

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",

**Formation Capital Corporation, U.S.
 Idaho Cobalt Project**

is authorized to discharge from the Idaho Cobalt Project facility located approximately 22 miles west of Salmon, Idaho at the following location:

Outfall	Receiving Water	Latitude	Longitude
001	Big Deer Creek	45°09'58"	114°21'52"

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

This permit shall become effective April 1, 2009.

This permit and the authorization to discharge shall expire at 11:59 p.m., March 31, 2014.

The permittee shall reapply for a permit reissuance on or before October 1, 2013, 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 9th day of February, 2009.

/s/

 Michael A. Bussell, Director
 Office of Water and Watersheds

Schedule of Submissions

The following is a summary of some of the items the permittee must complete and/or submit to EPA during the term of this permit:

Item	Due Date
1. Discharge Monitoring Reports (DMR)	DMRs are due monthly and must be postmarked on or before the 20 th day of the following month (see part III.B.)
2. Quality Assurance Plan (QAP)	The permittee must provide EPA and IDEQ with written notification that the Plan has been developed and implemented within 90 days after the effective date of the final permit (see Part II.A.). The Plan must be kept on site and made available to EPA and IDEQ upon request.
3. Best Management Practices (BMP) Plan	The permittee must provide EPA and IDEQ with written notification that the Plan has been developed and implemented within 120 days after the effective date of the final permit (see Part II.B.). The Plan must be kept on site and made available to EPA and IDEQ upon request.
4. Fish Tissue Study Plan	The permittee must develop and submit a Fish Tissue Study Plan within 90 days of the effective date of the final permit. The plan and the report must be submitted to EPA, IDEQ, and NMFS, and must be approved by IDEQ (see Parts I.A. and II.C.).
5. Fish Tissue Study Plan Approval Notification	Within 30 days of the approval of the plan, the permittee must provide a written notification to EPA and NMFS that the Fish Tissue Study Plan has been approved by IDEQ (see parts I.A. and II.C.).
6. Fish Tissue Baseline Results	At least 30 days prior to the commencement of discharge, the permittee must submit baseline fish tissue sample results to EPA, IDEQ, NMFS, and USFWS (see Parts I.A. and II.C.).
7. Aquatic Invertebrate Sampling Program	The permittee must develop and submit an aquatic invertebrate sampling program within 90 days of the effective date of the final permit. The plan and the report must be submitted to EPA, IDEQ, and NMFS, and must be approved by IDEQ (see Parts I.A. and II.D.).
8. Aquatic Invertebrate Sampling Program Approval Notification	Within 30 days of approval of the plan, the permittee must provide a written notification to EPA and NMFS that the Aquatic Invertebrate Sampling Program has been approved by IDEQ (see Parts I.A. and II.D.).

9. Aquatic Invertebrate Baseline Results At least 30 days prior to the commencement of discharge, the permittee must submit baseline aquatic invertebrate sample results to EPA, IDEQ, NMFS, and USFWS (see Parts I.A. and II.D.).
10. Copper Loading Demonstration Plan Prior to the commencement of discharge, the permittee must provide a written notification to EPA and IDEQ that there will be no net increase in copper mass loading to the Big Deer Creek watershed as a consequence of mining activity. This demonstration must be approved by IDEQ (see Parts I.A. and II.E.).
11. Predictive Model Updates and/or Refinements or Replacement In the cover letter for permit renewal (to be submitted at least 180 days prior to expiration of this permit), the permittee must provide written notification that the model has been updated and/or refined or replaced (see II.F.).
12. NPDES Application Renewal The application must be submitted at least 180 days before the expiration date of the permit (see V.B.).
13. Twenty-Four Hour Notice of Noncompliance Reporting The permittee must report certain occurrences of noncompliance by telephone within 24 hours from the time the permittee becomes aware of the circumstances (see Part III.G. and footnote #2 in Table 1).

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I. Limitations and Monitoring Requirements

A. Discharge Authorization

During the effective period of this permit and except as specified in Parts I.A.1 through I.A.3 below, the permittee is authorized to discharge pollutants from Outfall 001 to Big Deer 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.

Discharge from Outfall 001 may begin after the following requirements (I.A.1, I.A.2, and I.A.3) have been met:

1. Copper loading demonstration plan (Part II.E.): Prior to discharging pollutants, the permittee must submit written notice to EPA that it has developed and obtained written IDEQ approval of a plan that describes how Formation Capital Corporation (FCC) will comply with IDAPA 58.01.02.054.04.

- a) The written notice to EPA must include a copy of IDEQ's notice to the permittee that the plan has been approved by IDEQ.
- b) The plan must describe the measures FCC will implement to ensure the Permittee's discharge does not increase the total load of copper in the Big Deer Creek watershed.
- c) The plan must include a schedule for implementation of the measures.
- d) Once the plan is approved by IDEQ, the plan must be implemented according to the schedule in the approved plan.

