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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 C.F.R. § 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 December 28, 2005. A copy of the Lucky Friday Permit is attached hereto as **Attachment A**.¹ 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").² See 33 U.S.C. §§ 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 C.F.R. § 124.19(a). Hecla timely submitted written comments on the June 2005 permit modification for the Lucky Friday Unit on July 15, 2005 ("2005 Comments"), attached hereto as **Attachment B**. 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

¹ For ease of reference, documents submitted concurrently with this Petition for Review are referred to as "Attachments," documents referenced and incorporated from previous briefing before the Environmental Appeals Board (NPDES Appeal No. 03-10) are referred to by their original designation, for example, "Exhibit A to 2003 Petition for Review." A complete list of the exhibits incorporated from Hecla's previous briefing is included with the List of Attachments.

² Because the state of Idaho has not received authorization to implement its own NPDES permit program, the Region issues NPDES permits in Idaho.

review by the Environmental Appeals Board ("EAB"). Specifically, Hecla seeks review of the following:

- A. Failure to adjust the upper pH limit in the Lucky Friday Permit.
- B. Inclusion of whole effluent toxicity sampling condition.

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.

The history of the Lucky Friday Mine's NPDES permit is lengthy and complex.³ 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, 1977.⁴ On September 28, 1990 a draft NPDES permit for the Lucky Friday Unit was issued for public notice, but was never finalized.

In 1998, the Idaho Department of Environmental Quality ("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.

³ A more detailed history of the discharges and outfalls at the mine and the history of the permit is included in Hecla's 2003 Petition for Review, NPDES Appeal No. 03-10, p. 2-6.

⁴ The Region reissued a NPDES Permit to Hecla in 1977 which was stayed due to an appeal.

On February 21, 2001, prior to the Region issuing its draft permit, Hecla timely requested a water quality variance from EPA. 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* to 2003 Petition for Review.

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 U.S.C. § 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* to 2003 Petition for Review, and revised supporting Fact Sheet ("2003 Fact Sheet"), *Exhibit G* to 2003 Petition for Review, 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.* Hecla timely submitted written comments on the 2003 Revised Draft Permit on April 11, 2003 ("2003 Comments"). *See Exhibit B* to 2003 Petition for Review.

On June 17, 2003 the state of Idaho issued a 401 Certification of the Lucky Friday Permit. *See Exhibit H* to 2003 Petition for Review.⁵ Hecla timely appealed certain conditions in the state 401 Certification. *See Exhibit I* to 2003 Petition for Review.

⁵ Pursuant to Idaho administrative law, the June 2003 state 401 Certification was not final since Hecla timely initiated a contested case proceeding regarding the certification prior to the issuance of the

On August 12, 2003, the Region issued its "Response to Comments," **Exhibit J** to 2003 Petition for Review, which included responses to comments submitted on the 2001 and 2003 Draft Permit, and issued a permit for the Lucky Friday Mine ("2003 Permit"). **Exhibit A** to 2003 Petition for Review.

On September 11, 2003 Hecla timely filed a Petition for Review seeking review of nine conditions contained in the 2003 Permit.⁶ See 2003 Petition for Review, NPDES Appeal No. 03-10. The Region opposed Hecla's request for review.

On July 15, 2004 the State of Idaho issued a "revised" section 401 Certification ("2004 State 401 Certification").⁷ See **Attachment C**. Hecla filed a request with the Region pursuant to 40 C.F.R. §§ 122.62, 124.5 and 124.55 seeking incorporation of the 2004 Certification into the 2003 Permit. See **Attachment D**. Hecla also filed a motion asking the EAB to supplement the record of its 2003 Petition for Review to include the 2004 Certification and sought remand of the five conditions in the 2003 Petition for Review that were potentially impacted by the 2004 Certification. See Motion to Supplement Record and Brief in Support, NPDES Appeal No. 03-10. On October 13, 2004 the EAB issued an order remanding the five conditions raised in the 2003 Petition for Review that could be affected by Hecla's request for modification of the permit to incorporate the 2004 Certification. See Remand Order and Order Requiring Status Report NPDES Appeal No. 03-10 ("Remand Order").

Lucky Friday Permit. See Idaho Code §§ 67-5254 and 67-5270 (setting forth when final agency action occurs under Idaho law.).

⁶ Hecla's Status Report, filed concurrently herewith, provides a summary of the current status of the nine conditions that were subject to the 2003 Petition for Review.

⁷ Although the 2004 Certification is commonly referred to as a "revised" certification, Hecla disputes that the certification was final until the 2004 Certification. See *supra* note 5.

On March 8, 2005, the Region issued its final decision denying Hecla's variance request. *See Attachment E.* Hecla has not challenged this denial.

