky Friday Permit, **Exhibit A**. The Table states that the "Basis" for the interim discharge limits for Outfall 001 are as follows: (1) Cadmium – "Maximum of the data from May 2001 – Jan. 2002 rounded up to the next 1 ug/l. Two outliers were removed from the data set."; (2) Lead – "Maximum of the data from January 1997 – Jan. 2002 rounded up to the next 10 ug/l. The AML is the technology-based limit. 40 CFR § 125.3 requires that technology-based limits be met by March 31, 1989."; (3) Zinc – "Maximum of the data from Jan. 1997 – Jan. 2002 rounded up to the 10 ug/l and with 4 outliers removed." *Id.* Similar data was used as the basis for the interim discharge limits for lead, zinc and mercury from Outfall 003. *Id.* IDEQ's § 401 Certification states that "[t]he interim limits have been set at levels the permittee has shown they can achieve." See **Exhibit H** at p. 3. This is incorrect.

Hecla has estimated that it will exceed the interim limits for cadmium during the compliance schedule over 12.5% of the time. See Dexter Affidavit, **Exhibit K** at ¶ 11. Moreover, the interim limits did not take into consideration the water recycling requirements under the Permit which may result in higher concentrations of metals although corresponding lower loads to the SFCDA River (in pounds per day) may occur. *Id.*

The EPA erred by including these limits in the final permit because they are not truly based on actual past performance and, contrary to the Region's finding, Hecla will not achieve

these interim limits. The interim limits should be based upon maximum concentrations reported over the past five years DMR's. Thus Hecla requests that the Board remand the Permit to the Region to recalculate the interim limits.

**H. The Permit Should Allow for an Alternative Upper Limit for pH.**

The Lucky Friday Permit states that "the pH must not be less than 6.5 standard units (s.u.) nor greater than 9.0 s.u." See **Exhibit A**. Hecla specifically sought EPA to authorize a pH limit of 10 s.u. pursuant to 40 CFR § 125 subpart D, which establishes criteria and standards to be used in determining whether effluent limitations alternative to those required by effluent limitations guidelines should be imposed on the discharger because of factors relating to the dischargers facilities, equipment, processes are fundamentally different from factors considered by EPA in development of the effluent limitation guidelines. See 2003 Comments, **Exhibit B** at 11, 2001 Comments, **Exhibit C** at 16. In the Region's response to comments, it declined to alter the pH upper limit, stating that Hecla failed to demonstrate the factors relating to Helca's facilities, equipment or processes are fundamentally different from the factors considered by EPA in development of the effluent limitation guidelines for pH. See Response to Comments, **Exhibit J**, § IV, Comment 24.

The pH upper limit of 9.0 s.u. is technology-based and should be water quality-based. In accordance with 40 CFR § 125, subpart D, an exception to the pH limit should be authorized by EPA because it will not affect water quality and will result in a net improvement to water quality. The precipitation of dissolved metals requires a pH above 9.0 s.u. With an upper permit limit of 9.0 s.u., and optimum precipitation of dissolved metals above this level, it would be necessary to add acid to reduce the pH prior to discharge. The handling of acids, both in transportation and within the operation, is not warranted when pH is rapidly dissipated instream after mixing. In fact, this effluent limitations technology-based limit, for those subcategories with dissolved

metals in untreated effluent, are often above 9.0 s.u. with certain categories having pH upper limits at 10.0 s.u. (e.g. 40 CFR § 461 for battery manufacturing has distinct subparts for lead, cadmium, and zinc with an upper pH limit of 10.0 s.u. – these categories would be treating to remove dissolved lead, zinc, and cadmium also). An upper pH of 10.0 s.u. is justified to meet water quality-based limits where metal precipitation is involved and will result in improved water quality conditions. Hecla has therefore demonstrated that an exception to the pH limit should be authorized. Further, the Region failed to comply with their own regulations at 40 CFR § 440.131(d) which authorizes a pH of above 9.0 for the ore mining and dressing point source category. EPA authorized a higher pH pursuant to this regulation to another Mine that discharges to the SFCDA River. *See* Sunshine Mine Permit, attached as **Exhibit P**. There is no basis justified by the Region for treating Hecla differently.

#### **I. Whole Effluent Toxicity Testing**

The Lucky Friday Permit requires both bioassessment monitoring and Whole Effluent Toxicity (“WET”) testing as conditions of the permit. *See Exhibit A*, condition I.B. Hecla has submitted significant and substantial comments objecting to both of these permit requirements. *See Exhibits B, C*. Because of the existing health of the receiving water at current levels of discharge, these two requirements are not legally or factually justified. Hecla has specifically challenged the bioassessment monitoring with the state of Idaho in a Contested Case proceeding. *See Exhibit I*. However, until this is resolved, Hecla seeks review of the duplicative and onerous requirement of WET testing.

