UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 10
1200 Sixth Avenue
Seattle, WA 98101

December 28, 2005

Reply To
Attn Of: ORC-158

U.S. Environmental Protection Agency
Clerk of the Board, Environmental Appeals Board (MC 1103B)
Ariel Rios Building
1200 Pennsylvania Avenue, N.W.
Washington, D.C. 20460-0001

Re: Notification of Completion of Remand Proceedings, Hecla Mining Company, Lucky Friday Mine NPDES Permit No. ID-000017-5, Issued August 12, 2003

Dear Sir or Madam:

On October 13, 2004, the Environmental Appeals Board ("EAB") issued an order that remanded certain conditions of the above-referenced National Pollutant Discharge Elimination System ("NPDES") permit "to allow the Region to incorporate any changes it determines are appropriate" in light of the State of Idaho's decision to revise its Clean Water Act ("CWA") Section 401 certification of the permit. This letter is written to provide notification to the EAB and to the participants in the remand proceedings that the Region has completed the remand proceedings ordered by the EAB.

The Region's decision on remand is embodied in the enclosed modified NPDES permit that incorporates changes to the remanded conditions. Also enclosed is the response to comments received on the draft modified permit. Pursuant to the EAB's remand order, any party "who participated in the remand proceedings and is not satisfied with the Region's decision on remand may file an appeal with the Board pursuant to 40 C.F.R. § 124.19. Any such appeal must be limited to issues within the scope of the remand." Pursuant to 40 C.F.R. § 124.15(b), the modified permit conditions will go into effect on the date specified in the permit unless review in requested on the permit under 40 C.F.R. § 124.19.

Please feel free to contact me at (206) 553-2581 should you have questions regarding this letter.

Sincerely,

R. David Allnutt
Assistant Regional Counsel

encl.

cc: Mike Dexter, Hecla **[via certified mail]**
Rick Eichstaedt, Center for Justice **[via certified mail]**
Kevin J. Beaton, Stoel Rives LLP **[via certified mail]**
Ed Tulloch, IDEQ Coeur d'Alene Office
Gwen Fransen, IDEQ Coeur d'Alene Office
Phil Cernera, Coeur d'Alene Tribe
Justin Hayes, Idaho Conservation League

Permit No.: ID-000017-5

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

AUTHORIZATION TO DISCHARGE UNDER THE
NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM

In compliance with the provisions of the Clean Water Act, 33 U.S.C. §1251 *et seq.*, as amended by the Water Quality Act of 1987, P.L. 100-4, the "Act",

Hecla Mining Company, Lucky Friday Mine
P.O. Box 31, Mullan, Idaho 83846

is authorized to discharge from the Lucky Friday Mine and Mill facility located near Mullan, Idaho, to the South Fork Coeur d'Alene River at the following locations:

Outfall	Latitude	Longitude
001	47° 27' 49" N	115° 48' 21" W
002	47° 28' 06" N	115° 47' 09" W
003	47° 28' 13" N	115° 45' 50" W

in accordance with discharge point(s), effluent limitations, monitoring requirements and other conditions set forth herein.

This permit shall become effective September 14, 2003.

This permit and the authorization to discharge shall expire at midnight, September 14, 2008.

Signed this 12th day of August 2003.

/s/ Randall F. Smith
Randall F. Smith
Director, Office of Water, Region 10
U.S. Environmental Protection Agency

This permit modification shall become effective February 1, 2006.
Signed this 20th day of December, 2005

Michael F. Gearheard
Director, Office of Water and Wastewater, Region 10
U.S. Environmental Protection Agency

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I. LIMITATIONS AND MONITORING REQUIREMENTS

During the effective period of this permit, the permittee is authorized to discharge pollutants from outfalls 001, 002, and 003 to the South Fork Coeur d'Alene (SFCdA) River, within the limits and subject to the conditions set forth herein. This permit authorizes the discharge of only those pollutants resulting from facility processes, waste streams, and operations that have been clearly identified in the permit application process.

A. Effluent Limitations and Monitoring

1. The permittee must limit and monitor discharges from outfalls 001, 002, and 003, as specified in Tables 1, 2, 3, and 4, below. All figures represent maximum effluent limits unless otherwise indicated. The permittee must comply with the effluent limits in the tables at all times unless otherwise indicated, regardless of the frequency of monitoring or reporting required by other provisions of this permit.

Table 1 - Effluent Limitations and Monitoring Requirements for Outfall 001

Parameter	Upstream River Flow Tier[1]	Effluent Limitations				Monitoring Requirements	
		Maximum Daily		Average Monthly			
		ug/l	lb/day	ug/l	lb/day	Sample Frequency	Sample Type
Cadmium[2], total recoverable	not dependent upon river flow	1.8[4]	0.025[4]	0.70[4]	0.0098[4]	weekly	24-hour composite
Lead[2], total recoverable	not dependent upon river flow	50[4]	0.70[4]	30[4]	0.42[4]	weekly	24-hour composite
Zinc[2], total recoverable	not dependent upon river flow	190[4]	2.66[4]	71[4]	0.99[4]	weekly	24-hour composite
Copper[2], total recoverable	< 14 cfs	28	0.39	12	0.17	weekly	24-hour composite
	≥14 to < 32 cfs	26	0.36	11	0.15		
	≥ 32 to <113 cfs	38	0.53	17	0.24		
	≥113 to <194 cfs	73	1.0	32	0.45		
	≥ 194 cfs	63	0.88	28	0.39		

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Table 1 - Effluent Limitations and Monitoring Requirements for Outfall 001

Parameter	Upstream River Flow Tier[1]	Effluent Limitations				Monitoring Requirements	
		Maximum Daily		Average Monthly			
		ug/l	lb/day	ug/l	lb/day	Sample Frequency	Sample Type
Mercury[2], total	< 14 cfs	0.073[4]	0.0010[4]	0.036[4]	0.00050[4]	2/month[5]	grab
	≥ 14 to < 32 cfs	0.099[4]	0.0014[4]	0.050[4]	0.00070[4]		
	≥ 32 to <113 cfs	0.20	0.0028	0.10[4]	0.0014[4]		
	≥113 to <194 cfs	0.66	0.0092	0.32	0.0046		
	≥ 194 cfs	1.1	0.015	0.56	0.0078		
Silver[2], total recoverable	< 14 cfs	3.7	0.052	2.2	0.031	weekly	24-hour composite
	≥ 14 cfs	--	--	--	--	monthly	24-hour composite
Total Suspended Solids (TSS)	not dependent upon river flow	30 mg/l	see footnote 6	20 mg/l	see footnote 6	weekly	24-hour composite
pH, s.u.	not dependent upon river flow	see Part I.A.3.		see Part I.A.3.		weekly	grab
Outfall Flow, cfs	--	--	--	--	--	continuous	recording
Temperature, °C	--	--	--	--	--	weekly	grab
E. coli, #/100 ml.	--	--	--	--	--	monthly	grab
Hardness, as $CaCO_3$, mg/l	--	--	--	--	--	monthly	24-hour composite
Whole Effluent Toxicity (WET)[3], TU_c	--	--	--	--	--	quarterly	24-hour composite
SFCdA River flow directly upstream of the outfall, cfs	--	--	--	--	--	daily	recording

Footnotes:
1 - The effluent limits for copper, silver, and mercury will be determined by the monthly average of the daily flows measured in the SFCdA River directly upstream of outfall 001. The permittee must report the average monthly flow on the DMR.
2 - Reporting is required within 24 hours of a maximum daily violation. See Part III.G.
3 - See Part I.B. for whole effluent toxicity testing requirements.
4 - See Part I.A.4. for the cadmium, lead, mercury, and zinc compliance schedule.
5 - Monitoring for mercury is required twice per month. The monitoring must not occur on consecutive days or weeks.

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Table 1 - Effluent Limitations and Monitoring Requirements for Outfall 001

Parameter	Upstream River Flow Tier[1]	Effluent Limitations				Monitoring Requirements	
		Maximum Daily		Average Monthly			
		ug/l	lb/day	ug/l	lb/day	Sample Frequency	Sample Type

Footnotes, cont.:
6 - The following TSS limits apply:
when no portion of outfall 001 is discharged through outfall 002: maximum daily limit = 469 lbs/day
average monthly limit = 247 lbs/day
when all or a portion of the outfall 001 waste stream is discharged through outfall 002:
maximum daily limit = lbs/day from outfall 001 + lbs/day from outfall 002 must not exceed 469 lbs/day
average monthly limit = lbs/day from outfall 001 + lbs/day from outfall 002 must not exceed 247 lbs/day

Table 2 - Effluent Limitations and Monitoring Requirements for Outfall 002 When the Outfall 001 Waste Stream is Discharged Through Outfall 002

Parameter	Upstream River Flow Tier[1]	Effluent Limitations				Monitoring Requirements	
		Maximum Daily		Average Monthly			
		ug/l	lb/day	ug/l	lb/day	Sample Frequency	Sample Type
Cadmium[2], total recoverable	not dependent upon river flow	1.8[4]	0.025[4]	0.70[4]	0.0098[4]	weekly	24-hour composite
Lead[2], total recoverable	not dependent upon river flow	50[4]	0.70[4]	30[4]	0.42[4]	weekly	24-hour composite
Zinc[2], total recoverable	not dependent upon river flow	190[4]	2.66[4]	71[4]	0.99[4]	weekly	24-hour composite
Copper[2], total recoverable	< 8.6 cfs	20	0.28	8.6	0.12	weekly	24-hour composite
	≥ 8.6 to < 20 cfs	26	0.36	11	0.15		
	≥ 20 to <69 cfs	28	0.39	12	0.17		
	≥ 69 to <117 cfs	49	0.68	22	0.31		
	≥ 117 cfs	46	0.64	20	0.28		
Mercury[2], total	< 8.6 cfs	0.052[4]	0.00072[4]	0.026[4]	0.00036[4]	2/month[5]	grab
	≥ 8.6 to < 20 cfs	0.069[4]	0.00096[4]	0.034[4]	0.00048[4]		
	≥ 20 to <69 cfs	0.13[4]	0.0018[4]	0.067[4]	0.00094[4]		
	≥ 69 to <117 cfs	0.41	0.0057	0.21	0.0029		
	≥ 117 cfs	0.68	0.0095	0.34	0.0048		

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Table 2 - Effluent Limitations and Monitoring Requirements for Outfall 002 When the Outfall 001 Waste Stream is Discharged Through Outfall 002

Parameter	Upstream River Flow Tier[1]	Effluent Limitations				Monitoring Requirements	
		Maximum Daily		Average Monthly			
		ug/l	lb/day	ug/l	lb/day	Sample Frequency	Sample Type
Silver[2], total recoverable	< 8.6 cfs	2.7	0.038	1.6	0.022	weekly	24-hour composite
	≥ 8.6 to < 20 cfs	3.2	0.045	1.9	0.027		
	≥ 20 cfs	--	--	--	--	monthly	24-hour composite
Total Suspended Solids (TSS)	not dependent upon river flow	30 mg/l	see footnote 6	20 mg/l	see footnote 6	weekly	24-hour composite
pH, s.u.	not dependent upon river flow	see Part I.A.3.		see Part I.A.3.		weekly	grab
Outfall Flow, cfs	--	--	--	--	--	continuous	recording
Temperature, °C	--	--	--	--	--	weekly	grab
E. coli, #/100 ml.	--	--	--	--	--	monthly	grab
Hardness, as $CaCO_3$, mg/l	--	--	--	--	--	monthly	24-hour composite
Whole Effluent Toxicity (WET)[3], TU_c	--	--	--	--	--	quarterly	24-hour composite
SFCdA River flow directly upstream of the outfall, cfs	--	--	--	--	--	daily	recording

