United States Environmental Protection Agency
Region 10
1200 Sixth Avenue, Suite 155
Seattle, Washington 98101

Statement of Basis

A revised Draft National Pollutant Discharge Elimination System (NPDES) Permit has been prepared to address the withdrawn portions of the 2019 Permit (see Section III., below)

Table 1. General Facility Information	
NPDES Permit #:	ID0000175
Applicant:	Hecla Limited (Hecla) Lucky Friday Mine
Type of Ownership	Private
Physical Address:	397 Friday Avenue Mullan, ID 83846
Mailing Address:	PO Box 31 Mullan, Idaho 83846
Facility Contact:	Lance Boylan Environmental Supervisor LBoylan@hecla-mining.com (208) 744-1833
Facility Location:	47.472174°N, 115.785752°W
Receiving Water:	SF Coeur d'Alene (SFCdA) River
Facility Outfalls:	001: 47.4636°N, 115.8053°W 002: 47.4689°N, 115.7897°W 003: 47.4714°N, 115.7614°W

I. PROPOSED ACTION, TYPE OF FACILITY AND DISCHARGE LOCATION:

Pursuant to 40 CFR § 124.19(j), Region 10 of the United States Environmental Protection Agency (EPA) is proposing to address certain portions of the National Pollutant Discharge Elimination System Permit No. ID0000175, which the Region reissued to the Hecla Limited (Hecla) on June 21, 2019 for discharges from Hecla's Lucky Friday Unit (LFU), Lucky Friday Mine. Specifically, EPA revised the effluent limitations for Outfall 001, included a compliance schedule for copper for Outfall 003, and assessed the criteria by which the copper effluent limitations were developed (see SOB III. for further background on this action). In addition, EPA made minor clarifications and corrections pursuant to 40 CFR §§ 122.62 and/or 122.63.

Hecla's LFU is a deep, hard rock underground mine located just east of Mullan, Idaho. The site is comprised of two underground accesses, support facilities, surface mill, two water treatment facilities, and four tailings impoundments; two of which have been closed in accordance with the State of Idaho's Mine Tailings Impoundment Structures Rules, IDAPA 37.03.05, and one which is undergoing closure planning with input from the Idaho Department of Water Resources (IDWR) and the Idaho Department of Environmental Quality (DEQ).

The site has three outfalls, Outfalls 001, 002, and 003, which discharge treated effluent to the SFCdA River. Only two of the three outfalls discharge at any one time. The outfall water sources are summarized as follows:

- Outfall 001 – Historically, overflow from Tailings Impoundment No. 1 was discharged via Outfall 001. Tailings Impoundment No. 1 has been closed under a Superfund Consent Decree with the EPA, necessitating diversion of these flows to Outfall 002. To maintain ongoing flexibility in water management practices, Hecla would like to retain the authorization to discharge treated water from Water Treatment Plant 2 (WTP2) via Outfall 001, should it be needed for best water management purposes in the future.
- Outfall 002 – WTP2 currently discharges from Outfall 002. Hecla requested that the renewed Permit reflect that treated site waters from WTP2 be discharged via Outfall 002. WTP2 collects and treats mine water, mill water, ground water and captured storm water.
- Outfall 003 – Water Treatment Plant 3 (WTP3) currently discharges from Outfall 003. Water from the mill is routed to Tailings Impoundment No. 4 or directly to WTP3. WTP3 collects and treats mine water, mill water, ground water and captured storm water.

Please see the original Fact Sheet dated February 25, 2019, for more information on the site.

II. LIMITATIONS AND CONDITIONS

EPA is proposing to address only the following limited issues:

- separate effluent limitations for Outfall 001;
- a compliance schedule for copper for Outfall 003;
- the criteria by which the copper effluent limitations were developed; and
- reinstating the Minimum Level for copper as the compliance level after the compliance schedules end

All other conditions of the draft permit, including effluent limitations and monitoring provisions are unchanged. For clarity, rather than issue only the revised permit provisions, the new draft permit includes the entire text of the permit. **Therefore, EPA is accepting comments only on the permit provisions listed just above.**

III. BACKGROUND FOR THIS ACTION

On June 21, 2019, EPA reissued the NPDES Permit for the Lucky Friday Mine. On July 22, 2019, Hecla filed a Petition for Review of the permit (Permit Petition) with EPA's Environmental Appeals Board (EAB). At the same time, Hecla filed a Petition to Initiate Contested Case and Request to Stay 401 Certification with the Idaho Board of Environmental Quality (401 Petition). Hecla's Permit Petition included the following issues:

- The biotic ligand model (BLM)-based copper effluent limits were arbitrarily established;
- The permit should have separate site-specific effluent limits for Outfalls 001 and 002; and
- The permit should have established the flow-tiered effluent limits from the Prior Permit.