The state of Idaho plays a key role in ensuring the narrative criteria in Idaho’s Water Quality Standards are not exceeded by the discharge. *See* IDAPA 58.01.02.200, 02 (stating that “state water should be free of toxic substances in concentrations that impair beneficial uses). There is no authority under state standards to require both WET testing and instream

bioassessment monitoring. IDAPA 58.01.02.090, 03. Idaho regulations at IDAPA 58.01.02.210.04 allow for the use of WET or instream benthic assessments, not both. EPA responds that although the regulations use the term "or," they do not specifically prohibit both and that the WET testing and bioassessment monitoring in this permit is not being used to develop toxic substance criteria so these regulations are not applicable. See Exhibit H, § III, Comment 37. A plain reading of this requirement clearly demonstrates that either one "or" the other is required, not both. Therefore, it was an abuse of discretion for EPA to require both WET testing and bioassessment monitoring.

In its response to comments, EPA references federal regulations at 40 CFR § 122.44(d)(1) as justification for inclusion of biomonitoring. See Exhibit H, § III, Comment 57. The applicability of this section has not been justified. In its comments, Hecla expressed concern regarding the blanket approach EPA appears to be taking in applying the requirements of 40 CFR § 122.44(d)(1). The intent of this regulation, as clarified in the June 2, 1989 Federal Register (54 Fed. Reg. 23871-72) is limited to situations where "controls on individual pollutants do not adequately protect water quality". The tens of millions of dollars of studies on the basin have clearly identified lead, zinc, and cadmium as the limiting pollutants and EPA's recent approval of site-specific criteria for these constituents reaffirms that the criteria is protective. In so far as EPA is requiring compliance with the site specific criteria at the point of discharge, there is no justification for WET testing.

Further, the intent of this § 122.44 is to implement EPA's National Policy on Water Quality-Based Permit Limitations for Toxic Pollutants (49 Fed. Reg. 9016-9019, 9 March 1984). EPA is not adhering to this policy in their interpretation of this regulatory provision. This policy indicates anything but an all-inclusive applicability, stating that:



Where there is a significant likelihood of toxic effects to biota in the receiving water, EPA and the States may impose permit limits on effluent toxicity and may require an NPDES permittee to conduct a toxicity reduction evaluation.

49 Fed. Reg. 9017, c.2)(emphasis added). In situations where additional treatment will be added to a facility, the policy further indicates that testing will be required after the treatment upgrades have been met, yet the permit requires biomonitoring immediately. *Id*

In response to these comments, EPA simply stated that “EPA does not know if there is a significant likelihood of toxic effects and therefore whether or not permit limits on effluent toxicity are needed. WET testing is required in the permit in order to make this determination.” *See Exhibit H*, § IV, Comment 36. However, the policy particularly states that there should be a determination of a significant likelihood of toxic effects prior to requiring WET testing. Clearly, the policy does not support the circular reasoning of the EPA – that WET testing should be used to determine if there is a significant likelihood in order to require WET testing.

Again, the existing health of the receiving water at current levels of discharge undermines EPA’s requirement for WET testing. EPA argues that the need for WET testing applies regardless of the attainment of designated use. *Id.* at § III, Comment 63. This all-inclusive approach is not justified by EPA’s policies.

EPA has failed to provide a legal or factual basis for WET testing and bioassessment monitoring in the permit especially given the existing health of the receiving waters at current levels of discharge. The inclusion of WET testing, in the permit is arbitrary and capricious and an abuse of discretion.

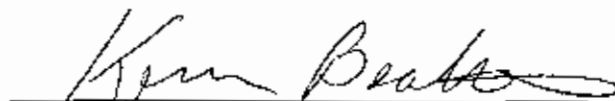
## V. CONCLUSION

For the reasons stated herein, the EAB should grant review of Hecla's petition for review of the Lucky Friday Permit and set aside, modify, and/or remand the unlawful conditions in the permit.

Dated this 10<sup>th</sup> day of September, 2003.

Respectfully submitted,

STOEL RIVES LLP



Kevin J. Beaton  
Attorneys for Hecla Mining Company

**CERTIFICATE OF SERVICE**

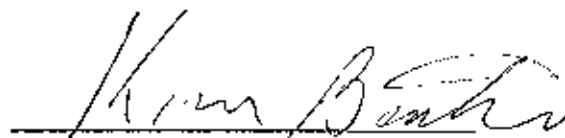
I hereby certify that the Memorandum in Support of Hecla Mining Company's Petition for Review was served on this 10th day of September, 2003 as follows:

By overnight delivery to:

United States Environmental Protection Agency  
Clerk of the Board, Environmental Appeals Board  
607 14th Street, NW, Suite 500  
Washington, DC 20005

By regular mail to:

Director, Office of Water  
United States Environmental Protection Agency  
Region X  
1200 Sixth Avenue  
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