



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

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AUTHORIZATION TO DISCHARGE UNDER THE  
NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM FOR

**GROUNDWATER REMEDIATION DISCHARGE FACILITIES IN IDAHO**

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 (hereafter, CWA), owners and operators of groundwater remediation discharge facilities in Idaho are authorized to discharge to waters of the United States which are in accordance with Notice of Intent requirements, effluent limitations, monitoring requirements and other conditions set forth herein.

A copy of this general permit must be kept at the groundwater remediation discharge facility where the discharge occurs.

This general permit shall become effective **July 1, 2007**

This general permit and the authorization to discharge shall expire at midnight, **June 30, 2012**

Operators of facilities within the general permit area who fail to notify the Director of their intent to be covered by this general permit and fail to receive written notification of permit coverage, or those operators of facilities who are denied coverage by the Director are not authorized under this general permit to discharge from those facilities to the receiving waters or areas named.

Signed this 27<sup>th</sup> day of April, 2007

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/s/  
Michael F. Gearheard, Director  
Office of Water and Watersheds

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The following table summarizes some of the action items the permittee must complete and/or submit to EPA/IDEQ during the term of this permit.

<b><u>Action Item</u></b>	<b><u>Due Date</u></b>
1. Notice of Intent (NOI)	Existing dischargers within 90 days of the effective date of this general permit, new facilities at least 30 days prior to the commencement of discharge. For facilities currently covered under an individual permit, within 180 days before expiration date of the individual permit. NOIs must be submitted to EPA, IDEQ and any affected tribe (see Parts I.I. & I.J)
2. Discharge Monitoring Reports (DMRs)	For new groundwater remediation facilities, DMRs must be submitted monthly for the first quarter of operation. Thereafter, DMRs must be submitted quarterly (in April, July, October and January) of each year and postmarked by the 15 <sup>th</sup> day of the month (see Part II.F).
3. Quality Assurance Plan (QAP)	The QAP must be developed and implemented within 90 days of receiving authorization to discharge under this general permit. The Plan must be kept on site (see Part II.I).
4. Operation and Maintenance Plan	The Plan must be developed and implemented within 90 days of receiving authorization to discharge under this general permit. The Plan must be kept on site (see Part II.J).
5. Monitoring Records	Monitoring records must be retained for a period of at least five years (see Part II.L).
6. Notice of Termination of Discharge	Facilities must notify EPA and IDEQ within 30 days of discharge termination (see Part I.L)
7. NPDES Application Renewal	Facilities intending to continue discharging beyond the permit expiration date must submit an NOI at least 180 days before the expiration date of this permit (see Part IV.D).

## I. APPLICABILITY AND NOTIFICATION REQUIREMENTS

- A. Eligible Facilities.** Facilities conducting groundwater remediation activities who discharge to waters of the United States within Idaho are eligible for coverage under this general permit. This includes all *exsitu* groundwater treatment facilities such as pump and treat or seepage water collection systems in which treated groundwater is discharged to surface water. Also eligible for coverage are construction/excavation dewatering activities and aquifer pump testing that occur at designated or known contaminated sites. Facilities utilizing *insitu* groundwater treatment, those who discharge treated effluent to a sanitary sewer under an authorized pretreatment program, or facilities who reinject treated effluent back into the subsurface are not eligible for coverage under this general permit.
- B. Authorized Discharges.** Groundwater remediation facilities within the State of Idaho are authorized to discharge those pollutants set out in Part II “Effluent Limitations, Monitoring, and Reporting Requirements” of this permit to receiving waters of the United States once a Notice of Intent (NOI) is submitted to the Director (see Part I.J) and a written authorization to discharge is received (see Part I.H). Owners and operators of a groundwater remediation facility who are not granted written authorization under this general NPDES permit are not authorized to discharge to the specified waters, unless the Director has issued an individual NPDES permit to the discharger. Facilities which are currently operating under an effective or an administratively extended individual permit must apply for coverage under this general permit by submitting an NOI. Those facilities currently authorized under an individual permit will receive notification of termination of the individual permit upon coverage under the general permit. This general NPDES permit does not authorize discharges into areas that are excluded from coverage unless a waiver is obtained (see Part I.F).

This general NPDES permit authorizes groundwater remediation facilities to discharge to waters of the United States within Idaho subject to the restrictions set forth herein. This general permit does not authorize the discharge of any waste streams, including spills and other unintentional or non-routine discharges of pollutants, that are not part of the normal operation of the facility as disclosed in the NOI to be covered by this general permit, or any pollutants that are not ordinarily present in such waste streams.

The Director may notify a discharger, pursuant to 40 CFR 122.28(b)(2)(vi), that it is covered by this permit, even if the discharger has not submitted a NOI to be covered.

- C. Requirements for an Individual Permit.**
1. The Director may require any discharger requesting coverage under this general permit to apply for and obtain an individual NPDES permit in accordance with 40

CFR 122.28(b)(3). In this case, the permittee will be notified in writing that an individual permit is required and be given a brief explanation of the reasons for the decision. When an individual permit is issued to an operator otherwise subject to the general permit, the applicability of the general permit is automatically terminated on the effective date of the individual permit. Individual permits may be appropriate if:

- a. The discharge(s) is a significant contributor of pollution;
  - b. The discharger is not in compliance with the conditions of this permit;
  - c. A change has occurred in the availability of the demonstrated technology or practices for the control or abatement of pollutants applicable to the point source;
  - d. Effluent limitation guidelines are promulgated for the groundwater remediation facility;
  - e. A Total Maximum Daily Load (TMDL) containing requirements applicable to such point source is approved; or
  - f. The point source(s) covered by this permit:
    - (1) no longer involves the same or substantially similar types of operations;
    - (2) no longer discharges the same types of waste;
    - (3) no longer requires the same effluent limitations or operating conditions;
    - (4) no longer requires the same or similar monitoring; or
    - (5) in the opinion of the Director, is more appropriately controlled under an individual permit rather than under the general permit.
2. The Director may require any owner or operator authorized by this general permit to apply for an individual NPDES permit only if the permittee has been notified in writing that an individual permit is required.
  3. Any permittee eligible for authorization under this general permit may request to be excluded from coverage by applying for an individual permit. The permittee must submit an individual permit application with reasons supporting the request to the Director no later than 90 days prior to commencing operations, or for existing dischargers, not later than 90 days from the effective date of this permit.

4. Upon issuance of an individual permit, the permittees coverage under this general permit will be automatically terminated on the effective date of the individual permit.
5. Notwithstanding Part I.C. of this general permit, existing groundwater remediation facilities covered under an existing NPDES individual permit must submit an NOI for coverage under this general permit. The Director has determined that individual permits reissued to groundwater remediation dischargers will contain effluent limitations, monitoring requirements, and other conditions included in this general permit.

**D. Facilities Excluded From Permit Coverage**

1. If a groundwater remediation discharge occurs in compliance with the instructions of an On-Scene Coordinator pursuant to the National Oil and Hazardous Substances Pollution Contingency Plan (40 CFR 300), then the discharge is excluded from NPDES requirements.
2. Facilities discharging treated groundwater as part of an on-site response action conducted pursuant to sections 104, 106, 120, 121 or 122 of the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) are not required to obtain permit coverage. The term *on site* means the aerial extent of contamination and all suitable areas in very close proximity to the contamination necessary for implementation of the response action.
3. Facilities discharging treated groundwater to a sanitary sewer under an authorized NPDES pretreatment program, or with the explicit written permission of the Public Works Director or similar authority, are not required to obtain coverage under this general permit.
4. Facilities injecting treated groundwater back into the subsurface (either under pressure or by gravity) are not required to obtain permit coverage. Underground injection will require a separate permit under authority of the Safe Drinking Water Act issued by the Idaho Department of Water Resources under their UIC program.
5. Insitu groundwater treatment systems are not affected by this permitting action unless there is subsequent discharge of treated groundwater to surface water.
6. Construction or excavation dewatering activities at uncontaminated sites, and uncontaminated groundwater seeps or spring water which are covered under the Storm Water Construction General Permit or the Storm Water Multi-Sector General Permit (MSGP) for Industrial Activities, are not affected by this general permit.

**E. Prohibited Areas of Discharge.**

1. 303(d) Listed Waters. This general permit does not authorize the discharge of pollutants from a groundwater remediation facility to a receiving water designated on the State of Idaho's 303(d) list for that same pollutant, or for pollutants that may have a negative effect on that listed pollutant.
2. Protected Water Resources and Special Habitats. This general permit does not authorize the discharge of pollutants to a river or stream segment designated by the State of Idaho as a Special Resource Water or Outstanding Resource Water.
3. Discharges to Other States, Canada or Tribal Waters. This general permit does not authorize the discharge of pollutants to receiving waters which flow into other states, Canada, or tribal waters; or less than one hundred (100) yards upstream from the state, international or reservation boundary.
4. In a river segment designated as wild or scenic under the Wild and Scenic River Act.
5. Into waters where federally listed threatened, endangered, or candidate species, or designated or proposed critical habitat are present.
6. Within ½ mile upstream of a permanent drinking water intake for a municipality.

**F. Waiver to Discharge to an Excluded Area.** An owner or operator of a groundwater remediation discharge facility may request a waiver to discharge under this general permit to the excluded areas listed in Part I.E, "Prohibited Areas of Discharge". In order to obtain a waiver to discharge to one or more of these excluded areas, applicants must submit a timely and complete request for a waiver with their NOI in accordance with the following requirements, as necessary:

1. A detailed description of the circumstances requiring discharges to the excluded areas. This description should address any alternatives to discharging within the excluded waters. Pre-existing, permanent siting within an excluded area may be considered justification for a waiver under this general permit;
2. A detailed description of why the discharge will not cause or contribute to a violation of state or tribal water quality standards, including antidegradation, in the receiving waters, and will not conflict with any applicable state or tribal water resource management plans or programs;
3. If federally listed threatened, endangered or candidate species are present in the receiving water, a Biological Evaluation (BE) must be prepared describing why



the discharge will not cause a degradation of the physical, chemical or biological integrity of the receiving water that would have an adverse impact on these species or their critical habitat. The BE must be submitted to EPA and IDEQ along with the NOI, and should conclude a *no effect* or a *not likely to adversely affect* determination. For a *not likely to adversely affect* determination, EPA will consult with the U.S. Fish and Wildlife Service and the National Marine Fisheries Service (the Services) to obtain their concurrence with the effects determination of the BE.