2. Fish tissue study plan: At least 30 days prior to discharging pollutants, the permittee must complete the following actions, as detailed in Part II.C:

- a) Within 90 days of the effective date of the permit, develop and submit to IDEQ for approval and to EPA and NMFS for review a fish tissue study plan to obtain bioaccumulation data for the following pollutants: aluminum, arsenic, cadmium, cobalt, lead, manganese, methylmercury, nickel, selenium, thallium, and zinc.
- b) Within 30 days of written approval of the plan, submit written notice to EPA and NMFS that the plan has been approved by IDEQ, including a copy of IDEQ's notice to the permittee that the plan has been approved.
- c) Complete the baseline monitoring (i.e., the first round of sampling, to determine baseline metals bioaccumulation in fish tissue prior to the addition of FCC's discharge).
- d) Submit the results from the baseline monitoring to IDEQ, EPA, NMFS, and USFWS at least 30 days prior to discharge.

3. Aquatic invertebrate sampling program: At least 30 days prior to discharging pollutants, the permittee must complete the following actions, as detailed in Part II.D:

- a) Within 90 days of the effective date of the permit, develop and submit to IDEQ for approval and to EPA and NMFS for review an aquatic invertebrate sampling program to assess changes in aquatic invertebrate community structure.
- b) Within 30 days of written approval of the plan, submit written notice to EPA and NMFS that the plan has been approved by IDEQ, including a copy of IDEQ's notice to the permittee that the plan has been approved.
- c) Complete the baseline monitoring (i.e., the first round of sampling, to determine baseline aquatic invertebrate community structure prior to the addition of FCC's discharge).
- d) Submit the results from the baseline monitoring to IDEQ, EPA, NMFS, and USFWS at least 30 days prior to discharge.

B. Effluent Limitations and Monitoring

1. The permittee must limit and monitor discharges from Outfall 001 as specified in Table 1, below. All figures represent maximum effluent limits unless otherwise indicated. 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.

Table 1. Outfall 001 Effluent Limits and Monitoring Requirements

Parameter	Units	Effluent Limits and Monitoring Requirements			
		Maximum Daily Limit	Average Monthly Limit	Monitoring Frequency	Sample Type
Arsenic ^{1, 2}	µg/l	10	10	Weekly	24-hr comp.
Cadmium ^{1, 2}	µg/l	0.42	0.21	Weekly	24-hr comp.
Cobalt ^{1, 2}	µg/l	141	70.4	Weekly	24-hr comp.
Copper ^{1, 2}	µg/l	4.80	2.40	Weekly	24-hr comp.
Lead ^{1, 2}	µg/l	0.90	0.45	Weekly	24-hr comp.
Mercury ^{1, 2}	µg/l	0.02	0.01	Weekly	Grab
Nickel ^{1, 2}	µg/l	26.52	13.22	Weekly	24-hr comp.
Thallium ¹	µg/l	0.95	0.47	Weekly	24-hr comp.
Zinc ^{1, 2}	µg/l	37.02	18.45	Weekly	24-hr comp.
Ammonia (total as N) ²	mg/l	5.6	2.8	2/Month	24-hr comp.
Nitrate + Nitrite	mg/l	10	---	2/Month	24-hr comp.

Table 1. Outfall 001 Effluent Limits and Monitoring Requirements

Parameter	Units	Effluent Limits and Monitoring Requirements			
		Maximum Daily Limit	Average Monthly Limit	Monitoring Frequency	Sample Type
Sulfate	mg/l	1,867	930	2/Month	24-hr comp.
TSS	mg/l	30	20	Weekly	24-hr comp.
pH	s.u.	Between 6.5 and 9.0 at all times		Daily	Grab
Dissolved Oxygen	mg/l	Must exceed 6.0 at all times		2/Month	Grab
Temperature	°C	19	---	Weekly	Grab
Iron	µg/l	---	---	Monthly	24-hr comp.
Aluminum	µg/l	---	---	Monthly	24-hr comp.
Manganese	µg/l	---	---	Monthly	24-hr comp.
Selenium	µg/l	---	---	Monthly	24-hr comp.
Hardness	mg/l	---	---	Monthly	Grab
Chloride	mg/l	---	---	Monthly	Grab
Conductivity	mS/m	---	---	Monthly	Grab
TDS	mg/l	---	---	Monthly	24-hr comp.
Outfall flow	mgd	---	---	Continuous	Recording
Chronic Whole Effluent Toxicity (WET)	TU _C	---	---	1x/6 months (September and May)	24-hr comp.
Expanded Effluent Testing ³	---	---	---	3x/5 years	--- ⁴

Notes:

1. Metals limits expressed as total recoverable except for mercury, which is expressed as total.
2. Reporting is required within 24 hours of a maximum daily limit violation (see Part I.B.2).
3. Expanded effluent testing includes testing required in 40 CFR 122.21 and NPDES Application Form 2C. This testing shall occur in years 2, 3 and 4 of the permit cycle, and should occur concurrently with the September WET testing and other routine monitoring (see Part I.C.1).
4. Sample types for Expanded Effluent Testing will be collected as required in NPDES Application Form 2C.

