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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",

CH2M HILL PLATEAU REMEDIATION COMPANY, LLC (CHPRC) DEPARTMENT OF ENERGY HANFORD NUCLEAR RESERVATION BENTON COUNTY, WASHINGTON 99352

is authorized to discharge from Area 100 and 300 facilities located on the Hanford Reservation near Richland Washington at the following locations:

Outfall	Receiving Water	Latitude	Longitude
001	Columbia River	46° 23' 3.5" N	119° 16' 22.7" W
004	Columbia River	46° 39' 16" N	119° 36.2" W

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

This permit shall become effective *insert date*

Signed this

day of

This permit and the authorization to discharge shall expire at midnight, *insert date*

The permittee shall reapply for a permit reissuance on or before *insert date*, 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.

Michael A. Bussell, Director

Office of Water and Watersheds

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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 1. Discharge Monitoring Reports (DMR)	Due Date DMRs are due monthly and must be postmarked on or before the 25 th day of the month.
2. Quality Assurance Plan (QAP)	Written notification of completed update must be submitted by, XXXXXXXX, 2009 (90 days from effective date). The Plan and any updates must be kept on site and made available to EPA upon request (See II.A.).
3. Best Management Practices (BMP) Plan	The permittee must provide EPA with written notification that the Plan has been developed and implemented within 180 days after the effective date of the final permit (see II.B.). The Plan must be kept on site and made available to EPA upon request.
4. NPDES Application Renewal	The application must be submitted at least 180 days before the expiration date of the permit (see V.B.).
5. 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 III.G.).

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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 the outfalls specified herein to the Columbia River, within the limits and subject to the conditions set forth herein. This permit authorizes the discharge of only those pollutants resulting from facility processes, waste streams, and operations that have been clearly identified in the permit application process and are listed in the permit.

B. Effluent Limitations and Monitoring

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

Table 1: Effluent Limitations and Monitoring Requirements					
Area 300 TEDF Outfall 001					
Parameter	Monthly Avg.	· ·	Sampling Frequency	Type of Sampling	
	μg/l	μg/l			
Flow - MGD			Continuous	Recording	
Dichlorobromomethane	2.2	4	Once per quarter	Grab	
Methylene Chloride	5	10	Once per quarter	Grab	
Chloroform	15	26	Twice per month	Grab	
1,1-Dichloroethane	4.7	7	Twice per month	Grab	
Aluminum (Al) 1	215	372	Once per quarter	Grab	
Arsenic (As) ¹	5	9	Once per quarter	Grab	
Iron (Fe) 1	846	1460	Once per quarter	Grab	
Lead (Pb) 1	4	8	Once per quarter	Grab	
Manganese (Mn) ¹	10	17	Once per quarter	Grab	
Mercury (Hg) ²	0.9	1.5	Once per quarter	Grab	
Nickel (Ni) 1	35	60	Once per quarter	Grab	
Nitrite (NO ₂ ⁻)	60	104	Once per quarter	Grab	
Selenium (Se) ¹	5	7	Once per quarter	Grab	
Zinc (Zn) ¹	25	43	Once per quarter	Grab	
Radium, Total pCi/l	0.2	0.4	Twice per month	Grab	
Temperature °F (°C)	95 (35)	105 (40.6)	Continuous	Recording	
Total Ammonia (as N)			Twice per month	Grab	
Gross Alpha (pCi/l)			Twice per month	Grab	
Gross Beta (pCi/l)			Twice per month	Grab	
pН	6.0-9.0		Continuous	Recording	
Acute WET Limit	The acute toxicity limit is no statistically significant difference in test				
	organism response between the acute critical toxicity concentration				
	(ACEC), 1.6 % of the effluent, and the control.				
Footnotes:					

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Table 1: Effluent Limitations and Monitoring Requirements					
Area 300 TEDF Outfall 001					
Parameter	Monthly Avg.	Daily Max	Sampling Frequency	Type of Sampling	
	μg/l	μg/l			

- 1 These parameters must be analyzed and reported as total recoverable.
- 2 Mercury must be analyzed and reported as total.
- 3 Reporting is required within 24 hours of a maximum daily limit violation for all parameters. See Part III.G.
- 4 See Part I.C. for whole effluent toxicity testing requirements.