Footnotes:
1 - The effluent limits for copper, silver, and mercury will be determined by the monthly average of the daily flows measured in the SFCdA River directly upstream of outfall 002. The permittee must report the average monthly flow on the DMR.
2 - Reporting is required within 24 hours of a maximum daily violation. See Part III.G.
3 - See Part I.B. for whole effluent toxicity testing requirements.
4 - See Part I.A.4. for the cadmium, lead, mercury, and zinc compliance schedule.
5 - Monitoring for mercury is required twice per month. The monitoring must not occur on consecutive days or weeks.
6 - The following TSS limits apply:
maximum daily limit = lbs/day from outfall 001 + lbs/day from outfall 002 must not exceed 469 lbs/day
average monthly limit = lbs/day from outfall 001 + lbs/day from outfall 002 must not exceed 247 lbs/day

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Table 3 - Effluent Limitations and Monitoring Requirements for Outfall 002 When the Outfall 003 Waste Stream is Discharged Through Outfall 002

Parameter	Upstream River Flow Tier[1]	Effluent Limitations				Monitoring Requirements	
		Maximum Daily		Average Monthly			
		ug/l	lb/day	ug/l	lb/day	Sample Frequency	Sample Type
Cadmium[2], total recoverable	not dependent upon river flow	2.1[4]	0.040[4]	1.1[4]	0.021[4]	weekly	24-hour composite
Lead[2], total recoverable	not dependent upon river flow	75[4]	1.4[4]	45[4]	0.86[4]	weekly	24-hour composite
Zinc[2], total recoverable	not dependent upon river flow	260[4]	4.9[4]	150[4]	2.8[4]	weekly	24-hour composite
Copper[2], total recoverable	< 8.6 cfs	20	0.38	7.4	0.14	weekly	24-hour composite
	≥ 8.6 to < 20 cfs	23	0.43	8.6	0.16		
	≥ 20 to < 69 cfs	25	0.47	9.3	0.18		
	≥ 69 to <117 cfs	39	0.73	15	0.28		
	≥ 117 cfs	35	0.66	13	0.24		
Mercury[2], total	< 8.6 cfs	0.043[4]	0.00081[4]	0.022[4]	0.00041[4]	2/month[5]	grab
	≥ 8.6 to < 20 cfs	0.056[4]	0.0011[4]	0.028[4]	0.00053[4]		
	≥ 20 to <69 cfs	0.10[4]	0.0019[4]	0.052[4]	0.00098[4]		
	≥ 69 to <117 cfs	0.31	0.0058	0.16[4]	0.030[4]		
	≥ 117 cfs	0.51	0.0096	0.26	0.0049		
Silver[2], total recoverable	< 8.6 cfs	3.2	0.060	1.9	0.036	weekly	24-hour composite
	≥ 8.6 to < 20 cfs	3.4	0.064	2.0	0.038		
	≥ 20 to <69 cfs	4.3	0.081	2.6	0.049		
	≥ 69 to <117 cfs	5.6	0.11	3.3	0.062		
	≥ 117 cfs	4.0	0.075	2.4	0.045		
Total Suspended Solids (TSS)	not dependent upon river flow	30 mg/l	see footnote 6	20 mg/l	see footnote 6	weekly	24-hour composite
pH, s.u.	not dependent upon river flow	see Part I.A.3.		see Part I.A.3.		weekly	grab

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Table 3 - Effluent Limitations and Monitoring Requirements for Outfall 002 When the Outfall 003 Waste Stream is Discharged Through Outfall 002

Parameter	Upstream River Flow Tier[1]	Effluent Limitations				Monitoring Requirements	
		Maximum Daily		Average Monthly			
		ug/l	lb/day	ug/l	lb/day	Sample Frequency	Sample Type
Outfall Flow, cfs	–	–	–	–	–	continuous	recording
Temperature, °C	–	–	–	–	–	weekly	grab
E. coli, #/100 ml.	–	–	–	–	–	monthly	grab
Hardness, as $CaCO_3$, mg/l	–	–	–	–	–	monthly	24-hour composite
Whole Effluent Toxicity (WET)[3], TU_c	–	–	–	–	–	quarterly	24-hour composite
SFCdA River flow directly upstream of the outfall, cfs	–	–	–	–	–	daily	recording

Footnotes:
1 - The effluent limits for copper, silver, and mercury will be determined by the monthly average of the daily flows measured in the SFCdA River directly upstream of outfall 002. The permittee must report the average monthly flow on the DMR.
2 - Reporting is required within 24 hours of a maximum daily violation. See Part III.G.
3 - See Part I.B. for whole effluent toxicity testing requirements.
4 - See Part I.A.4. for the cadmium, lead, mercury, and zinc compliance schedule.
5 - Monitoring for mercury is required twice per month. The monitoring must not occur on consecutive days or weeks.
6 - The following TSS limits apply:
maximum daily limit = lbs/day from outfall 003 + lbs/day from outfall 002 must not exceed 346 lbs/day
average monthly limit = lbs/day from outfall 003 + lbs/day from outfall 002 must not exceed 188 lbs/day

Table 4 - Effluent Limitations and Monitoring Requirements for Outfall 003

Parameter	Upstream River Flow Tier[1]	Effluent Limitations				Monitoring Requirements	
		Maximum Daily		Average Monthly			
		ug/l	lb/day	ug/l	lb/day	Sample Frequency	Sample Type
Cadmium[2], total recoverable	not dependent upon river flow	2.1[4]	0.040[4]	1.1[4]	0.021[4]	weekly	24-hour composite
Lead[2], total recoverable	not dependent upon river flow	75[4]	1.4[4]	45[4]	0.85[4]	weekly	24-hour composite

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Table 4 - Effluent Limitations and Monitoring Requirements for Outfall 003

Parameter	Upstream River Flow Tier[1]	Effluent Limitations				Monitoring Requirements	
		Maximum Daily		Average Monthly			
		ug/l	lb/day	ug/l	lb/day	Sample Frequency	Sample Type
Zinc[2], total recoverable	not dependent upon river flow	260[4]	4.9[4]	160[4]	2.8[4]	weekly	24-hour composite
Copper[2], total recoverable	< 8.0 cfs	20	0.38	7.4	0.14	weekly	24-hour composite
	≥8.0 to < 18 cfs	23	0.43	8.4	0.16		
	≥ 18 to < 63 cfs	29	0.55	11	0.21		
	≥ 63 cfs	30	0.56	11	0.21		
Mercury[2], total	< 8.0 cfs	0.042[4]	0.00079[4]	0.021[4]	0.00040[4]	2/month[5]	grab
	≥8.0 to < 18cfs	0.054[4]	0.0010[4]	0.027[4]	0.00051[4]		
	≥18 to < 63 cfs	0.096[4]	0.0018[4]	0.048[4]	0.00090[4]		
	≥ 63 to < 108 cfs	0.29	0.0055	0.14[4]	0.0026[4]		
	≥ 108 cfs	0.48	0.0090	0.24	0.0045		
Silver[2], total recoverable	< 8.0 cfs	3.2	0.060	1.9	0.036	weekly	24-hour composite
	≥8.0 to < 18 cfs	3.3	0.062	2.0	0.038		
	≥ 18 to < 63 cfs	3.2	0.060	1.9	0.036		
	≥ 63 to < 108 cfs	3.9	0.073	2.3	0.043		
	≥ 108 cfs	3.3	0.062	2.0	0.038		
Total Suspended Solids (TSS)	not dependent upon river flow	30 mg/l	see footnote 6	20 mg/l	see footnote 6	weekly	24-hour composite
pH, s.u.	not dependent upon river flow	see Part I.A.3.		see Part I.A.3.		weekly	grab
Outfall Flow, cfs	--	--	--	--	--	continuous	recording
Temperature, °C	--	--	--	--	--	weekly	grab
E. coli, #/100 ml.	--	--	--	--	--	monthly	grab
Hardness, as $CaCO_3$, mg/l	--	--	--	--	--	monthly	24-hour composite
Whole Effluent Toxicity (WET)[3], TU_c	--	--	--	--	--	quarterly	24-hour composite

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Table 4 - Effluent Limitations and Monitoring Requirements for Outfall 003

Parameter	Upstream River Flow Tier[1]	Effluent Limitations				Monitoring Requirements	
		Maximum Daily		Average Monthly			
		ug/l	lb/day	ug/l	lb/day	Sample Frequency	Sample Type
SFCdA River flow directly upstream of the outfall, cfs	–	–	–	–	–	daily	recording

Footnotes:
1 - The effluent limits for copper, silver, and mercury will be determined by the monthly average of the daily flows measured in the SFCdA River directly upstream of outfall 003. The permittee must report the average monthly flow on the DMR.
2 - Reporting is required within 24 hours of a maximum daily violation. See Part III.G.
3 - See Part I.B. for whole effluent toxicity testing requirements.
4 - See Part I.A.4. for the cadmium, lead, mercury, and zinc compliance schedule.
5 - Monitoring for mercury is required twice per month. The monitoring must not occur on consecutive days or weeks.
6 - The following TSS limits apply:
when no portion of outfall 003 is discharged through outfall 002:
maximum daily limit = 346 lbs/day
average monthly limit = 188 lbs/day
when all or a portion of the outfall 003 waste stream is discharged through outfall 002:
maximum daily limit = lbs/day from outfall 001 + lbs/day from outfall 002 must not exceed 346 lbs/day
average monthly limit = lbs/day from outfall 001 + lbs/day from outfall 002 must not exceed 188 lbs/day

2. The permittee must not discharge any floating, suspended, or submerged matter of any kind in concentrations causing a nuisance or objectionable condition or that may impair the designated beneficial uses of the receiving water.

3. The pH must not be less than 6.5 standard units (s.u.) nor greater than 9.0 s.u.

4. Cadmium, Lead, Mercury, and Zinc Compliance Schedule.

   a. The permittee must comply with the cadmium, lead, mercury, and zinc effluent limitations in Tables 1, 2, 3, and 4 on or before September 13, 2008.

   b. The permittee shall design and implement a water recycling system on or before August 12, 2005. The permittee shall provide the design of the water recycling system to IDEQ for comment and to EPA prior to implementing the system.

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c. The permittee shall have at the end of August 12, 2005, an additional 12 months for testing and analysis.

d. If it is determined that a water treatment system is needed to comply with the effluent limits, the permittee shall design, build, and implement a water treatment system and comply with the effluent limits on or before September 13, 2008.

e. During the period that the compliance schedule is in effect, the permittee shall comply with the interim limits in Table 5.