The 401 Petition contained these same issues and also alleged that DEQ failed to include a compliance schedule for copper at Outfall 003.

EPA notified Hecla in a letter dated August 2, 2019 that the following permit conditions were stayed pursuant to 40 CFR § 124.16(a):

- The Outfall 001 effluent limitations and monitoring requirements in Permit Part I.B.1.,
- The Copper effluent limitations and monitoring requirements in Permit Part I.B.1. Tables 2 and 3,
- The Copper Compliance Level in Permit Part I.B.9.,
- The Copper Compliance Schedule in Permit Part II.A.,
- The Mercury effluent monitoring requirements in Permit Part I.B.1. Tables 2 and 3, and
- The chronic triggers for Whole Effluent Toxicity (WET) in Permit Part I.C.3.

As a result, the requirements from the previous permit that pertained to these permit conditions remained in effect pending resolution of the Permit Petition.

Since the 401 Petition contained the same issues alleged in the Permit Petition, the Permit Petition proceedings were stayed pending the outcome of the 401 Petition. On January 8, 2020, DEQ and Hecla reached a settlement on the 401 Petition, which resulted in a new final modified CWA § 401 Certification.

On January 21, 2020, EPA and Hecla filed a Joint Motion to Dismiss the Permit Petition EPA withdrew the following permit conditions for reconsideration given the settlement agreement on the 401 Petition:

- The Outfall 001 effluent limitations and monitoring requirements in Permit Part I.B.1.,
- The Copper effluent limitations and monitoring requirements in Permit Part I.B.1. Tables 2 and 3,
- The Copper Compliance Level in Permit Part 1.B.9., and
- The Copper Compliance Schedule in Permit Part II.A.

In addition, Hecla requested dismissal of the remaining contested conditions that were not addressed in the settlement on the 401 Petition: the Mercury effluent limitations in Permit Part I.B.1, Tables 2 and 3, and the chronic triggers for Whole Effluent Toxicity (WET) in Permit Part I.C.3. The EAB dismissed the Permit Petition on January 24, 2020.

Consistent with the modified final CWA § 401 Certification, EPA is addressing the following issues in this permit action:

A. the effluent limitations for Outfall 001 (including interim compliance schedule limitations),
B. the criteria by which the copper effluent limitations were developed (see FS III. for further background on this action), and
C. a compliance schedule for copper for Outfall 003.

Appendix A provides the basis for the conditions and the revised analysis for the effluent limitations that are proposed to replace the withdrawn conditions. In addition, any clarifications or corrections that were discovered since the permit was first issued or in the drafting of this permit action are included.

V. PUBLIC COMMENT PERIOD AND PROCEDURE FOR FINAL DECISION

Because of the COVID-19 virus, access to the Region 10 EPA building is limited. Therefore, we request that all comments on this draft permit or a request for a public hearing be submitted via email to godsey.cindi@epa,gov. If you are unable to submit comments via email, please call (206) 553-1676.

Persons wishing to comment on or request a public hearing for this revised draft permit action may do so by the expiration date of the public notice period. A request for a public hearing must state the nature of the issues to be raised as well as the requester's name, address, and telephone number. All comments should include name, address, phone number, a concise statement of the basis for a comment and relevant facts upon which it is based. All comments and requests for Public Hearings must be submitted to EPA as described in the Public Comments Section of the attached Public Notice.

After the Public Notice expires, EPA will consider all substantive comments related to this revised draft permit. EPA's Regional Director for the Water Division will make a final decision regarding permit issuance. If no substantive comments are received, the tentative conditions in the revised draft permit will become final, and the permit may become effective upon issuance. If substantive comments are received, EPA will address the comments and issue the permit along with a response to comments. The permit will become effective no less than 30 days after the issuance date, unless an appeal is submitted to the Environmental Appeals Board within 30 days pursuant to 40 CFR § 124.19.