4. If the BE determines that the discharge *may adversely affect* any listed threatened, endangered or candidate species, the facility must provide a description in the BE of mitigation or conditions proposed to reduce the likelihood of an adverse affect. If the Services determine that the discharge *may adversely affect* any listed species, the facility shall provide a description of mitigation or conditions proposed to reduce the likelihood of an adverse effect within 30 days of this determination. EPA will initiate formal consultation with the Services, and will seek a no-jeopardy Biological Opinion (BO) with an incidental take statement along with reasonable and prudent measures. If the BO renders a jeopardy conclusion, the facility may have to apply for and obtain an individual NPDES permit (Part I.C).
5. Discharge to Outstanding or Special Resource Waters, or to CWA section 303(d) listed waters where the pollutant discharge could potentially have a negative impact on the listed impairment, will only be allowed if IDEQ provides a written waiver that will be attached to EPA's authorization to discharge letter. Discharges to waters within a reservation boundary, or within 100 yards or less upstream from a reservation boundary, will only be allowed after consultation between EPA and the affected tribe, and if the tribe provides a waiver. Discharges to waters with ESA threatened, endangered or candidate species will only be authorized after consultation between EPA and the Services.
6. A waiver shall not be granted until after consultation between EPA, IDEQ, any affected tribe, and other appropriate federal, state, and local government offices to determine that the proposed discharge will comply with applicable laws and regulations. If a waiver is granted for any exclusion under Part I.E, IDEQ (or any affected tribe that has EPA approved water quality standards) will issue an individual section 401 CWA certification, and the facility can not discharge under this general permit until that written certification is received by EPA and included in EPA's authorization to discharge letter. Any additional conditions included in the 401 certification will automatically become a condition of this general permit.

**G. Submission of Information.**

A facility requesting authorization to discharge under this general NPDES permit must submit a timely and complete NOI to be covered under this general permit

to EPA in accordance with the requirements listed in Part I.J. A copy of the NOI must also be sent to the IDEQ state office, the responsible IDEQ regional office, and any affected tribe.

1. A discharger must submit legible originals of all NOIs and Termination Notices to be covered under this general NPDES permit to EPA at the following address:

Director, Office of Water and Watersheds  
U.S. Environmental Protection Agency, Region 10  
1200 6<sup>th</sup> Avenue, OWW-130  
Seattle, Washington 98101

2. The discharger must submit legible originals of all monitoring reports, other reports required by this permit, and notices of noncompliance to EPA at the following address:

Director, Office of Compliance and Enforcement  
U.S. Environmental Protection Agency, Region 10  
1200 6<sup>th</sup> Avenue, OCE-133  
Attn: PCS Data Entry Team  
Seattle, Washington 98101

3. The discharger must also submit a copy of the information in paragraphs G.1 and G.2 of this Part to the IDEQ state office, the appropriate IDEQ regional office, and any affected tribe whose waters may be impacted:

### **IDEQ Offices**

Idaho Department of Environmental Quality  
State Office  
1410 North Hilton  
Boise, ID. 83706  
208/373-0502

Idaho Department of Environmental Quality  
Twin Falls Regional Office  
1363 Fillmore Street  
Twin Falls, Idaho 83301

Idaho Department of Environmental Quality  
Boise Regional Office  
1445 N. Orchard  
Boise, Idaho 83706-2239

Idaho Department of Environmental Quality  
Pocatello Regional Office  
444 Hospital Way, #300  
Pocatello, Idaho 83201

Idaho Department of Environmental Quality  
Lewiston Regional Office  
1118 F St.  
Lewiston, Idaho 83501

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

Idaho Department of Environmental Quality  
Idaho Falls Regional Office  
900 N. Skyline  
Idaho Falls, Idaho 83402

**Tribal Offices**

Chairman  
Duck Valley Reservation  
Shoshone-Paiute Tribes  
P.O. Box 21  
Owyhee, NV 89832

Chairman  
Shoshone-Bannock Tribes of Idaho  
P.O. Box 306  
Ft. Hall, ID 83203

Chairman  
Coeur d'Alene Tribe  
850 A Street, P.O. Box 408  
Plummer, ID 83851

Chairman  
Kootenai Tribe of Idaho  
County Road 38A, P.O. Box 1269  
Bonners Ferry, ID. 83805

Chairman  
Nez Perce Tribe of Idaho

P.O. Box 365  
Lapwai, ID 83540

#### **H. Authorization to Discharge**

Applicants will be authorized to discharge as of the date of the written notification that EPA has authorized the discharge and assigned an individual permit number under this general permit. The state certification, waivers to discharge to excluded waters, and/or mixing zone authorizations, will be attached to EPA written authorization, as necessary. The final list of indicator chemicals of concern (COCs), effluent limitations, and monitoring requirement will also be specified in the authorization letter. The authorized permittee will be allowed to discharge during the effective period of this general permit 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/NOI process.

#### **I. Notice of Intent Submittal Deadlines.**

1. A new discharger whose operations commence after the effective date of this general permit must submit an NOI at least **30 days prior to commencement** of operation and discharge of pollutants.
2. An existing discharger currently authorized under an effective or administratively extended individual NPDES permit, or any existing groundwater remediation discharger eligible for coverage, must apply for coverage under this general NPDES permit. NOIs must be submitted within **90 days of the effective date** of this general NPDES permit. Upon receiving written authorization to discharge under this general permit, any existing individual permit will become inactive.
3. A permittee authorized to discharge under this general NPDES permit must submit to EPA an updated and/or amended NOI when there is any material change in the information submitted within its original NOI. A material change may include, but not be limited to, changes in the operator/owner of the facility, a modification in the treatment train, or the introduction of new pollutants not identified in the original NOI. A copy of the updated NOI must also be sent to the responsible IDEQ regional office and any affected tribe as listed in Part I.G. of this general permit.

#### **J. Notice of Intent Requirements.**

The Notice of Intent (NOI) may consist of either a letter, report or a form developed for the purpose of the NOI, along with necessary attachments, which

address all of the requirements identified in this section. In addition to submitting a data table summarizing the concentrations of pollutants or chemicals of concern (COCs), facilities are encouraged to submit electronic data in spreadsheet format.

The NOI must include the following information to discharge under this general NPDES permit:

1. Owner information. The name and the complete address and telephone number of the owner of the facility and the name of his or her duly authorized representative. Provide ownership status as a federal, state, private, public or other entity. The owner may also provide a facsimile machine number or e-mail address.
2. Operator information. The name and the complete address and telephone number of the individual or company operating the facility and the name of his or her duly authorized representative. The operator may also provide a facsimile machine number or e-mail address.
3. Facility information.
  - a. Facility address. The name, address and telephone number of the facility (if any). Indicate whether the facility is located on Indian lands. If the name of the facility has changed during the last five years, the NOI must include the previous name(s) of the facility and the date(s) of these changes. The facility may also provide a facsimile machine number or e-mail address.
  - b. Facility location. Include an area map identifying the location of the facility and its outfall(s). This map should have a scale of resolution of at least 1:24,000 (If USGS map is used, provide title and catalog number).
  - c. Location information. Include a description of the physical location of the facility and its outfall(s) with latitude and longitude information precise to within at least 7.5 seconds of a degree (~0.125 mile). New facilities must also include the date when the facility is scheduled to begin discharging.
  - d. A statement as to whether the site is on the state or federal Superfund list, the National Priorities List under CERCLA, a RCRA corrective action site, or a state Leaking Underground Storage Tank (LUST) site.
4. Operations and production information (Project Plan).
  - a. A description of the nature and size of facility to be covered by the

general permit. This must include a description of the treatment train, the number of extraction wells and outfalls, and a process flow diagram.

- b. A description of any chemical additives or biocides that are used in the treatment process, including chlorinated tap water. Include material Safety Data Sheets (MSDSs) for these chemicals.

5. Nature of Contamination

- a. Part II.A. and Attachment A of this general permit contain a list of 55 indicator chemicals that are reasonably expected to be present at contaminated groundwater sites. An NOI must include (at a minimum) the analytical results for each of these 55 chemicals of concern (COCs) for both influent and effluent samples, test methods used, and method detection limits. Alternatively, the facility may wish to submit full Priority Pollutant (see 40 CFR 131.36) scans for both influent and effluent samples. If contaminants are present at the site, but are not identified in Part II.A as one of the 55 COCs, the facility must identify each COC that is present in site groundwater, and report both influent and effluent concentrations on the NOI. If available, include both maximum and average influent/effluent concentrations of COCs. New groundwater remediation facilities that have not yet discharged shall report remedial action design criteria and/or anticipated effluent concentrations on their NOI.

If a remediation discharger has sufficient historical groundwater monitoring and/or operational data to support a determination that certain COCs are believed absent in site groundwater, then a reduced list of chemical reporting requirements is allowed on the NOI. Under these circumstances, the NOI shall identify which of the 55 COCs are believed absent, and briefly describe the historical testing data and site characterization work that supports this determination.

- b. If known, briefly describe the nature of the groundwater contamination and how the contamination originated. Identify the Standard Industrial Classification (SIC) code of the industry that caused the pollution (if applicable). Identify which of the six general classifications of “site types” is best represented by the facility (see Attachment A). Include a listing of the pollutants that could reasonably be expected to be present at the site given

the nature of the contaminants including, but not limited to, those identified in Part II.

6. Description of discharge(s).
  - a. Include the design flow of water (in gallons per minute) through the facility and the overall anticipated duration of the discharge. If the discharge is not continuous, provide the dates of discharge during a representative year of operation.
  - b. Identify the temperature of the discharge including minimum, average and maximum temperatures, and the corresponding times of year in which they occur.
7. Receiving water information.
  - a. The name of the water body receiving the discharge from the facility, and the name of any other receiving water within 1 mile downstream of the discharge.
  - b. The designated beneficial uses of these waters in the State of Idaho Water Quality Standards (see IDAPA 58.01.02.110-160).
  - c. Identify any federally listed threatened, endangered or candidate species in the receiving water using information provided on the USFWS web site at <http://www.fws.gov/idahoes>, or by contacting the Snake River Fish and Wildlife Office in Boise, Idaho, at (208) 378-5243.
  - d. An NOI must include the minimum and maximum measured flow (cfs) of the receiving water body and any other receiving water within 100 yards downstream of the discharge. If adequate flow data is available, also include the critical low flow values (i.e., the 7Q10), and how they were calculated.
  - e. Identify if the receiving water is excluded from permit coverage as described in Part I.E, and state whether the facility is requesting a waiver as described in Part I.F. If the facility is seeking a waiver under Part I.F.3, submit a Biological Evaluation along with the waiver request.
  - f. If the receiving water has been included on the state's 303(d) list of impaired waterways, identify the pollutant impairment, and state whether any pollutant(s) proposed to be discharged is indicated as a cause or a contributor to the listing.





use dilution as a form of treatment in order to comply with the concentration based effluent limits in this general permit.