2. The permittee must report within 24 hours any violation of the maximum daily limits for the following pollutants: arsenic, cadmium, cobalt, copper, lead, mercury, nickel, zinc, and ammonia. Violations of all other effluent limits are to be reported at the time that discharge monitoring reports are submitted (See III.B. and III.H.).
3. The permittee shall establish an internal monitoring point to continuously measure the combined flow from the tailings and waste rock storage facility (TWSF) and the ore stockpile to the water management pond.

4. The maximum cumulative volume discharged from the TWSF and the ore stockpile combined flows shall not exceed 17.6 million gallons from January 1 through December 31 of each year.

The permittee shall report the cumulative volume discharged from the internal monitoring point for that year on the discharge monitoring report (DMR) for each month. For example, if the permittee discharges 1 million gallons to the water management pond in January and 2 million gallons in February, the February DMR shall state a cumulative flow discharged to the water management pond of 3 million gallons (1 million + 2 million = 3 million). In addition, the permittee shall report the total volume discharged each month.

5. The permittee must not discharge hazardous materials in concentrations that pose a threat to public health or impair the beneficial uses of the receiving water.
6. The permittee must not discharge chemicals or toxic pollutants in concentrations that impair the beneficial uses of the receiving water.
7. The permittee must not discharge deleterious materials in concentrations that impair the beneficial uses of the receiving water.
8. The permittee must not discharge floating, suspended or submerged matter of any kind in concentrations causing nuisance or objectionable conditions or that may impair the beneficial uses of the receiving water.
9. The permittee must not discharge excess nutrients that cause visible slime growths or other nuisance aquatic growths impairing beneficial uses of the receiving water.
10. The permittee must collect effluent samples from the effluent stream after the last treatment unit prior to discharge into the receiving waters.
11. 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.
12. For purposes of reporting on the DMR for a single sample, if a value is less than the MDL, the permittee must report "less than {numeric value of the MDL}" and if a value is less than the minimum level (ML), the permittee must report "less than {numeric value of the ML}."
13. For purposes of calculating monthly averages, zero may be assigned for values less than the method detection limit (MDL) and the {numeric value of the MDL} may be assigned for values between the MDL and the ML. If the average value is less than the MDL, the permittee must report "less than {numeric value of the MDL}" and if the average value is less than the ML, the permittee must report "less than {numeric value of the ML}." If a value is equal to or greater than the ML, the permittee must report and use the actual value. The resulting average value must be compared to the effluent limitation to assess compliance.

C. Whole Effluent Toxicity Testing Requirements

The permittee must conduct chronic whole effluent toxicity (WET) tests on effluent samples from Outfall 001. Testing must be conducted in accordance with subsections 1 through 7, below.

1. Toxicity testing must be conducted semiannually during the low flow (September) and high flow (May) seasons. Toxicity testing must be performed on the same day as the other chemical and physical test parameters required in Part 1.B. above.
2. Chronic Test Species and Methods
 - a) The permittee must conduct short-term 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.
 - b) 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-02-013, October 2002.
 - c) Results must be reported in TUC (chronic toxic units), where $TUC = 100/IC_{25}$. See Part VI. for a definition of IC.
3. Toxicity Trigger. For the purposes of determining compliance with paragraph I.C.5., the chronic toxicity trigger is defined as toxicity exceeding 1 TUC.
4. Quality Assurance
 - a) The toxicity testing on each organism must include a series of five test dilutions and a control. Dilution series must be selected in accordance with *Short-Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms*, Fourth Edition, EPA/821-R-02-013, October 2002.
 - 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-02-013, 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 and IDEQ. In no case shall water that has not met test acceptability criteria be used for either dilution or control.
5. Accelerated Testing.
- a) If chronic toxicity is detected above the trigger specified in paragraph C.3., the permittee must conduct four (see also Part C.5.d., below) more biweekly tests over an eight week period. This accelerated testing must be initiated within two weeks of receipt of the test results that indicate an exceedance.
 - b) The permittee must notify EPA of the exceedance in writing within two weeks of receipt of the test results. The notification must include the following information:
 - (i) A status report on any actions required by the permit, with a schedule for actions not yet completed.
 - (ii) A description of any additional actions the permittee has taken or will take to investigate and correct the cause(s) of the toxicity.
 - (iii) Where no actions have been taken, a discussion of the reasons for not taking action.
 - c) If none of the four accelerated tests exceed the toxicity trigger, the permittee may return to the normal testing frequency. If any of the four tests exceed the trigger, then the TRE requirements in Part I.C.6., shall apply.
 - d) Initial Investigation. If the permittee demonstrates through an evaluation of facility operations that the cause of the exceedance 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.C.6. shall apply.
6. Toxicity Reduction Evaluation (TRE) and Toxicity Identification Evaluation (TIE):
- a) If the chronic toxicity trigger is exceeded during accelerated testing under Part I.C.5., the permittee must initiate a toxicity reduction evaluation (TRE) in accordance with *Generalized Methodology for Conducting Industrial Toxicity Reduction Evaluations* (EPA/600/2-88/070) within two weeks of the exceedance. 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 Toxicity Identification Evaluation (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).