Documents are Available for Review.

The revised draft permit, this Statement of Basis, the previous permit documents and other information can also be found by visiting the Region 10 website at https://www.epa.gov/npdes-permits/idaho-npdes-permits. Because of the COVID-19 virus and limited building access, we cannot make hard copies available.

The draft Administrative Record for this action contains the pertinent documents from the previous draft permit and any documents listed in the References section that were not previously included. The Administrative Record or documents from it are available electronically upon request by contacting Cindi Godsey.

For technical questions regarding the Statement of Basis, contact Cindi Godsey at (206) 553-1676 or godsey.cindi@epa.gov. Services can be made available to persons with disabilities by contacting Audrey Washington at (206) 553-0523.

VI. REFERENCES

EPA 1991. *Technical Support Document for Water Quality-based Toxics Control*. Office of Water Enforcement and Permits, Office of Water Regulations and Standards. Washington, DC. March 1991. EPA/505/2-90-001.

EPA 2010. *NPDES Permit Writers' Manual 2010.* Office of Wastewater Management, Water Permits Division, State and Regional Branch. Washington, DC. September 2010. EPA-833-K-10-001.

DEQ, 2018. Rules of the Department of Environmental Quality, IDAPA 58.01.02, "Water Quality Standards." https://adminrules.idaho.gov/rules/current/58/580102.pdf

40 CFR 122 - EPA Administered Permit Programs: The National Pollutant Discharge Elimination System. July 1, 2019.

40 CFR 124 - Procedures for Decision-making. July 1, 2019.

DEQ 2020. Final CWA § 401 Certification dated February 12, 2020, and Response to Comments.

DEQ 2017a. Implementation Guidance for the Idaho Copper Criteria for Aquatic Life: Using the Biotic Ligand Model. Idaho Department of Environmental Quality, Water Quality Division, Boise, Idaho. November 2017. http://air.idaho.gov/media/60180840/58-0102-1502-implementation-guidance-idaho-copper-criteria-aquatic-life-1117.pdf

DEQ 2020. Email dated January 22, 2020, from AJ Maupin (DEQ) to Cindi Godsey (EPA) regarding the dissolved analysis of parameters for Copper BLM surface water monitoring and analysis.

APPENDIX A

A. Effluent Limitations for Outfall 001

1. State CWA § 401 Certification Requirements

In the modified CWA § 401 Certification, DEQ stated:

> "Outfall 001 is located approximately 5,400 feet downstream of Outfall 002. There are two tributaries that contribute additional flow to the river between the two outfalls. Available data indicate that the critical low flow in the South Fork Coeur d'Alene River is greater at Outfall 001 than at Outfall 002. Therefore, the water quality-based effluent limitations for pH, copper, cadmium, lead, zinc, and mercury in Permit Part I.B.1, Table 2 can be made less stringent for Outfall 001 by accounting for the additional flow at Outfall 001."

Since there is greater flow at Outfall 001 than Outfall 002, as stated in DEQ's modified CWA § 401 Certification, EPA is proposing to revise the effluent limitations in the permit for Outfall 001 based on the receiving water flow and hardness upstream of Outfall 001. Since there has not been a discharge from Outfall 001 in many years, EPA will use the effluent data from Outfall 002 because the effluent that would normally be discharged from Outfall 002 would be the one diverted to Outfall 001, if necessary. See Section 1 of the Statement of Basis. As discussed in Section 1 of the Statement of Basis, only one of these two outfalls is permitted to discharge at a time.

2. Effluent Data

The effluent data for Outfall 002 can be found in Appendix B of the previous Fact Sheet. It is summarized in Table A-1,below:

Table A-1: Effluent Summary

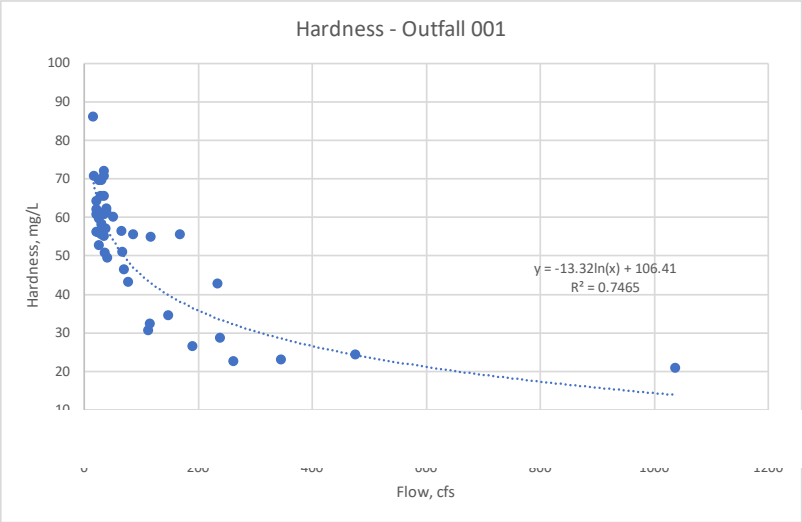
All in ug/L unless noted	Mercury, Total	Cadmium, Total Recoverable	Copper,Total Recoverable	Lead,Total Recoverable	Silver,Total Recoverable	Zinc,Total Recoverable	Temperature °C	pH Standard Units	TSS (mg/L)	Hardness (mg/l as $CaCO_3$)
Average	0.00037	0.065	0.990	3.673	0.050	8.7111	21.7	7.5	1.1	236.349
CV	1.304	1.415	1.327	1.194	0.096	1.0064	0.237	0.057	0.690	0.389
Maximum	0.00308	1.300	13.1	46.2	0.110	69.2	31.8	10.0	5.0	489
Minimum	0.00005	0.050	0.5	2.5	0.050	5	8.1	6.6	0.1	84.7
N	118	298	298	298	298	298	298	298	298	134
std dev	0.00048	0.092	1.314	4.383	0.005	8.767	5.1	0.4	0.8	121.35
										5th percentile

3. Hardness

IDAPA 58.01.02.210.03(c)(ii) states:

> The hardness values used for calculating aquatic life criteria for metals at design discharge conditions shall be representative of the ambient hardnesses for a receiving water that occur at the design discharge conditions given in Subsection 210.03.b.

This requirement has been interpreted as applying the hardness at the design discharge conditions to a criterion (1Q10 for an acute criterion and the 7Q10 for the chronic) to calculate an end-of-pipe criterion and applying a mixed hardness to calculate a criterion for a parameter with an authorized mixing zone, in this case, only mercury which is not hardness dependent.



	cfs	mg/L
1Q10	14.776	70.54
7Q10	17.135	68.57

4. WATER QUALITY STANDARDS

Table A-2 displays the WQS applicable to Outfall 001 (see Section B, below for a discussion of the Copper criteria).

Table A-2: Water Quality Standards

		Hardness (7Q10) =	68.57	Hardness (1Q10) =		70.54	
		Water Quality				Technology-based	
		Aquatic Life 001		Human Health			
Parameter	Units	Chronic	Acute	Water & Org	Org Only	Average	Maximum
Cadmium	ug/L	1.0	1.5			50	100
Lead	ug/L	19.8	178.6			300	600
Zinc	ug/L	152.0	154.9	7400.0	26000.0	500	1000
Copper, BLM	ug/L	0.6	1.0			150	300
Mercury	ug/L	0.012	2.4			2	1
Silver	ug/L		2.121				
TSS	mg/L					20	30
pH	s.u.	within 6.5 to 9.0				within 6.0 to 9.0	
Temperature	°C	19.0	22.0				
Copper, H-based	ug/L	8.6	12.8				

5. DETERMINING REASONABLE POTENTIAL

Mass Balance

For discharges to flowing water bodies, the maximum projected receiving water concentration is determined using the following mass balance equation:

$$C_d Q_d = C_e Q_e + C_u Q_u$$ *Equation A-1*

where,

C_d = Receiving water concentration downstream of the effluent discharge (that is, the concentration at the edge of the mixing zone)
C_e = Maximum projected effluent concentration
C_u = 95th percentile measured receiving water upstream concentration
Q_d = Receiving water flow rate downstream of the effluent discharge = Q_e+Q_u
Q_e = Effluent flow rate (set equal to the design flow of the WWTP)
Q_u = Receiving water low flow rate upstream of the discharge (1Q10, 7Q10 or 30Q5

When the mass balance equation is solved for C_d, it becomes:

$$C_d = \frac{C_e \times Q_e + C_u \times Q_u}{Q_e + Q_u}$$ *Equation A-2*

The above form of the equation is based on the assumption that the discharge is rapidly and completely mixed with 100% of the receiving stream.