- K. Transfers.** This permit may be automatically transferred to a new permittee if:
1. The current permittee notifies the Director at least 30 days in advance of the proposed transfer date;
  2. The notice includes a written agreement between the existing and new permittees containing a specific date for transfer of permit responsibility, coverage, and liability between them; and,
  3. The Director does not notify the existing permittee and the proposed new permittee of his or her intent to modify, or revoke and reissue the permit.

**L. Notice of Termination of Discharge**

The facility must notify EPA, the appropriate IDEQ regional office, and any affected tribe within 30 days of discharge termination. The notification must be in writing, and include the date of discharge termination, and signed in accordance with the signatory requirements of Part IV.G of this general permit. Termination of permit coverage shall be effective 30 days from the date of written notification from the Director that the coverage under this general permit has been terminated. The permittee is required to submit discharge monitoring reports (DMRs) until the effective date of termination. In cases such as temporary shutdowns, a facility should not submit a notice of discharge termination as this action results in the termination of NPDES coverage.

**II. EFFLUENT LIMITATIONS, MONITORING AND REPORTING REQUIREMENTS**

**A. Effluent Limitations**

1. During the effective period of this general permit, the permittee is authorized to discharge subject to the restrictions set forth herein. This general permit does not authorize the discharge of any waste streams, including spills and other unintentional or non-routine discharges of pollutants, that are not part of the normal operation of the facility as disclosed in the permit application and/or NOI, or any pollutants that are not ordinarily present in such waste streams.
2. 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.

3. The permittee must not discharge chemicals or toxic pollutants in concentrations that impair the beneficial uses of the receiving water.
4. The permittee must not discharge deleterious materials in concentrations that impair the beneficial uses of the receiving water.
5. 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.
6. The permittee must not discharge excess nutrients that can cause visible slime growths or other nuisance aquatic growths impairing beneficial uses of the receiving water.
7. The effluent pH range must be between 6.5 and 9.0 standard units.
8. Discharges to designated cold water and warm water must have a maximum temperature limit of 19°C and 29°C, respectively. Effluent limits of 9°C or 10°C may apply for cold receiving waters further designated for salmonid or Bull Trout spawning during specific times of the year. Nondesignated surface waters are protected for cold water biota where discharges must not exceed 19°C. If natural background temperatures in the receiving water are above these limitations, then the discharge may not raise water temperatures more than 0.3°C above the natural condition on a cumulative (i.e., considering all anthropogenic sources) basis. Temperature limits will be specified in the authorization letter.
9. Discharges must comply with the effluent limitations in Table 1 only for those indicator COCs that are applicable to their site classification or site type (see Attachment A for additional information). As in Part I.J.5.a, if sufficient historical or operational data exists to demonstrate that certain COCs are believed absent in site groundwater, then the list of indicator chemicals with effluent limitations can be reduced from what is shown in Tables A-1 through A-6. The final list of indicator COCs with effluent limits will be specified in the authorization letter (Part I.H).
10. Dilution of effluent as a form of treatment, or as a means of complying with concentration-based effluent limitations is prohibited.

**Table 1. Effluent Limitations for Indicator Chemicals**

Parameter	Effluent Limit	Limit Type	Sample Type
1. Total Suspended Solids (TSS)	30.0 mg/l	Daily Maximum	grab
2. Total Residual Chlorine	11 µg/l <sup>1</sup>	Daily Maximum	grab
3. Total Petroleum Hydrocarbons (TPH)	5.0 mg/l	Daily Maximum	grab
4a. Benzene	1.2 µg/l	Daily Maximum	grab
4b. Total BTEX <sup>2</sup>	100 µg/l	Daily Maximum	grab
5. Ethylene Dibromide (EDB)	0.05 µg/l	Daily Maximum	grab
6. Methyl-tert-Butyl Ether (MTBE)	30.0 µg/l	Daily Maximum	grab
7. Naphthalene	100 µg/l <sup>3</sup>	Daily Maximum	grab
8a. Carbon Tetrachloride	0.25 µg/l <sup>8</sup>	Daily Maximum	grab
8b. 1,4 Dichlorobenzene (p-DCB)	75 µg/l	Daily Maximum	grab
8c. 1,2 Dichlorobenzene (o-DCB)	600 µg/l	Daily Maximum	grab
8d. 1,3 Dichlorobenzene (m-DCB)	5.5 µg/l	Daily Maximum	grab
8e. 1,1 Dichloroethane (DCA)	810 µg/l	Daily Maximum	grab
8f. 1,2 Dichloroethane (DCA)	0.38 µg/l <sup>8</sup>	Daily Maximum	grab
8g. 1,1 Dichloroethylene (DCE)	0.057 µg/l <sup>8</sup>	Daily Maximum	grab
8h. cis-1,2 Dichloro-ethylene (DCE)	70 µg/l	Daily Maximum	grab
8i. Dichloromethane (Methylene Chloride)	4.7 µg/l	Daily Maximum	grab
8j. Tetrachloroethylene (PCE)	0.8 µg/l	Daily Maximum	grab
8k. 1,1,1 Trichloroethane (TCA)	200 µg/l	Daily Maximum	grab
8l. 1,1,2 Trichloroethane (TCA)	0.6 µg/l	Daily Maximum	grab
8m. Trichloroethylene (TCE)	2.7 µg/l	Daily Maximum	grab
8n. Vinyl Chloride (Chloroethene)	2.0 µg/l	Daily Maximum	grab
9. Pentachlorophenol (PCP)	0.28 µg/l	Daily Maximum	grab
10. Bis (2-Ethylhexyl) Phthalate [Di-(ethylhexyl) Phthalate]	1.8 µg/l <sup>9</sup>	Daily Maximum	grab
11a. Benzo(a) Anthracene	0.0028 µg/l <sup>4</sup>	Daily Maximum	grab

**Table 1. Effluent Limitations for Indicator Chemicals**

Parameter	Effluent Limit	Limit Type	Sample Type
11b. Benzo(a) Pyrene	0.0028 µg/l <sup>4</sup>	Daily Maximum	grab
11c. Benzo(b)Fluoranthene	0.0028 µg/l <sup>4</sup>	Daily Maximum	grab
11d. Benzo(k)Fluoranthene	0.0028 µg/l <sup>4</sup>	Daily Maximum	grab
11e. Chrysene	0.0028 µg/l <sup>4</sup>	Daily Maximum	grab
11f. Dibenzo(a,h)anthracene	0.0028 µg/l <sup>4</sup>	Daily Maximum	grab
11g. Indeno(1,2,3-cd) Pyrene	0.0028 µg/l <sup>4</sup>	Daily Maximum	grab
11h. Total Group II Polycyclic Aromatic Hydrocarbons (PAHs) <sup>6</sup>	200 µg/l	Daily Maximum	grab
11i. Acenaphthene <sup>6</sup>	(200 µg/l total Group II PAHs)	Daily Maximum	grab
11j. Acenaphthylene <sup>6</sup>	(200 µg/l total Group II PAHs)	Daily Maximum	grab
11k. Anthracene <sup>6</sup>	(200 µg/l total Group II PAHs)	Daily Maximum	grab
11l. Benzo(ghi) Perylene <sup>6</sup>	(200 µg/l total Group II PAHs)	Daily Maximum	grab
11m. Fluoranthene <sup>6</sup>	(200 µg/l total Group II PAHs)	Daily Maximum	grab
11n. Fluorene <sup>6</sup>	(200 µg/l total Group II PAHs)	Daily Maximum	grab
11o. Naphthalene	100 µg/l	Daily Maximum	grab
11p. Phenanthrene <sup>6</sup>	(200 µg/l total Group II PAHs)	Daily Maximum	grab
11q. Pyrene <sup>6</sup>	(200 µg/l total Group II PAHs)	Daily Maximum	grab
12. Total Polychlorinated Biphenyls (PCBs)	0.00017 µg/l <sup>5</sup>	Daily Maximum	grab
13a. Antimony	5.6 µg/l	Daily Maximum	grab
13b. Arsenic	10 µg/l	Daily Maximum	grab
13c. Cadmium <sup>7</sup>	1.1 µg/l	Daily Maximum	grab
13d. Chromium III (trivalent) <sup>7</sup>	86 µg/l	Daily Maximum	grab
13e. Chromium IV (hexavalent)	11 µg/l	Daily Maximum	grab
13f. Copper <sup>7</sup>	11.5 µg/l	Daily Maximum	grab
13g. Lead <sup>7</sup>	3.16 µg/l	Daily Maximum	grab
13h. Mercury	0.012 µg/l	Daily Maximum	grab
13i. Nickel <sup>7</sup>	52 µg/l	Daily Maximum	grab

**Table 1. Effluent Limitations for Indicator Chemicals**

Parameter	Effluent Limit	Limit Type	Sample Type
13j. Selenium	5.0 µg/l	Daily Maximum	grab
13k. Silver <sup>7</sup>	4.0 µg/l	Daily Maximum	grab
13l. Zinc <sup>7</sup>	122 µg/l	Daily Maximum	grab
13m. Iron	1,000 µg/l	Daily Maximum	grab
14. Cyanide	5.2 µg/l	Daily Maximum	grab
<p>1. Although the maximum values for total residual chlorine is 11 µg/l, the compliance limits are equal to the minimum level (ML) of the test method used as listed in Attachment B (i.e., 100 µg/l).</p> <p>2. BTEX = Sum of Benzene, Toluene, Ethylbenzene, total Xylenes.</p> <p>3. Naphthalene can be reported as both a purgeable (VOC) and extractable (SVOC) organic compound. The highest reported value should be used.</p> <p>4. Although the maximum value for the individual Group I PAH compounds is 0.0028 µg/l, the compliance limits are equal to the minimum level (ML) of the test method used as listed in Attachment B.</p> <p>5. Although the maximum value for total PCBs is 0.00017µg/l, the compliance limit is equal to the minimum level (ML) of the test method used as listed in Attachment B (i.e., 0.5 µg/l).</p> <p>6. See Attachment A for information on PAH groups.</p> <p>7. Effluent limit shown for a default receiving water hardness of 100 mg/l. Actual limit will be site-specific.</p> <p>8. Compliance limit of 0.5 µg/l is set equal to the minimum level (ML) in Attachment B</p> <p>9. Compliance limit of 5.0 µg/l is set equal to the minimum level (ML) in Attachment B</p> <p>Note: If contaminants of concern are present at the site, but not identified in this table, these pollutants and their influent/effluent concentrations must be provided on the NOI.</p>			

**B. Method Detection Limits**

For all monitoring, the permittee must use methods that can achieve a MDL equal to 0.1 times the effluent limitation or the most sensitive EPA approved method, whichever is greater. If the analytical result for any sample is below the MDL, the permittee shall report “less than (<) numeric MDL” on the DMR. For purposes of averaging results, the permittee shall use zero (0) for all values below the MDL. EPA will use the interim minimum level or the ML as the compliance evaluation level when the permit limit and/or the MDL is below the ML (see Attachment B).