7. Reporting

- a) The permittee must submit the results of the toxicity tests with the discharge monitoring reports (DMR) for the month following sample collection.
- b) The permittee must submit the results of any accelerated testing, under Part I.C.5., within 2 weeks of receipt of the results from the lab. The full report must be submitted within 4 weeks of receipt of the results from the lab. If an initial investigation indicates the source of toxicity and accelerated testing is unnecessary, the result of the investigation must be submitted with the DMR for the month following completion of the investigation.
- c) The report of toxicity test results must include all relevant information outlined in Section 10, Report Preparation, of *Short-Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms*, Fourth Edition, EPA/821-R-02-013, October 2002. In addition to toxicity test results, the permittee must report: dates of sample collection and initiation of each test; the toxicity trigger as defined in paragraph C.3.; flow rate at the time of sample collection; and the results of the monitoring required in Part I.B.

D. Surface Water Monitoring

The permittee must conduct surface water monitoring. Surface water monitoring must begin within 60 days of the effective date of this permit, and continue until the next permit issuance becomes effective. The program must meet the following requirements:

1. Monitoring stations must be established in Big Deer Creek at the following locations:
 - a) at monitoring station WQ-24 located upstream of Outfall 001.
 - b) at a newly established monitoring station in Big Deer Creek not less than 400 feet downstream from Outfall 001, but no further downstream (i.e., east) than the confluence of Big Deer Creek with the unnamed tributary to which SS-1

(surface seep #1) drains. The final location of this newly established monitoring station must be approved in writing by IDEQ.

2. To the extent practicable, surface water sample collection must occur on the same day as effluent sample collection.
3. All ambient samples must be grab samples.
4. For metals monitoring, arsenic, cadmium, copper, lead, nickel, silver, and zinc must be analyzed as dissolved concentrations. Aluminum, cobalt, iron, manganese, selenium, and thallium must be analyzed as total recoverable concentrations. Mercury must be analyzed as total concentrations.
5. The flow rate must be measured as near as practicable to the time that other ambient parameters are sampled.
6. Samples must be analyzed for the parameters listed in Table 2 to achieve method detection limits (MDLs) that are equivalent to or less than the Maximum MDL values listed in Table 2. The permittee may request different MDLs. Such a request must be in writing and must be approved by EPA.

Table 2. Ambient Surface Water Monitoring Requirements at WQ-24 and Downstream Station

Parameter	Units	Monitoring Frequency	Sample Type	Maximum MDL
Flow	gpm	Quarterly	Grab	---
Arsenic, dissolved	µg/l	1x/6 months	Grab	2.0
Cadmium, dissolved	µg/l	1x/6 months	Grab	0.1
Cobalt, total recoverable	µg/l	1x/6 months	Grab	2.0
Copper, dissolved	µg/l	1x/6 months	Grab	1.0
Lead, dissolved	µg/l	1x/6 months	Grab	0.1
Mercury, total	µg/l	1x/6 months	Grab	0.0002
Nickel, dissolved	µg/l	1x/6 months	Grab	5.0
Selenium, total recoverable	µg/l	1x/6 months	Grab	2.0
Silver, dissolved	µg/l	1x/6 months	Grab	0.2
Thallium, total recoverable	µg/l	1x/6 months	Grab	0.3
Zinc, dissolved	µg/l	1x/6 months	Grab	10.0
Ammonia (total as N)	mg/l	1x/6 months	Grab	1.0
Nitrate + Nitrite	µg/l	1x/6 months	Grab	10
Sulfate	mg/l	1x/6 months	Grab	20
TSS	mg/l	1x/6 months	Grab	5
pH	s.u.	1x/6 months	Grab	---

Table 2. Ambient Surface Water Monitoring Requirements at WQ-24 and Downstream Station

Parameter	Units	Monitoring Frequency	Sample Type	Maximum MDL
Dissolved Oxygen	mg/l	1x/6 months	Grab	---
Temperature	°C	1x/6 months	Grab	---
Iron, total recoverable	µg/l	1x/6 months	Grab	30
Aluminum, total recoverable	µg/l	1x/6 months	Grab	20
Hardness	mg/l	Quarterly	Grab	---
Chloride	mg/l	1x/6 months	Grab	1.0
Conductivity	mS/m	1x/6 months	Grab	---
TDS	mg/l	1x/6 months	Grab	---