On June 21, 2005, the Region issued a draft modification to the Lucky Friday NPDES permit in response to the 2004 State 401 Certification, the EAB remand order and Hecla's request for modification. *See Attachment F, Fact Sheet for Permit Remand and Modification Proceedings ("2005 Fact Sheet").* Hecla timely submitted written comments on the June 2005 draft permit modification for the Lucky Friday Unit on July 15, 2005 ("2005 Comments"). **Attachment B.** The Region issued its response to comments on the permit modification and remand proceedings on December 27, 2005 ("2005 Response to Comments"). *See Attachment G.* On December 28, 2005 the Region completed the modification and issued a modified permit ("2005 Permit"). *See Attachment A.*⁸ Hecla hereby timely submits its Petition for Review of certain conditions contained in the 2005 Permit.⁹

III. STANDARD OF REVIEW

Under 40 C.F.R. § 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. 40 C.F.R. § 124.19(a); *see In re City of Marlborough, Massachusetts Easterly Wastewater Treatment Facility*, NPDES Appeal No. 04-13, slip op. at 7 (EAB, August 11, 2005). The Board analyzes NPDES permits

⁸ On December 28, 2005 the Region also sent a letter regarding its completion of the remand proceedings. **Attachment H.** The letter outlines the process before the EAB, but is unclear regarding the requirements for an appeal; therefore, Hecla has followed the regulations and EAB's status report in pursuing this appeal.

⁹ Although these issues were previously raised in the 2003 Petition for Review, the EAB Remand Order provides that parties who participated in the remand proceedings, and were not satisfied with the Region's decision on remand, should file a Petition for Review pursuant to 40 C.F.R. § 124.19. Remand Order at 13.

guided by the preamble to the part 124 regulations, which recognizes that the power of review should only be “sparingly exercised” and most permit conditions should be finally determined at the Regional level. *Id. citing* 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*, 10 E.A.D. 297, 304 (EAB 2002)(quoting 40 C.F.R. § 124.13)(citation omitted). 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 C.F.R. § 124.19(a); *In re City of Marlborough*, NPDES Appeal No. 04-13, slip op. at 7 (EAB, August 11, 2005)(citations omitted).

IV. ARGUMENT

A. The Region Erred by Failing to Adjust the Upper pH Limit.

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 Attachment A, ¶ I.A.3*. Hecla has continuously and specifically requested that EPA authorize an alternative upper pH limit of 10 s.u. *See* 2005 Comments, **Attachment B** at 1-4; 2003 Comments, **Exhibit B** to 2003 Petition for Review at 11; 2001 Comments, **Exhibit C** to 2003 Petition for Review at 16. The State of Idaho’s 2004 Certification specifically allows for a mixing zone of 25% for pH above 9.0. EPA’s regulations also allow for an adjustment of the upper pH limit to meet the metals limits in the permit. *See* 40 C.F.R. 440.131(d). The Region did not incorporate the State of Idaho’s revised mixing zone for

pH and declined to change the upper pH limit in the permit based on 40 C.F.R. § 440.131(d).

See 2005 Response to Comments, **Attachment G** at 6-8.

The Region's response to comments regarding the pH condition is inadequate and erroneous. In addition, the Region's adoption of a new standard for granting an adjustment of the upper pH is arbitrary and capricious and an abuse of discretion. Finally, the Region's failure to adjust the upper pH limit in the Lucky Friday Permit is not rational in light of the information in the record.

1. The Region's Dismissal of Hecla's Comments Requesting an Adjustment of the Upper pH Limits is Erroneous.

a. The Region erred by dismissing Hecla's arguments as untimely.

The Region inappropriately dismissed and failed to adequately respond to Hecla's request to alter the upper pH limit. In particular, the Region erroneously found that Hecla's comments were untimely. See 2005 Response to Comments, **Attachment G** at 6. Hecla timely submitted comments regarding the pH issue during the public comment period on the 2005 draft permit, and specifically cites 40 C.F.R. § 440.131(d) as the basis for this adjustment. See **Attachment B** at 2. The Region nevertheless found the comments untimely, erroneously focusing on Hecla's failure to cite 40 C.F.R. 440.131(d) as the basis for increasing the pH limit during the *previous* comment period in 2003. See **Attachment G** at 6 (referencing the 2003 permitting action and stating that "Hecla did not cite 40 C.F.R. 440.131(d) as a basis for increasing the [pH] limit."). The Region's response is particularly disingenuous since two key decisions – the variance denial and revision of the state 401 certification -- have changed the context of the pH issue; therefore,

Hecla's argument and reliance on 40 C.F.R. 440.131(d) were not ripe during the 2003 comment period.¹⁰