Table 5 - Interim Effluent Limitations

Outfall	Parameter	Maximum Daily Limit		Average Monthly Limit	
		ug/l	lb/day	ug/l	lb/day
Outfall 001 and Outfall 002 when the outfall 001 waste stream is discharged through outfall 002	Cadmium[1], total recoverable	6.0	0.046	2.0	0.023
	Lead[1], total recoverable	600	5.96	300	3.10
	Mercury[1], total	0.2[2]	0.0026[2]	0.2	0.0026
	Zinc[1], total recoverable	880	6.53	469	2.54
Outfall 003 and Outfall 002 when the outfall 003 waste stream is discharged through outfall 002	Cadmium[1], total recoverable	3	0.043	2	0.022
	Lead[1], total recoverable	321	2.76	265	1.43
	Mercury[1], total	0.2[3]	0.0038[3]	0.2[3]	0.0038[3]
	Zinc[1], total recoverable	670	6.29	480	4.26

Footnotes:
1 - Reporting is required within 24 hours of a maximum daily violation. See Part III.G.
2 - This interim limit applies to the first three flow tiers for outfall 001 [< 14 cfs, 14-32 cfs, and 32-113 cfs (average monthly limit only)] and the first three flow tiers for outfall 002 when the outfall 001 waste stream is discharged through outfall 002 [< 8.6 cfs, 8.6-20 cfs, and 20 - 69 cfs (average monthly limit only)].
3 - This interim limit applies to the first four flow tiers for outfall 002 when the outfall 003 waste stream is discharged through outfall 002 [< 8.6 cfs, 8.6-20 cfs, 20-69 cfs, and 69-117 cfs (average monthly limit only)] and the first four flow tiers for outfall 003 [< 6 cfs, 6-16 cfs, 16 - 63 cfs, and 63-108 cfs (average monthly limit only)].

f. Until compliance with the effluent limits is achieved, the permittee must submit an annual Report of Progress to EPA and IDEQ which outlines the progress made towards achieving compliance. The report

must be submitted by January 31st of each year. At a minimum the annual report must include:

i) An assessment of the previous years cadmium, lead, mercury, and zinc data and comparison to the final effluent limitations.

ii) A report on progress made toward meeting the final effluent limitations.

iii) Further actions and milestones targeted for the upcoming year.

5. The permittee must collect effluent samples from the effluent stream after the last treatment unit prior to discharge into the receiving waters.

6. Method Detection Limits. For all effluent monitoring, the permittee must use methods that can achieve a method detection limit (MDL) less than the effluent limitation.

For purposes of reporting on the DMR, if a value is greater than the MDL, the permittee must report the actual value. If a value is less than the MDL, the permittee must report "less than {numeric MDL}" on the DMR. For purposes of calculating monthly averages, zero may be used for values less than the MDL.

B. Whole Effluent Toxicity Testing Requirements. The permittee must conduct chronic toxicity tests on effluent samples from outfalls 001, 002, and 003. Testing must be conducted in accordance with subsections 1 through 6, below.

1. Test Species and Methods

a. Tests must be run four times per year, during the months of February, May, August, and November.

b. Toxicity testing must be conducted on 24-hour composite samples of effluent. In addition, a split of each sample collected must be analyzed for the chemical and physical parameters required in Part I.A above. When the timing of sample collection coincides with that of the sampling required in

Part I.A, analysis of the split sample will fulfill the requirements of Part I.A. as well.

c. The permittee must conduct tests with the water flea, *Ceriodaphnia dubia* (survival and reproduction test) and the fathead minnow, *Pimephales promelas* (larval survival and growth test) for the first three suites of tests. After this screening period, monitoring shall be conducted using the most sensitive species.

d. The presence of chronic toxicity must be determined as specified in *Short-Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms*, Fourth Edition, EPA-821-R-02-213, October 2002.

e. Results must be reported in TU_c (chronic toxic units), where $TU_c = 100/IC_{25}$. See Part VI. for a definition of IC_{25}.

2. Toxicity Triggers. For the purposes of determining compliance with paragraphs I.B.4. and I.B.5., the chronic toxicity trigger is defined as toxicity exceeding the trigger values in Table 6.

Table 6: Chronic Toxicity Triggers and Receiving Water Concentrations

Outfall	Flow Tier[1]	Chronic Toxicity Trigger, TU_c	Receiving Water Concentration (RWC), % effluent
001	< 14 cfs	1.9	53
	≥ 14 to < 32 cfs	2.3	43
	≥ 32 to < 113 cfs	4.1	24
	≥ 113 to < 194 cfs	12	8.3
	≥ 194 cfs	20	5
002 - when the outfall 001 waste stream is discharged through outfall 002	< 8.6 cfs	1.5	68
	≥ 8.6 to < 20 cfs	1.8	56
	≥ 20 to < 69 cfs	2.9	34
	≥ 69 to < 117 cfs	7.6	13
	≥ 117 cfs	12	8.3

Table 6: Chronic Toxicity Triggers and Receiving Water Concentrations			
Outfall	Flow Tier[1]	Chronic Toxicity Trigger, TU_c	Receiving Water Concentration (RWC), % effluent
002 - when the outfall 003 waste stream is discharged through outfall 002	< 8.6 cfs	1.4	71
	≥ 8.6 to < 20 cfs	1.6	63
	≥ 20 to < 69 cfs	2.4	42
	≥ 69 to < 117 cfs	5.9	17
	≥ 117 cfs	9.4	11
003	< 8.0 cfs	1.4	71
	≥ 8.0 to < 18 cfs	1.6	63
	≥ 18 to < 63 cfs	2.3	43
	≥ 63 to < 108 cfs	5.5	18
	≥ 108 cfs	8.7	11
footnote 1: The trigger values shall be determined by the average monthly flow directly upstream of the outfall for the testing month.			

3. Quality Assurance

   a. The toxicity testing on each organism must include a series of five test dilutions and a control. The series must include the receiving water concentration (RWC), which is the dilution associated with the chronic toxicity trigger, and test dilutions which bracket the RWC. The RWCs for each outfall are provided in Table 6, above.

   b. All quality assurance criteria and statistical analyses used for chronic tests and reference toxicant tests must be in accordance with *Short-Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms*, Fourth Edition, EPA-821-R-02-213, October 2002, and individual test protocols.

   c. In addition to those quality assurance measures specified in the methodology, the following quality assurance procedures must be followed:

      i) If organisms are not cultured in-house, concurrent testing with reference toxicants must be conducted. If organisms are cultured in-house, monthly reference toxicant testing is sufficient. Reference

toxicant tests must be conducted using the same test conditions as the effluent toxicity tests.

ii) If either of the reference toxicant tests or the effluent tests do not meet all test acceptability criteria as specified in the test methods manual, the permittee must re-sample and re-test within 14 days of receipt of the test results.

iii) Control and dilution water must be receiving water or lab water, as appropriate, as described in the manual. If the dilution water used is different from the culture water, a second control, using culture water must also be used. Receiving water may be used as control and dilution water upon notification of EPA. In no case shall water that has not met test acceptability criteria be used for either dilution or control.

4. Accelerated Testing.

a. If chronic toxicity is detected above a trigger specified in paragraph B.2., the permittee must conduct six more tests, bi-weekly, over a twelve week period. This accelerated testing must be initiated within two weeks of receipt of the test results that indicate an exceedence. Part I.B.4.d., below, allows for the permittee to conduct only one accelerated test if the conditions under that part are met.

b. If none of the six accelerated tests exceed the trigger, then the permittee may return to the normal testing frequency.

c. If any of the six tests exceed the trigger, then the permittee shall initiate a Toxicity Reduction Evaluation (TRE) in accordance with Part I.B.5.

d. Initial Investigation. If the permittee demonstrates through an evaluation of facility operations that the cause of the exceedence is known and corrective actions have been implemented, only one accelerated test is necessary. If toxicity exceeding the trigger is detected in this test, then the TRE requirements in Part I.B.5. shall apply. If toxicity does not exceed the trigger, then the permittee may return to the normal quarterly testing frequency.

5. Toxicity Reduction Evaluation and Toxicity Identification Evaluation:

   a. If a toxicity trigger is exceeded during accelerated testing under Part I.B.4.c. or d., the permittee must initiate a TRE in accordance with *Generalized Methodology for Conducting Industrial Toxicity Reduction Evaluations* (EPA/600/2-88/070) within fifteen (15) days of the exceedence. At a minimum, the TRE must include:

      i) further actions to investigate and identify the cause of toxicity;

      ii) actions the permittee will take to mitigate the impact of the discharge and to prevent the recurrence of toxicity; and

      iii) a schedule for these actions.

   b. If a TRE is initiated prior to completion of the accelerated testing, the accelerated testing schedule may be terminated, or used as necessary in performing the TRE.

   c. The permittee may initiate a TIE as part of the TRE process. Any TIE must be performed in accordance with EPA guidance manuals, *Toxicity Identification Evaluation; Characterization of Chronically Toxic Effluents, Phase I* (EPA/600/6-91/005F), *Methods for Aquatic Toxicity Identification Evaluations, Phase II: Toxicity Identification Procedures for Samples Exhibiting Acute and Chronic Toxicity* (EPA/600/R-92/080), and *Methods for Aquatic Toxicity Identification Evaluations, Phase III: Toxicity Confirmation Procedures for Samples Exhibiting Acute and Chronic Toxicity* (EPA-600/R-92/081).

6. Reporting

   a. The permittee must submit a full report of the results of the toxicity tests with the DMR for the month following sample collection.

   b. The permittee must submit the results of any accelerated testing, under Part I.B.4., within two weeks of receipt of the results from the lab. The full report must be submitted within four weeks of receipt of the results from the lab. If an initial investigation, under Part I.B.4.d. indicates the source of toxicity and accelerated testing is unnecessary, the result of the investigation must be submitted with the full report.

c. The report of toxicity test results must include all relevant information outlined in Section 10.1, Report Preparation, of *Short-Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms*, Fourth Edition, EPA-821-R-02-213, October 2002. The full report must include: toxicity test results, dates of sample collection and initiation of each test, the toxicity triggers as defined in paragraph B.2., flow rate at the time of sample collection, and the results of the monitoring required in Part I.A.

C. **Seepage Study and Hydrological Analysis.** The permittee must 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. If there is a discharge from outfall 002 for more than 6 months, then a seepage study must also be conducted for tailings pond no. 2.

1. The seepage study and hydrological analysis must begin in 2007 after implementation of the water recycling program.

2. The permittee must quantify seepage by performing a water balance analysis for each tailings pond based on monitoring and evaluation of inflows, outflows, and estimated losses (e.g., evaporation). Seasonal variation must be addressed in each water balance analysis.

3. The permittee must perform a hydrological analysis to determine if seepage from the ponds enters the SFCdA River and to estimate the amount of this seepage. Seasonal variation must be addressed in the hydrological analysis.

4. Results of the seepage study and hydrological analysis must be submitted to EPA and IDEQ in a Seepage Study and Hydrological Analysis Report. The report must include a description of the methodology and data used to determine if seepage is occurring and the extent that seepage enters the SFCdA River and the results of the study.

   a. The Seepage Study and Hydrological Analysis Report for tailings pond no. 1 and tailings pond no. 3 must be submitted to EPA and IDEQ 6 months prior to the expiration date of the permit (by March 14, 2008).

   b. If a discharge occurs through outfall 002 for more than 6 months, then a seepage study and hydrological analysis must be performed for tailings pond no. 2. The Seepage Study and Hydrological Analysis Report for tailings pond no. 2 must be submitted to EPA and IDEQ 6 months prior to the expiration date of the permit (by March 14, 2008).