7. Surface water monitoring in Big Deer Creek shall occur during the following times:
 - a) Quarterly sampling for flow and hardness: 1) fall quarter – September through November; 2) winter quarter – December through February; 3) spring quarter – March through May; and, 4) summer quarter – June through August. Quarterly sampling events must be separated by at least one month.
 - b) Semiannual sampling for all other parameters: 1) fall quarter – September through November; and, 2) spring quarter – March through May.
8. Quality assurance/quality control plans for all the monitoring must be documented in the Quality Assurance Plan required under Part II.A., “Quality Assurance Plan.”
9. Surface water monitoring results must be submitted to EPA, IDEQ, NMFS, and USFWS with the DMR for the month following FCC’s receipt of the monitoring results. A report containing the results must also be submitted with the application for renewal of this permit (see V.B.). At a minimum, the submittals must include the following:
 - a) Dates of sample collection and analyses.
 - b) Results of sample analysis.
 - c) Relevant quality assurance/quality control (QA/QC) information.
 - d) Results of all other surface water monitoring conducted at stations WQ-24 and WQ-28 as part of operational and pre-operational monitoring.

II. Special Conditions

A. Quality Assurance Plan (QAP)

The permittee must develop a quality assurance plan (QAP) for all monitoring required by this permit. The permittee must submit written notice to EPA and IDEQ that the Plan has been developed and implemented within 90 days of the effective date of this permit. Any existing QAPs may be modified for compliance with 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 *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 that is specified in these documents.
3. At a minimum, the QAP must include the following:
 - a) Details on the number of samples, type of sample containers, preservation of samples, holding times, analytical methods, analytical detection and quantitation limits for each target compound, type and number of quality assurance field samples, precision and accuracy requirements, sample preparation requirements, sample shipping methods, and laboratory data delivery requirements.
 - b) Map(s) indicating the location of each sampling point.
 - c) Qualification and training of personnel.
 - d) Name(s), address(es) and telephone number(s) of the laboratories used by or proposed to be used by the permittee.
4. The permittee must amend the QAP whenever there is a modification in sample collection, sample analysis, or other procedure addressed by the QAP.
5. Copies of the QAP must be kept on site and made available to EPA and/or IDEQ upon request.

B. Best Management Practices Plan

1. Purpose

Through implementation of the best management practices (BMP) plan, which contains a subsection specific to the minimization of mercury in the discharge (Mercury Minimization Plan, MMP), the permittee must prevent or minimize the generation and the potential for the release of all pollutants, and specifically mercury, from the facility to the waters of the United States through normal and ancillary activities.

2. Development and Implementation Schedule

The permittee must develop and implement a BMP Plan which achieves the objectives and the specific requirements listed below. The permittee must submit written notice to EPA and IDEQ that the Plan has been developed and implemented within 120 days of the effective date of the permit. Any existing BMP plans may be modified for compliance with this section. The permittee must implement the provisions of the plan as conditions of this permit within 120 days of the effective date of this permit.

3. Objectives

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) The quantity of mercury discharged or potentially discharged at the facility must be minimized by the permittee by managing each waste stream in the most appropriate manner.
- c) 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.
- d) 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.

4. Elements of the BMP Plan

The BMP Plan must be consistent with the objectives above and the general guidance contained in Guidance Manual for *Developing Best Management Practices* (EPA 833-B-93-004, October 1993) and *Storm Water Management for Industrial Activities, Developing Pollution Prevention Plans and Best Management Practices* (EPA 832-R-92-006) or any subsequent revision to these guidance documents. The BMP Plan must include, at a minimum, the following items:

- a) Plan Components.
 - (i) 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.

- (ii) 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.
 - (iii) Description of potential pollutant sources.
 - (iv) Risk identification and assessment.
 - (v) Standard operating procedures to achieve the above objectives and specific best management practices (see below).
 - (vi) Reporting of BMP incidents. The reports must include a description of the circumstances leading to the incident, corrective actions taken and recommended changes to operating and maintenance practices to prevent recurrence.
 - (vii) Materials compatibility.
 - (viii) Good housekeeping.
 - (ix) Inspections.
 - (x) Preventative maintenance and repair.
 - (xi) Security.
 - (xii) Employee training.
 - (xiii) Recordkeeping and reporting.
 - (xiv) Prior evaluation of any planned modifications to the facility to ensure that the requirements of the BMP plan are considered as part of the modifications.
 - (xv) A subsection specific to minimization of mercury in the discharge.
 - (xvi) Final constructed site plans, drawings and maps (including detailed storm water outfall/culvert configurations).
- b) Specific Best Management Practices. The BMP Plan must establish specific BMPs or other measures to achieve the objectives under Part II.B. and which ensure that the following specific requirements are met:
- (i) 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.
 - (ii) 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.
 - (iii) 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.

5. Review and Certification.

The BMP Plan must be reviewed and certified as follows:

- a) Annual review by the plant manager and BMP Committee.
- b) Certified statement that the above reviews have been completed and that the BMP Plan fulfills the requirements set forth in this permit. The statement must be certified by the dated signatures of each BMP Committee member. The statement must be submitted to EPA on or before January 31st of each year of operation under this permit after the initial BMP notification submittal.

6. 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.

7. BMP Plan Modification

- a) 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.
- b) 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.
- c) 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 with the annual certification required under Part II.B.5., above.

