



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",

Meridian Beartrack Company
Beartrack Mine
P.O. Box 749
Salmon, Idaho 83467

is authorized to discharge from the **Beartrack Mine** located near the historic town of Leesburg, Idaho, through Outfall 001 to receiving waters named Napias Creek at Latitude N 45°12'20", Longitude W 114°08'00" in accordance with the effluent limitations, monitoring requirements, and other conditions set forth herein.

This permit shall become effective **December 1, 2003**.

This permit and the authorization to discharge shall expire at midnight,
October 31, 2008.

The permittee shall reapply for a permit reissuance on or before **April 30, 2008**, 180 days before the expiration of this permit if the permittee intends to continue operations and discharges at the facility beyond the term of this permit.

Signed this **31st** day of **October, 2003**.

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

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I. Limitations and Monitoring Requirements

- A. **Discharge Authorization.** During the effective period of this permit, the permittee is authorized to discharge pollutants from Outfall 001 to Napias Creek, 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.
- B. **Effluent Limits and Monitoring.**
1. The permittee must limit and monitor discharges from Outfall 001 as specified in Table 1. The permittee must comply with the effluent limits in the table at all times unless otherwise indicated, regardless of the frequency of monitoring or reporting required by other provisions of this permit.
 2. The permittee must collect all effluent samples from the effluent stream after the last treatment unit prior to discharge into the receiving water.
 3. The permittee must not discharge any floating solids, visible foam in other than trace amounts, or oily wastes that produce a sheen on the surface of the receiving water.
 4. For all effluent monitoring, the permittee must use methods that can quantify the effluent limitation unless otherwise specified in Table 1. For parameters that do not have effluent limitations, the permittee must use methods that can achieve MDLs less than or equal to those specified in Table 5.

Table 1. Outfall 001 Effluent Limitations and Monitoring Requirements							
Parameter	Units	Effluent Limitations ¹				Monitoring Requirements ⁴	
		Low Flow ²		High Flow ³			
		Average Monthly Limit	Maximum Daily Limit	Average Monthly Limit	Maximum Daily Limit	Sample Frequency	Sample Type
Ammonia ⁷	mg/L	20	40	42	84	weekly	grab
	lb/day	50	100	370	740		calculated
Arsenic	mg/L	1.9	3.2	0.98	2.0	weekly	grab
	lb/day	4.8	8.0	8.6	18		calculated
Cadmium ⁷	ug/L	1.4	2.7	1.3	2.7	weekly	grab
	lb/day	0.0035	0.0068	0.11	0.024		calculated
Copper ⁷	ug/L	11	21	12	24	weekly	grab
	lb/day	0.028	0.053	0.11	0.35		calculated
Cyanide ⁷ (Weak Acid Dissociable)	ug/L	33	66	32	64	weekly	grab
	lb/day	0.083	0.17	0.28	0.56		calculated
Flow	mgd	---				continuous	recording
Hardness, as CaCO ₃	mg/L	---				weekly	grab
Iron	mg/L	---	---	3.1	7.8	weekly	grab
	lb/day	---	---	27	68		calculated
Lead ⁷	ug/L	6.9	14	6.8	14	weekly	grab
	lb/day	0.017	0.035	0.060	0.12		calculated
Mercury ⁷	ug/L	0.075	0.15	0.074	0.15	weekly	grab
	lb/day	0.00019	0.00038	0.00065	0.0013		calculated
Nickel	ug/L	---				weekly	grab
pH	s.u.	within the range of 6.5 to 9.0				weekly	grab

Table 1. Outfall 001 Effluent Limitations and Monitoring Requirements

Parameter	Units	Effluent Limitations ¹				Monitoring Requirements ⁴	
		Low Flow ²		High Flow ³			
		Average Monthly Limit	Maximum Daily Limit	Average Monthly Limit	Maximum Daily Limit	Sample Frequency	Sample Type
Selenium ⁷	ug/L	32	63	31	62	weekly	grab
	lb/day	0.080	0.16	0.27	0.54		calculated
Silver ⁷	ug/L	0.66 ⁵	1.3	0.74 ⁵	1.5	weekly	grab
	lb/day	0.0017	0.0033	0.0065	0.013		calculated
Temperature	°C	---				weekly	grab
TSS	mg/L	20	30	20	30	weekly	grab
	lb/day	50	180	75	260		calculated
Whole Effluent Toxicity	TUa	---				twice per year ⁶	grab
	TUc						
Zinc ⁷	ug/L	68	137	69	133	weekly	grab
	lb/day	0.17	0.34	0.60	1.2		calculated

Footnotes:

- To calculate lb/day from mg/L for MDL, multiply the concentration limit (in mg/L) by 8.34 and the measured maximum daily effluent flow rate (in mgd).
To calculate lb/day from mg/L for AML, multiply the concentration limit (in mg/L) by 8.34 and the measured average monthly effluent flow rate (in mgd).
To calculate lb/day from ug/L for MDL, multiply the concentration limit (in ug/L) by 0.00834 and the measured maximum daily effluent flow rate (in mgd).
To calculate lb/day from ug/L for AML, multiply the concentration limit (in ug/L) by 0.00834 and the measured average monthly effluent flow rate (in mgd).
- The effluent limitations for the low flow period apply from July 1 through April 30.
- The effluent limitations for the high flow period apply from May 1 through June 30.
- Metals are to be measured as total recoverable, except for mercury which is to be measured as total.
- This effluent limit is not quantifiable using EPA approved analytical methods. The permittee will be in compliance with the effluent limit provided the measured concentration is at or below the compliance evaluation level of 1.0 u/L using EPA Method 272.2.
- Monitoring shall be performed in May and October. Monitoring may be discontinued if the permittee provides four observations below 4.2 TUc in any consecutive two year period under this permit, has not provided any other observation under this permit above 4.2 TUc, and EPA authorizes the monitoring reduction. See section I.C. for additional information on WET testing requirements.
- Reporting is required within 24 hours of a maximum daily limit violation. See section III.G.