First, the Region has finally issued a decision denying Hecla's variance request, whereas it had failed to act on this request prior to issuance of the 2003 Permit. See March 8, 2005 letter denying variance request, **Attachment E**. Prior to issuance of the 2003 draft permit, Hecla had requested a variance from application of the cadmium, lead, zinc and mercury water quality standards. See **Exhibits D, E**, 2003 Petition for Review. The Region did not act on this request and used these metals standards as the basis for the limits in the Lucky Friday Permit. See **Exhibit E**, 2003 Petition for Review.¹¹ Because Hecla's request for variance was pending during the 2003 permitting action there was an open question as to whether Hecla would ultimately need to treat to the metals limits in the permit. The Region did not act on the request until almost two years after the permit was issued and finally denied Hecla's request for variance in March 2005. See **Attachment E**.¹² Hecla is now faced with treating the effluent to meet the water quality based limits in the permit. Hecla's 2005 comments demonstrate that the most

¹⁰ Hecla cited 40 C.F.R. § 440.131(d) in its Petition for Review as an additional basis for providing an adjustment to the upper pH limit. The Region acknowledged that it was aware of this argument. See **Attachment G** at 6 (stating that "Hecla did cite this provision in its brief to the EAB, however, that was after the 2003 permit was issued.")

¹¹ Hecla's 2003 Petition for Review specifically challenged the Region's failure to act on the variance request. In its response, the Region argued that the EAB did not have jurisdiction to hear Hecla's challenge and therefore should not review the Region's failure to act on the variance request prior to issuance of the permit. See Response to Petition for Review, NPDES Appeal No. 03-10.

¹² During the 2003 comment period and in its Petition for Review of the 2003 permit Hecla requested an alternative upper pH limit based on a fundamentally different factor (FDF) variance at 40 C.F.R. Part 125, subpart D. This argument was negated by the Region's denial of Hecla's variance request. To establish a FDF variance Hecla would be required to demonstrate pH adjustment costs are wholly out of proportion to pH costs considered by EPA in setting the effluent limits at 40 C.F.R. Part 440. However, EPA's subsequent denial of Hecla's request for a variance to water quality based limits was based on a finding by the Region of no economic hardship. See **Attachment E**. Therefore, Hecla believes it is futile to further pursue an economic based FDF variance request to EPA.

viable treatment option to achieve these limits is neutralization and sedimentation. *See* 2005 Comments, **Attachment B** at 2. However, this process often results in a discharge of pH above 9.0 s.u. *Id.* (*citing* Centra Conceptual Design Report (Centra Consulting Inc., August 2001)(“Centra Report”). EPA’s regulations acknowledge this, and allow for the pH limit in the final effluent to exceed 9.0 where the application of neutralization and sedimentation technology to comply with the relevant metals limits results in an inability to comply with the pH range of 6 to 9. *See* 40 C.F.R. § 440.131(d).

Second, the arguments underlying use of 40 C.F.R. § 440.131 as a basis for adjusting the upper pH limit had not ripened prior to revision of the state 401 certification. The June 2003 section 401 certification was silent regarding a mixing zone for pH. *See Exhibit H*, 2003 Petition for Review. However, a “revised” section 401 certification was issued after the 2003 Permit, in July 2004. *See* 2004 State 401 Certification, **Attachment C**. The 2004 certification provides for a mixing zone of 25% for pH above 9.0 s.u. *Id.* The state’s revision now allows Hecla’s discharge to exceed 9.0 s.u. *Id.* The state certification also confirms that an adjustment of the upper pH will not result in the degradation of the water quality in the receiving stream. *Id.* Absent a mixing zone authorization by the state, EPA will not authorize discharges that exceed state water quality standards.¹³ Therefore, the state’s certification provides the basis for adjustment of the pH based on 40 C.F.R. § 440.131(d), which also requires evidence that water quality will not be degraded.¹⁴

¹³ Idaho water quality standards require a pH of 6.5 to 9.0 s.u. in the receiving water. *See* IDAPA 58.01.02.250.

¹⁴ The state certification also confirms that adjustment of the upper pH limit conforms to the overriding intent of the Clean Water Act – to meet applicable criteria instream.

The variance denial and 2004 State 401 Certification, which both occurred subsequent to the 2003 comment period and permit provide the basis for Hecla's current argument that the Region should adjust the upper pH limit in the permit based on 40 C.F.R. § 440.131. Because this argument is based on events that happened subsequent to the 2003 permitting, this argument was not ripe and Hecla could not reasonably anticipate this argument during its 2003 comments. *See* 40 C.F.R. § 124.13 (requiring that persons raise "reasonably ascertainable issues" and "reasonably available arguments"). Nevertheless, Hecla timely submitted comments regarding the pH adjustment during the 2005 comment period on the reopened permit conditions and the issue was properly before the Region. The Region erred by concluding that this argument was untimely. Furthermore, because the Region dismissed the argument as untimely, the Region failed to provide adequate consideration of Hecla's request.¹⁵

b. Hecla's comments meet the specificity requirement.