If the mixing zone is based on less than complete mixing with the receiving water, the equation becomes:

$$C_d = \frac{C_e \times Q_e + C_u \times (Q_u \times \%MZ)}{Q_e + (Q_u \times \%MZ)}$$ *Equation A-3*

Where:

% MZ = the percentage of the receiving water flow available for mixing.

If a mixing zone is not allowed, dilution is not considered when projecting the receiving water concentration and,

$$C_d = C_e$$ *Equation A-4*

A dilution factor (D) can be introduced to describe the allowable mixing. Where the dilution factor is expressed as:

$$D = \frac{Q_e + Q_u \times \%MZ}{Q_e}$$ *Equation A-5*

After the dilution factor simplification, the mass balance equation becomes:

$$C_d = \frac{C_e - C_u}{D} + C_u$$ *Equation A-6*

If the criterion is expressed as dissolved metal, the effluent concentrations are measured in total recoverable metal and must be converted to dissolved metal as follows:

$$C_d = \frac{CF \times C_e - C_u}{D} + C_u$$ *Equation A-7*

Where C_e is expressed as total recoverable metal, C_u and C_d are expressed as dissolved metal, and CF is a conversion factor used to convert between dissolved and total recoverable metal.

The above equations for C_d are the forms of the mass balance equation which were used to determine reasonable potential and calculate wasteload allocations.

Maximum Projected Effluent Concentration

When determining the projected receiving water concentration downstream of the effluent discharge, EPA's Technical Support Document for Water Quality-based Toxics Controls (TSD) recommends using the maximum projected effluent concentration (C_e) in the mass balance calculation (see Equation 3). To determine C_e, EPA has developed a statistical approach to better characterize the effects of effluent variability. The approach combines knowledge of effluent variability as estimated by a coefficient of variation (CV) with the

uncertainty due to a limited number of data to project an estimated maximum concentration for the effluent. Once the CV for each pollutant parameter has been calculated, the reasonable potential multiplier (RPM) used to derive the C_e can be calculated using the following equations:

First, the percentile represented by the highest reported concentration is calculated.

$$p_n = (1 - \text{confidence level})^{1/n} \qquad \textit{Equation A-8}$$

where,

p_n = the percentile represented by the highest reported concentration
n = the number of samples

confidence level = 99% = 0.99

and

$$\text{RPM} = \frac{C_{99}}{C_{P_n}} = \frac{e^{Z_{99} \times \sigma - 0.5 \times \sigma^2}}{e^{Z_{P_n} \times \sigma - 0.5 \times \sigma^2}} \qquad \textit{Equation A-9}$$

where,

σ^2 = $\ln(CV^2 + 1)$
Z_{99} = 2.326 (z-score for the 99th percentile)
Z_{Pn} = z-score for the P_n percentile (inverse of the normal cumulative distribution function at a given percentile)
CV = coefficient of variation (standard deviation ÷ mean)

C_e is determined by simply multiplying the maximum reported effluent concentration by the RPM:

$$C_e = (\text{RPM})(\text{MRC}) \qquad \textit{Equation A-10}$$

where MRC = Maximum Reported Concentration

Projected Effluent Concentration at the Edge of the Mixing Zone

Once the C_e is calculated, the maximum projected effluent concentration at the edge of the acute and chronic mixing zones is calculated using the mass balance equations presented previously.