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D. Ambient Water Monitoring. The permittee must perform the following receiving water monitoring program.

1. River Flow Monitoring. River flow of the South Fork Coeur d'Alene (SFCdA) River directly upstream of each outfall must be determined daily according to requirements in Section I.A. (Tables 1, 2, 3, and 4).

2. Water Quality Monitoring

   a. The permittee must monitor the SFCdA River directly upstream of outfall 001 and directly upstream of outfall 003. If outfall 002 is being utilized, then the permittee must monitor directly upstream of outfall 002.

   b. All locations must be monitored four times per year during February, May, August, and November.

   c. All ambient samples must be grab samples.

   d. Samples must be analyzed for the parameters listed in Table 7 to achieve method detection limits (MDLs) that are equivalent to or less than those listed in Table 7. The permittee may request different MDLs. Such a request must be in writing and must be approved by EPA.

Table 7: Receiving Water Monitoring Parameters and MDLs

Parameter	Units	Method Detection Limit (MDL)
Cadmium, dissolved	ug/l	0.1
Copper, dissolved	ug/l	1
Lead, dissolved	ug/l	5
Mercury, total	ug/l	0.001
Silver, dissolved	ug/l	0.1
Zinc, dissolved	ug/l	10
Total Suspended Solids (TSS)	mg/l	–
pH	standard units	–
Temperature	°C	–
Hardness[1]	mg/l $CaCO_3$	–

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Table 7: Receiving Water Monitoring Parameters and MDLs		
Parameter	Units	Method Detection Limit (MDL)
footnote 1: Hardness shall be monitored upstream and downstream of the outfall.		

3. Bioassessment Monitoring. The permittee must annually conduct instream bioassessment monitoring to ensure compliance with the Idaho Water Quality Standards.

   a. Beginning in 2007, the permittee shall conduct annual instream bioassessment monitoring using a sample design that will allow IDEQ to make a determination as to the impact of the discharges to the beneficial use. The permittee must coordinate the sample design with the Coeur d'Alene office of IDEQ.

   b. Monitoring shall occur for outfalls 001 and 003. If effluent is discharged from outfall 002 for six months or longer, monitoring shall be required directly downstream of outfall 002.

   c. In the event that discharge effluent is combined to one outfall, annual monitoring is required directly downstream of the combined outfall and the abandoned outfall for comparison.

   d. Bioassessment monitoring shall be consistent with the most recent IDEQ Beneficial Use Reconnaissance Project workplan for wadeable streams.

4. Quality assurance/quality control plans for all the monitoring must be documented in the Quality Assurance Plan required under Part I.E.

5. The permittee must submit an annual report summarizing the results of the ambient water monitoring to EPA and IDEQ by January 31st of the next year. At a minimum, the report must include: the sample locations; dates of sample collection and analyses; analytical and bioassessment results; a discussion of field sampling and laboratory methods, including quality assurance/quality control; data handling; and, in addition for the bioassessment monitoring, copies of the field forms, macroinvertebrate identification and enumeration, fish taxa and abundance.

E. **Quality Assurance Plan.** The permittee must develop a quality assurance plan (QAP) for all monitoring required by this permit. The plan must be submitted to EPA for review within 60 days of the effective date of this permit and implemented within 120 days of the effective date of this permit. Any existing QAPs may be modified for submittal under this section.

1. The QAP must be designed to assist in planning for the collection and analysis of effluent and receiving water samples in support of the permit and in explaining data anomalies when they occur.

2. Throughout all sample collection and analysis activities, the permittee must use the EPA-approved QA/QC and chain-of-custody procedures described in the most recent editions of *Requirements for Quality Assurance Project Plans* (EPA/QA/R-5) and *Guidance for Quality Assurance Project Plans* (EPA/QA/G-5). The QAP must be prepared in the format which is specified in these documents. These documents can be found at the following EPA websites: www.epa.gov/Region10/offices/oea/epaqar5.pdf and www.epa.gov/swerust1/cat/epaqag5.pdf

3. The permittee must amend the QAP whenever there is a modification in sample collection, sample analysis, or other procedure addressed by the QAP.

4. Copies of the QAP must be kept on site and made available to EPA and/or IDEQ upon request.

II. BEST MANAGEMENT PRACTICES PLAN

A. **Purpose.** Through implementation of the best management practices (BMP) plan the permittee must prevent or minimize the generation and the potential for the release of pollutants from the facility to the waters of the United States.

B. **Development and Implementation Schedule.** The permittee must develop and implement a BMP Plan which achieves the objectives and the specific requirements listed below. A copy of the BMP Plan must be submitted to EPA within 120 days of the effective date of the permit. Any existing BMP plans may be modified for submittal and approval under this section. The permittee must implement the provisions of the plan as conditions of this permit within 180 days of the effective date of this permit.

C. **Objectives.** The permittee must develop and amend the BMP Plan consistent with the following objectives for the control of pollutants.

1. The number and quantity of pollutants and the toxicity of effluent generated, discharged or potentially discharges at the facility must be minimized by the permittee to the extent feasible by managing each waste stream in the most appropriate manner.

2. Under the BMP Plan and any Standard Operating Procedures included in the BMP Plan, the permittee must ensure proper operation and maintenance of water management and wastewater treatment systems. BMP Plan elements must be developed in accordance with good engineering practices.

3. Each facility component or system must be examined for its waste minimization opportunities and its potential for causing a release of significant amounts of pollutants to waters of the United States due to equipment failure, improper operation, natural phenomena such as rain or snowfall, etc. The examination must include all normal operations and ancillary activities including material storage areas, storm water, in-plant transfer, material handling and process handling areas, loading or unloading operations, spillage or leaks, sludge and waste disposal, or drainage from raw material storage.

D. **Elements of the BMP Plan.** The BMP Plan must be consistent with the objectives above. The BMP Plan should be consistent with the general guidance contained in *Guidance Manual for Developing Best Management Practices* (EPA 833-B-93-004, October 1993) or any subsequent revisions to this guidance document. The BMP Plan must include, at a minimum, the following items:

1. Statement of BMP policy. The BMP Plan must include a statement of management commitment to provide the necessary financial, staff, equipment, and training resources to develop and implement the BMP Plan on a continuing basis.

2. Structure, functions, and procedures of the BMP Committee. The BMP Plan must establish a BMP Committee responsible for developing, implementing, and maintaining the BMP Plan.

3. Release Identification and Assessment. A release identification is the systematic cataloging of areas at a facility with ongoing or potential releases to the environment. A release assessment is used to determine the impact on

human health and the environment of any on-going or potential release identified. The identification and assessment process involves the evaluation of both current discharges and potential discharges.

4. Measures and Controls. The permittee must develop a description of pollution prevention controls, BMPs, and other measures appropriate for the facility, and implement such controls. The appropriateness and priorities of controls in the BMP Plan must reflect identified potential sources of pollutants at the facility. The description of management controls must address the following minimum components:

   a. Good Housekeeping. A program by which the facility is kept in a clean and orderly fashion to prevent releases to the environment.

   b. Preventative Maintenance. A program focused on preventing releases caused by equipment problems, rather than repair of equipment after problems occur.

   c. Inspections. A program established to oversee facility operations and identify actual or potential environmental releases and to ensure that BMPs are being implemented.

   d. Security. A program designed to avoid releases due to accidental or intentional entry.

   e. Employee Training. A program developed to instill in employees an understanding of the BMP Plan.

   f. Recordkeeping and Reporting. A program designed to maintain relevant information and foster communication.

5. Specific Best Management Practices. The BMP Plan must establish specific BMPs or other measures which ensure that the following specific requirements are met:

   a. Solids, sludges, or other pollutants removed in the course of treatment or control of water and wastewaters must be disposed of in a manner such as to prevent any pollutant from such materials from entering navigable waters.

   b. Ensure proper management of solid and hazardous waste in accordance with regulations promulgated under the Resource

Conservation and Recovery Act (RCRA). Management practices required under RCRA regulations must be referenced in the BMP Plan.

c. Ensure proper management of materials in accordance with Spill Prevention, Control, and Countermeasure (SPCC) plans under Section 311 of the Act and 40 CFR Part 112. The BMP Plan may incorporate any part of such plans into the BMP Plan by reference.

E. Annual Review and Certification.

1. Annual Review. An annual review of the BMP Plan must be conducted by the responsible manager and BMP committee.

2. Annual Certification. The permittee must prepare a certified statement that the above reviews have been completed and that the BMP Plan fulfills the requirements set forth in the permit. This statement must be signed in accordance with Part V.E. (Signatory Requirements) of this permit. This statement must be submitted to EPA on or before January 31st of each year of operation under this permit.

F. Documentation. The permittee must maintain a copy of the BMP Plan at the facility and make it available to EPA or an authorized representative upon request.

G. BMP Plan Modification.

1. The permittee must amend the BMP Plan whenever there is a change in the facility or in the operation of the facility which materially increases the generation of pollutants or their release or potential release to surface waters.

2. The permittee must amend the BMP Plan whenever it is found to be ineffective in achieving the general objective of preventing and minimizing the generation and the potential for the release of pollutants from the facility to the waters of the United States and/or the specific requirements above.

3. Any changes to the BMP Plan must be consistent with the objectives and specific requirements listed above. All changes in the BMP Plan must be reported to EPA in writing.

III. MONITORING, RECORDING AND REPORTING REQUIREMENTS

A. **Representative Sampling (Routine and Non-Routine Discharges).** Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity.

In order to ensure that the effluent limits set forth in this permit are not violated at times other than when routine samples are taken, the permittee must collect additional samples at the appropriate outfall whenever any discharge occurs that may reasonably be expected to cause or contribute to a violation that is unlikely to be detected by a routine sample. The permittee must analyze the additional samples for those parameters limited in Part I.A. of this permit that are likely to be affected by the discharge.

The permittee must collect such additional samples as soon as the spill, discharge, or bypassed effluent reaches the outfall. The samples must be analyzed in accordance with paragraph III.C ("Monitoring Procedures"). The permittee must report all additional monitoring in accordance with paragraph III.D ("Additional Monitoring by Permittee").

B. **Reporting of Monitoring Results.** The permittee must summarize monitoring results each month on the Discharge Monitoring Report (DMR) form (EPA No. 3320-1) or equivalent. The permittee must submit reports monthly, postmarked by the 20th day of the following month. The permittee must sign and certify all DMRs, and all other reports, in accordance with the requirements of Part V.E. of this permit ("Signatory Requirements"). The permittee must submit the legible originals of these documents to the Director, Office of Compliance and Enforcement, with copies to IDEQ at the following addresses:

United States Environmental Protection Agency, Region 10
1200 Sixth Avenue, OCE-133
Seattle, Washington 98101

Idaho Department of Environmental Quality, Coeur d'Alene Regional Office
2110 Ironwood Parkway
Coeur d'Alene, Idaho 83814

C. **Monitoring Procedures.** Monitoring must be conducted according to test procedures approved under 40 CFR 136, unless other test procedures have been specified in this permit.

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D. Additional Monitoring by Permittee. If the permittee monitors any pollutant more frequently than required by this permit, using test procedures approved under 40 CFR 136 or as specified in this permit, the permittee must include the results of this monitoring in the calculation and reporting of the data submitted in the DMR.