**C. Representative Sampling (Routine and Non-Routine Discharges)**

1. The Permittee must ensure that samples and measurements collected for the purpose of monitoring are representative of the monitored activity or the environmental condition.
2. In order to ensure that the effluent limits set forth in this permit are not violated at times other than when routine samples are collected, the

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

3. The permittee must collect such additional samples as soon as a spill, discharge, or bypassed effluent reaches the outfall. The samples must be analyzed in accordance with Part II.E (“Monitoring Procedures”). The permittee must report all additional monitoring in accordance with Part II.G (“Additional Monitoring by Permittee”).

#### **D. Monitoring Requirements**

1. Groundwater remediation discharge facilities are required to monitor flow, pH, total suspended solids (TSS) and chemicals of concern. Samples shall be collected from a location after the last treatment unit but prior to discharge. Upon evaluation of the NOI, the Director will notify the facility of their final monitoring requirements in the written authorization to discharge. Flow must be monitored continuously during periods of discharge. All other parameters must be monitored using grab samples with the minimum frequencies identified below in 2 and 3 of this Part.
2. For new groundwater remediation facilities, monitoring is required **monthly** for the first quarter (i.e., 3 months) that the project is in operation. Results must be reported to EPA and the responsible IDEQ regional office. Beginning with the fourth month of operation, monitoring will be required **quarterly**.
3. Existing projects must monitor **quarterly** as of the effective date of this permit.

**E. Monitoring Procedures.** The permittee must conduct monitoring according to test procedures approved under 40 CFR 136 or SW-846, *Test Methods for Evaluating Solid Waste, Physical/Chemical Methods*.

#### **F. Reporting of Monitoring Results.**

1. The permittee must summarize monitoring results on the Discharge Monitoring Report (DMR) form (EPA No. 3320-1 or equivalent). The DMRs must be submitted **quarterly** in April, July, October and January of each year, and are to be postmarked by the 15th day of the month. For new groundwater remediation facilities, DMRs must also be submitted **monthly** for the first quarter (i.e., every 3 months) that the project is in operation, and postmarked by the 15<sup>th</sup> day of the following month. DMRs

must be sent to the EPA at the address below:

U.S. EPA Region 10  
1200 6<sup>th</sup> Avenue, OCE-133  
Attn: PCS Data Entry Team  
Seattle, Washington 98101

DMRs must also be submitted to the appropriate IDEQ regional office or any affected tribe (Part I.G.3).

2. The permittee is not required to monitor when the facility is not discharging. However, the DMR must indicate the facility is not discharging and must be submitted as described in F.1 of this part. The permittee must submit DMRs even if a discharge has not occurred unless their permit coverage has been terminated in accordance with Part I.L of this permit.

**G. Additional Monitoring by a Permittee**

1. If a permittee monitors any pollutant more frequently than required by this general NPDES permit, using test procedures approved under 40 CFR 136 or as specified in this general permit, the permittee must include the results of this monitoring in the calculation and reporting of the data submitted in the DMRs.
2. Upon request by the Director, the permittee must submit results of any other sampling regardless of the test method used.

**H. Prohibited Practices.**

The following practices are prohibited to ensure the protection of the Idaho State Water Quality Standards for hazardous materials, deleterious materials, and floating, suspended or submerged matter.

1. Discharging hazardous materials is prohibited.
2. Discharging sludge, grit and accumulated solid residues is prohibited.

**I. Quality Assurance Requirements.**

The permittee must develop a Quality Assurance Plan (QAP) for all monitoring required by this permit. The plan must be completed and implemented within **90 days** of the authorization to discharge under this general permit.

1. The QAP shall be designed to assist in planning for the collection and

analysis of environmental samples in support of the permit and in explaining data anomalies when they occur.

2. Throughout all sample collection and analysis activities, the permittee shall 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)*. Copies of these documents can be found at <http://epa.gov/r10earth/waterpermits.htm>. The QAP shall be prepared in the format which is specified in these documents.
3. At a minimum, the QAP shall include the following:
  - a. Details on the number of samples, detailed sampling locations, type of sample containers, preservation of samples, holding times, analytical detection and quantitation limits for each target compound, analytical methods, type and number of quality assurance field samples, precision and accuracy requirements, sample preparation requirements, sample shipping methods, and laboratory data delivery requirements.
  - b. A map indicating the location of each monitoring point.
  - c. Qualification and training of personnel.
  - d. Specifications for the collection and analysis of quality assurance samples for each sampling event, including matrix spiked and duplicate samples and analysis of field transfer blanks (sample blanks).
  - e. 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.

**J. Operation and Maintenance Plan.** In addition to the requirements specified in Part III.A (“Proper Operation and Maintenance”), the permittee must develop and implement an Operations and Maintenance (O&M) Plan within **90 days** of the authorization to discharge under this general permit. Any existing O&M Plan may be modified for use under this part. The O&M Plan shall also incorporate



elements of best management practices used to prevent or minimize the generation, or potential release of, pollutants from the facility to waters of the United States through normal and ancillary activities. The O&M Plan must be retained on site and made available to EPA and IDEQ upon request.

**K. Records Content.** All effluent monitoring records must bear the hand-written signature of the person who prepared them. In addition, the permittee must ensure that records of monitoring information include:

1. the date, exact place, and time of sampling or measurements
2. the names of the individual(s) who performed the sampling or measurements;
3. date(s) analyses were performed;
4. the names of the individual(s) who performed the analyses;
5. the analytical techniques or methods used;
6. the results of such analyses; and
7. certification requirements as identified in Part IV.G.

**L. Retention of Records.**

A permittee must retain records of all monitoring information, including but not limited to, all calibration and maintenance records, copies of all reports required by this general NPDES permit, a copy of the NPDES permit, and records of all data used to complete the notice of intent for this general NPDES permit, for a period of at least five years from the date of the sample, measurement, report, or notice of intent submittal, or for the term of this general NPDES permit, whichever is longer. This period may be extended by request of the Director at any time.

**M. Twenty-four Hour Notice of Noncompliance Reporting.**

1. A permittee must report the following occurrences of noncompliance by telephone (206/553-1846) within 24 hours from the time a permittee becomes aware of the circumstances:
  - a. any noncompliance that may endanger health or the environment;
  - b. any unanticipated bypass that results in or contributes to an exceedance of any effluent limitation in this general NPDES permit;
  - c. any upset that results in or contributes to an exceedance of any effluent limitation in this general NPDES permit.
2. A permittee must also provide a written submission within five business

days of the time that a permittee becomes aware of any event required to be reported under Part II.M.1. 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 reoccurrence of the noncompliance.
3. The Director may waive the written report on a case-by-case basis if the oral report has been received within 24 hours by the NPDES Compliance Hotline in Seattle, Washington, by telephone, (206) 553-1846.
  4. The permittee must submit reports to EPA and IDEQ as specified in Part II.F (“Reporting of Monitoring Results”) of this general permit.

**N. 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 II.F (“Reporting of Monitoring Results”) are submitted. The reports must contain the information listed in Part II.M (“Twenty-four Hour Notice of Noncompliance Reporting”) of this permit.

**O. Changes in Discharge of Toxic Substances.** The permittee must notify the Director as soon as it knows, or has reason to believe [40 CFR 122.42(a)]:

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 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; 500 micrograms per liter (500 µg/l) for 2,4 dinitrophenol and for 2-methyl-4,6-dinitrophenol; and one milligram per liter (1 mg/l) for antimony.
  - c. Five (5) times the maximum concentration value reported for that pollutant in the permit application in accordance with 40 CFR

- 122.21(g)(7); or,
- d. The level established by the Director in accordance with 40 CFR 122.44(f).
2. That any activity has occurred or will occur that would result in any discharge, on a non-routine or infrequent basis, of any toxic pollutant that is not limited in the permit, if that discharge may reasonably be expected to exceed the following "notification levels":
- a. Five hundred micrograms per liter (500 µg/l);
  - b. One milligram per liter (1 mg/l) for antimony;
  - c. Ten (10) times the maximum concentration value reported for that pollutant in the permit application in accordance with 40 CFR 122.21(g)(7); or
  - d. The level established by the Director in accordance with 40 CFR 122.44(f).

### III. COMPLIANCE RESPONSIBILITIES

- A. Proper Operation and Maintenance.** A permittee must at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) that are installed or used by a permittee to achieve compliance with the conditions of this general NPDES permit. Proper O&M also includes best management practices, adequate laboratory controls and appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems only when the operation is necessary to achieve compliance with the conditions of this general NPDES permit.
- B. Duty to Comply.** A permittee must comply with all conditions of this general NPDES permit. Any permit noncompliance constitutes a violation of the CWA and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application or notice of intent.
- C. Inspection and Entry.** A permittee must allow the Director, or an authorized representative (including an authorized contractor acting as a representative of the Director), upon the presentation of credentials and other documents as may be required by law, to:
1. Enter upon a permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this general NPDES permit;

2. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this general NPDES permit;
3. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this general NPDES permit; and
4. Sample or monitor at reasonable times, for the purpose of assuring permit compliance or as otherwise authorized by the CWA, any discharges, substances or parameters at any location.