C. Fish Tissue Study Plan

1. Purpose

Through development and implementation of a fish tissue study plan the permittee must assess current (baseline) bioaccumulation in fish tissue and continue to annually monitor the impacts on fish tissue bioaccumulation of FCC's discharge of the following pollutants:

Aluminum, arsenic, cadmium, cobalt, lead, manganese, methylmercury, nickel, selenium, thallium, and zinc.

2. Development and Implementation Schedule

The permittee must develop and implement a fish tissue study plan to assess bioaccumulation in fish tissue which achieves the objectives and the specific requirements listed below.

- a) Prior to discharging pollutants, the permittee must complete the following actions:
 - (i) Within 90 days of the effective date of the permit, the permittee must develop and submit to IDEQ for approval and to EPA and NMFS for review a fish tissue study plan to assess fish tissue bioaccumulation of the pollutants listed in Part II.C.1 above. Submittals must be sent to the addresses in Part III.B.
 - (ii) Within 30 days of approval of the plan by IDEQ, the permittee must submit notice to EPA and NMFS that the plan has been approved by IDEQ. The notice shall include a copy of IDEQ's notice to the permittee that the plan has been approved.
 - (iii) Prior to discharge of pollutants, the permittee shall complete the baseline monitoring in accordance with the fish tissue study plan (i.e. the first round of sampling, to determine baseline bioaccumulation in fish tissue prior to the addition of FCC's discharge).
 - (iv) At least 30 days prior to discharge of pollutants, the permittee shall submit the results from the baseline monitoring to IDEQ, EPA, NMFS, and USFWS at the addresses in Part III.B.
- b) For the remainder of the permit term, the permittee shall conduct annual fish tissue bioaccumulation monitoring for the pollutants listed in II.C.1 above in accordance with the approved fish tissue study plan.

3. Objectives

The permittee must develop and implement the fish tissue study plan consistently with the following objectives:

- a) Obtain baseline bioaccumulation information to assess the bioaccumulation in fish tissues of the pollutants listed in II.C.1. prior to FCC's effluent discharge:
- b) Perform annual fish tissue bioaccumulation monitoring of the pollutants listed in II.C.1 to assess impacts from FCC's effluent discharge.
- c) Compare methylmercury results to IDEQ's methylmercury fish tissue criterion.

4. Procedures Regarding the Fish Tissue Study Plan

- a) The fish tissue study plan must be consistent with the state's *Idaho Fish Consumption Advisory Program* (IFCAP) protocol, the state's *Implementation Guidance for the Idaho Mercury Water Quality Criteria* (IDEQ 2005), and EPA's *Guidance for Assessing Chemical Contaminant Data for use in Fish Advisories, Volume I* (EPA 823-B-00-007, November 2000).
- b) After the baseline study is completed, fish tissue monitoring shall be performed annually in accordance with the approved plan.

- c) The permittee must conduct fish tissue monitoring of non-ESA listed resident salmonids. If the permittee has difficulty obtaining adequate numbers of resident salmonids, other local species may be substituted with the approval of IDEQ.
 - d) Fish for tissue samples must be collected in the reach of Big Deer Creek downstream of Outfall 001 and upstream from the falls.
5. Quality assurance/quality control plans for all the monitoring must be documented in the Quality Assurance Plan required under Part II.A., "Quality Assurance Plan."
 6. Baseline and annual fish tissue monitoring results must be submitted to EPA, IDEQ, NMFS, and USFWS with the DMR for the month following FCC's receipt of the results. Submittals must be sent to the addresses in Part III.B. In addition, a summary of the results must be submitted with the application for renewal of the permit. At a minimum, results submitted must include the following:
 - a) Dates of sample collection and analysis.
 - b) Sample location.
 - c) Results of sample analysis.
 - d) Relevant quality assurance/quality control (QA/QC) information.
 - e) For the summary submitted with the application for permit renewal, an analysis of any increases or decreases seen in bioaccumulation of each of the pollutants measured.
 7. This permit may be modified in accordance with the requirements set forth at 40 CFR Parts 122 and 124, to include appropriate conditions or limits to address reasonable potential to exceed fish tissue criteria based on newly available information.

D. Aquatic Invertebrate Sampling Program

1. Purpose

Through development and implementation of an aquatic invertebrate sampling program the permittee must assess current (baseline) aquatic invertebrate community structure and continue to annually monitor the impacts of FCC's discharge on the aquatic invertebrate community structure in Big Deer Creek.

2. Development and Implementation Schedule

The permittee must develop and implement an aquatic invertebrate sampling program to assess changes to the aquatic invertebrate community structure in Big Deer Creek. The program must achieve the objectives and the specific requirements listed below.