Upon request by the Director, the permittee must submit results of any other sampling, regardless of the test method used.

E. Records Contents. Records of monitoring information must include:

1. the date, exact place, and time of sampling or measurements;
2. the name(s) of the individual(s) who performed the sampling or measurements;
3. the date(s) analyses were performed;
4. the name(s) of the individual(s) who performed the analyses;
5. the analytical techniques or methods used; and
6. the results of such analyses.

F. Retention of Records. The permittee must retain records of all monitoring information, including, all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this permit, copies of DMRs, a copy of the NPDES permit, and records of all data used to complete the application for this permit, for a period of at least five years from the date of the sample, measurement, report or application. This period may be extended by request of the Director or IDEQ at any time.

G. Twenty-four Hour Notice of Noncompliance Reporting

1. The permittee must report the following occurrences of noncompliance by telephone within 24 hours from the time the permittee becomes aware of the circumstances:

   a. any noncompliance that may endanger health or the environment;

   b. any unanticipated bypass that exceeds any effluent limitation in the permit (See Part IV.F., "Bypass of Treatment Facilities");

   c. any upset that exceeds any effluent limitation in the permit (See Part IV.G., "Upset Conditions"); or

d. any violation of a maximum daily discharge limitation for any of the pollutants listed in Tables 1, 2, 3, 4, and 5 of Part I.A. of the permit requiring 24-hour reporting.

2. The permittee must also provide a written submission within five days of the time that the permittee becomes aware of any event required to be reported under subpart 1 above. The written submission must contain:

   a. a description of the noncompliance and its cause;

   b. the period of noncompliance, including exact dates and times;

   c. the estimated time noncompliance is expected to continue if it has not been corrected; and

   d. steps taken or planned to reduce, eliminate, and prevent recurrence of the noncompliance.

3. The Director may waive the written report on a case-by-case basis if the oral report has been received within 24 hours by the NPDES Compliance Hotline in Seattle, Washington, by telephone, (206) 553-1846.

4. Reports must be submitted to the addresses in Part III.B ("Reporting of Monitoring Results").

H. Other Noncompliance Reporting. The permittee must report all instances of noncompliance, not required to be reported within 24 hours, at the time that monitoring reports for Part III.B ("Reporting of Monitoring Results") are submitted. The reports must contain the information listed in Part III.G.2 of this permit ("Twenty-four Hour Notice of Noncompliance Reporting").

I. Changes in Discharge of Toxic Substances. The permittee must notify the Director and IDEQ as soon as it knows, or has reason to believe:

1. That any activity has occurred or will occur that would result in the discharge, on a routine or frequent basis, of any toxic pollutant that is not limited in the permit, if that discharge will exceed the highest of the following "notification levels":

   a. One hundred micrograms per liter (100 ug/l);

b. Two hundred micrograms per liter (200 ug/l) for acrolein and acrylonitrile; five hundred micrograms per liter (500 ug/l) for 2,4-dinitrophenol and for 2-methyl-4, 6-dinitrophenol; and one milligram per liter (1 mg/l) for antimony;

c. Five (5) times the maximum concentration value reported for that pollutant in the permit application in accordance with 40 CFR 122.21(g)(7); or

d. The level established by the Director in accordance with 40 CFR 122.44(f).

2. That any activity has occurred or will occur that would result in any discharge, on a non-routine or infrequent basis, of any toxic pollutant that is not limited in the permit, if that discharge will exceed the highest of the following "notification levels":

a. Five hundred micrograms per liter (500 ug/l);

b. One milligram per liter (1 mg/l) for antimony;

c. Ten (10) times the maximum concentration value reported for that pollutant in the permit application in accordance with 40 CFR 122.21(g)(7); or

d. The level established by the Director in accordance with 40 CFR 122.44(f).

J. **Compliance Schedules.** Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this permit must be submitted no later than 14 days following each schedule date.

IV. COMPLIANCE RESPONSIBILITIES

A. **Duty to Comply.** The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the Act and is grounds for enforcement action, for permit termination, revocation and reissuance, or modification, or for denial of a permit renewal application.

B. Penalties for Violations of Permit Conditions

1. Civil Penalties. Pursuant to 40 CFR 19 and the Act, any person who violates section 301, 302, 306, 307, 308, 318 or 405 of the Act, or any permit condition or limitation implementing any such sections in a permit issued under section 402, or any requirement imposed in a pretreatment program approved under sections 402(a)(3) or 402(b)(8) of the Act, is subject to a civil penalty not to exceed the maximum amounts authorized by Section 309(d) of the Act and the Federal Civil Penalties Inflation Adjustment Act (28 U.S.C. 2461 note) as amended by the Debt Collection Improvement Act (31 U.S.C. 3701 note) (currently $27,500 per day for each violation).

2. Administrative Penalties. Any person may be assessed an administrative penalty by the Administrator for violating section 301, 302, 306, 307, 308, 318 or 405 of this Act, or any permit condition or limitation implementing any of such sections in a permit issued under section 402 of this Act. Pursuant to 40 CFR 19 and the Act, administrative penalties for Class I violations are not to exceed the maximum amounts authorized by Section 309(g)(2)(A) of the Act and the Federal Civil Penalties Inflation Adjustment Act (28 U.S.C. 2461 note) as amended by the Debt Collection Improvement Act (31 U.S.C. 3701 note) (currently $11,000 per violation, with the maximum amount of any Class I penalty assessed not to exceed $27,500). Pursuant to 40 CFR 19 and the Act, penalties for Class II violations are not to exceed the maximum amounts authorized by Section 309(g)(2)(B) of the Act and the Federal Civil Penalties Inflation Adjustment Act (28 U.S.C. 2461 note) as amended by the Debt Collection Improvement Act (31 U.S.C. 3701 note) (currently $11,000 per day for each day during which the violation continues, with the maximum amount of any Class II penalty not to exceed $137,500).

3. Criminal Penalties:

   a. Negligent Violations. The Act provides that any person who negligently violates sections 301, 302, 306, 307, 308, 318, or 405 of the Act, or any condition or limitation implementing any of such sections in a permit issued under section 402 of the Act, or any requirement imposed in a pretreatment program approved under section 402(a)(3) or 402(b)(8) of the Act, is subject to criminal penalties of $2,500 to $25,000 per day of violation, or imprisonment of not more than 1 year, or both. In the case of a second or subsequent conviction for a negligent violation, a person shall be subject to criminal penalties of not more than $50,000 per day of violation, or by imprisonment of not more than 2 years, or both.

b. Knowing Violations. Any person who knowingly violates such sections, or such conditions or limitations is subject to criminal penalties of $5,000 to $50,000 per day of violation, or imprisonment for not more than 3 years, or both. In the case of a second or subsequent conviction for a knowing violation, a person shall be subject to criminal penalties of not more than $100,000 per day of violation, or imprisonment of not more than 6 years, or both.

c. Knowing Endangerment. Any person who knowingly violates section 301, 302, 303, 306, 307, 308, 318 or 405 of the Act, or any permit condition or limitation implementing any of such sections in a permit issued under section 402 of the Act, and who knows at that time that he thereby places another person in imminent danger of death or serious bodily injury, shall, upon conviction, be subject to a fine of not more than $250,000 or imprisonment of not more than 15 years, or both. In the case of a second or subsequent conviction for a knowing endangerment violation, a person shall be subject to a fine of not more than $500,000 or by imprisonment of not more than 30 years, or both. An organization, as defined in section 309(c)(3)(B)(iii) of the Act, shall, upon conviction of violating the imminent danger provision, be subject to a fine of not more than $1,000,000 and can be fined up to $2,000,000 for second or subsequent convictions.

d. False Statements. The Act provides that any person who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained under this permit shall, upon conviction, be punished by a fine of not more than $10,000, or by imprisonment for not more than 2 years, or both. If a conviction of a person is for a violation committed after a first conviction of such person under this paragraph, punishment is a fine of not more than $20,000 per day of violation, or by imprisonment of not more than 4 years, or both. The Act further provides that any person who knowingly makes any false statement, representation, or certification in any record or other document submitted or required to be maintained under this permit, including monitoring reports or reports of compliance or non-compliance shall, upon conviction, be punished by a fine of not more than $10,000 per violation, or by imprisonment for not more than 6 months per violation, or by both.

C. **Need to Halt or Reduce Activity not a Defense.** It shall not be a defense for the permittee in an enforcement action that it would have been necessary to halt or

reduce the permitted activity in order to maintain compliance with the conditions of this permit.

D. **Duty to Mitigate.** The permittee must take all reasonable steps to minimize or prevent any discharge in violation of this permit that has a reasonable likelihood of adversely affecting human health or the environment.

E. **Proper Operation and Maintenance.** The permittee must at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems which are installed by the permittee only when the operation is necessary to achieve compliance with the conditions of the permit.

F. **Bypass of Treatment Facilities**

1. Bypass not exceeding limitations. The permittee may allow any bypass to occur that does not cause effluent limitations to be exceeded, but only if it also is for essential maintenance to assure efficient operation. These bypasses are not subject to the provisions of paragraphs 2 and 3 of this Part.

2. Notice.

   a. Anticipated bypass. If the permittee knows in advance of the need for a bypass, it must submit prior notice to the Director and IDEQ, if possible, at least 10 days before the date of the bypass.

   b. Unanticipated bypass. The permittee must submit notice of an unanticipated bypass as required under Part III.G ("Twenty-four Hour Notice of Noncompliance Reporting").

3. Prohibition of bypass.

   a. Bypass is prohibited, and the Director may take enforcement action against the permittee for a bypass, unless:

      i) The bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;

ii) There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass that occurred during normal periods of equipment downtime or preventive maintenance; and

iii) The permittee submitted notices as required under paragraph 2 of this Part.

b. The Director may approve an anticipated bypass, after considering its adverse effects, if the Director determines that it will meet the three conditions listed above in paragraph 3.a. of this Part.

G. Upset Conditions

1. Effect of an upset. An upset constitutes an affirmative defense to an action brought for noncompliance with such technology-based permit effluent limitations if the permittee meets the requirements of paragraph 2 of this Part. No determination made during administrative review of claims that noncompliance was caused by upset, and before an action for noncompliance, is final administrative action subject to judicial review.

2. Conditions necessary for a demonstration of upset. To establish the affirmative defense of upset, the permittee must demonstrate, through properly signed, contemporaneous operating logs, or other relevant evidence that:

   a. An upset occurred and that the permittee can identify the cause(s) of the upset;

   b. The permitted facility was at the time being properly operated;

   c. The permittee submitted notice of the upset as required under Part III.G, "Twenty-four Hour Notice of Noncompliance Reporting;" and

   d. The permittee complied with any remedial measures required under Part IV.D, "Duty to Mitigate."

3. Burden of proof. In any enforcement proceeding, the permittee seeking to establish the occurrence of an upset has the burden of proof.

H. **Toxic Pollutants.** The permittee must comply with effluent standards or prohibitions established under Section 307(a) of the Act for toxic pollutants within the time provided in the regulations that establish those standards or prohibitions, even if the permit has not yet been modified to incorporate the requirement.