**D. Penalties for Violations of Permit Conditions.**

1. **Civil and Administrative Penalties.** Pursuant to 40 CFR 19 and the CWA, any person who violates sections 301, 302, 306, 307, 308, 318 or 405 of the CWA, 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 CWA, is subject to a civil penalty not to exceed the maximum amounts authorized by section 309(d) of the CWA 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 \$32,500 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 CWA and the Federal Civil Penalties Inflation Adjustment Act (28 U.S.C. § 2461 note) as amended by the Debt Collection Improvement Act (31 U.S.C. § 3701 note) [currently \$11,000 per day for each violation, with the maximum amount of any Class I penalty assessed not to exceed \$32,500]. 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 CWA and the Federal Civil Penalties Inflation Adjustment Act (28 U.S.C. § 2461 note) as amended by the Debt Collection Improvement Act (31 U.S.C. § 3701 note) [currently \$11,000 per day for each violation, with the maximum amount of any Class II penalty not to exceed \$157,500].
3. **Criminal Penalties:**

- a. **Negligent Violations.** The CWA 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.
- e. **False Statements.** The CWA provides that any person who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained under this permit shall, upon conviction, be punished by a fine of not more than \$10,000, or by imprisonment for not more than two years, or both. If a conviction of a person is for a violation committed after a first conviction of such person under this paragraph, punishment is

a fine of not more than \$20,000 per day of violation, or by imprisonment of not more than four years, or both. The CWA further provides that any person who knowingly makes any false statement, representation, or certification in any record or other document submitted or required to be maintained under this permit, including monitoring reports or reports of compliance or non-compliance shall, upon conviction, be punished by a fine of not more than \$10,000 per violation, or by imprisonment for not more than six months per violation, or by both.

**E. Need to Halt or Reduce Activity not a Defense.** It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

**F. Duty to Mitigate.** A 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.

**G. Removed Substances.** Collected screenings, grit, solids, sludges, filter backwash, or other pollutants removed in the course of treatment or control of wastewaters must be disposed of in a manner such as to prevent any pollutant from such materials from entering waters of the United States.

#### **H. Bypass of Treatment Facilities**

1. Bypass not exceeding limitations. The permittee may allow any bypass to occur that does not cause effluent limitations to be exceeded, but only if it also is for essential maintenance to assure efficient operation. These bypasses are not subject to the provisions of paragraphs 2 and 3 of this Part.
2. Notice.
  - a. Anticipated bypass. If the permittee knows in advance of the need for a bypass, it must submit prior notice, to the Director, 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.M ("Twenty-four Hour Notice of Noncompliance Reporting").
3. Prohibition of bypass.
  - a. Bypass is prohibited, and the Director may take enforcement action against the permittee for a bypass, unless:

- i) The bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;
  - ii) There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass that occurred during normal periods of equipment downtime or preventive maintenance; and
  - iii) The permittee submitted notices as required under paragraph 2 of this Part.
- b. The Director may approve an anticipated bypass, after considering its adverse effects, if the Director determines that it will meet the three conditions listed above in paragraph 3.a of this Part.

## **I. Upset Conditions.**

1. Effect of an upset. An upset constitutes an affirmative defense to an action brought for noncompliance with a technology-based permit effluent limitation if a permittee meets the requirements of paragraph 2 of this section. 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, a permittee must demonstrate, through properly signed, contemporaneous operating logs, or other relevant evidence that:
  - a. An upset occurred and that a permittee can identify the cause(s) of the upset;
  - b. The permitted facility was at the time being properly operated;
  - c. A permittee submitted notice of the upset as required under Part II.M, "Twenty-four Hour Notice of Noncompliance Reporting" and
  - d. A permittee complied with any remedial measures required under

Part III.F, “Duty to Mitigate”.

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

**J. Toxic Pollutants.** The permittee must comply with effluent standards or prohibitions established under section 307(a) of the CWA 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.

**IV. GENERAL REQUIREMENTS**

**A. Permit Actions.** This permit or coverage under 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. Planned Changes.** A permittee must give notice to the Director and the responsible IDEQ office 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 the pollutants discharged. This notification applies to pollutants that are subject neither to effluent limitations in the permit, nor to notification requirements under Part II.O (“Changes in Discharge of Toxic Substances”) of this permit.

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

**D. Duty to Reapply.** If a permittee intends to continue an activity regulated by this general permit after the expiration date of this permit, a permittee must submit a Notice of Intent (acting as an application renewal) to be covered under a new general 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 Director, the permittee must submit an application for an individual permit or submit a new NOI at least **180 days** before the expiration date of this permit.



**E. Duty to Provide Information.** A permittee must furnish to the Director, within the time specified in the request, any information that the Director may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. A permittee must also furnish to the Director, upon request, copies of records required to be kept by this permit.

**F. Other Information.** When a permittee becomes aware that it failed to submit any relevant facts in a notice of intent, or that it submitted incorrect information in a notice of intent or any report to the Director, it shall promptly submit the omitted facts or corrected information.

**G. Signatory Requirements.** All applications (including NOIs), reports or information submitted to the Director must be signed and certified as follows:

1. All NOIs submitted to the Director must be signed and certified by:
  - a. For a corporation: by a principal corporate officer.
  - b. For a partnership or sole proprietorship: by a general partner or the proprietor, respectively.
  - c. For a municipality, state, federal, or other public agency: by either a principal executive officer or ranking elected official.
2. All reports required by this permit and other information requested by the Director must be signed by a person described in paragraph 1 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 and submitted to the Director.
  - 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, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters for the company. (A duly authorized representative may thus be either a named individual or any individual occupying a named position.)
3. Changes to authorization. If an authorization under paragraph 2 above is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization

satisfying the requirements of paragraph 2 must be submitted to EPA and the responsible IDEQ office 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."*

- H. 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 CWA, permit applications, permits, and effluent data are not considered confidential. Any confidential claim must be asserted at the time of submission by stamping the words "confidential business information" on each page containing such information. If no claim is made at the time of submission, EPA may make the information available to the public without further notice to the permittee. If a claim is asserted, the information will be treated in accordance with the procedures in 40 CFR 2, Subpart B (Public Information) and 41 Fed. Reg. 36924 (September 1, 1976), as amended.
- I. Oil and Hazardous Substance Liability.** Nothing in this permit shall be construed to preclude the institution of any legal action or relieve a permittee from any responsibilities, liabilities, or penalties to which a permittee is or may be subject under section 311 of the CWA or section 106 of the Comprehensive Environmental Response, Compensation and Liability Act of 1980 (CERCLA).
- J. 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 private property or any invasion of personal rights, nor any infringement of federal, state or local laws or regulations.
- K. State Laws.** Nothing in this permit shall be construed to preclude the institution of any legal action or relieve a permittee from any responsibilities, liabilities, or penalties established pursuant to any applicable state law or regulation under authority preserved by section 510 of the CWA.

## V. ACRONYMS

APA	Administrative Procedures Act
BAT	Best Available Technology Economically Achievable
BCT	Best Conventional Pollutant Control Technology
BPJ	Best Professional Judgment
BPT	Best Practicable Control Technology Currently Available
CF	Conversion Factor
CFR	Code of Federal Regulations
COCs	Contaminants of Concern
cfs	Cubic feet per second
CWA	Clean Water Act
DF	Dilution Factor
DMR	Discharge monitoring report
EPA	U.S. Environmental Protection Agency
ESA	Endangered Species Act
FWS	U.S. Fish & Wildlife Service
IDA	Idaho Department of Agriculture
IDAPA	Idaho Administrative Procedures Act
IDEQ	Idaho Department of Environmental Quality
LUST	Leaking Underground Storage Tanks
MCL	Maximum Contaminant Level
MDL	Maximum daily limit or Method detection limit
mg/L	Milligrams per liter
MGD	Million gallons per day
ML	Minimum level
MTBE	Methyl Tert-Butyl Ether
NEPA	National Environmental Policy Act
NMFS	National Marine Fisheries Service
NMFS	National Marine Fisheries Service

NOI	Notice of Intent
NPDES	National Pollutant Discharge Elimination System
OMB	U.S. Office of Management and Budget
OWW	Office of Water and Watersheds
PAH	Polycyclic aromatic hydrocarbons
PCBs	Polychlorinated Biphenyls
POTW	Publicly owned treatment works
QAP	Quality Assurance Plan
RCRA	Resource Conservation Recovery Act
TPH	Total Petroleum Hydrocarbon
TMDL	Total Maximum Daily Load
TSS	Total Suspended Solids
USC	United States Code
USFWS	United States Fish and Wildlife Service
USGS	U.S. Geological Survey
VOCs	Volatile Organic Compounds
WET	Whole effluent toxicity
WLA	Waste load allocation
µg/L	Micrograms per liter
UIC	Underground Injection Control
UST	Underground Storage Tank

## VI. DEFINITIONS

*Administrator* means the Administrator of the United States Environmental Protection Agency, or an authorized representative (40 CFR 122.2).

*Best Available Technology Economically Achievable (BAT)* means the technology-based standard established by the Clean Water Act (CWA) as the most appropriate means available on a national basis for controlling the direct discharge of toxic and nonconventional pollutants to navigable waters. BAT effluent limitations guidelines, in general, represent the best existing performance of treatment technologies that are economically achievable within an industrial point source category or subcategory.

*Best Conventional Pollutant Control Technology (BCT)* means the technology-based standard for the discharge from existing industrial point sources of conventional

pollutants including BOD, TSS, fecal coliform, pH, oil and grease.

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

*CFR* means the Code of Federal Regulations, which is a codification of the final rules published daily in the *Federal Register*.

*Composite sample* means a flow-proportioned mixture of not less than four discrete representative samples.

*CWA* means the Clean Water Act (formerly referred to as the Federal Water Pollution Control Act or Federal Water Pollution Control Act Amendments of 1972) Public Law 92-500, as amended by Public Law 95-217, Public Law 95-576, Public Law 96-483, and Public Law 97-117, 33 U.S.C. 1251 et seq. (40 CFR 122.2).

*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 limits expressed as mass “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 (40 CFR 122.2).

*Designated Use* means any of the various uses which may be made of the water of Idaho, including, but not limited to, domestic water supplies, industrial water supplies, agricultural water supplies, navigation, recreation in and on the water, wildlife habitat, and aesthetics (IDAPA 16.01.02.003.04).

The *Director* means the Regional Administrator of EPA Region 10, or the State of Idaho DEQ Director, or an authorized representative thereof.

*Discharge* when used without qualification means the “discharge of a pollutant.”

*Discharge Monitoring Report (DMR)* means the EPA uniform national form, including any subsequent additions, revisions, or modifications for the reporting of self-monitoring results by permittees (40 CFR 122.2).

*Discharge of a pollutant* means:

(a) Any addition of any “pollutant” or combination of pollutants to “waters of the United States” from any ‘point source,’ or

(b) Any addition of any pollutant or combination of pollutants to the waters of the “contiguous zone” or the ocean from any point source other than a vessel or other floating craft which is being used as a means of transportation.

This definition includes additions of pollutants into waters of the United States from: surface runoff which is collected or channeled by man; discharges through pipes, sewers,

or other conveyances owned by a State, municipality, or other person which do not lead to a treatment works; and discharges through pipes, sewers, or other conveyances, leading into privately owned treatment works. This term does not include an addition of pollutants by any “indirect discharger” (40 CFR 122.2).