C. Compliance Schedule for Outfall 001 Effluent Limitations.

1. By November 1, 2006, the permittee must achieve compliance with the effluent limitations for ammonia, WAD cyanide, and mercury in section I.B for Outfall 001 (Table 1). Until compliance with the final effluent limits is achieved, at a minimum, the permittee must:
 - a. complete the tasks required in Table 2;

Table 2: Tasks Required under the Compliance Schedule	
Completion Date	Task
November 30, 2003	Design and install pilot water treatment testing equipment.
June 30, 2004	Evaluate operational performance of pilot test for efficiency and consistency.
November 30, 2004	Evaluate treatment progress, in situ attenuation within the leach pad, and progress towards meeting final NPDES effluent limits.
June 30, 2005	Design full-scale treatment system.
June 30, 2006	Construct and install full-scale treatment system.
October 31, 2006	Start-up and testing of full-scale treatment system.
November 1, 2006	Comply with final effluent limits.

- b. report completion of tasks on the DMR for the month in which the task is due (e.g., if a task is due in March, then report on the March DMR that the task has been completed);
 - c. submit an annual report of progress to EPA and IDEQ that outlines the progress made towards achieving compliance by April 1st of each year, which includes the following:
 - (1) an assessment of the previous years data and comparison to the final effluent limitations,
 - (2) a report on the progress made toward meeting the final effluent limitations, and
 - (3) further actions and milestones targeted for the upcoming year.

- d. limit discharges from outfall 001 as specified in Table 3 at all times unless otherwise indicated, regardless of the frequency of monitoring or reporting required by other provisions of this permit; and
- e. monitor the effluent in accordance with the monitoring requirements specified in Table 1.

Table 3. Outfall 001 Interim Effluent Limitations					
Parameter³	Units	Low Flow¹		High Flow²	
		Average Monthly Limit	Maximum Daily Limit	Average Monthly Limit	Maximum Daily Limit
Ammonia ⁴	mg/L	51	103	22	44
Cyanide, WAD ⁴	µg/L	61	123	60	120
Mercury ⁴	µg/L	0.4	0.6	0.4	0.6

Footnotes:

1. The effluent limitations for the low flow period apply from July 1 through April 30.
2. The effluent limitations for the high flow period apply from May 1 through June 30.
3. Metals are to be measured as total recoverable, except for mercury which is to be measured as total.
4. Reporting is required within 24 hours of a maximum daily limit violation. See section III.G.

D. Whole Effluent Toxicity Testing Requirements.

1. The permittee must coordinate toxicity sampling with the effluent sampling in Table 1 and with surface water sampling in Table 2. A split of the toxicity sample must be analyzed for the chemical and physical parameters required in Table 1, which can be used to fulfill the monitoring requirements of section I.A.
2. The permittee must conduct chronic toxicity tests with the following species:
 - a. Water flea (*Ceriodaphnia dubia*): survival and reproduction;
 - b. Green algae (*Selenastrum capricornutum*): growth; and
 - c. Fathead minnow (*Pimephales promelas*): larval survival and growth.
3. The permittee must conduct 96-hour static renewal tests for acute toxicity tests with the rainbow trout (*Oncorhynchus mykiss*).

4. The permittee must use EPA's guidance manual *Short-Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms*, Third Edition (EPA/600/4-91-002, July 1994) to:
 - a. estimate the presence of chronic toxicity;
 - b. conduct all quality assurance criteria and protocols; and
 - c. ensure toxicity test results include all relevant information required by Section 10, Report Preparation, of this method.
5. The permittee must use EPA's guidance manual *Methods for Measuring the Acute Toxicity of Effluents to Freshwater and Marine Organisms*, Fourth Edition (EPA/600-4-90-027F, August 1993) to:
 - a. estimate the presence of acute toxicity;
 - b. conduct all quality assurance criteria and protocols; and
 - c. ensure toxicity test results include all relevant information required by this method.
6. The permittee must report the chronic toxicity results in TU_c , where $TU_c = 100/NOEC$. The permittee must use the highest NOEC calculated in TU_c for the applicable survival, growth, or reproduction endpoints. Acute toxicity test results shall be reported in TU_a (acute toxic units), where $TU_a = 100/LC50$ (in percent effluent). Acute toxicity shall be reported for both the 24-hour and the 96-hour endpoints.
7. The permittee must conduct tests on each organism using a series of five dilutions and a control. The dilution series must include the instream waste concentrations (IWC) for the applicable flow period, two dilutions above the IWC, and two dilutions below the IWC. The IWC is 23% effluent.
8. In addition to the quality assurance measures specified in the methodology sited in paragraph D.3 of this Part, the permittee must observe the following quality assurance procedures:
 - a. If organisms are not cultured in-house, the permittee must ensure that concurrent testing with reference toxicants are conducted. Where

organisms are cultured in-house, monthly reference toxicant testing is sufficient.