Table 2: Effluent Limitations and Monitoring Requirements Area 100 Water Treatment Plant Outfall 004				
Parameter	Monthly Avg.	Daily Max	Sampling Frequency	Type of Sampling
Flow - MGD			continuous	recording
Temperature		80	continuous	recording
Total Residual Chlorine mg/L	0.08	0.1	once per quarter	grab
рН	6.0-9	.0	continuous	recording

Table 3: Limitations and Monitoring Requirements Area 100 Filter Plant Backwash Water Outfall 004B					
Parameter	Monthly Avg.	Daily Max	Sampling Frequency	Type of Sampling	
	μg/l	μg/l			
Flow - MGD			each discharge	total	
Total Suspended Solids	30	45	weekly	grab	

- 2. The permittee must report within 24 hours any violation of the maximum daily limits for any pollutant. 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 must not discharge any floating solids or visible foam, or oily wastes that produce a sheen on the surface of the receiving water. Aesthetic values must not be impaired by the presence of materials or their effects, excluding those of natural origin, which offend the senses of sight, smell, touch, or taste.
- 4. The pH must not be less than 6.0 standard units (s.u.) nor greater than 9.0 standard units (s.u.).
- 5. The permittee must collect effluent samples from the effluent stream after the last treatment unit prior to discharge into the receiving waters except for Outfall 004B. The Filter Plant Backwash Water, Outfall 004B, must be sampled prior to combining with any other flow.
- 6. Grab samples for chlorine and pH analysis from the 1908k structure must be undiluted by quench water.
- 7. Grab sampling at Outfall 004B for TSS must be at least 30 minutes after the start of drawdown.

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- 8. For all effluent monitoring, the permittee must use methods that can achieve a minimum level (ML) less than the effluent limitation.
- 9. For purposes of reporting on the DMR for a single sample, if a value is less than the MDL, the permitte e must report "less than {numeric value of the MDL}" and if a value is less than the ML, the permittee must report "less than {numeric value of the ML}."
- 10. For purposes of calculating monthly averages, zero may be assigned for values less than the MDL, 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 compliance level, the ML, in assessing compliance.

C. Whole Effluent Toxicity Testing Requirements

1. Effluent Limit for Acute Toxicity

The effluent limit for acute toxicity for the TEDF is no acute toxicity detected in a test concentration representing the acute critical effluent concentration (ACEC).

The ACEC means the maximum concentration of effluent during critical conditions at the boundary of the zone of acute criteria exceedance assigned pursuant to WAC 173-201A-100. The ACEC equals 1.6% effluent.

In the event of failure to pass the test described in Subsection 2 of this section for compliance with the effluent limit for acute toxicity, the Permittee is considered to be in compliance with all permit requirements for acute whole effluent toxicity as long as the requirements in Subsection 3 are being met to the satisfaction of EPA.

2. Monitoring for Compliance With an Effluent Limit for Acute Toxicity

The Permittee must conduct monitoring to determine compliance with the effluent limit for acute toxicity. The acute toxicity tests shall be performed using at a minimum 100% effluent, the ACEC, and a control. Acute toxicity testing shall follow protocols, monitoring requirements, and quality assurance/quality control procedures specified in this section. A written report shall be submitted to EPA within sixty (60) days after the sample date. The percent survival in 100% effluent shall be reported along with all compliance monitoring results.

Compliance monitoring must be conducted twice per year for discharges from the TEDF, Outfall 001, once during the extreme hot of summer and once during the extreme cold of winter using each of the species and protocols listed below:

a) Daphnid, Ceriodaphnia dubia, Daphnia pulex, or Daphnia magna

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(48-hour static test, method: EPA821-R-02-0127F).

b) Fathead minnow, *Pimephales promelas* EPA (96-hour static-renewal test, method: EPA821-R-02-012.

The Permittee is in violation of the effluent limit for acute toxicity in Subsection 1 and shall immediately implement Subsection 3, if any acute toxicity test conducted for compliance monitoring determines a statistically significant difference in survival between the control and the ACEC.