*Draft permit* means a document prepared under 40 CFR 124.6 indicating the Director's tentative decision to issue or deny, modify, revoke and reissue, terminate, or reissue a “permit” (40 CFR 122.2).

*Effluent limitation* means any restriction imposed by the Director on quantities, discharge rates, and concentrations of “pollutants” which are “discharged” from “point sources” into “waters of the United States,” the waters of the “contiguous zone,” or the ocean (40 CFR 122.2).

*Effluent limitations guidelines* means a regulation published by the Administrator under section 304(b) of CWA to adopt or revise “effluent limitations.” (40 CFR 122.2).

*Excluded Waters* means a water not authorized as a receiving water covered under this general NPDES permit.

*General permit* means an NPDES “permit” issued under Sec. 122.28 authorizing a category of discharges under the CWA within a geographical area. (40 CFR 122.2)

*Grab sample* means a single sample or measurement taken at a specific time.

*Hazardous Material* means A material or combination of materials which, when discharged in any quantity into state waters, presents a substantial present or potential hazard to human health, the public health, or the environment. Unless otherwise specified, published guides such as Quality Criteria for Water (1976) by EPA, Water Quality Criteria (Second Edition, 1963) by the state of California Water Quality Control Board, their subsequent revisions, and more recent research papers, regulations and guidelines will be used in identifying individual and specific materials and in evaluating the tolerances of the individual materials for the beneficial uses indicated (IDAPA 58.01.02.003.49)

*Indian Country* as indicated by 18 USC 1151 means:

- a. All land within the limits of any Indian Reservation under the jurisdiction of the US Government notwithstanding the issuance of any patent, and including rights-of-way running through the reservation.
- b. All dependent Indian communities within the borders of the US whether within the original or subsequently acquired territory thereof, and whether within or without the limits of a state, and

- c. All Indian allotments, the Indian titles to which have not been extinguished including right-of-way running through them.

*Influent* means the point(s) where the water enters the facility or settling pond(s).

*In situ Treatment* means groundwater treatment that occurs within the aquifer in contrast to pump and treat or similar systems where groundwater is removed from the aquifer and treated on the surface.

*Maximum* means the highest measured discharge or pollutant in a waste stream during the time period of interest.

*Maximum daily discharge limitation* means the highest allowable 'daily discharge' (40 CFR 122.2).

*National Pollutant Discharge Elimination System (NPDES)* means the national program for issuing, modifying, revoking and reissuing, terminating, monitoring and enforcing permits, and imposing and enforcing pretreatment requirements, under sections 307, 402, 318, and 405 of CWA (40 CFR 122.2).

*Notice of Intent (NOI)* means a request, or application, to be authorized to discharge under a general NPDES permit.

*Nuisance* means anything which is injurious to the public health or an obstruction to the free use, in the customary manner, of any waters of the State (IDAPA 16.01.02.003.65).

*Outstanding resource water* means a high quality water, such as water of national and state parks and wildlife refuges and water of exceptional recreational significance. ORW constitutes as outstanding national or state resource that requires protection from point and nonpoint source activities that may lower water quality (IDAPA 16.01.02.003.70).

*Pollutant* means dredged spoil, solid waste, incinerator residue, filter backwash, sewage, garbage, sewage sludge, munitions, chemical wastes, biological materials, radioactive materials (except those regulated under the Atomic Energy Act of 1954, as amended (42 U.S.C. 2011 et seq.)), heat, wrecked or discarded equipment, rock, sand, cellar dirt and industrial, municipal, and agricultural waste discharged into water.

*Services* means the U.S. Fish and Wildlife Service and/or the National Marine Fisheries Service (NOAA Fisheries)

*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.

*Special resource water* means those specific segments or bodies of water which are recognized as needing intensive protection to preserve outstanding or unique characteristics or to maintain current beneficial use (IDAPA 16.01.02.003.95).

*Technology-based permit effluent limitation* means wastewater treatment requirements under section 301(b) of the Clean Water Act that represent the minimum level of control that must be imposed in a permit issued under section 402 of the Clean Water Act (IDAPA 16.01.02.003.102).

*Total Maximum Daily Load (TMDL)* means a determination of the amount of a pollutant, or property of a pollutant, from point, nonpoint, and natural background sources (including a margin of safety) that may be discharged to a water body without causing the water body to exceed the water quality criterion for that pollutant.

*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.

*Waiver* means the intentional relinquishment of a right, claim, or privilege.

*Water Pollutant* means dredged spoil, solid waste, incinerator residue, filter backwash, sewage, garbage, sewage sludge, munitions, chemical wastes, biological materials, radioactive materials (except those regulated under the Atomic Energy Act of 1954, as amended [42 U.S.C. 2011 *et seq.*]), heat, wrecked or discarded equipment, rock, sand, cellar dirt and industrial, municipal, and agricultural waste discharged into water.

*Waters of the United States* or waters of the U.S. means:

- (a) All waters which are currently used, were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide;
- (b) All interstate waters, including interstate “wetlands;”
- (c) All other waters such as intrastate lakes, rivers, streams (including intermittent streams), mudflats, sandflats, “wetlands,” sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds the use, degradation, or destruction of which would affect or could affect interstate or foreign commerce including any such waters:
  - (1) Which are or could be used by interstate or foreign travelers for recreational or other purposes;
  - (2) From which fish or shellfish are or could be taken and sold in interstate or foreign commerce; or
  - (3) Which are used or could be used for industrial purposes by industries in interstate commerce;
- (d) All impoundments of waters otherwise defined as waters of the United States under this definition;



- (e) Tributaries of waters identified in paragraphs (a) through (d) of this definition;
- (f) The territorial sea; and
- (g) ‘Wetlands’ adjacent to waters (other than waters that are themselves wetlands) identified in paragraphs (a) through (f) of this definition (40 CFR 122.2).

**ATTACHMENT A**

**INDICATOR COCs APPLICABLE TO SITE CLASSIFICATIONS**

**A. Pollutants Associated With Groundwater Remediation Facilities**

Provided below is a discussion of six general classifications of “site types” (3 petroleum related and 3 non-petroleum related). The general permit is intended to cover discharges from these site classifications. As part of the NOI process (see Part I.J.5.b), a groundwater remediation facility will be required to identify which of these six site classifications most accurately describes their site. Additional information is provided in the Fact Sheet.

In general, facilities will be required to monitor for those parameters identified in Tables A-1 through A-6 for whatever site classification or “site type” is most applicable to their discharge. After a review of the NOI, EPA and IDEQ will determine the final list of monitoring parameters for which the permittee will be responsible. In some cases, such as when certain pollutants are not present in the influent or site groundwater, the list of monitoring parameters will be reduced from what is shown on the appropriate Attachment A table. In other circumstances, such as when additional contaminants are present that are not shown on the applicable table below, the list of monitoring parameters will be extended to include those chemicals. In either case, EPA will inform the facility of their final list of monitoring parameters for the purposes of DMR reporting in the written authorization to discharge letter (Part I.H). It is the responsibility of the facility to identify all COCs in site groundwater in the NOI whether listed in Table 1 or not. All groundwater remediation discharge facilities are required to monitor for flow, TSS, and pH.

**1. Petroleum Related Site Remediation Activities**

Gasoline Only Sites: The general permit is designed to cover discharges resulting from the treatment of contaminated groundwater and remediation related wastewater where gasoline was released. This includes short term dewatering from underground storage tank (UST) removal or replacement, long term groundwater pump and treat system, groundwater seepage collection systems, construction dewatering, aquifer pump testing, or other activities where gasoline is a known contaminant. This also includes releases which may contain leaded gasoline (See Table A-1).

**Table A-1. Gasoline Only Cleanup Sites**

<b>Pollutants To Be Monitored</b>	<b>Effluent Limit</b>	<b>Limit Type</b>	<b>Sample Type</b>
Benzene	1.2 µg/l	daily maximum	grab
Total BTEX	100 µg/l	daily maximum	grab
Naphthalene	100 µg/l	daily maximum	grab
Ethylene dibromide	0.05 µg/l	daily maximum	grab
Methyl-t-Butyl Ether (MTBE)	30 µg/l	daily maximum	grab
Total Suspended Solids (TSS)	30.0 mg/l	daily maximum	grab

**Table A-1. Gasoline Only Cleanup Sites**

Pollutants To Be Monitored	Effluent Limit	Limit Type	Sample Type
Total Petroleum Hydrocarbon (TPH)	5.0 mg/l	daily maximum	grab
Lead <sup>1</sup>	3.16 µg/l	daily maximum	grab
Iron	1,000 µg/l	daily maximum	grab

1. Criteria are hardness dependent. Limit shown represents a default hardness value of 100 mg/l. Actual limit will be site-specific.

Fuel Oils (and Other Oils) Only Sites: The general permit is designed to cover discharges resulting from the treatment of contaminated groundwater and remediation related wastewater where there has been a release of fuel oils such as diesel fuel, kerosene, jet fuel, heating oil, and heavier residual fuel oils. Also included are lube oils, machine oils, hydraulic fluids, mineral oils, and other oil products excluding waste oil. This includes short term dewatering from USTs removal or replacement, long term groundwater pump and treat system, groundwater seepage collection systems, construction dewatering, aquifer pump testing, or other activities where oil is a known contaminant (See Table A-2).

**Table A-2. Fuel Oils (and Other Oils) Only Sites**

Pollutants To Be Monitored	Effluent Limit	Limit Type	Sample Type
TPH	5.0 mg/l	daily maximum	grab
Naphthalene	100 µg/l	daily maximum	grab
Polycyclic Aromatic Hydrocarbons (PAHs)	See Table 1 (#'s 11a - 11q)	daily maximum	grab
Benzene	1.2 µg/l	daily maximum	grab
BTEX	100 µg/l	daily maximum	grab
Nickel <sup>1</sup>	52 µg/l	daily maximum	grab
Chromium III (trivalent)	86 µg/l	daily maximum	grab
Chromium VI (hexavalent)	11 µg/l	daily maximum	grab
Zinc <sup>1</sup>	122 µg/l	daily maximum	grab
Iron	1,000 µg/l	daily maximum	grab

1. Criteria are hardness dependent. Limit shown represents a default hardness value of 100 mg/l. Actual limit will be site-specific.