- b. 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, then the permittee must re-sample and re-test within 14 days of receipt of the test results.
 - c. Control and dilution water must be receiving water or lab water, when appropriate, as described in the methodology. The permittee must conduct an acclimation study prior to conducting the first WET test required by this permit to determine whether or not the test species can acclimate to Napias Creek water. The permittee must submit the results of the acclimation study by April 20, 2004. If the species can acclimate, then Napias Creek water must be used for WET testing to determine toxicity of the effluent, rather than laboratory water, as a control or dilution agent. In order to maintain the survivability of the test species, extended acclimation periods may be necessary (e.g., if hardness levels in Napias Creek water are much lower than laboratory water). If the dilution water used is different from the culture water, a second control using culture water must also be used. In no case shall water that has not met test acceptability criteria be used for either dilution or control.
9. Within fifteen (15) days of receipt of the sample results that indicate the reported toxicity level (100/NOEC) exceeds a chronic toxicity trigger of 4.2 TUC or an acute toxicity trigger of 1 TUA at 24-hours (a 24-hour NOEC of 100% effluent) and 3 TUA at 96-hours (a 96-hour NOEC of 33% effluent), the permittee must:
- a. Submit a written notice to the Director and IDEQ with the following information:
 - (1) a description of the actions the permittee has taken or will take to investigate and correct the cause(s) of toxicity in accordance with the TRE Work Plan; and
 - (2) a copy of the sample results that indicate the reported toxicity level exceeds the chronic or acute toxicity triggers.

- b. Initiate the following special monitoring requirements:
- (1) If the source of toxicity is known and corrective actions have been implemented, then the permittee is required to perform one additional test. If the subsequent sample exceeds the chronic or acute toxicity trigger, then the permittee is required to conduct a TRE in accordance with the facility's TRE Work Plan (see section II.A).
 - (2) If the source of toxicity is unknown, the permittee is required to perform four biweekly tests over an eight week period. If any of these tests exceeds the chronic or acute toxicity trigger, then the permittee is required to conduct a TRE in accordance with the facility's TRE Work Plan (see section II.A). If the permittee implements the TRE Work Plan prior to the completion of all four tests, the permittee is not required to perform the remainder of the tests.
10. Within ninety (90) days of receipt of the sample results that indicate the reported toxicity level exceeds the chronic or acute toxicity triggers in paragraph 7, the permittee must submit a report to the Director and IDEQ, in writing, with the following information:
- (1) a description of the actions the permittee has taken or will take to investigate and correct the cause(s) of toxicity in accordance with the TRE Work Plan;
 - (2) a status report on any actions required by the permit, with a schedule for actions not yet completed;
 - (3) where no actions have been taken, include the reasons for not taking action; and
 - (4) a copy of the test results from the special monitoring required under paragraph D.7.a of this Part.

E. Dye Study of Outfall 001.

1. During the first year of the permit, the permittee must perform dye tests once each during high and low flow events to discern the size and shape of the mixing zone.
2. The permittee should based dye selection on toxicity and rate of breakdown due to temperature and light. The use of fluorescent dyes is encouraged, as small quantities are needed, lessening the potential for toxicity. The dye solution should be pumped into the discharge at a constant rate and monitored until the diluted concentration of the dye plateaus, indicating equilibrium.
3. The permittee should use protocols from the USGS or ASTM (or other protocol approved by the USFWS) and the following ancillary reports related to dye tests in conducting the dye tests.
 - a. ASTM . 1998. Standard Test Methods for Open-Channel Measurement of Time and Travel Using Dye Tracers, D5613-94.
 - b. USGS (Karl K. Lee). 1995. Stream Velocity and Dispersion Characteristics Determined by Dye-Tracer Studies on Selected Stream Reaches in the Willamette River Basin, Oregon. Water-Resources Investigation Report 95-4078. Portland, Oregon.
 - c. USGS (Wilson, J.F., E.D. Cobb, and F.A. Kilpatrick). 1986. Techniques of Water-Resources Investigations of the United States Geological Survey. Book 3, Chapter A12, Fluorometric Procedures for Dye Tracing.
 - d. USGS (Kilpatrick, F.A. and E.D. Cobb). 1995. Techniques of Water-Resources Investigations of the United States Geological Survey. Book 3, Chapter A16, Measurement of Discharge Using Tracers.
 - e. USGS (Kilpatrick, F.A. and J.F. Wilson). 1989. Techniques of Water-Resources Investigations of the United States Geological Survey. Book 3, Chapter A9, Measurement of Time of Travel in Streams by Dye Tracing.

4. The permittee must verify the results of the dye test analyses using the Cormix model. The permittee must submit a report with the dye test analyses results and the Cormix model verification to the Director and the USFWS with the March 2005 DMR.