I. **Planned Changes.** The permittee must give notice to the Director and IDEQ as soon as possible of any planned physical alterations or additions to the permitted facility whenever:

1. The alteration or addition to a permitted facility may meet one of the criteria for determining whether a facility is a new source as determined in 40 CFR 122.29(b); or

2. The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants that are subject neither to effluent limitations in the permit, nor to notification requirements under Part III.I ("Changes in Discharge of Toxic Substances").

J. **Anticipated Noncompliance.** The permittee must give advance notice to the Director and IDEQ of any planned changes in the permitted facility or activity that may result in noncompliance with this permit.

V. GENERAL PROVISIONS

A. **Permit Actions.** This permit may be modified, revoked and reissued, or terminated for cause as specified in 40 CFR 122.62, 122.64, or 124.5. The filing of a request by the permittee for a permit modification, revocation and reissuance, termination, or a notification of planned changes or anticipated noncompliance, does not stay any permit condition.

B. **Duty to Reapply.** If the permittee intends to continue an activity regulated by this permit after the expiration date of this permit, the permittee must apply for and obtain a new permit. In accordance with 40 CFR 122.21(d), and unless permission for the application to be submitted at a later date has been granted by the Regional Administrator, the permittee must submit a new application at least 180 days before the expiration date of this permit.

C. **Duty to Provide Information.** The permittee must furnish to the Director and IDEQ, within a reasonable time, any information that the Director or IDEQ may request to determine whether cause exists for modifying, revoking and reissuing, or

terminating this permit, or to determine compliance with this permit. The permittee must also furnish to the Director or IDEQ, upon request, copies of records required to be kept by this permit.

D. **Other Information.** When the permittee becomes aware that it failed to submit any relevant facts in a permit application, or that it submitted incorrect information in a permit application or any report to the Director or IDEQ, it must promptly submit the omitted facts or corrected information.

E. **Signatory Requirements.** All applications, reports or information submitted to the Director and IDEQ must be signed and certified as follows.

1. All permit applications must be signed as follows:

   a. For a corporation: by a responsible corporate officer.

   b. For a partnership or sole proprietorship: by a general partner or the proprietor, respectively.

   c. For a municipality, state, federal, or other public agency: by either a principal executive officer or ranking elected official.

2. All reports required by the permit and other information requested by the Director or IDEQ must be signed by a person described above or by a duly authorized representative of that person. A person is a duly authorized representative only if:

   a. The authorization is made in writing by a person described above;

   b. The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity, such as the position of plant manager, operator of a well or a well field, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters for the company; and

   c. The written authorization is submitted to the Director and IDEQ.

3. Changes to authorization. If an authorization under Part V.E.2 is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements

of Part V.E.2. must be submitted to the Director and IDEQ prior to or together with any reports, information, or applications to be signed by an authorized representative.

4. Certification. Any person signing a document under this Part must make the following certification:

> "I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

F. **Availability of Reports.** In accordance with 40 CFR 2, information submitted to EPA pursuant to this permit may be claimed as confidential by the permittee. In accordance with the Act, permit applications, permits and effluent data are not considered confidential. Any confidentiality claim must be asserted at the time of submission by stamping the words "confidential business information" on each page containing such information. If no claim is made at the time of submission, EPA may make the information available to the public without further notice to the permittee. If a claim is asserted, the information will be treated in accordance with the procedures in 40 CFR 2, Subpart B (Public Information) and 41 Fed. Reg. 36902 through 36924 (September 1, 1976), as amended.

G. **Inspection and Entry.** The permittee must allow the Director, IDEQ, or an authorized representative (including an authorized contractor acting as a representative of the Administrator), upon the presentation of credentials and other documents as may be required by law, to:

1. Enter upon the permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this permit;

2. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;

3. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit; and

4. Sample or monitor at reasonable times, for the purpose of assuring permit compliance or as otherwise authorized by the Act, any substances or parameters at any location.

H. **Property Rights.** The issuance of this permit does not convey any property rights of any sort, or any exclusive privileges, nor does it authorize any injury to persons or property or invasion of other private rights, nor any infringement of state or local laws or regulations.

I. **Transfers.** This permit is not transferable to any person except after notice to the Director. The Director may require modification or revocation and reissuance of the permit to change the name of the permittee and incorporate such other requirements as may be necessary under the Act. (See 40 CFR 122.61; in some cases, modification or revocation and reissuance is mandatory).

J. **State Laws.** Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties established pursuant to any applicable state law or regulation under authority preserved by Section 510 of the Act.

VI. DEFINITIONS

1. "Act" means the Clean Water Act.

2. "Administrator" means the Administrator of the EPA, or an authorized representative.

3. "Average monthly discharge limitation" means the highest allowable average of "daily discharges" over a calendar month, calculated as the sum of all "daily discharges" measured during a calendar month divided by the number of "daily discharges" measured during that month.

4. "Best Management Practices" (BMPs) means schedules of activities, prohibitions of practices, maintenance procedures, and other management practices to prevent or reduce the pollution of waters of the United States. BMPs also include treatment requirements, operating procedures, and practices to control plant site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage.

5. "Bypass" means the intentional diversion of waste streams from any portion of a treatment facility.

6. "CWA" means the Clean Water Act.

7. "Daily discharge" means the discharge of a pollutant measured during a calendar day or any 24-hour period that reasonably represents the calendar day for purposes of sampling. For pollutants with limitations expressed in units of mass, the "daily discharge" is calculated as the total mass of the pollutant discharged over the day. For pollutants with limitations expressed in other units of measurement, the "daily discharge" is calculated as the average measurement of the pollutant over the day.

8. "Director" means the Director of the Office of Water, EPA, or an authorized representative.

9. "DMR" means discharge monitoring report.

10. "EPA" means the United States Environmental Protection Agency.

11. "Grab" sample is an individual sample collected over a period of time not exceeding 15 minutes.

12. "IC_{25}" means inhibition concentration 25. The IC_{25} is a point estimate of the toxicant concentration that would cause a 25% reduction in a nonlethal biological measurement of the test organisms, such as reproduction or growth.

13. "IDEQ" means Idaho Department of Environmental Quality.

14. "Maximum daily discharge limitation" means the highest allowable "daily discharge."

15. "Method Detection Limit (MDL)" means the minimum concentration of a substance that can be measured and reported with 99 percent confidence that the analyte concentration is greater than zero and is determined from analysis of a sample in a given matrix containing the analyte.

16. "QA/QC" means quality assurance/quality control.

17. "Regional Administrator" means the Regional Administrator of Region 10 of the EPA, or the authorized representative of the Regional Administrator.

18. "Severe property damage" means substantial physical damage to property, damage to the treatment facilities which causes them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production.

19. "Upset" means an exceptional incident in which there is unintentional and temporary noncompliance with technology-based permit effluent limitations because of factors beyond the reasonable control of the permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation.

20. "24-hour composite" sample means a combination of at least 8 sample aliquots of at least 100 milliliters, collected at periodic intervals during the operating hours of the facility over a 24 hour period. The composite must be flow proportional; either the time interval between each aliquot or the volume of each aliquot must be proportional to either the effluent flow at the time of sampling or the total effluent flow since the collection of the previous aliquot. The sample aliquots must be collected and stored in accordance with procedures prescribed in the most recent edition of *Standard Methods for the Examination of Water and Wastewater*.

National Pollutant Discharge Elimination System (NPDES) Permit for
Hecla Mining Company - Lucky Friday Mine
NPDES Permit No. ID-000017-5

Response to Comments on Permit Modification

December 27, 2005

U.S. Environmental Protection Agency, Region 10

INTRODUCTION

This document provides a response to comments received on the draft National Pollutant Discharge Elimination System (NPDES) permit modification for the Lucky Friday Mine, owned and operated by Hecla Mining Company (Hecla). The draft permit modification was issued for public comment on June 21, 2005. A Fact Sheet entitled "Fact Sheet for Permit Remand and Modification Proceedings" (the Fact Sheet) was issued with the draft permit modification. The Fact Sheet described the facility activities, wastewater discharges, reason for the modification, and how the modified permit conditions were developed.

BACKGROUND

EPA Region 10 (the Region) issued a final NPDES permit for the Lucky Friday Mine on August 12, 2003. Hecla filed a petition with EPA's Environmental Appeals Board (EAB) to appeal some of the conditions in the permit. These permit conditions are stayed pending the outcome of the appeal. Hecla also appealed the State's Clean Water Act Section 401 certification of the 2003 NPDES permit. In response to Hecla's appeal of the 401 certification, the Idaho Department of Environmental Quality (IDEQ) revised some of the 401 certification conditions and sent to the Region, on July 15, 2004, the final revised Section 401 certification. On August 19, 2004, Hecla sent to the Region a request to modify the Lucky Friday Mine permit based on the revised 401 certification. In addition, Hecla sent a request to the EAB requesting that the EAB remand five issues raised in its petition that were affected by the revised 401 certification. On October 13, 2004, the EAB remanded these five issues to the Region.

On June 21, 2005, the Region issued a draft modification to the Lucky Friday NPDES permit in response to the revised 401 certification, the EAB remand order, and Hecla's request for modification. The following modifications were proposed:

- Revised effluent limits for copper and mercury based on increased mixing zone sizes.
- Addition of a compliance schedule for meeting the cadmium limits at outfall 003 and at outfall 002 when the outfall 003 waste stream is discharged through outfall 002.
- Addition of a compliance schedule requirement that Hecla submit to EPA and IDEQ the design of its wastewater recycling system prior to implementing the system.
- Revision of some of the interim effluent limits effective during the compliance schedule.

- Establishment of a 2007 deadline for beginning the permit's seepage study and hydrological analysis requirements and a March 14, 2008 submission date for the report documenting the results of this study and analysis.

- Revision of some of the bioassessment monitoring requirements and establishment of a 2007 deadline for beginning the bioassessment monitoring.

The Region also proposed modification of the total suspended solids (TSS) limits to include new TSS loading limits based on wasteload allocations in the South Fork Coeur d'Alene River Sediment Subbasin Assessment and Total Maximum Daily Load (the Sediment TMDL). The Sediment TMDL was approved by EPA on August 21, 2003.

The draft permit modification comment period ended on July 21, 2005. Comments on the draft permit modification were received from Hecla and from the Center for Justice (on behalf of Idaho Rivers United and the Sierra Club). This document provides a response to the comments.

CWA SECTION 401 CERTIFICATION OF THE TSS LIMITS

Most of the permit conditions that were proposed for modification were based on the revised 401 certification. The Region, therefore, did not request that IDEQ re-certify these conditions. The new proposed TSS loading limits, however, were based on the sediment TMDL which was approved following issuance of the 2003 permit. On December 16, 2005, IDEQ issued a Section 401 certification for the TSS limits in the draft permit modification (IDEQ 2005). The TSS Certification stated that the TSS limits included in the permit comply with the wasteload allocations set forth in the Sediment TMDL and that if the Lucky Friday Mine and Mill complies with the terms and conditions related to TSS imposed by the permit, there is reasonable assurance the discharge will comply with Idaho Water Quality Standards.

CHANGE TO EPA REPORTING ADDRESS

Part III.B. of the permit provides the address for submitting monitoring results to EPA and IDEQ. Due to organizational changes within EPA, the address for submitting monitoring information to EPA has changed. The original address was the Office of Water at OW-133. The new address is the Office of Compliance and Enforcement at OCE-133. This change is reflected in Part III.B. of the permit.