The Region has attempted to create a hypertechnical and arbitrary bar to submission of comments by requiring that commenters cite to particular regulations, and by asserting that comments are only allowed on a reopened permit condition if the argument was raised during the original permitting decision. *See* 2005 Response to Comments, **Attachment G** at 6. The Region's position is an erroneous conclusion of law that is not supported by the regulations.

Hecla properly and timely raised, with the requisite specificity, the pH issue in its 2005 comments. *See Attachment B* at 1-4. The regulations require commenters to raise all

¹⁵ Pursuant to 40 C.F.R. § 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.*, 9 E.A.D. 165, n. 31 (EAB 2000). The Region's summary rejection of Hecla's arguments does not reflect the considered judgment required by regulators. *See In re Ash Grove Cement Co.*, 7 E.A.D. 387, 417-18 (EAB 1997)(remanding

reasonably ascertainable issues and submit all reasonably available arguments supporting their position prior to the end of the public comment period. 40 C.F.R. § 124.13. The EAB has further clarified that to preserve an issue for appeal; comments must be raised with the “specificity” to ensure that the Region has an opportunity to address potential problems with a draft permit before it becomes final. *See In re: New England Plating Co.*, 9 E.A.D. 726 (EAB 2001).¹⁶ The regulations do not require, as the Region suggests, that a commenter must cite the specific regulation upon which relief is requested or that regulations are somehow void if not raised by the regulated community. Regardless, Hecla cited the specific regulation it is relying on and went beyond what is required to raise the pH issue before the Region. Hecla’s comments provided the Region ample opportunity to address the pH issue in the draft permit.

Contrary to the Region's contentions, the regulations also do not require that arguments on a reopened permit condition must have been raised during the previous comment period. The regulations provide that when a permit is modified, only the conditions subject to modification are reopened. 40 C.F.R. § 124.5(c)(2) . However, conditions subject to the modification are reopened and the regulations reset and renew the public notice and comment on these potentially modified conditions. *See* 40 C.F.R. § 124.5(c)(requiring preparation of draft permit under 40 C.F.R. § 124.6, which triggers public comment and notice requirements). Here, the pH issue was reopened based on the remand by the EAB and 2004 State 401 Certification. *See* Remand Order, NPDES Appeal No. 03-10; 2005 Fact Sheet, **Attachment F**. Any interested party was invited to

RCRA permit because permitting authority’s rationale for certain permit limits was not clear and therefore did not reflect considered judgment required by regulators).

¹⁶ However, the EAB will consider comments not specifically raised during the comment period that “are very closely related” to challenges that were raised, and the Region had the opportunity to address the concerns in its response to comments.” *Id.* This approach has been adopted to avoid a

submit comments on this condition. *See* 2005 Fact Sheet, **Attachment F** at 1-2. There is no requirement that the comments submitted on a reopened condition must have been previously submitted. Such a requirement would completely negate the need to reopen the permit condition for public comment.

The Region failed to respond to and adequately address Hecla's comments based on the Region's erroneous conclusion that the comments were untimely. Therefore, the EAB should review and remand this permit condition.

2. The Region's Failure to Adjust the Upper pH Limit Despite the Change in the State 401 Certification is Erroneous.

The 2004 State 401 Certification authorized a mixing zone of 25% for pH above 9.0 s.u., however, the Region declined to make this adjustment in the permit. The Region rejected this change, stating that the upper pH limit is technology-based and does not allow for a mixing zone. *See Attachment F* at 18. Hecla submitted significant comments seeking clarification of the Region's position. *See Attachment B* at 1. The Region does not provide an adequate response and simply restates their position that the upper range is technology-based and does not allow for a mixing zone. *See Attachment G* at 6. The Region erred by failing to articulate its reasoning on this key issue. *See In re Tallmadge Generating Station*, PSD Appeal No. 02-12, slip op. at 17 (EAB, May 21, 2003)(requiring permit issuer to "articulate with reasonable clarity the reasons for [its] conclusions and the significance of crucial facts in reaching those conclusions."). Hecla also commented regarding the need to incorporate the state certification of the mixing zone based on the overriding intent of the CWA to meet the applicable instream criteria and to recognize,

"hypertechnical approach to issue preservation" while simultaneously maintaining the importance of allowing the Region the first opportunity to consider an issue. *Id.*

preserve and protect the States' rights to manage their water resources. See 2005 Comments, Attachment B at 1. Again, the Region does not respond to this comment.