F. Surface Water Monitoring Requirements.

1. The permittee must conduct receiving water monitoring activities within the same 24-hour period as effluent monitoring activities, to the extent possible.
2. Unless otherwise indicated in this permit, the permittee must conduct surface water monitoring at Napias Creek station WQ-22 located upstream of Outfall 001 and establish three monitoring stations located 30 meters, 60 meters, and 500 meters downstream of Outfall 001.
3. The permittee may be required by the USFWS to establish no more than two additional sampling points between 500 and 1444 meters downstream of Outfall 001, in addition to the current requirements of the three sampling points located 30, 60, and 500 meters downstream of the Outfall. The locations of the additional one or two sampling points, along with the frequency of sampling, shall be established following the results of the dye test, and approved by the USFWS. Sampling shall include at least 3 samples from each sample point in order to establish average values. Sampling shall occur for the first 2 years following USFWS approval of the sampling locations, then every 5 years following for verification. All surface water sampling results shall be provided to the USFWS as indicated in paragraph III.B.4.
4. The permittee must conduct annual biomonitoring of macroinvertebrates and fish in accordance with Idaho Beneficial Use Reconnaissance Process (BURP) protocols.
 - a. The permittee must conduct biomonitoring at the following surface water monitoring locations: WQ-22, 361 meters downstream of Outfall 001, 1444 meters downstream of Outfall 001, and 2888 meters downstream of Outfall 001.
 - b. The annual biomonitoring must be conducted after seasonal high flow conditions have receded but before annual low flows (i.e., July or August). Sampling should be conducted in the late summer or early fall.

The permittee must conduct sampling at the same time every year, and continue throughout the life of the permit.

- c. The permittee must obtain collection permits from the Idaho Department of Fish and Game (IDFG) for collection of fish. If the permittee's request is denied by IDFG due to potential concerns for the protection of species under ESA, the permittee must coordinate with IDFG to develop alternative methods to acquire necessary biomonitoring information and submit them to IDEQ.
- d. The permittee must measure specific endpoints (e.g., invertebrate density, number of taxa, diversity indices, EPT taxa, and mayfly richness) as a part of the sampling/monitoring plan. Additionally, statistical analyses shall be performed to assess if there are significant differences in macroinvertebrate chemical concentrations, diversity, abundance, or composition. These analyses must be included in the annual report.
- e. The permittee shall conduct chemical analyses of the macroinvertebrate samples in accordance with the protocols of the United States Geological Survey tissue sampling protocols (Crawford and Luoma 1993). Macroinvertebrate sampling should be done in such a manner as to not interfere with chemical analyses. Results of the chemical analyses must be included in the annual report. Constituents being analyzed shall include: arsenic, cadmium, copper, iron, lead, mercury, selenium, silver, and zinc. All constituents listed above shall be analyzed annually for the first 2 years of the permit. Following the first 2 years, the list of constituents to be analyzed can be re-evaluated, in consultation with Meridian Beartrack Company, EPA, and USFWS, for refinement and possible exclusion of some constituents.
- f. The permittee must conduct a trend analysis of macroinvertebrate abundance, diversity, and composition over time, as well as trace element concentration analysis in the macroinvertebrates upstream and downstream of the discharge. The trend analysis should examine all available past data prior to discharge, during mining, as well as current data.

- g. The permittee must submit a report summarizing the results of the biomonitoring to the Director, IDEQ, and USFWS by April 1st each year.
5. The permittee must conduct an annual bioaccumulation study of mercury accumulation in fish tissues.
- a. The permittee must collect fish at the Napias Creek station WQ-22 located upstream of Outfall 001 and 160 meters downstream of Outfall 001.
 - b. The annual bioaccumulation study must be conducted after seasonal high flow conditions have receded but before annual low flows (i.e., July or August).
 - c. The permittee must obtain collection permits from the Idaho Department of Fish and Game (IDFG) for collection of fish. If the permittee's request is denied by IDFG due to potential concerns for the protection of species under ESA, the permittee must coordinate with IDFG to develop alternative methods to acquire information germane to the protection of resident species from mercury accumulation and submit them to IDEQ.
 - d. The permittee must use sculpins as the test species.
 - e. The permittee must submit the results of the bioaccumulation to the Director, IDEQ and the USFWS by April 1st each year. The report must include the trend analysis and impact analysis.
 - f. The permittee must conduct a trends analysis as follows:
 - (1) Collect four replicate samples at each of the sample sites.
 - (2) Compare fish tissue levels with MDL of 0.4 mg/kg of mercury accumulation.
 - (3) Contact IDEQ within 10 days if the downstream fish tissue concentrations indicate a statistically significant increase in mercury concentrations. Conduct follow-up set of verification samples as directed by IDEQ.

- g. The permittee must conduct an impact analysis as follows:
- (1) Compare fish tissue levels with concentration of 0.3 mg/kg of mercury.
 - (2) Within 24-hours of receipt of the sample results that indicate the fish tissue levels exceed the concentration in paragraph (1), the permittee must notify IDEQ.
 - (3) Within 24-hours of receipt of the sample results that indicate the fish tissue levels exceed the concentration in paragraph (1), the permittee must initiate an investigation of the sources of mercury and take steps to reduce mercury discharges.
 - (4) Within 60 days of receipt of the sample results that indicate the fish tissue levels exceed the concentration in paragraph (1), the permittee must submit a report to the Director and IDEQ describing the results of the source identification and steps already implemented to reduce mercury concentrations in the discharge.
6. The permittee must monitor the receiving water for the parameters specified in Table 4.