Mixed Petroleum Sites Containing Other Contaminants: The general permit is designed to cover discharges resulting from the treatment of contaminated groundwater and remediation related wastewater where the releases are primarily petroleum contaminants from mixed wastes. Typically, these are sites where petroleum releases have been identified as the primary source; however, other contaminants have also been found. These contaminants may include waste solvents, heavy metals from industrial processes, or waste oils which may be commingled with other contaminants including PAHs and PCBs (See Table A-3).

**Table A-3. Mixed Petroleum Sites Containing Other Contaminants**

Pollutants To Be Monitored	Effluent Limit	Limit Type	Sample Type
All pollutants listed in Table 1	See Table 1	See Table 1	grab

## 2. Non Petroleum Site Remediation Activities

Volatile Organic Compound (VOC) Only Sites: This general permit is designed to cover discharges resulting from the treatment of contaminated groundwater and remediation related wastewater where the release of chlorinated VOC compounds is the primary source of contamination. These releases are typically related to improper disposal or spills of solvents, de-greasers, cleaners, paint removers, etc., or from industrial operations, chemical blending, transportation, or other sources (See Table A-4).

**Table A-4. VOC Only Sites**

Pollutants To Be Monitored	Effluent Limit	Limit Type	Sample Type
Carbon Tetrachloride	0.25 µg/l	daily maximum	grab
1,4 Dichlorobenzene (p-DCB)	75 µg/l	daily maximum	grab
1,2 Dichlorobenzene (o-DCB)	600 µg/l	daily maximum	grab
1,3 Dichlorobenzene (m-DCB)	5.5 µg/l	daily maximum	grab
1,1 Dichloroethane (DCA)	810 µg/l	daily maximum	grab
1,2 Dichloroethane (DCA)	0.38 µg/l	daily maximum	grab
1,1 Dichloroethylene (DCE)	0.057 µg/l	daily maximum	grab
cis-1,2 Dichloro-ethylene (DCE)	70 µg/l	daily maximum	grab
Dichloromethane (Methylene Chloride)	4.7 µg/l	daily maximum	grab
Tetrachloroethylene (PCE)	0.8 µg/l	daily maximum	grab
1,1,1 Trichloroethane (TCA)	200 µg/l	daily maximum	grab

**Table A-4. VOC Only Sites**

Pollutants To Be Monitored	Effluent Limit	Limit Type	Sample Type
1,1,2 Trichloroethane (TCA)	0.6 µg/l	daily maximum	grab
Trichloroethylene (TCE)	2.7 µg/l	daily maximum	grab
Vinyl Chloride (Chloroethene)	2.0 µg/l	daily maximum	grab
TPH	5.0 mg/l	daily maximum	grab
Pentachlorophenol	0.28 µg/l	daily maximum	grab
Bis (2-Ethylhexyl) Phthalate [Di-(ethylhexyl) Phthalate]	1.8 µg/l	daily maximum	grab
BTEX	100 µg/l	daily maximum	grab
Iron	1,000 µg/l	daily maximum	grab

VOC Sites With Other Contaminants: The general permit is designed to cover discharges resulting from the treatment of contaminated groundwater and remediation related wastewater where site characterization has identified chlorinated VOC compounds as the primary source of contamination, but where other chemicals are present in small amounts. For example, VOC sites may have varying amounts of petroleum hydrocarbons, PAHs, metals or other pollutants (See Table A-5).

**Table A-5. VOC Sites With Other Contaminants**

Pollutants To Be Monitored	Effluent Limit	Limit Type	Sample Type
All pollutants listed in Table 1	See Table 1	See Table 1	grab

Sites Containing Primarily Metals: The general permit is designed to cover discharges resulting from the treatment of contaminated groundwater and remediation related wastewater where the release of heavy metals is the primary source of contamination. For example, a sludge lagoon from a former metal plating shop may contain small amounts of other contaminant types; however, the treatment process and discharge limitations are driven by the heavy metals present (See Table A-6).

**Table A-6. Sites Containing Primarily Metals**

Pollutants To Be Monitored	Effluent Limit	Limit Type	Sample Type
All metals listed in Table 1	See Table 1	See Table 1	grab
All organic contaminants listed in Table			

I potentially present.	See Table 1	See Table 1	grab
Total Suspended Solids (TSS)	30.0 mg/l	daily maximum	grab

**B. Polycyclic Aromatic Hydrocarbon (PAH) Limits and Monitoring**

EPA has listed 16 PAH compounds as priority pollutants under the CWA, seven of which have been identified as probable carcinogens. Accordingly, the PAHs have been divided into two separate groups for the purposes of this general NPDES permit based upon their toxicity:

Group I: Carcinogenic PAHs: a. Benzo(a) Anthracene, b. Benzo(a) Pyrene, c. Benzo(b)-Fluoranthene, d. Benzo(k)Fluoranthene, e. Chrysene, f. Dibenzo(a,h) Anthracene, g. Indeno(1,2,3-cd) Pyrene.

Effluent Limitation for Group I PAHs - Maximum Value = 0.0028 µg/L  
Individual Compounds Compliance Limit = Minimum Level (see Attachment B)

Group II: Non Carcinogenic PAHs: a. Acenaphthene, b. Acenaphthylene, c. Anthracene, d. Benzo(ghi)- Perylene, e. Fluoranthene, f. Fluorene, g. Naphthalene, h. Phenanthrene, i. Pyrene.

Effluent Limitation for Group II PAH Compounds:  
Naphthalene Maximum Value = 100 µg/L  
Total of Group II Isomers Maximum Value = 200 µg/L

**C. Consideration of Hardness**

For metals in which the criteria are hardness dependent, published numeric criteria are generally expressed at a hardness value of 100 mg/L as calcium carbonate (CaCO<sub>3</sub>) in the receiving water. IDEQ follows this procedure where lookup criteria values for hardness dependent metals (found in IDAPA 58.01.02.210.01) are expressed at a hardness of 100 mg/l. For the hardness dependent metals limited by the general permit (including cadmium, chromium III, copper, lead, nickel, silver and zinc), the effluent limitations presented in Table 1 are calculated at a default receiving water hardness of 100 mg/l. However, the general permit allows for site-specific consideration of receiving water hardness where effluent limits for the seven hardness dependent metals are derived on a case-by-case basis.

For each hardness dependent metal, the value of the numeric criteria increases as receiving water hardness increases in accordance with the equations presented in Table A-7. Each of these equations calculates water quality criteria for the protection of aquatic life under the chronic exposure scenario (except for silver which is an acute exposure). In Idaho, the minimum hardness allowed for use in these equations is 25 mg/l and the maximum is 400 mg/l [IDAPA 58.01.02.210.03(c)]. Accordingly, receiving water hardness values above and below these values use them as default input values to the equations in Table A-7.

**Table A-7. Equations for Calculating Criteria for Hardness Dependent Metals**

PARAMETER	Criteria Value (µg/L)	Conversion Factors
Cadmium	= EXP <sup>(0.7852*LN(hardness) - 3.490)</sup>	0.909
Chromium (III)	= EXP <sup>(0.819*LN(hardness) + 0.6848)</sup>	0.860
Copper	= EXP <sup>(0.8545*LN(hardness) - 1.465)</sup>	0.960
Lead	= EXP <sup>(1.273*LN(hardness) - 4.705)</sup>	0.791
Nickel	= EXP <sup>(0.846*LN(hardness) + 0.0584)</sup>	0.997
Silver	= EXP <sup>(1.72*LN(hardness) - 6.52)</sup>	0.85
Zinc	= EXP <sup>(0.8473*LN(hardness) + 0.884)</sup>	0.986

EXP = base e exponential function; LN = natural logarithm

Provided below is an example calculation that EPA used to determine the total recoverable limits for metals. After performing the appropriate hardness calculation (if necessary), the effluent limitations for metals included in the permit are expressed in a total recoverable basis after application of appropriate conversion factors from dissolved criteria. Federal regulations at 40 CFR 122.45(c) require that NPDES permit limits be expressed on a total recoverable basis whereas state water quality criteria are typically expressed on a dissolved basis as that is the bioavailable portion of the metal more suited for toxicity testing of aquatic life.

Numeric metals criteria must be translated to total recoverable (TR) concentrations using the element specific conversion factors from the state standards which are shown in Table 4. Accordingly, the effluent limitations for metals in this general permit (on a TR basis), are determined by the following equation.

$$\text{Total recoverable metal concentration} = (\text{Dissolved concentration})/(\text{CF})$$

For purposes of example, the Idaho chronic water quality criteria for lead is 2.5 µg/l (dissolved) with a conversion factor of 0.791. Consequently, the effluent limit for lead in the general permit is 3.16 µg/l (TR) at a hardness of 100 mg/l. This is the effluent limit for lead presented in Table 1 of the general permit. If the receiving water hardness was 225 mg/l, the effluent limit for lead becomes 8.93 µg/l (TR). The NOI (Part I.J.7.h) requests a representative hardness value of the receiving water. This value will be used to calculate final effluent limits (if necessary) for each facility for those seven metals with hardness dependent criteria. Final effluent limits will be identified in EPA's authorization to discharge letter prepared for each facility.

#### **D. Mixing Zones**

The general permit sets the maximum daily effluent limit equal to the most stringent of Best Professional Judgment (BPJ) technology-based effluent limit, or the Idaho water quality criteria for each of the 55 indicator COCs. For pollutants with water quality-based effluent limits (WQBELs), the most stringent water quality criteria were based on either the protection of aquatic life for chronic exposures (i.e., metals), or for the protection of human health through the consumption of water and organisms (i.e., organics). Since technology-



based effluent limits represent the minimum level of treatment that must be imposed in a permit under section 402 of the CWA, mixing zones are generally not available for these pollutants [40 CFR 125.3(a)]. However, for the 18 organic and 15 inorganic (including arsenic) pollutants for which WQBELs were derived, mixing zones are available on a case-by-case basis at the discretion of IDEQ (or any affected tribe with approved water quality standards). The single exception is arsenic which is the only metal limited by the general permit with a technology-based effluent limit (set equal to the MCL at 10 µg/l). Since arsenic occurs in relatively high concentrations in some geology environments, and anthropogenic arsenic can be widespread from atmospheric fallout, EPA has decided to allow mixing zones for arsenic which has a very low BPJ technology-based effluent limit.

A mixing zone is an allocated impact zone where state water quality standards can be exceeded so long as acutely toxic conditions are prevented. It is a defined area or volume of the receiving water adjacent to or surrounding a wastewater discharge where the receiving water, as a result of the discharge, may not meet all applicable water quality criteria or standards. Only IDEQ can authorize a mixing zone, and it is based upon the dilution available and the assimilative capacity of the receiving water. Mixing zones should be as small as practicable, and in the case of this general permit, can not result in effluent limits that exceed applicable BPJ technology based limits (i.e., ceiling values. State mixing zone policy is stated in IDAPA 58.01.02.060, and is generally limited to 25% of the appropriate critical low flow volume for fluvial receiving waters [IDAPA 58.01.02.060.(e)(iv)].