3. The Region Acted Arbitrarily by Setting a New Standard for Adjusting the Upper pH Limit.

Hecla meets the standard for an adjustment of the upper pH limit based on 40 C.F.R. § 440.131(d). The Region erred by holding Hecla to a different standard than required under the regulations.¹⁷

In its response to comments EPA recognized that the regulations provide a basis for increasing the upper pH limit specified in the effluent limitation guidelines and recognized that in "many cases" a pH adjustment is required to precipitate metals. See 2005 Response to Comments, Attachment G at 6-7. In particular, 40 C.F.R. § 440.131(d) states: "Where the application of neutralization and sedimentation technology to comply with relevant metals limitations results in an inability to comply with the pH range of 6 to 9, the permit issuer may allow the pH level in the final effluent to slightly exceed 9.0 so that the copper, lead, zinc, mercury, and cadmium limitations will be achieved." When EPA proposed 40 C.F.R. § 440.131 it provided that a pH adjustment was authorized "if evidence is submitted to the permitting authority demonstrating that this provision will not result in the degradation of water quality in

¹⁷ Hecla did not previously comment on the Region's standard for applying 40 C.F.R. § 440.131 because this standard had not been articulated to Hecla nor included in the draft 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, slip op. at 12 (EAB, September 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 C.F.R. § 124.13)(citations omitted); *In re: New England Plating*, 9 E.A.D. 726 (EAB, March 29, 2001). Hecla specifically challenged the Region's failure to adjust the upper pH limit. In addition, because this newly created standard was not previously known to Hecla it was not "reasonably ascertainable" during the comment period and Hecla should be allowed to appeal this previously unknown reasoning.

the receiving stream or toxic conditions for its biota.” See 2005 Comments, **Attachment B** at 2 (quoting 47 Fed.Reg. 25,682, 25,701 (June 14, 1982)). Hecla provided the information necessary to establish an adjustment based on this regulation.

Hecla submitted documentation that in order to achieve the water quality based effluent limits in the permit; the most economically viable treatment option is for lime addition combined with sedimentation. *Id.* at 2 (citing 2001 Centra Conceptual Design Report). The comments, and documents underlying Hecla’s comments, acknowledge that this process could result in the discharge of pH up to 10.0 s.u. *Id.*¹⁸ In addition, the 2004 State 401 Certification provides that water quality in the SFCDA River will not be degraded and there will not be toxic conditions for biota because of pH discharges of 10.0 s.u. See 2005 Comments, **Attachment B** at 2-3; 2004 State 401 Certification, **Attachment C**.

Instead of relying on this information and conditionally authorizing a higher pH limit if Hecla treats its wastewater by neutralization and sedimentation the Region arbitrarily created a new standard for allowing an adjustment under 40 C.F.R. § 440.131, requiring that Hecla must supply EPA with a “commitment that they will implement neutralization technology in order to meet the metals limits in the permit.” See 2005 Response to Comments, **Attachment G** at 6. In addition, the Region found that Hecla had submitted “no specific plans or commitment to implement a specific neutralization treatment technology to treat wastewater from the Lucky Friday Mine nor any demonstration that the pH of the wastewater following treatment will exceed 9.0 s.u.” *Id.* at 7. The Region concluded that it would “consider modifying the NPDES permit to incorporate a limit higher than 9.0” if such information is submitted. *Id.* at 8. The

Region's delay is unwarranted, particularly since its concerns could be addressed by a simple amendment to the pH permit condition. For example, the Region could have clarified in the permit that "The pH must not be less than 6.5 standard units (s.u.) or greater than 9.0 s.u. An upper pH limit of 10.0 s.u. is allowed when neutralization and sedimentation technology is applied to the effluent."

The Region applied a previously unarticulated standard to delay addressing Hecla's request for an adjustment of the upper pH limit. In addition, the Region's delay is not rational where a simple permit condition would address its concerns. The Region's failure to act on the pH issue is arbitrary and an abuse of discretion.

4. The Region's Failure to Adjust the Upper pH Limit is Not Rational in Light of the Information in the Record.

Finally, the Region's continued refusal to adjust the pH upper limit in the Lucky Friday Permit is clearly erroneous based on the information in the record. In reviewing technical issues, the EAB determines whether the record demonstrates that the Region duly considered the issues raised and "whether the approach ultimately adopted by the [permit issuer] is rational in light of all of the information in the record." *In re Tallmadge Generating Station*, PSD Appeal No. 02-12, slip op. at 11 (EAB, May 21, 2003)(citations omitted). The Region's technical judgment must be both "rational and supportable." *Id.* Here, the Region's retention of an upper pH limit of 9.0 – despite the State certification allowing an adjustment of the upper limit, EPA technical documents that support such an adjustment, and the Region's own acknowledgment that an adjustment is available in Hecla's circumstance – is not rational or supportable.