3. Response to Noncompliance With an Effluent Limit for Acute Toxicity

If a toxicity test conducted for compliance monitoring under Subsection 2 determines a statistically significant difference in response between the ACEC and the control, the Permittee shall begin additional compliance monitoring within one week from the time of receiving the test results. This additional monitoring shall be conducted weekly for four consecutive weeks using the same test and species as the failed compliance test. Testing shall be conducted using a series of at least five effluent concentrations and a control in order to be able to determine appropriate point estimates. One of these effluent concentrations must equal the ACEC and be compared statistically to the nontoxic control in order to determine compliance with the effluent limit for acute toxicity as described in Subsection 2. The discharger shall return to the original monitoring frequency in Subsection 2 after completion of the additional compliance monitoring.

If the Permittee believes that a test indicating noncompliance will be identified by EPA as an anomalous test result, the Permittee may notify EPA that the compliance test result might be anomalous and that the Permittee intends to take only one additional sample for toxicity testing and wait for notification from EPA before completing the additional monitoring required in this subsection. The notification to EPA shall accompany the report of the compliance test result and identify the reason for considering the compliance test result to be anomalous. The Permittee shall complete all of the additional monitoring required in this subsection as soon as possible after notification by EPA that the compliance test result was not anomalous. If the one additional sample fails to comply with the effluent limit for acute toxicity, then the Permittee shall proceed without delay to complete all of the additional monitoring required in this subsection. The one additional test result shall replace the compliance test result upon determination by EPA that the compliance test result was anomalous.

If all of the additional compliance monitoring conducted in accordance with this subsection complies with the permit limit, the Permittee shall search all pertinent and recent facility records (operating records, monitoring results, inspection records, spill reports, weather records, production records, raw material purchases, etc.) and submit a report to EPA on possible causes and preventive measures for the transient toxicity event which triggered the additional compliance monitoring.

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If toxicity occurs in violation of the acute toxicity limit during the additional compliance monitoring, the Permittee must submit a Toxicity Identification/Reduction Evaluation (TI/RE) plan to EPA based on WAC 173-205-100(2) for approval. Following written approval of the plan the Permittee must implement the TI/RE in accordance with WAC 173-205-100(3).

4. Sampling and Reporting Requirements

- a) All reports for effluent characterization or compliance monitoring shall be submitted in accordance with the most recent version of Department of Ecology Publication # WQ-R-95-80, Laboratory Guidance and Whole Effluent Toxicity Test Review Criteria, in regards to format and content. Reports shall contain bench sheets and reference toxicant results for test methods. If the lab provides the toxicity test data on floppy disk for electronic entry into the Washington Department of Ecology's database, then the Permittee shall send the disk to EPA along with the test report, bench sheets, and reference toxicant results. EPA will forward this information to Ecology.
- b) Testing shall be conducted on composite samples. Samples taken for toxicity testing shall be cooled to 4 degrees Celsius while being collected and shall be sent to the lab immediately upon completion. The lab must begin the toxicity testing as soon as possible but no later than 36 hours after sampling was ended.
- c) All samples and test solutions for toxicity testing must have water quality measurements as specified in Department of Ecology Publication # WQ-R-95-80, *Laboratory Guidance and Whole Effluent Toxicity TestReview Criteria*, or most recent version thereof.
- d) All toxicity tests shall meet quality assurance criteria and test conditions in the most recent versions of the EPA manual listed in Subsection 2 and the Department of Ecology Publication # WQ-R-95-80, *Laboratory Guidance and Whole Effluent Toxicity Test Review Criteria*. If test results are determined to be invalid or anomalous by EPA, testing shall be repeated with freshly collected effluent.
- e) Control water and dilution water shall be laboratory water meeting the requirements of the EPA manual listed in Subsection 1 or pristine natural water of sufficient quality for good control performance.
- f) The whole effluent toxicity tests shall be run on an unmodified sample of final effluent.
- g) The Permittee may choose to conduct a full dilution series test during compliance monitoring in order to determine dose response. In this case, the series must have a minimum of five effluent concentrations and a control. The series of concentrations must include the ACEC. The ACEC may either substitute for the effluent concentration that is closest to it in the dilution series or be an extra effluent concentration.