Table 4. Surface Water Monitoring Requirements				
Parameter	Units	Sample Location	Sample Frequency	Sample Type ⁷
Ammonia ¹	mg/L	upstream & downstream	2/month ⁵	grab
Arsenic ¹	ug/L	upstream & downstream	2/month ⁵	grab
Cadmium ²	ug/L	upstream & downstream	2/month ⁵	grab
Copper ²	ug/L	upstream & downstream	2/month ⁵	grab
Cyanide (WAD)	ug/L	downstream	2/month ⁵	grab
Floating Solids or Visible Foam	---	downstream	2/month ⁵	visual
Flow	cfs	upstream	daily	calculation ³
		downstream ⁴	daily	measurement
Hardness, as CaCO ₃	mg/L	downstream	2/month ⁵	grab
Iron ¹	ug/L	upstream & downstream	2/month ⁵	grab
Lead ²	ug/L	upstream & downstream	2/month ⁵	grab
Nickel ²	ug/L	upstream & downstream	2/month ⁵	grab
Mercury ^{1 & 2}	ug/L	upstream & downstream	2/month ^{5, 6}	grab
pH	s.u.	upstream & downstream	2/month ⁵	grab
Selenium ¹	ug/L	upstream & downstream	2/month ⁵	grab
Silver ²	ug/L	upstream & downstream	2/month ⁵	grab
Temperature	°C	upstream & downstream	2/month ⁵	grab
TSS	mg/L	upstream & downstream	2/month ⁵	grab

Table 4. Surface Water Monitoring Requirements				
Parameter	Units	Sample Location	Sample Frequency	Sample Type⁷
Zinc ²	ug/L	upstream & downstream	2/month ⁵	grab
<p>Footnotes:</p> <ol style="list-style-type: none"> 1. Shall be measured as total recoverable, except for mercury which is to be measured as total. 2. Shall be measured as dissolved fraction. 3. The upstream flow shall be calculated by subtracting the average daily effluent flow from the average daily flow measured at USGS gaging station 133066385 in Napias Creek. 4. Flow monitoring of the surface water must be conducted at USGS gaging station 133066385 in Napias Creek. 5. Monitoring shall occur from March through October. After two years, the permittee may reduce monitoring to once per month. 6. After one year, the permittee may reduce monitoring to once per year if the monitoring results from the first year show that receiving water concentrations are below 0.012 µg/L. The annual monitoring must occur at the same time the permittee conducts the mercury bioaccumulation study. 7. Sampling shall include at least 3 samples from each sample point in order to establish average values. 				

- G. **Analytical Testing Requirements.** For effluent parameters that do not have limitations in Table 1 and all surface water parameters in Table 2, the permittee must use analytical methods that can achieve the method detection limits (MDLs) provided in Table 5. The permittee may submit a written request for different MDLs than those provided in Table 5. The permittee may not use MDLs greater than those specified in Table 5 unless approved by EPA.

Table 5. Analytical Testing Requirements		
Parameter	Units	MDL
Ammonia	mg/L	1
Arsenic	ug/L	10
Cadmium	ug/L	0.1
Copper	ug/L	1
Cyanide (WAD)	ug/L	2.0
Lead	ug/L	0.2
Mercury	ug/L	0.004
Selenium	ug/L	2
Silver	ug/L	0.2
Zinc	ug/L	11

II. Special Conditions

A. Toxicity Reduction Evaluation (TRE) Requirements.

1. Within 90 days of the effective date of this permit, the permittee must complete the facility's initial investigation Toxicity Reduction Evaluation (TRE) Work Plan. The permittee must notify EPA, in writing, when the TRE Work Plan is completed.
2. The TRE Work Plan must describe the steps the permittee intends to follow if toxicity is detected above the chronic or acute toxicity triggers. The permittee must use EPA's guidance manual *Generalized Methodology for Conducting Industrial Toxicity Reduction Evaluations (TREs)*, EPA/600/2-88/070, in developing a TRE Work Plan for this facility. The TRE Work Plan must include, at a minimum, the following steps for conducting a TRE:

- a. Information and Data Acquisition. Collect one sample approximately every two weeks over an eight-week period. Testing must commence within two weeks of receipt of the sample results that indicated the exceedance of the chronic or acute toxicity triggers. These testing requirements may be modified based on consultation with the Director. If none of the additional tests indicates toxicity, then the permittee may return to the normal testing frequency specified in Table 1.
- b. Performance Evaluation. Identify the facility's methods of maximizing in-house treatment efficiency of the effluent and good housekeeping practices.
- c. Toxicity Identification Evaluation. Identify any investigation and evaluation techniques or actions that may be used to identify potential causes/sources of toxicity, effluent variability, and treatment system efficiency. 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).
- d. Toxicity Control. Develop actions that will be taken to mitigate the impact of the discharge and to prevent the recurrence of toxicity.
- e. Schedule. Develop a schedule for the TRE.

B. Quality Assurance Plan.

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

2. 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.
3. Throughout all sample collection and analysis activities, the permittee must use the EPA-approved QA/QC and chain-of-custody procedures described in *Requirements for Quality Assurance Project Plans* (EPA/QA/R-5) and *Guidance for Quality Assurance Project Plans* (EPA/QA/G-5). The QAP plan must be prepared in the format which is specified in these documents.
4. The permittee must address effluent and receiving water monitoring in the QAP. At a minimum, the following information must be provided in the QAP:
 - a. Sample locations (map and physical description, which includes station identification number, latitude, and longitude);
 - b. Sample frequency;
 - c. Sample handling, storage, transport, and Chain-of-Custody procedures;
 - d. Parameters, preparation and analysis methods, detection and quantitation limits for each parameter, and volume of sample required for each analyte in each medium (i.e., water);
 - e. Type and number of QC samples, spikes and replicates required for analysis (for precision accuracy);
 - f. Retention or holding time;
 - g. QA/QC procedures for test methods;
 - h. Number of samples collected;
 - i. Volume of each sample collected;
 - j. Field test blanks;

- k. Organizational responsibilities - who is responsible for QA/QC activities (i.e., who takes samples, who reviews the data analysis, etc.); and
 - l. Qualification and training of personnel conducting QA/QC activities;
 - m. Name(s), address(es), and phone number(s) of laboratories used or proposed to be used by the permittee.
5. The permittee is responsible for ensuring all material in the QAP is current and applicable. The permittee must amend the QAP whenever there is a modification in the sample collection, sample analysis, or conditions or requirements of the QAP.
6. The permittee must keep copies of the most current QAP on site and must make the QAP available to the Director and IDEQ upon request.