COMMENTS RECEIVED ON THE DRAFT PERMIT MODIFICATION

Following are comments on the draft permit modification and EPA's responses. In some cases, the exact phrasing of comments is presented. In other cases, substantive portions were excerpted or summarized from the comment. The Administrative Record files contain complete copies of each comment letter.

Comments from Hecla Mining Company (July 15, 2005 letter from Mike Dexter, Lucky Friday Mine, to the Director Office of Water and Watersheds, EPA)

Comment 1: Incorporation of Prior Comments.
The Draft Modified Permit raises a variety of issues that are relevant to prior Hecla comments and therefore, all comments submitted on previous permit actions, including the variance request and any exhibits, by either the Lucky Friday Mine or Hecla are hereby incorporated into these comments by reference without limitation.

Response: Comments submitted by Hecla on past EPA actions, including issuance of the 2003 final NPDES permit and EPA's decision on Hecla's request for a variance were responded to as part of the decision-making processes for those actions. EPA refers Hecla to the administrative records for those actions.

Comment 2: Hecla seeks pH Adjustment.
Hecla commented that the upper pH limits should be adjusted from 9.0 su to 10.0 su. Hecla provided the following reasons for increasing the pH limits.

> Reason 1: The 401 certification allows for a higher upper pH limit.
> The state's final 401 certification of July 15, 2004 authorized a mixing zone for pH. DEQ was supplied with a mixing zone analysis for pH showing that a pH of 10 s.u. in the effluent would result in no more than 0.2 s.u. pH increase in the receiving water, thus the state certified mixing zone would meet state water quality standards. The overriding intent of the Clean Water Act (CWA) is to meet applicable criteria instream. To ignore the will of the state on this issue flies in the face of the Congressional intent of the CWA to recognize, preserve, and protect the States' rights to manage the water resources of the States (Section 101(b)).
>
> Reason 2: EPA regulations allow for relief of the upper pH limit.
> EPA regulations at 40 CFR 440.131 allow for relief of the technology-based pH upper limit; 40 CFR § 440.131(d) clearly allows an adjustment to the pH technology based effluent limit to achieve "relevant metal limitations." It is also clear, that use of the term "relevant metals limitation" in 40 CFR § 440.131(d) not only include the technology based effluent limits in Part 440 but also included water quality based effluent limits (WQBELs).

Hecla cites a previous report submitted to EPA that points to the need for lime treatment (which would raise the pH) to meet the new metals limits in the final permit (Centra Conceptual Design Report. Centra Consulting, Inc., August 2001). Hecla states that the use of lime treatment and sedimentation for the treatment of dissolved metals could result in the discharge of pH up to 10. Hecla also cites EPA Treatability Manual, Volumes 1-5 (EPA-600/2.82-001) and the Development Document for Proposed Effluent Limit Guidelines for the Ores Mining and Dressing Point Source Category (EPA May 1982) that lime is needed to achieve metals limits and that resulting pH levels are higher than 9.0.

Hecla also cites the work of EPA consultants in the Coeur d'Alene Basin "FINAL CANYON CREEK TREATABILITY STUDY PHASE I REPORT" (March 23, 2005), prepared for EPA by URS Group, Inc. that a high pH is necessary to treat for metals. Hecla cites Appendix C (Columbia Analytical Services Case Narrative), page 4, states under "General Observations" that "It was apparent that the optimal target pH is 10.5"! The focus of this study was on the removal of dissolved zinc, cadmium, and lead – the same metals of concern, from the same ore types, as those in the Lucky Friday discharge.

Hecla cites the Federal Register to EPA's proposal of 40 CFR § 440.131, that provides that a pH adjustment was authorized "if evidence as submitted to the permitting authority demonstrates that this provision will not result in degradation of water quality in the receiving stream or toxic conditions for its biota." 47 Fed. Reg. 25682, 25701 (June 14, 1982). The State of Idaho's final water quality certification of July 15, 2004 clearly provides that water quality in the South Fork of the Coeur d'Alene River will not be degraded and that there will not be toxic conditions for biota by reason of pH discharges of 10.0 s.u.

Reason 3: The alternative to pH adjustment is for storage and use of large volumes of acid near the river. Hecla cannot understand why EPA would advocate such a result from an environmental protection standpoint.

Reason 4: EPA has provided relief of the upper pH limit to other facilities. The Red Dog Mine was issued a permit with a pH upper limit of 10.5 s.u. in 1998 based upon that facility's need to achieve more stringent WQBELS for dissolved metals and in reliance upon 40 CFR 440.131. The Sunshine Mine was issued a permit with an upper pH limit of 9.5 s.u. to remove dissolved metals. The Bunker Hill Central Treatment Plant (CTP), operated by EPA, is operating under the conditions of an expired permit issued to Bunker Hill, with an upper pH limit of 10.0 s.u. to remove dissolved metals. Even though the CTP operates within the superfund "box", it discharges to the South Fork of the Coeur d'Alene River, which is not part of the superfund "box", thus the CTP discharge should be subject to the same standards as the Lucky Friday Mine.

Reason 5: Increased hardness due to increased pH in the discharge also helps the health of the receiving water. Increased hardness reduces the toxicity of the heavy metals already in the system due to natural and manmade causes, and EPA Region 10 knows this.

Response: The upper pH limit of 9.0 su in the final permit was based on the technology-based effluent limitation guidelines (ELGs) for Copper, Lead, Zinc, Gold, Silver, and Molybdenum Ores subcategory found in Subpart J of 40 CFR 440. The guidelines specify an upper pH limit of 9.0 s.u. During the comment periods available for the permit that was issued in 2003, Hecla requested an upper pH limit of 10.0 s.u. Hecla did not cite 40 CFR 440.131(d) as a basis for increasing the limit. Hecla did cite this provision in its brief to the EAB, however, that was after the 2003 permit was issued.

The revised 401 certification authorized a mixing zone of 25% for pH above 9.0 s.u. However, the upper pH limit of 9.0 s.u. is a technology-based limit and the NPDES regulations do not allow for dilution (mixing zones) to be considered in implementation of technology-based limits. The NPDES regulations at 40 CFR 122.44(a)(1) require that NPDES permits include technology-based effluent limitations and standards and nothing in the regulations allows for considering dilution of effluent in the receiving water to determine technology-based limits. Therefore, the upper pH limit cannot be increased on the basis of the mixing zone included in the revised 401 certification.

The NPDES regulations at 40 CFR 440.131(d)(1), however, do provide a basis for increasing the upper pH limit specified in the ELGs. 40 CFR 440.131(d)(1) states "Where the application of neutralization and sedimentation technology to comply with relevant metal 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." Hecla currently operates tailings ponds that allow for sedimentation prior to discharge. However, Hecla has not supplied EPA with any commitment that they will implement neutralization technology in order to meet the metals limits in the permit. Nor has Hecla supplied information related to the expected pH in the discharge following neutralization and sedimentation treatment to meet the metals limits in the final permit or draft permit modification. In fact, Hecla has challenged the metals limits in the permit in an appeal to the EAB.

In its comment Hecla cites the Centra report, EPA's treatability study manual, EPA's development document for the effluent limitations guidelines, and a treatability study report for Canyon Creek as examples of documents that discuss processes that require pH above 9 s.u. in order to

treat for metals. EPA agrees 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. However, there are also examples were pH adjustment is used to treat metals, yet the final effluent meets the technology-based limit of 9.0 s.u. One example, is Hecla's Grouse Creek Mine. Wastewater from the mine is treated via processes similar to those identified by Hecla in its comment, yet the wastewater meets the NPDES permit limit which requires that the effluent not exceed pH 9 s.u. (EPA 1999 and EPA 2002).

Hecla has 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. If Hecla submits information that provides a commitment to implement a neutralization process to meet the metals limits and demonstrates that the process will result in a pH above 9.0 s.u. upon discharge, then EPA may consider modifying the NPDES permit to incorporate a limit higher than 9.0.

EPA did allow a higher pH limit in the NPDES permit for the Red Dog mine discharge pursuant to 40 CFR 440.131(d)(1) (EPA 1993). The permit included the higher limit since the wastewater was being treated by a high density sludge wastewater treatment plant that utilized neutralization and settling as part of the treatment processes. In addition, the Red Dog permittee (Cominco) had committed to upgrading the treatment process. EPA would consider allowing a higher pH limit for the Lucky Friday mine should Hecla commit to installing similar treatment and demonstrate that the use of this technology would render it unable to comply with an upper pH limit of 9.0 s.u.

The permit for the Sunshine Mine includes an upper pH limit of 9.5. That limit was not developed according to 40 CFR 440.131(d)(1), but rather represents a calculated technology-based pH requirement for a number of combined wastestreams. (EPA 1990). Some of these wastestreams have technology-based limits of 10.0. These wastestreams are not equivalent to those for the Lucky Friday Mine.

Contrary to the statements in the comment, the Bunker Hill CTP does not operate under an expired NPDES permit and the CTP discharge does not exceed a pH of 9.0. The NPDES permit for the CTP has been terminated since the CTP is operated by EPA under Superfund authorities. The CTP is operated pursuant to the "Bunker Hill CTP Discharge Quality and Monitoring Plan" (EPA 2001) which provides effluent quality limits and monitoring requirements for the CTP. The CTP Discharge Quality and Monitoring Plan requires that the discharge from the CTP not exceed a pH of 9.0 s.u (see Table 2 of EPA 2001). This is equivalent to what is currently being required for the Lucky Friday Mine.

Based upon the above response, the upper pH limit of 9.0 will be retained in the final permit. However, EPA will consider modifying the NPDES permit to include a higher pH limit pursuant to 440.131(d)(1) should Hecla submit information that provides a commitment to implement a neutralization and sedimentation process to meet the metals limits and demonstrates that the process will render it unable to comply with an upper pH limit of 9.0 s.u.

Comment 3: Interim Limits.
The draft modified permit does not allow for the interim limits based upon recent performance agreed to with DEQ in the state 401 certification. We were under the impression that EPA Region 10 also agreed that the interim limits should be based upon past performance. Compliance schedules authorized by state law should be considered controlling on the issue of interim limits and EPA Region 10 should reconsider their position.

Response: In the revised 401 certification, IDEQ authorized a compliance schedule to meet the cadmium, lead, mercury, and zinc metals limits in the Lucky Friday permit. The compliance schedule included interim limits for these parameters. The Region included, in the draft permit modification, the interim limits as specified in the revised 401 certification, with one exception. The exception is the lead interim limits for outfall 001.

The revised 401 certification specified interim lead limits for outfall 001 of 899 ug/l (maximum daily) and 440 ug/l (average monthly). These limits are higher than the technology-based effluent limitation guidelines (ELGs) that are applicable to the Lucky Friday Mine. The ELGs for lead that are applicable to Lucky Friday Mine outfall 001 are 600 ug/l (maximum daily) and 300 ug/l (average monthly); see 40 CFR 440.103 and the Fact Sheet, Appendix B, Section II. The statutory deadline for meeting technology-based limits based on ELGs was March 31, 1989 (40 CFR 125.3(a)(2) and CWA 301(b)). Compliance schedules are not allowed where statutory deadlines have passed (40 CFR 122.47(a)(1)). Since the CWA and NPDES regulations do not allow setting limits higher than technology-based ELGs, the outfall 001 interim lead limits in the revised 401 certification cannot be included in the permit. The technology-based ELGs, instead, were included as the interim limits in the draft permit modification. This was discussed in the Fact Sheet (see Table 5, footnote 5 and Section D.). Based upon the above discussion, the interim limits included in the draft permit modification were retained in the final permit.