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h) All whole effluent toxicity tests that involve hypothesis testing and do not comply with the acute statistical power standard of 29% as defined in WAC 173-205-020 must be repeated on a fresh sample with an increased number of replicates to increase the power.

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 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 upon request.
- 6. The QAP must be designed to assist in planning for the collection and analysis of effluent samples in support of the permit and in explaining data anomalies when they occur.

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B. Best Management Practices Plan

1. Purpose

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

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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 that the Plan has been developed and implemented within 180 days of the effective date of the permit. Any existing BMP plans may be modified for compliance with this section.

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) 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.
- c) 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,

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- 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) 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.C. 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.

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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.

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 D.3., above.

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 the appropriate outfall whenever any discharge occurs that may reasonably be expected to cause or contribute to a violation that is unlikely to be detected by a routine sample. The permittee must analyze the additional samples for those parameters limited in Part I.A. of this permit that are likely to be affected by the discharge.

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

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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 25th day of the following month. Quarterly monitoring must be submitted with the monthly reports. 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 at the following addresses:

US EPA Region 10, Suite 900 Attn: ICIS Data Entry Team 1200 Sixth Avenue, OCE-130 Seattle, Washington 98101-3140

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

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complete the application for this permit, for a period of at least five years from the date of the sample, measurement, report or application and made available to EPA upon request. This period may be extended by request of EPA at any time.

G. Twenty-four Hour Notice of Noncompliance Reporting

- 1. The permittee must report the following occurrences of noncompliance by telephone (206-553-1846) within 24 hours from the time the permittee becomes aware of the circumstances;
- 2. any noncompliance that may endanger health or the environment;
 - a. any unanticipated bypass that exceeds any effluent limitation in the permit (See Part IV.F., "Bypass of Treatment Facilities");
 - b. any upset that exceeds any effluent limitation in the permit (See Part IV.G., "Upset Conditions"); or
 - c. any violation of a maximum daily discharge limitation for any of the pollutants listed in the permit.
- 3. 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.
- 4. 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.
- 5. 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").

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I. Changes in Discharge of Toxic Pollutants

The permittee must notify the Director of the Office of Water and Watersheds 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 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 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 μ g/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:

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

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.

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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).

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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.

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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 noncompliance 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

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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:
- b) The bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;
- c) 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
- d) The permittee submitted notices as required under paragraph 2 of this Part.
- e) 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.

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- 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. 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 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

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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 within the time specified in the request, any information that EPA 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 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 it must promptly submit the omitted facts or corrected information in writing.

E. Signatory Requirements

All applications, reports or information submitted to EPA 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 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

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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.

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- 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 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 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;

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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. "Composite" see "24-hour composite".
- 7. "Daily discharge" means the discharge of a pollutant measured during a calendar day or any 24-hour period that reasonably represents the calendar day for purposes of sampling. For pollutants with limitations expressed in units of mass, the "daily discharge" is calculated as the total mass of the pollutant discharged over the day. For pollutants with limitations expressed in other units of measurement, the "daily discharge" is calculated as the average measurement of the pollutant over the day.
- 8. "Director of the Office of Compliance and Enforcement" means the Director of the Office of Compliance and Enforcement, EPA Region 10, or an authorized representative.
- 9. "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.
- 10. "DMR" means discharge monitoring report.
- 11. "EPA" means the United States Environmental Protection Agency.
- 12. "Geometric Mean" means the nth root of a product of n factors, or the antilogarithm of the arithmetic mean of the logarithms of the individual sample values.
- 13. "Grab" sample is an individual sample collected over a period of time not exceeding 15 minutes.
- 14. "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.
- 15. "Maximum daily discharge limitation" means the highest allowable "daily discharge."
- 16. "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.
- 17. "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.
- 18. "NOEC" means no observed effect concentration. The NOEC is the highest concentration of toxicant (e.g., effluent) to which organisms are exposed in a

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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).

- 19. "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.
- 20. "QA/QC" means quality assurance/quality control.
- 21. "Regional Administrator" means the Regional Administrator of Region 10 of the EPA, or the authorized representative of the Regional Administrator.
- 22. "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.
- 23. "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.
- 24. "24-hour composite" sample means a combination of at least 8 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.