¹⁸ The Region itself notes that "Hecla currently operates tailings ponds that allow for sedimentation prior to discharge." See 2005 Response to Comments at 6.

The Region's response to comments erroneously ignores information provided by Hecla. The Region states that Hecla has not supplied information that an increase in the pH limit is necessary to meet permit limits. *See* 2005 Response to Comments, **Attachment G** at 6. To the contrary, the record and Hecla's comments demonstrate that Hecla will have to reduce metals and this reduction will require an increase in the pH. The permit itself is evidence that Hecla will have to reduce metals. For example, the Interim Effluent Limits for metals contained in Table 5 represent the current discharge quality of the effluent. *See* 2005 Permit, **Attachment A** at Table 5. The interim limits are well above the final permit limits contained in the permit. *Id.* at Tables 1-4. Hecla commented that it will have "to remove dissolved metals to meet the final permit limits." *See* 2005 Comments, **Attachment B** at 3. In addition, Hecla commented that it "will be required to increase pH as part of its treatment in the tailings ponds to meet WQBELs for metal." *Id.* These assertions are not unsupported. Hecla provided documentation that high pH treatment is "what the science and technology dictate for the removal of dissolved metals and that EPA's own treatability manuals acknowledge that removal of dissolved metals requires a pH in excess of 9.0 s.u." *Id.* In particular, Hecla's comments specifically reference its past comments, the Centra Conceptual Design Report, the EPA Treatability Manual, EPA consultant documents and the Development Document for Proposed Effluent Limit Guidelines for the Ores Mining and Dressing Point Source Category ("ELG Development Document"), which all support the conclusion that an adjustment in the upper pH limit for the Lucky Friday permit is necessary to achieve the permit limits. *Id.* at 2.

The Region does not adequately address Hecla's comments and ignores the information in the record. In particular, the Region provides no response to Hecla's comments regarding the

ELG Development Document. See 2005 Response to Comments, **Attachment G** at 7.¹⁹ The Region responds generally to the documents cited in Hecla's comments by agreeing that they demonstrate that in "many cases pH adjustment is required to precipitate metals and that for certain wastewaters pH adjustment above 9.0 s.u. is required." *Id.* However, the Region does not articulate its reasons for rejecting these documents or the rationale for its failure to adjust the Lucky Friday permit based on these sources. *Id.* Instead, the Region simply cites to the Hecla Grouse Creek Mine as an example "where pH adjustment is used to treat metals, yet the final effluent meets the technology-based limit of 9.0 s.u." *Id.* The Region is presumably making an untenable comparison between the Grouse Creek Mine, an inactive gold mine that has not operated in over eight years, and the Lucky Friday Mine, a lead/zinc/silver mine that mills up to 1,000 tons of ore per day. Furthermore, the Grouse Creek discharges consist primarily of stormwater, whereas the Lucky Friday Mine is dealing with mining and milling effluent from an active operation with completely different ores. The Region's example of the Grouse Creek Mine therefore does not provide the requisite articulation of the Region's rationale not to rely on the cited documents – documents the Region expresses no disagreement with – in the case of the Lucky Friday Mine.

The Region's refusal to adjust the pH limit is also not rational in light of the record where EPA specifically acknowledges that in "many cases" a pH adjustment is required, there is a

¹⁹ Hecla's comments note that when EPA developed the effluent limit guidelines for ore mining in 1982, it was clear that many facilities in the industry were achieving optimum metal removal by use of lime and sedimentation with the resulting pH of greater than 9.0 s.u. See **Attachment B** (citing ELG Development Document at Section VIII (EPA May 1982)). The ELG document specifically recognized that controlling dissolved metals was not addressed in development of the effluent limit guidelines. This is in contrast to other ELG categories, which contain an upper pH limit of 10.0 because dissolved metals were addressed. Again, the Region does not dispute the ELG Development Document and agrees that pH adjustment is necessary in many cases. See **Attachment G** at 7.

regulatory basis for this adjustment, and the Region acknowledges that such adjustment has been made in other permits.²⁰ See 2005 Response to Comments, **Attachment G** at 6-8. The Region's decision to put off making a determination on this issue is particularly troubling considering that an adjustment in the upper pH will not affect water quality, as demonstrated by the State of Idaho's certification, and subjects Hecla to the risk of potential and unnecessary permit exceedances. In addition, this delay ignores Hecla's comments that 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. See **Attachment B** at 2-3, & n.3. The handling of acids, both in transportation and within the operation, is not warranted when the regulations provide for an adjustment to avoid this unnecessary risk. *Id.*