Reasonable Potential

Table A-3: Reasonable Potential

Parameter	Units	N	CV	Pn	RPM	Max Eff	MEC	Edge of MZ: Chronic	Edge of MZ: Acute	Edge of MZ: HH - nc	Edge of MZ: HH - c	RP?	
Cadmium - EOP	ug/L	298	1.415	0.985	1.188	1.3	1.55					Yes	End of Pipe
Cadmium - TBEL							50.00					Yes	End of Pipe
Lead - EOP	ug/L	298	1.194	0.985	1.168	46.2	53.94					Yes	End of Pipe
Lead - TBEL							300.00					Yes	End of Pipe
Zinc - EOP	ug/L	298	1.006	0.985	1.148	69.2	79.42					No	End of Pipe
Zinc - TBEL							750.00					Yes	End of Pipe
Copper - BLM	ug/L	298	1.327	0.985	1.181	13.1	15.46					Yes	No mixing, ambient exceeds criteria
Mercury - EOP	ug/L	118	1.304	0.962	1.000	0.003	0.003					No	End of Pipe
Mercury - TBEL							1.0					Yes	End of Pipe
Mercury-1							0.003	0.0411	0.0400			No	25% of 7Q10 and 1Q10
Silver	ug/L	298	0.096	0.985	1.016	0.110	0.112	End of pipe MEC less than the criterion				No	No upstream data - used zero

The discharge has reasonable potential to cause or contribute to an exceedance of water quality criteria if the maximum projected concentration of the pollutant at the edge of the

mixing zone, if one is authorized, exceeds the most stringent criterion for that pollutant or if the end of pipe technology-based effluent limitation exceeds the WQS.

6. Derive Permit Effluent Limitations

Calculate the Wasteload Allocations (WLAs)

Wasteload allocations (WLAs) are calculated using the same mass balance equations used to calculate the concentration of the pollutant at the edge of the mixing zone in the reasonable potential analysis. To calculate the wasteload allocations, C_d is set equal to the acute or chronic criterion and the equation is solved for C_e. The calculated C_e is the acute or chronic WLA. Equation 6 is rearranged to solve for the WLA, becoming:

$$C_e = WLA = D \times (C_d - C_u) + C_u \qquad \textit{Equation A-11}$$

The next step is to compute the "long term average" concentrations which will be protective of the WLAs. This is done using the following equations from the TSD:

$$LTA_a = WLA_a \times e^{(0.5\sigma^2 - z\,\sigma)} \qquad \textit{Equation A-12}$$

$$LTA_c = WLA_c \times e^{(0.5\sigma_4^2 - z\sigma_4)} \qquad \textit{Equation A-13}$$

where,

σ^2 = $\ln(CV^2 + 1)$
Z_{99} = 2.326 (z-score for the 99th percentile probability basis)
CV = coefficient of variation (standard deviation ÷ mean)
σ_4^2 = $\ln(CV^2/4 + 1)$

The LTAs are compared and the more stringent is used to develop the daily maximum and monthly average permit limits as shown below.

Maximum daily and average monthly effluent limits

Using the TSD equations, the MDL and AML effluent limits are calculated as follows:

$$MDL = LTA \times e^{(z_m\sigma - 0.5\sigma^2)} \qquad \textit{Equation A-14}$$

$$AML = LTA \times e^{(z_a\sigma_n - 0.5\sigma_n^2)} \qquad \textit{Equation A-15}$$

where σ, and σ^2 are defined as they are for the LTA equations above, and,

σ_n^2 = $\ln(CV^2/n + 1)$
z_{95} = 1.645 (z-score for the 95th percentile probability basis)
z_{99} = 2.326 (z-score for the 99th percentile probability basis)
N = number of sampling events required per month.

Table A-4: Effluent Limitations

													Concentration		Loading	
	Acute	Chronic	CV	σ^2 =	σ =	σ^2_4 =	σ_4 =	WLAc	WLAa	LTAc	LTAa	LTAmin	AML	MDL	AML	MDL
Cadmium	1.50	0.95	1.415	1.100	1.049	0.406	0.637	0.952	1.496	0.265	0.226	0.226	0.5	1.5	0.002	0.006
Lead	178.58	19.84	1.194	0.886	0.941	0.305	0.552	19.836	178.582	6.398	31.153	6.398	13.6	36.7	0.06	0.16
Zinc	154.90	152.02	1.006	0.700	0.836	0.226	0.475	152.017	154.901	56.360	31.409	31.409	61.3	154.9	0.27	0.69
Mercury	2.4	0.012	1.304	0.993	0.997	0.354	0.595	0.070	12.547	0.021	2.030	0.021	0.05	0.13	0.0002	0.0005
Copper (BLM)	1	0.6	1.327	1.016	1.008	0.365	0.604	0.6	1	0.177	0.159	0.159	0.4	1.0	0.0020	0.0050
For purposes of the interim effluent limitation:																
Copper	12.76	8.56	1.327	1.016	1.008	0.365	0.604	8.565	12.758	2.522	2.033	2.033	4.6	12.8	0.02	0.06

The effluent limitations that are being proposed are set forth in Table A-4 above.