C. Best Management Practices Plan.

- 1. The permittee must, during the term of this permit, operate the facility in accordance with a Best Management Practices (BMP) Plan or in accordance with subsequent amendments to the BMP Plan. The permittee must also amend this Plan to incorporate practices to achieve the objectives and specific requirements listed below.
- 2. The permittee must modify their current BMP Plan or develop a new BMP Plan that meets the provisions of this permit. The BMP Plan must be completed and implemented as soon as possible but not later than 180 days from the effective date of the permit. The permittee must notify EPA, in writing, when the BMP Plan is completed.
- 3. The permittee shall maintain a copy of the BMP Plan at the facility and shall make the plan available to EPA and IDEQ upon request.
- 4. The permittee shall 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 the receiving waters. The permittee shall also amend the Plan, as appropriate, when facility operations covered by the BMP Plan change. Any such changes to the BMP

Plan shall be consistent with the objectives and specific requirement listed above.

5. At any time, if the BMP Plan proves to be ineffective in achieving the general objective of preventing and minimizing the generation of pollutants and their release and potential release to the receiving waters and/or the specific requirements above, the permit and/or the BMP Plan shall be subject to modification to incorporate revised BMP requirements.
6. Through implementation of the BMP Plan, the permittee must:
 - a. Prevent or minimize the generation and the potential for the release of pollutants from the facility to the waters of the United States through normal operations and ancillary activities; and
 - b. Ensure that methods of pollution prevention, control, and treatment will be applied to all components and facilities associated with the Beartrack Mine.
7. The permittee must develop and amend the BMP Plan consistent with the following objectives for the control of pollutants.
 - a. The number and quantity of pollutants and the toxicity of effluent generated, discharged or potentially discharged at the facility must be minimized by the permittee to the extent feasible by managing each waste stream in the most appropriate manner.
 - b. Under the BMP Plan, and any Standard Operating Procedures (SOPs) 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.
 - c. The permittee shall establish specific objectives for the control of pollutants by examining each facility component or system 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, and natural phenomena such as rain or snowfall, etc. The examination shall 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.

8. The permittee must develop a BMP Plan consistent with the objectives listed above and the general guidance contained in the publications entitled *Guidance Manual for Developing Best Management Practices (BMPs)* (USEPA, 1993) and *Stormwater Management for Industrial Activities, Developing PPPs and BMPs* (EPA 832-R-92-006) or any subsequent revisions to these guidance documents. The BMP Plan must include, at a minimum, the following items:
 - a. 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.
 - b. A description of the structure, functions, and procedures of the BMP Committee. The BMP Committee is responsible for developing, implementing, and maintaining the BMP Plan.
 - c. A description of the activities taking place at the site which affect or may affect storm water runoff or which may result in the discharge of pollutants to surface waters during dry weather.
 - d. A description of potential pollutant sources by identifying all activities and significant materials which may potentially be significant storm water pollutant sources or may result in the discharge of pollutants during dry weather.
 - e. A site topographic map that indicates site boundaries, access and haul roads; location of storm water outfall(s) and outlines of drainage areas; storage and maintenance areas for equipment, fuel, chemicals, and explosives; materials handling areas; areas used for storage of overburden, materials, soils, tailings, or wastes; location and points of permitted discharges; springs, streams, wetlands and other surface waters; and predicted direction of flow.

- f. An inventory of the types of materials handled at the site that potentially may be exposed to precipitation. The inventory must include a description of the exposed materials; method and location of onsite storage and disposal; and materials management practices employed to minimize contact with storm water runoff and reduce pollutants in storm water runoff.
- g. A list of significant spills and leaks of toxic or hazardous pollutants that have the potential to drain to a permitted outfall, a storm water conveyance, or otherwise drain to surface waters.
- h. A risk evaluation that identifies all activities, sites, and significant materials which may potentially be pollutant sources. The evaluation must indicate all pollutant parameters associated with each activity or site.
- i. A description of pollution prevention controls, BMPs, and other measures appropriate for the facility. At a minimum, the following controls must be addressed:
 - (1) **Good Housekeeping.** Good Housekeeping requires the maintenance of areas which may contribute pollutants to surface waters.
 - (2) **Preventative Maintenance.** A preventative maintenance program must be developed that includes inspection and maintenance of wastewater and storm water management devices, inspection and testing of facility equipment and systems to uncover conditions that could cause breakdowns or failures resulting in discharges of pollutants to surface waters, and ensuring appropriate maintenance of such equipment systems.
 - (3) **Spill Prevention and Response Procedures.** Areas where spills could result in the discharge of pollutants must be identified clearly in the BMP Plan. The description of each area must include procedures for spill prevention and procedures for cleaning up spills.
 - (4) **Sediment and Erosion Control.** The BMP Plan must identify areas that have a high potential for significant erosion of soil

and/or other materials and identify BMPs and other measures to be used to limit erosion and/or remove sediment from storm water runoff.