- a) Prior to discharging pollutants, the permittee must complete the following actions:

- (i) Within 90 days of the effective date of the permit, the permittee must develop and submit to IDEQ for approval and to EPA and NMFS for review an aquatic invertebrate sampling program to assess aquatic invertebrate community structure in Big Deer Creek. Submittals must be sent to the addresses in Part III.B.
 - (ii) Within 30 days of approval of the plan by IDEQ, the permittee must submit notice to EPA and NMFS that the plan has been approved by IDEQ. The notice shall include a copy of IDEQ's notice to the permittee that the plan has been approved.
 - (iii) Prior to discharge of pollutants, the permittee shall complete the baseline monitoring in accordance with the approved aquatic invertebrate sampling program (i.e. the first round of sampling, to determine baseline aquatic invertebrate community structure prior to the addition of FCC's discharge).
 - (iv) At least 30 days prior to discharge of pollutants, the permittee shall submit the results from the baseline monitoring to IDEQ, EPA, NMFS, and USFWS at the addresses in Part III.B.
- b) For the remainder of the permit term, the permittee shall conduct annual sampling of aquatic invertebrates in Big Deer Creek in accordance with the approved aquatic invertebrate sampling program.

3. Objectives

The permittee must develop and implement the aquatic invertebrate sampling program consistently with the following objectives:

- a) Obtain baseline aquatic invertebrate information to assess the aquatic invertebrate community structure prior to FCC's effluent discharge.
- b) Perform annual aquatic invertebrate monitoring to assess impacts on the community structure from FCC's effluent discharge.

4. Procedures Regarding the Aquatic Invertebrate Sampling Program

- a) The aquatic invertebrate sampling program must be consistent with the state's *Idaho Small Stream Ecological Assessment Framework: An Integrated Approach* (Grafe 2002) and IDEQ's *Water Body Assessment Guidance, Second Ed. Final* (Grafe, et al., 2002).
- b) After the baseline study is completed, aquatic invertebrate monitoring shall be performed annually in accordance with the approved plan.
- c) Aquatic invertebrate sampling must be conducted within the reach of Big Deer Creek downstream of the effluent and upstream from the falls, or as specified in the IDEQ-approved sampling program.

5. Quality assurance/quality control plans for all the monitoring must be documented in the Quality Assurance Plan required under Part II.A., “Quality Assurance Plan.”
6. Baseline and annual aquatic invertebrate monitoring results must be submitted to EPA, IDEQ, NMFS, and USFWS with the DMR for the month following FCC’s receipt of the data at the addresses in Part III.B. In addition, a summary of the results must be submitted with the application for renewal of the permit. At a minimum, results submitted must include the following:
 - a) Dates of sample collection and analysis.
 - b) Sample location.
 - c) Results of sample analysis.
 - d) Relevant quality assurance/quality control (QA/QC) information.
 - e) For the summary submitted with the application for permit renewal, an analysis of any changes in the structure of the aquatic invertebrate community in Big Deer Creek.

E. Copper Loading Demonstration Plan

As described in the State’s certification of the permit, the permittee must demonstrate to IDEQ, prior to the commencement of discharge, that there will be no net increase in copper mass loading to the Big Deer Creek watershed as a consequence of the outfall 001 discharge. Because Big Deer Creek is identified as a “high priority” waterbody under the CWA Section 303(d) program, this requirement is necessary in order to comply with State requirements at IDAPA 58.01.02.054.04. Prior to discharge, the permittee must prepare a written plan that: 1) describes the measures that will be implemented (if any) to ensure that, notwithstanding the addition of copper from the discharge, the total mass load of copper remains constant or decreases in the Big Deer Creek watershed; and, 2) includes a schedule for the implementation of these measures. The written plan must be submitted to EPA and the IDEQ regional office at the addresses shown in Part III.B. The plan must be approved by IDEQ prior to discharge, and implemented in accordance with the approved plan.

F. Predictive Model Updates and/or Refinements or Replacement

The permittee must periodically update and/or refine their computer model or replace it with another appropriate model that predicts water and chemical mass balance relationships between the project components and the surrounding water environment throughout the life of the mine and the post-operational period. At a minimum, the model must be updated and/or refined, or replaced prior to the application for permit renewal, at least 180 days before the expiration date of this permit (Part V.B.). In the cover letter for permit renewal, the permittee must provide written notification that the model has been updated and/or refined, or replaced. Summary reports of these updates and/or refinements, or replacement, or electronic copies of the model simulations, must be made available to EPA and IDEQ upon request.

III. General Monitoring, Recording and Reporting Requirements

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

Samples and measurements must be representative of the volume and nature of the monitored discharge.

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 Outfall 001 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, NMFS, and USFWS at the following addresses:

US EPA Region 10
Attn: PCS Data Entry Team
1200 Sixth Avenue, Suite 900, OCE-133
Seattle, Washington 98101

Idaho Department of Environmental Quality
Idaho Falls Regional Office (Attn: Water Division)
900 N. Skyline, Suite B
Idaho Falls, Idaho 83402

National Marine Fisheries Service
Idaho State Habitat Office (Attn: Director)
10095 W Emerald
Boise, Idaho 83704

U.S. Fish and Wildlife Service
Snake River Fish and Wildlife Office

1387 S Vinnell Way, Suite 368
Boise, Idaho 83709

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 or approved by EPA as an alternate test procedure under 40 CFR 136.5.