7. WET TRIGGERS FOR OUTFALL 001

The modified CWA § 401 Certification states that the effluent limits for cadmium, lead, zinc and mercury can be made less stringent; it does not address the WET triggers at Outfall 001. Since Hecla dismissed the Permit Petition related to the chronic WET triggers, the WET Triggers included in the original permit are in effect and will not change as a result of this revision.

B. COPPER BLM CRITERIA

The modified CWA § 401 Certification explained that the Permit set forth water quality-based effluent limitations for copper at Outfalls 001, 002, and 003. These copper effluent limitations were developed to meet Idaho's copper BLM criteria, which became effective for Clean Water Act purposes on May 2, 2019. IDAPA 58.01.02.210.03.c.v sets forth the copper BLM criteria. Under that rule, copper criteria may be derived using either of the following methods: (1) the output of BLM software in accordance with IDAPA 58.01.02.210.03.c.v.(I)(a), or (2) an estimate derived from BLM outputs in accordance with IDAPA 58.01.02.210.03.c.v.(I)(b). A suite of site-specific data is necessary to use the first method, and the second method allows for criteria to be derived when site-specific data is not available. Since there is insufficient site-specific data for the LFU discharges, EPA used the second method and developed the copper effluent limitations based on DEQ's BLM Guidance. Once site-specific data is collected as specified in the permit, water quality-based effluent limits for copper may be made less stringent consistent with federal law or IDAPA 58.01.25, as applicable. Use of site-specific data to derive a dissolved metals translator for copper may result in less stringent water quality-based effluent limits for copper.

The modified CWA § 401 Certification explains that alternatives such as evaluating a paired watershed with a full dataset or providing a justifiable rationale for use of a different conservative estimate of the copper BLM criterion from the conservative estimates table that would demonstrate selecting a different value still protects the beneficial uses of the water body are options that could be used in developing criteria. However, the modified CWA § 401 Certification fails to identify a similar watershed with a full dataset and also fails to provide a rationale for using a different conservative estimate. Since EPA is unaware of another similar watershed with the requisite data and does not know of a basis for a different conservative estimate, EPA has chosen to develop the final effluent limitations for copper based on the conservative estimates set forth in Section 6 of the BLM Guidance entitled “Estimating Criteria When Data Are Absent.” This Section recommends using the lowest of the conservative estimates provided, which EPA did in the calculation of the effluent limitations for Outfalls 001/002 and 003. In this action, EPA is proposing the same copper effluent limitations for Outfall 001 as were previously for Outfall 001/002 (now applicable to only Outfall 002). Even though there is higher dilution at Outfall 001, the background copper levels are higher than the criteria so no mixing zone can be authorized.

At this time, EPA is proposing to reinstate the Minimum Level of 1 ug/L as the Compliance Level that was withdrawn when the permit was appealed.

C. COMPLIANCE SCHEDULE FOR COPPER FOR OUTFALL 003

The modified CWA § 401 Certification states that the LFU cannot immediately achieve compliance with the BLM-based effluent limits for copper; therefore, DEQ authorized a compliance schedule and interim requirements as set forth below. The copper BLM effluent limits are based on conservative estimates of water quality, not actual water quality data. To obtain the actual copper criteria that future copper effluent limits will be based on, the first two years of this compliance schedule allows time for the permittee to collect in-stream monitoring data to determine their BLM based copper effluent limits. In this way, Hecla can most effectively design a copper removal system that assures final limits can be met. Pursuant to IDAPA 58.01.02.400.03, DEQ may authorize compliance schedules for water quality-based effluent limits issued in a permit for the first time. Interim copper limits were derived from DEQ's hardness dependent metals criteria.

The regulations at 40 CFR 122.47 (Schedules of Compliance) state that permits may, when appropriate, specify a schedule of compliance leading to compliance with CWA and regulations.

(1) *Time for compliance.* Any schedules of compliance under this section shall require compliance as soon as possible, but not later than the applicable statutory deadline under the CWA.