Despite the record, the Region concludes only that it "will consider" modifying the permit in the future if Hecla meets the new, arbitrary standard it has developed. See 2005 Response to Comments, **Attachment G** at 8. The Region's delay is not rational. The information required was properly before the Region during the drafting of the permit. The Region's failure to consider the information in the record, refusal to adjust the pH limit and delay of the decision despite the evidence in the record demonstrates that its decision not to adjust the

²⁰ The Region's attempt to distinguish application of 40 C.F.R. § 440.131 to other mines where such adjustment has been made is disingenuous, especially considering its agreement that pH adjustment is required in many cases and that they "may consider" modifying the upper pH limit for the Lucky Friday mine. In particular, the Region's explanation that the Bunker Hill CTP pH discharge does not exceed a pH of 9.0 s.u. does not provide a basis for denying such an adjustment to the Lucky Friday mine. The Bunker Hill CTP has metals limits far higher than the Lucky Friday's interim and final permit limits. For example, the CTP zinc limits are 1,500 ug/l for a daily maximum with no limit on the monthly average concentration. The Lucky Friday outfall 001 final limit for zinc, monthly average is 71 ug/l. In addition, the CTP, operated by Region 10, does not have to meet the technology-based limits, whereas the Lucky Friday has to meet water-quality based limitations within a permit containing enforcement and penalty provisions. A pH adjustment is justified in many cases, including for the Lucky Friday Mine.

upper pH limit is arbitrary, not rational, and not supportable. The delay is particularly unsupportable considering that the Region's sole concern – that it have a “commitment” from Hecla regarding the use of neutralization and sedimentation technology – could have been easily addressed by a simple amendment to the permit. The EAB should review and modify and/or remand this erroneous permit condition.

B. Whole Effluent Toxicity Testing

The Lucky Friday Permit requires both bioassessment monitoring and Whole Effluent Toxicity (“WET”) testing as conditions of the permit. *See Attachment A*, conditions I.B, I.D.3. Hecla seeks review of the duplicative and onerous requirement of WET testing. In addition, Hecla seeks review of the Region's failure to incorporate the State of Idaho's suggestion that WET testing not be required until 2007, after Hecla completes its implementation, testing and analysis of the water recycling program. *See 2004 State 401 Certification, Attachment C*.

Hecla submitted comments regarding the WET testing requirement in its 2005 Response to Comments by incorporating its prior comments, which include significant and substantial comments objecting to the WET testing condition in the permit. *See 2005 Comments, Attachment B* at 1 (incorporating all comments submitted on previous permit actions). *See also Exhibits B, C* to 2003 Petition for Review. The WET testing condition was appealed to the EAB in Hecla's 2003 Petition for Review. *See 2003 Petition for Review, NPDES Appeal No. 03-10*. The EAB did not issue a substantive ruling on this condition and at Hecla's request remanded the condition as one that may be affected by the subsequent 401 certification and modification of the permit. *See Remand Order, NPDES Appeal No. 03-10*. The Region declined to modify the WET testing requirement. *See 2005 Response to Comments, Attachment G* at 12.

Hecla's substantive arguments that the condition itself is unwarranted have not been reviewed. Hecla has already fully briefed this issue before the EAB pursuant to Hecla's 2003 Petition for Review. Therefore, to avoid unnecessary duplication of these arguments, Hecla incorporates its previous arguments regarding the WET testing condition and asks the EAB to review and remand this condition based on these arguments. See 2003 Petition for Review and Reply Brief in Support of Petition for Review, NPDES Appeal No. 03-10.²¹

The only additional argument raised by the modified permit is the Region's failure to incorporate the 2007 deadline for implementing 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). The Region erred by not deferring to the state's suggestion that WET testing be delayed until Hecla completes its implementation, testing and analysis of the water recycling program in 2007. The Region declined to incorporate this change stating only that it "believes it is important to monitor toxicity regardless of whether Hecla is recycling their wastewater." 2005 Fact Sheet at 19. This response ignores the CWA's goal to recognize, preserve and protect the States' rights to manage their water resources.

EPA has failed to provide a legal or factual basis for WET testing in the permit. In addition, the Region erred by failing to include the state's suggestion that WET testing be delayed until 2007. The inclusion of WET testing in the permit is arbitrary and capricious and an abuse of discretion.

²¹ Because of the remand proceeding, the EAB should allow Hecla to revive the substantive arguments regarding the WET testing condition. To hold otherwise would deny Hecla review of these arguments.

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 25th day of January, 2006.