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 EPA, 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 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 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 EPA 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 applicable pollutants identified by footnote #2 in Table 1(See Part I.B.).
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 of the Office of Compliance and Enforcement 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 Pollutants

The permittee must notify the Director of the Office of Water and Watersheds 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 may reasonably be expected to 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 EPA 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 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 EPA in accordance with 40 CFR 122.44(f).
 3. The permittee must submit the notification to Office of Water and Watersheds at the following address and to IDEQ at the address in Part III.B:

US EPA Region 10
Attn: NPDES Permits Unit Manager
1200 Sixth Avenue, Suite 900, OWW-130
Seattle, Washington 98101

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 and Administrative Penalties.** Pursuant to 40 CFR Part 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 \$37,500 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 \$16,000 per violation, with the maximum amount of any Class I penalty assessed not to exceed \$37,500). 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 \$16,000 per day for each day during which the violation continues, with the maximum amount of any Class II penalty not to exceed \$177,500).
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 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 written notice, 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 of the Office of Compliance and Enforcement 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 of the Office of Compliance and Enforcement 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 written notice to the Director of the Office of Water and Watersheds as specified in Part III.I.3. 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 written advance notice to the Director of the Office of Compliance and Enforcement 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 EPA and IDEQ, within the time specified in the request, any information that EPA 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 EPA 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 EPA, IDEQ, NMFS, or USFWS, it must promptly submit the omitted facts or corrected information in writing.

E. Signatory Requirements

All applications, reports or information submitted to EPA, IDEQ, NMFS, and USFWS 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, Indian tribe, 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 EPA 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 of the Office of Compliance and Enforcement 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 of the Office of Compliance and

Enforcement 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 of the Office of Compliance and Enforcement, EPA Region 10, 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 federal, tribal, state or local laws or regulations.

I. Transfers

This permit is not transferable to any person except after written notice to the Director of the Office of Water and Watersheds as specified in part III.I.3. 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 areas.
5. "Bypass" means the intentional diversion of waste streams from any portion of a treatment facility.
6. "Chronic toxic unit" ("TUc") is 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., 100/"NOEC").
7. "Composite" - see "24-hour composite".

8. “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.
9. “Deleterious material” as defined in IDAPA 58.01.02.010.16 means any nontoxic substance which may cause the tainting of edible species of fish, taste and odors in drinking water supplies, or the reduction of the usability of water without causing physical injury to water users or aquatic and terrestrial organisms.
10. “Director of the Office of Compliance and Enforcement” means the Director of the Office of Compliance and Enforcement, EPA Region 10, or an authorized representative.
11. “Director of the Office of Water and Watersheds” means the Director of the Office of Water and Watersheds, EPA Region 10, or an authorized representative.
12. “DMR” means discharge monitoring report.
13. “EPA” means the United States Environmental Protection Agency.
14. “Grab” sample is an individual sample collected over a period of time not exceeding 15 minutes.
15. “IDEQ” means the Idaho Department of Environmental Quality.
16. “IDFG” means the Idaho Department of Fish and Game.
17. “Inhibition concentration”, IC, is a point estimate of the toxicant concentration that causes a given percent reduction (p) in a non-quantal biological measurement (e.g., reproduction or growth) calculated from a continuous model (e.g., Interpolation Method).
18. “LC50” means the concentration of toxicant (e.g., effluent) which is lethal to 50 percent of the test organisms exposed in the time period prescribed by the test.
19. “Maximum daily discharge limitation” means the highest allowable “daily discharge.”
20. “Method Detection Limit (MDL)” means 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.
21. “Minimum Level (ML)” means the concentration at which the entire analytical system must give a recognizable signal and an acceptable calibration point. The ML is the concentration in a sample that is equivalent to the concentration of the lowest calibration standard analyzed by a specific analytical procedure, assuming that all the method-specified sample weights, volumes and processing steps have been followed.

22. “NMFS” means the National Oceanic and Atmospheric Administration, National Marine Fisheries Service.
23. “NOEC” means no observed effect concentration. The NOEC is 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).
24. “NPDES” means National Pollutant Discharge Elimination System, the national program for issuing, modifying, revoking and reissuing, terminating, monitoring and enforcing permits . . . under sections 307, 402, 318, and 405 of the CWA.
25. “QA/QC” means quality assurance/quality control.
26. “Regional Administrator” means the Regional Administrator of Region 10 of the EPA, or the authorized representative of the Regional Administrator.
27. “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.
28. “TWSF” means tailings and waste rock storage facility
29. “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.
30. “USFWS” means the United States Fish and Wildlife Service.
31. “24-hour composite” sample means a combination of at least discrete sample aliquots of at least 100 milliliters, collected over periodic intervals from the same location, during the operating hours of a facility over a 24-hour period. The composite must be flow proportional. 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.