- (5) Management of Runoff. The BMP Plan must address the appropriateness of traditional storm water management practices (practices other than those that control the generation or source(s) of pollutants) used to divert, infiltrate, reuse, or otherwise manage storm water runoff in a manner that reduces pollutants in storm water discharges from the site. The BMP Plan must include provisions for implementation and maintenance of such measures that the permittee determines to be reasonable and appropriate.
- (6) Treatment. The BMP Plan must provide a description of how wastewater and storm water will be treated prior to discharging to waters of the United States, if treatment is necessary.
- (7) Inspections and Comprehensive Site Compliance Evaluations. The BMP Plan must include provisions for qualified personnel to inspect BMPs and designated equipment and facility areas at least on a monthly bases, however, inspections are not required when adverse weather conditions make a location inaccessible. Inspections must include, at a minimum, all material handling and storage areas, wastewater and storm water control and containment structures, and erosion control systems. Records of inspection must be maintained at the site. The BMP Plan must also include provisions for conducting comprehensive site compliance evaluations.
- (8) Employee Training. The BMP Plan must outline employee training programs related to implementation of the BMP Plan and specify how often training will take place.
- (9) Recordkeeping and Internal Reporting Procedures. The BMP Plan must outline recordkeeping and internal reporting procedures. Records must include a description if incidents (such as spills, or other discharges), a description of the

quantity and quality of storm water discharges, inspection, maintenance activities, and training sessions.

- j. Include the following specific BMPs:
 - (1) Ensure that solids, sludges, or other pollutants removed in the course of treatment or control of water and wastewaters are disposed of in a manner such as to prevent any pollutant from such materials from entering navigable waters.
 - (2) 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.
 - (3) 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.

- 9. The permittee must ensure that qualified personnel conduct a comprehensive site compliance evaluation at appropriate intervals specified in the BMP Plan. At a minimum, the comprehensive site compliance evaluations must be conducted at least twice per year.
 - a. The comprehensive site evaluation must include, at a minimum, the following:
 - (1) A visual inspection of areas contributing to wastewater and storm water discharges and areas susceptible to leaks or spills for evidence of, or the potential for, pollutants entering the permitted outfalls, storm water drainage system, or surface waters.
 - (2) An evaluation of structural and non-structural BMPs and other measures to reduce pollutant loadings to determine whether they are adequate and properly implemented.

- (3) An inspection of all equipment needed to implement the BMP Plan, such as spill response equipment.
 - b. The permittee must revise the BMP Plan within 30 days of the evaluation if the results of the evaluation indicate that the existing BMPs are insufficient in meeting the goals of the BMP Plan. The revised BMPs must be implemented in a timely manner, but in no case more than 90 days after the inspection.
- 10. The permittee must prepare an annual report and certification that must be submitted to EPA and IDEQ by January 31 of each year. The annual report must include:
 - a. a summary of the comprehensive site evaluations and inspections performed during the year;
 - b. the scope and dates of the evaluations and inspections;
 - c. major observations related to implementation of the BMP Plan;
 - d. corrective actions taken as a result of the evaluations and inspections;
 - e. a description of the quantity and quality of storm water discharge, and BMP Plan modification made during the year;
 - f. any incidents of non-compliance;
 - g. a certified statement that the evaluations and inspections have been completed and that the BMP Plan fulfills the requirements set forth in the permit; and
 - h. signed in accordance with the section V.E (“Signatory Requirements”).

III. General Monitoring, Recording and Reporting Requirements

A. Representative Sampling (Routine and Non-Routine Discharges).

- 1. The permittee must ensure that samples and measurements taken for the purpose of monitoring are representative of the monitored activity.

2. 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 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 section I.B of this permit that are likely to be affected by the discharge.
3. 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 section III.C (“Monitoring Procedures”). The permittee must report all additional monitoring in accordance with section III.D (“Additional Monitoring by Permittee”).

B. Reporting of Monitoring Results.

1. If the monitoring result is greater than the method detection limit (MDL), the permittee must report the actual value on the DMR. If a value is less than the MDL, the permittee must report “less than [MDL value]” on the DMR. For purposes of calculating monthly averages, zero may be used for values less than the MDL.
2. The permittee must submit surface water monitoring results to EPA and IDEQ with the DMR for the month following sample collection. At a minimum, the report must include the following:
 - a. Dates of sample collection and analyses;
 - b. Results of sample analyses;
 - c. Method and MDL; and
 - d. Relevant quality assurance/quality control (QA/QC) information.
3. The permittee must submit the results of the toxicity tests required in Table 1, with the dates of sample collection and initiation of each test, the applicable toxicity trigger (see paragraph I.C.5), and the flow rate at the time of sample

collection, to EPA and IDEQ with the DMR for the month following sample collection.