EPA has determined that the time alloted is adequate but not excessive.

(2) The first NPDES permit issued to a new source or a new discharger shall contain a schedule of compliance only when necessary to allow a reasonable opportunity to attain compliance with requirements issued or revised after commencement of construction but less than three years before commencement of the relevant discharge. For recommencing dischargers, a schedule of compliance shall be available only when necessary to allow a reasonable opportunity to attain compliance with requirements issued or revised less than three years before recommencement of discharge.

This facility is not a new source or a new discharger nor is it a recommencing discharger, therefore this section does not apply.

(3) *Interim dates.* Except as provided in paragraph (b)(1)(ii) of this section, if a permit establishes a schedule of compliance which exceeds 1 year from the date of permit issuance, the schedule shall set forth interim requirements and the dates for their achievement.

The compliance schedule is longer than one year and contains interim dates.

(i) The time between interim dates shall not exceed 1 year, except that in the case of a schedule for compliance with standards for sewage sludge use and disposal, the time between interim dates shall not exceed six months.

The compliance schedule requires interim reports to be submitted annually, therefore none of the interim dates exceeds one year.

(ii) If the time necessary for completion of any interim requirement (such as the construction of a control facility) is more than 1 year and is not readily divisible into stages for completion, the permit shall specify interim dates for the submission of

reports of progress toward completion of the interim requirements and indicate a projected completion date.

Since the requirements of the previous section are met, this does not apply.

(4) *Reporting.* The permit shall be written to require that no later than 14 days following each interim date and the final date of compliance, the permittee shall notify the Director in writing of its compliance or noncompliance with the interim or final requirements, or submit progress reports if paragraph (a)(3)(ii) is applicable.

The compliance schedule requires reports to be submitted at each interim date.

EPA has reviewed the copper effluent data from 2013 through January 2020. These data show that the effluent at Outfall 003 has exceeded the proposed Copper BLM based effluent limitations and the Compliance Level:

Table A-5: Outfall 003 Copper Effluent Statistics		
	Maximum	Average
Daily Maximum	3.26	1.11
Average Monthly	2.27	0.92

Therefore, EPA is including the compliance schedule for Outfall 003 that is reflected in the modified CWA § 401 Certification

The interim limitations for Outfall 003 from the CWA § 401 Certification are:

Parameter	Units	Average Monthly Limit	Maximum Daily Limit
Copper	µg/L	4.9	8.1
	lb/day	0.04	0.07

D. MINOR CLARIFICATIONS AND CORRECTIONS

Minor modifications to a permit may be made by EPA in order to correct typographical and/or technical errors. Pursuant to 40 CFR § 122.63, such minor modifications may be made without public notice and review. EPA has made the following minor modifications to the Permit, which will be effective on the date the Permit is signed.

1. Copper Interim Limit Outfalls 001/002

   In calculating the copper interim effluent limitations for Outfall 001, above, EPA discovered an error in the calculations for the copper interim effluent limitation that was calculated for Outfall 001/002.

   Therefore, the interim effluent limitations for Outfall 002 have been modified and are summarized in the following table:

													Concentration			Loading	
	Acute	Chronic	CV	σ^2 =	σ =	σ_4^2 =	σ_4 =	WLAc	WLAa	LTAc	LTAa	LTAmin	AML	MDL	Hardness	AML	MDL
Copper	11.67	8.07	1.327	1.016	1.008	0.365	0.604	8.1	11.7	2.4	1.9	1.9	4.2	11.7		0.020	0.055

2. Methods for measuring some receiving water parameters

   It was brought to EPA's attention that some receiving water parameters did not list the type of analysis that is required by the Copper BLM Guidance. These include Calcium, Magnesium, Sodium, Potassium, Sulfate (as SO_4), and Chloride.

The BLM Guidance specifies that Calcium and Magnesium should be analyzed as dissolved. Although the Guidance is silent on the methodology to be followed for the other parameters, DEQ, in subsequent communications, indicated that the remaining parameters should also be analyzed as dissolved. EPA has added this clarification to Table 5: Surface Water Monitoring Requirements.

3. Report Nomenclature

   The nomenclature for electronic reporting contained an incorrect permit number reference and EPA has corrected these typographical errors in this permit action.