Respectfully submitted,

STOEL RIVES LLP


Kevin J. Beaton
Attorneys for Hecla Mining Company

LIST OF ATTACHMENTS

- Attachment A** Lucky Friday Permit No. ID-000017-5, issued December 28, 2005 (the "Lucky Friday Permit").
- Attachment B** July 21, 2005 letter from Mike Dexter, General Manager Lucky Friday Mine to Director, Office of Water and Watersheds, U.S. EPA Region 10.
- Attachment C** July 15, 2004 letter from Toni Hardesty, Director Idaho Department of Environmental Quality to Robert Robichaud, U.S. EPA Region 10.
- Attachment D** August 19, 2004 letter from Mike Dexter, General Manger Lucky Friday Mine to Ronald Kreizenbeck, Acting Regional Administrator, U.S. EPA Region 10.
- Attachment E** March 8, 2005 letter from Ronald Kreizenbeck, Acting Regional Administrator, U.S. EPA Region 10 to Mike Dexter, General Manager Lucky Friday Mine; Final Decision Document; Response to Comments.
- Attachment F** Fact Sheet for Permit Remand and Modification Proceedings, NPDES Permit No. ID-000017-5, July 21, 2005.
- Attachment G** Response to Comments on Permit Modification for Lucky Friday Mine NPDES Permit No. ID-000017-5, December 27, 2005.
- Attachment H** December 28, 2005 letter from R. David Allnutt Re: Notification of Completion of Remand Proceedings.

LIST OF EXHIBITS REFERENCED AND INCORPORATED FROM 2003 PETITION FOR REVIEW

- Exhibit A** NPDES Permit No. ID-000017-5, issued August 12, 2003.
- Exhibit B** April 11, 2003 letter from Mike Dexter, Lucky Friday Unit Manager and Tom Fudge, Hecla Mining Company Vice President – Operations to Office of Water Director, U.S. EPA Region 10.
- Exhibit C** August 2, 2001 letter from Tim Arnold, Lucky Friday Unit Manager and Dave Holland, Environmental Manager to Office of Water Director, U.S. EPA Region 10.

- Exhibit D** February 21, 2001 Request for Variance NPDES Permit No. ID-000017-5 (Lucky Friday Mine) (attachments not included).
- Exhibit E** July 11, 2003 letter from Mike Dexter, Lucky Friday Unit Manager to Randall F. Smith, Director – Office of Water U.S. EPA Region 10 Re: EPA letter of 9 June 2003 – Variance Request Additional Information.
- Exhibit F** January 6, 2003 Revised Draft Permit No. ID-000017-5.
- Exhibit G** January 6, 2003 EPA Fact Sheet for Revised Draft Permit.
- Exhibit H** June 17, 2003 letter from Gwen P. Fransen, Regional Administrator, Idaho Department of Environmental Quality to Robert R. Robichaud, U.S. EPA Region 10 RE: § 401 Certification regarding NPDES Permit No. 000017-5 Hecla Mining Company – Lucky Friday Mine and Mill, Mullan, Idaho.
- Exhibit I** Petition for Contested Case Proceeding and Request for Stay of Certain § 401 Certification
- Exhibit J** August 12, 2003 National Pollution Discharge Elimination System (NPDES) Permit for Hecla Mining Company – Lucky Friday Mine, NPDES Permit No. ID-000017-5, Response to Comments.
- Exhibit K** Affidavit of Mike Dexter in Support of Hecla Mining Company's Petition for Review
- Exhibit L** June 9, 2003 letter from Randy Smith, Director, Office of Water to Mike Dexter, General Manager, Hecla Mining Company Lucky Friday Mine Re: Request for Variance NPDES Permit No. ID-000017-5, Hecla Friday Mine
- Exhibit M** August 22, 2003 letter from Randall F. Smith, Director, Office of Water to Mike Dexter, General Manager, Hecla Mining Company Re: Request for Variance NPDES Permit No. ID-000017-5, Hecla Lucky Friday Mine Completeness Review of Variance Request
- Exhibit N** Affidavit of Bob Tridle in Support of Hecla Mining Company's Petition for Review
- Exhibit O** July 22, 2003 Memorandum to File, From Patty McGrath, NPDES Permits Unit RE: Hecla Mining Company, Lucky Friday Mine, NPDES Permit No. ID-000017-5; Basis for Interim Effluent Limits.
- Exhibit P** US EPA Region 10 Authorization to Discharge Under the National Pollutant Discharge Elimination System, Permit No. ID-000006-0.

CERTIFICATE OF SERVICE

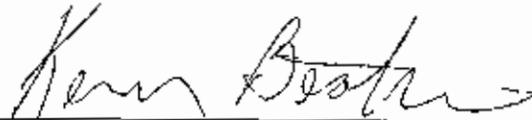
I hereby certify that the Memorandum in Support of Hecla Mining Company's Petition for Review was served on this 25th day of January, 2006 as follows:

By overnight delivery to:

United States Environmental Protection Agency
Clerk of the Board, Environmental Appeals Board
Colorado Building
1341 G Street, N.W., Suite 600
Washington, DC 20005

By regular mail to:

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