Comment 4: Permit Effective Date.
The Fact Sheet states that most of the "changes proposed in today's action are based on a revised Clean Water Act Section 401 certification". Regardless of how either DEQ or EPA characterize the 401 certification issued by DEQ on 15 July 2004, this certification is the "final" certification after the compliance required for 401 certifications under the Idaho Administrative Procedures Act (IDAPA). Clean Water Act Section 401(a) (1) mandates these IDAPA requirements. This same section clearly states "No license or permit shall be granted until the certification required by this section has been obtained...". Subsequent issues requiring a "modification" or "revision", such as the TSS TMDL, clearly represent a "modification" or "revision", but the 15 July 2004 certification was the "final" pursuant to IDAPA. As such, the issuance of the permit prior to addressing the final 401 certification was premature, thus both the effective date, compliance schedule and expiration date of the permit must be changed accordingly.

Response: EPA's issuance of the permit was not premature. IDEQ issued a final Section 401 certification for the Lucky Friday permit on June 17, 2003. The June 17, 2003 certification was a final certification as characterized in the certification letter which stated "This letter will serve as certification by the State of Idaho pursuant to the provisions of Section 401 of the Federal Water pollution Control At, (Clean Water Act) as amended, 33 USC Section 1341." The NPDES permit issued by the Region on August 12, 2003 included conditions authorized in the June 2003 certification.

On July 15, 2004 IDEQ issued a revised 401 certification. In subsequent correspondence, IDEQ refers to the July 15, 2004 certification as a "revised 401 certification" and "modified certification" (IDEQ 2004b). By today's action, EPA is revising a number of the permit's conditions to reflect the modified (July 2004) 401 certification. A number of these revisions to the permit limits are mandated by 40 CFR 124.55(b) because the modified 401 certification was received before final agency action on the permit and required more stringent conditions. Other conditions are being revised to be less stringent in light of the modified 401 certification, Hecla's August 19, 2004 modification request, and the EAB's remand order. Nothing in EPA's regulations, the modified 401 certification, Hecla's August 19, 2004 modification request, or the EAB's remand order authorizes or compels revisions to the permit's original effective dates, compliance schedules, or expiration date.

Many of the original permit's conditions were neither challenged by Hecla nor affected by the EAB's remand order and have therefore been in effect since November 2003 in accordance with 40 CFR 124.16(a)(2) (EPA 2003, EPA 2004). Revising the permit's effective and expiration dates more than two years after these conditions went into effect would sow further confusion and could run afoul of the requirement that "NPDES permits shall be effective for a fixed term not to exceed 5 years" and that

this maximum duration not be exceeded through permit modification. 40 CFR 122.46(a), (b).

Based on the above discussion, the permit effective and expiration dates have not been changed and neither have the compliance schedule dates. The NPDES regulations at 40 CFR 122.62 state that when a permit is modified, "only the conditions subject to modification are reopened." Therefore the permit effective and compliance schedule dates have not been revised

Comments from the Center for Justice, submitted on behalf of Idaho Rivers United and the Upper Columbia River Groups of the Sierra Club (July 20, 2005 letter from Rick Elchstaedt to Patty McGrath, EPA)

Comment 5: Mixing Zones
Center for Justice comments that the mixing zones for mercury and copper are increased by 200% and 100%, respectively. IDAPA 58.01.02.051 requires that "the existing in stream water uses and the level of water quality necessary to protect the existing uses shall be maintained and protected." They comment that the increases appear to be in violation of state regulations addressing maximum size limitations for mixing zones. The permit lacks an explanation of the reason for such a large increase in the size of the mixing zones and no measures are discussed identifying how stream quality and beneficial uses will be protected. For the mercury mixing zones, Center for Justice requests additional explanation and analysis, including a discussion of the consistency of the mixing zone with the protection of beneficial uses. For the copper mixing zones, Center for Justice requests that the copper mixing zones be changed to be consistent with the mixing zone size limits at 58.01.02.060 Section 1 (a) and (i). They also request that the increases, the reason for the increases, and the overall size of the mixing zones be explained in more detail.

Response: The NPDES regulations allow for dilution (mixing zones) to be considered in developing water quality-based effluent limits (40 CFR 122.44(d)(1)(ii)), such as those for copper and mercury in the Lucky Friday permit modification. Mixing zones can be established where the state has mixing zone provisions in its water quality standards regulations and authorizes mixing zones in a CWA Section 401 certification of the NPDES permit. As discussed in the Fact Sheet for the draft permit modification, the mixing zone volumes used to develop the copper and mercury effluent limits were based on IDEQ's July 15, 2004 revised 401 certification. IDEQ certified that these mixing zones will be protective of designated uses in the South Fork and that there is reasonable assurance that the discharges will comply with Idaho Water Quality Standards. Comments related to the state certification action and authorization of mixing zones should be sent to IDEQ. Please see IDEQ's administrative

record supporting the mixing zones for information related to consistency with the states mixing zone policy, mixing zone sizes, and protection of beneficial uses.

Comment 6: Antidegradation Analysis

The permit documents lack any discussion of antidegradation requirements or any antidegradation assessment. The CWA requires that EPA conduct a full antidegradation analysis for all NPDES permits. The commenter requests that an antidegradation analysis take place to ensure that the levels for release do not further degrade the river and damage current uses (including within the mixing zone). Given the length of time that the Lucky Friday Mine has been operating without a valid permit (1980-until now), an extensive antidegradation analysis is appropriate.

Response: The proposed limits in the draft permit modification were based on state water quality standards and mixing zones authorized in the revised 401 certification. The revised 401 certification states "If the Lucky Friday Mine and Mill complies with the terms and conditions imposed by this permit and the conditions set forth in this 401 Certification, there is reasonable assurance the discharges will comply with the applicable requirements of Sections 208(e), 301, 302, 303, 306, and 307 of the Clean Water Act, including Idaho Water Quality Standards and Wastewater Treatment Requirements (Water Quality Standards)." Antidegradation is part of the state water quality standards and the certification provides reasonable assurance that the permit complies with the standards, and therefore, with antidegradation.

Idaho's antidegradation policy (IDAPA 58.01.02051.01) states in part, that "the existing in stream water uses and the level of water quality necessary to protect the existing uses shall be maintained and protected." The "level of water quality necessary to protect the existing uses" is defined by the State's water quality standards. Meeting these standards will ensure that the existing uses will be protected. The limits in the final permit are based on the state standards. Therefore, the permit is consistent with Idaho's antidegradation policy. The metals limits in the final permit will require Hecla to improve the quality of the wastewater that they are currently discharging. This will result in improved water quality and therefore complies with the Idaho's antidegradation policy.

Comment 7: Seepage Studies

The draft permit indicates that the applicant will receive extension on the required seepage studies. Center for Justice comments that it is unclear why the applicant after 20+ years of operating without a valid permit why such an extension is appropriate. Please provide additional details as to why an extension is appropriate.

Response: The 2003 NPDES permit required that the seepage study be submitted to EPA and IDEQ within 3 years of the effective date of the permit. However, in its revised 401 certification, IDEQ stated that the seepage study should be required after implementation of the water recycling program in 2007. This change was included in the draft permit modification. It makes sense to begin the seepage study after implementation of water recycling since changes to wastewater flowing into the tailings ponds may result in changes to any seepage from the ponds. It is important for seepage to be adequately characterized in order for the Region to determine the need for any future permit conditions related to the seepage.

It should be noted that requiring that the seepage study begin in 2007 is not really an extension or delay of the seepage studies. That is because the seepage study portion of the permit is not currently in effect due to Hecla's petition to appeal this portion of the permit. Conditions in the permit that are subject to appeal are currently stayed, or not in effect, pending outcome of the appeal. Therefore, the original language (3 years from the effective date of the permit) is actually less stringent than the new language that requires the seepage study begin in 2007.

Comment 8: Monitoring
The draft permit proposed that bioassessment monitoring will begin in 2007. Given the length of the permit (5 years), monitoring should begin immediately. Please provide additional details as to why such a delay is appropriate.

Response: The bioassessment monitoring provisions were included in the 2003 NPDES permit because the state required the monitoring in its original 401 certification. The revised 401 certification specified that bioassessment monitoring begin in 2007. This change was incorporated into the draft permit modification. The Region believes that it is appropriate to defer to the State's 401 certification regarding when to begin the bioassessment monitoring since the State authorized the bioassessment monitoring in the certification.

REFERENCES

EPA 1990. Proposed Reissuance of a NPDES Permit to Discharge Pollutants Pursuant to the Provisions of the Clean Water Act. Fact Sheet for Sunshine Mining Company. US Environmental Protection Agency (EPA) Region 10. July 24, 1990.

EPA 1993. Proposed Reissuance of a NPDES Permit to Discharge Pollutants Pursuant to the Provisions of the Clean Water Act. Fact Sheet for Cominco Alaska, Inc. (Red Dog Mine). EPA Region 10. December 27, 1993.

EPA 1999. Fact Sheet for Proposed Reissuance of NPDES Permit to Hecla Mining Company, Grouse Creek Unit. EPA Region 10. November 24, 1999.

EPA 2001. Bunker Hill CTP Discharge Quality and Monitoring Plan. Prepared by URS Greiner and CH2M Hill for EPA Region 10. June 2001.

EPA 2002. NPDES Permit No. ID-002646-8. Hecla Mining Company – Grouse Creek Unit. January 8, 2002.

EPA 2003. Notification of Stayed Permit Conditions, Hecla Mining Company, Lucky Friday Mine NPDES Permit No. ID-000017-5, Issued August 12, 2003. Letter from Randall F. Smith, EPA, to Mike Dexter, Hecla. October 1, 2003.

EPA 2004. Notification of Remanded and Withdrawn Permit Conditions, Hecla Mining Company, Lucky Friday Mine NPDES Permit No. ID-000017-5, Issued August 12, 2003. Letter from Michael F. Gearheard, EPA, to Mike Dexter, Hecla. October 28, 2004.

EPA 2005. Fact Sheet for Permit Remand and Modification Proceedings. EPA Region 10. June 21, 2005.

IDEQ 2004a. 401 Certification regarding NPDES Permit No. ID-000017-5, Hecla Mining Company – Lucky Friday Mine and Mill, Mullan, Idaho. Letter from Toni Hardesty, IDEQ, to Robert R. Robichaud, EPA. July 15, 2004.

IDEQ 2004b. Letter from Toni Hardesty, IDEQ, to Mike Gearheard, EPA.

IDEQ 2005. 401 Certification regarding NPDES Permit No. ID-000017-5, Hecla Mining Company – Lucky Friday Mine and Mill, Mullan, Idaho, Total Suspended Solids Certification. Letter from Toni Hardesty, IDEQ, to Robert R. Robichaud, EPA. December 16, 2005.