4. The permittee must summarize monitoring results each month on the DMR form (EPA No. 3320-1) or equivalent. The permittee must submit these 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 section V.E (“Signatory Requirements”) of this permit. The permittee must submit the legible originals of these documents to the Direction, Office of Water, with copies to IDEQ at the following addresses:

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

Idaho Department of Environmental Quality (IDEQ)
Idaho Falls Regional Office
900 North Skyline, Suite B
Idaho Falls, Idaho 83402

The permittee must submit reports and biannual WET test results in electronic format on a CD to the following address:

USFWS
Eastern Idaho Field Office
4425 Burley Drive, Suite A
Chubbuck, Idaho 83202

- C. **Monitoring Procedures.** The permittee must conduct monitoring according to test procedures approved under 40 CFR Part 136, unless other test procedures have been specified in this permit.

D. **Additional Monitoring by Permittee.**

1. 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.

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

E. Records Contents. The permittee must ensure that records of monitoring information 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 names 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 this 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 following circumstances:
 - a. any noncompliance that may endanger health or the environment;
 - b. any unanticipated bypass that exceeds any effluent limitation in the permit (See section IV.F, "Bypass of Treatment Facilities");
 - c. any upset that exceeds any effluent limitation in the permit (See section IV.G, "Upset Conditions"); or

- d. any violation of a maximum daily discharge limitation for any of the pollutants in Table 1 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 paragraph G.1 of this Part. 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. The permittee must submit reports to the Director, IDEQ, and USFWS at the addresses in section 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 section III.B (“Reporting of Monitoring Results”) are submitted. The reports must contain the information listed in section III.G (“Twenty-four Hour Notice of Noncompliance Reporting”) of this permit.
- I. **Changes in Discharge of Toxic Substances.** The permittee must notify the Director, IDEQ, and USFWS 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 µg/l);
 - b. Two hundred micrograms per liter (200 µg/l) for acrolein and acrylonitrile; five hundred micrograms per liter (500 µg/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 may reasonably be expected to exceed the highest of the following “notification level”:
- a. Five hundred micrograms per liter (500 µg/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. **Bull Trout Reporting Requirement.** Upon locating dead, injured or sick bull trout, initial notification should be made to the FWS's Law Enforcement (LE) Office as well as the Eastern Idaho Field Office, via a phone call, within three working days of locating the fish. Notification must include the date, time, and location of the fish when found, and possible cause of injury or death of each fish. Contact information for the LE office follows:

Special Agent Craig Tabor
1387 S. Vinnell Way, Suite 341

Boise, Idaho 83709-1657
208-378-5333

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 the Act, or any permit condition or limitation implementing any of such Sections in a permit issued under Section 402 of the 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 Section 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 one 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 two years, or both.
- b. Knowing Violations. The Act provides that any person who knowingly violates Section 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 \$5,000 to \$50,000 per day of violation, or imprisonment for not more than three 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 six years, or both.
- c. Knowing Endangerment. The Act provides that any person who knowingly violates Section 301, 302, 303, 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, 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 a 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 two 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 four 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 six 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 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 F.2 and F.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, IDEQ, and USFWS, if possible at least 10 days before the date of the bypass.
 - b. Unanticipated bypass. The permittee must submit notice of an unanticipated bypass a required under section 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:
 - (1) The bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;
 - (2) 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 preventative maintenance; and
 - (3) The permittee submitted notices as required under paragraph F.2 of this Part.
 - b. The Director may approve an anticipated bypass, after considering its adverse effects, if the Director determine that it will meet the three conditions listed above in paragraph F.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 G.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 section III.G (“Twenty-four Hour Notice of Noncompliance Reporting”); and
 - d. The permittee complied with any remedial measures required under section 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 section 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 any reasonable time specified in the request, 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 in any report to the Director or IDEQ, it must promptly submit such facts or 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 paragraph E.2 of this Part 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 paragraph E.2 of this Part 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 section 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. 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

Act - the Clean Water Act.

Acute toxic unit (TUa) - a measure of acute toxicity. TUa is the reciprocal of the effluent concentration that causes 50 percent of the organisms to die by the end of the acute exposure period (i.e., $TUa = 100/LC50$).

Administrator - the Administrator of the EPA, or an authorized representative.

Average monthly limit (AML) - 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.

Best management practices (BMPs) - schedules of activities, prohibitions or 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 areas.

Bypass - the intentional diversion of waste streams from any portion of a treatment facility.

Chronic toxic unit (TUc) - a measure of chronic toxicity. TUc is the reciprocal of the effluent concentration that causes no observable effect on the test organisms by the end of the chronic exposure period (i.e., $TUc = 100/NOEC$).

Daily discharge - 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.

Director - the Director of the Office of Water, EPA, or an authorized representative.

DMR - discharge monitoring report.

EPA - the United States Environmental Protection Agency.

Grab sample - an individual sample collected over a period of time not exceeding 15 minutes.

IDEQ - Idaho Department of Environmental Quality.

lb/day - pounds per day.

Maximum daily limit - the highest allowable “daily discharge.”

Method detection limit (MDL) - the minimum concentration of a substance (analyte) 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.

mgd - million gallons per day.

ug/L - micrograms per liter.

mg/L - milligrams per liter.

No observed effect concentration (NOEC) - the highest concentration of toxicant (e.g., effluent) to which organisms are exposed in a chronic toxicity test [full life-cycle or partial life-cycle (short-term) test], that causes no observable adverse effects on the test organisms (i.e., the highest concentration of effluent in which the values for the observed responses are not statistically significantly different from the controls).

QA/QC - quality assurance/quality control.

Regional Administrator - the Regional Administrator of Region 10 of the EPA, or the authorized representative of the Regional Administrator.

s.u. - standard units.

Severe property damage - 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.

Upset - 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.