Under this general permit, mixing zones or dilution factors may be granted by IDEQ for metals (including arsenic) and pollutants with WQBELs. While the effluent limits summarized in Table 1 can be increased with the application of a mixing zone for those pollutants with WQBELs, the draft permit imposes “ceiling values” representing a never to be exceeded effluent concentration based upon adopted technology based BPJ limits. For organic pollutants, BPJ ceiling values are either drinking water MCLs, or EPA Region 9 PRGs. For metals, other effluent limitation guidelines were adopted as BPJ ceiling values including those from the Metal Finishing Point Source Category (40 CFR 433), and the Landfill Category (40 CFR 445). Tables A-8 and A-9 present effluent limitations at various dilution factors in addition to never to be exceeded ceiling values for organic and inorganic pollutants, respectively, for which WQBELs were derived. Mixing zones are available only for these pollutants. Additional information is provided in the fact sheet.

**Table A-8. Organic Pollutant Effluent Limitations at Selected Dilution Ranges (µg/l)**

PARAMETER	DILUTION FACTOR RANGE CONCENTRATION					
	0 - 5	5 -10	10 - 50	50 - 100	>100	CEILING VALUE
Benzene	1.2	5	5	5	5	5 <sup>1</sup>
Carbon Tetrachloride	0.25	1.25	2.5	5	5	5 <sup>1</sup>
1,2 Dichloroethane	0.38	1.9	3.8	5	5	5 <sup>1</sup>
1,1 Dichloroethylene	0.057	0.285	0.57	2.85	5.7	7 <sup>1</sup>
Dichloromethane	4.7	5	5	5	5	5 <sup>1</sup>
Tetrachloroethylene	0.8	4	5	5	5	5 <sup>1</sup>
1,1,2 Trichloroethane	0.6	3	5	5	5	5 <sup>1</sup>
Trichloroethylene	2.7	5	5	5	5	5 <sup>1</sup>
Pentachlorophenol	0.28	1	1	1	1	1 <sup>1</sup>
Bis (2-Ethylhexyl) Phthalate	1.8	4.8	4.8	4.8	4.8	4.8 <sup>2</sup>
Benzo(a) Anthracene	0.0028	0.014	0.028	0.092	0.092	0.092 <sup>2</sup>
Benzo(a) Pyrene	0.0028	0.0092	0.0092	0.0092	0.0092	0.0092 <sup>2</sup>
Benzo(b) Fluoranthene	0.0028	0.014	0.028	0.092	0.092	0.092 <sup>2</sup>
Benzo(k) Fluroanthene	0.0028	0.014	0.028	0.14	0.28	0.92 <sup>2</sup>
Chrysene	0.0028	0.014	0.028	0.14	0.28	9.2 <sup>2</sup>
Dibenzo(a,h) Anthracene	0.0028	0.0092	0.0092	0.0092	0.0092	0.0092 <sup>2</sup>
Indeo(1,2,3-cd) Pyrene	0.0028	0.014	0.028	0.092	0.092	0.092 <sup>2</sup>
Total PCBs	0.00017	0.00085	0.0017	0.0085	0.017	0.034 <sup>2</sup>

1. Based upon drinking water maximum contaminant level (MCL)  
 2. Based upon EPA Region 9 Preliminary Remediation Goal (PRG) for tap water  
 Note: Dilution factors shown in Table A-8 are inclusive at the end of the range. For example, if the calculated DF is 10.0, the DF is 5, not 10.

**Table A-9. Inorganic Effluent Limitations at Selected Dilution Ranges (µg/l)**

PARAMETER	DILUTION FACTOR RANGE CONCENTRATION					
	1 - 5	5 -10	10 - 50	50 - 100	>100	CEILING VALUE
Residual Chlorine	11	55	110	500	500	500 <sup>9</sup>
Antimony	5.6 <sup>1</sup>	28	56	141	141	141 <sup>2</sup>
Arsenic	10	50	100	500	540	540 <sup>3</sup>
Cadmium <sup>10</sup>	1.1	5.5	11	55	110	260 <sup>6</sup>
Chromium <sup>III</sup> <sup>10</sup>	86 <sup>8</sup>	430	860	1,710	1,710	1,710 <sup>6</sup>
Chromium <sup>VI</sup>	11	55	110	550	1,100	1,710 <sup>4</sup>
Copper <sup>10</sup>	11.5	57.5	115	575	1,150	2,070 <sup>6</sup>
Lead <sup>10</sup>	3.16	15.8	31.6	158	316	430 <sup>6</sup>
Mercury <sup>7</sup>	0.012	0.06	0.12	0.6	1.2	2.3 <sup>2</sup>
Nickel <sup>10</sup>	52	260	520	2,380	2,380	2,380 <sup>6</sup>
Selenium	5	25	50	250	408	408 <sup>2</sup>
Silver <sup>10</sup>	4.0	20	40	200	240	240 <sup>6</sup>
Zinc <sup>10</sup>	122	610	1,220	1,480	1,480	1,480 <sup>6</sup>
Iron	1,000	5,000	6,000	6,000	6,000	6,000 <sup>5</sup>
Cyanide	5.2	26	52	260	520	1,200 <sup>6</sup>

1. Based on Idaho Water Quality Standards for the consumption of water and organisms.  
2. Based on 40 CFR 437.42, "Centralized Waste Treatment Point Source Category" BPT.  
3. Based on 40 CFR 445.11, "RCRA Subtitle C Landfill" BPT.  
4. Assumes hexavalent chromium reduced to trivalent form during treatment.  
5. Based on 40 CFR 434.25, "Coal Mining Point Source Category" NSPS.  
6. Based on 40 CFR 433 Subpart A, "Metal Finishing Subcategory".  
7. Mercury compliance limit = 0.2 µg/l.  
8. Based on Idaho Water quality Standards for chronic exposure to aquatic life  
9. Based upon Water Pollution Control Federation's Chlorination of Wastewater Guidelines  
10. Effluent limit shown for a receiving water hardness of 100 mg/l. Actual limit will be site-specific.  
Note: Dilution factors shown in Table A-9 are inclusive at the end of the range. For example, if the calculated DF is 10.0, the DF is 5, not 10.

In order to receive a mixing zone for the pollutants identified in Tables A-8 and A-9, a facility must first request that IDEQ (or an affected tribe with approved water quality standards) consider a mixing zone on the NOI as described in Part I.J. In order to be

eligible for a mixing zone, the ambient background concentration in the receiving water must first be below water quality criteria for that pollutant, and the receiving water must not be listed as impaired for that pollutant. Accordingly, the facility must submit at least one representative analysis from an ambient sample collected from the receiving water at a location immediately upstream of the outfall, and include these results on the NOI. In addition, the permittee must calculate a dilution factor (DF) as follows:

$$DF = (Qd + Qs)/Qd$$

**Where:**

<b>DF</b>	=	<b>Dilution Factor</b>
<b>Qd</b>	=	<b>Maximum flow rate of the discharge in cubic feet per second (cfs) (1.0 gpm = .00223 cfs)</b>
<b>Qs</b>	=	<b>25% of receiving water 7Q10 flow (or other appropriate critical low flow measure) where,</b>
<b>7Q10</b>	=	<b>The minimum flow for 7 consecutive days with a recurrence interval of 10 years</b>

**For Example:**

a) A 100 gpm discharge into a stream with 7Q10 = 1 cfs :	DF = 2.1
b) A 50 gpm “ “ “ = 1 cfs :	DF = 3.2
c) A 25 gpm “ “ ” = 3 cfs :	DF = 14.4
d) A 45 gpm “ ” “ = 10 cfs :	DF = 25.9

The 7Q10 for a receiving water may be estimated by use of available information such as nearby USGS stream gauging station, by application of certain “flow factors,” using historic stream flow data, calculations based on drainage area, information from state water quality offices, or other means. Whichever method is selected, the source of the low flow value(s) used by the applicant must be included on NOI application form. Stream flow data from USGS gauge sites can be downloaded at the following web site: <http://nwis.waterdata.usgs.gov/usa/nwis/discharge>. In addition, the computer software program DFLOW is a flow analysis tool for calculating 7Q10 and other critical low flow values, and can be downloaded at <http://epa.gov/waterscience/dflow/>.

Once the DF is calculated, the corresponding maximum effluent limitations for the various pollutants with allowable mixing zones can be obtained from Table A-7 or Table A-8. As shown on Tables A-8 and A-9, five separate dilution ranges are available for the permittee based upon the calculated DF. For example, the effluent limit for lead is 3.16 µg/l for dilution factors of 1-5 (inclusive). This means that if the calculated DF is 4.5, the effluent limit is the end-of-pipe limit at 3.16 µg/l, and no mixing zone is provided. Alternatively, if the calculated DF is 11.6, then the lead limit would be 31.6 µg/l using a DF of 10. Dilution factors shown in Tables A-7 and A-8 are inclusive at the end of the range. For example, if the calculated DF is 10.0, the DF is 5, not 10.

After the proper information is submitted on the NOI requesting a mixing zone for metals, IDEQ (or an approved tribe) will consider this request, and determine if a mixing zone is appropriate for the particular receiving water. IDEQ (or an approved tribe) will

then prepare a decision document in the form an individual section 401 certification that will grant a mixing zone along with the appropriate effluent limits shown in Tables A-8 and A-9, adjusted for hardness, where appropriate. Alternatively, IDEQ (or an approved tribe) may deny the request for dilution. The IDEQ (or approved tribe) mixing zone decision document will then be attached to EPA's written authorization to discharge letter that must be received prior to discharging (Part I.H). The decision document from IDEQ (or an approved tribe) functions as a section 401 certification for an individual discharger to use a mixing zone. IDEQ (or an approved tribe) may also require biological information about the receiving water in order to determine if a mixing zone is appropriate.

**ATTACHMENT B**  
**MINIMUM LEVELS**

**Table B-1. Minimum Levels**

PARAMETER (CAS #)	Minimum Levels and Test Methods <sup>1, 2, 3</sup>				
	GC	GCMS	LC	FAA	Other
Total Suspended Solids (TSS)					5 mg/l Method 160.2
Total Residual Chlorine (TRC)					Method 330.4, 100 µg/l; Method 330.5 20µg/l
Total Petroleum Hydrocarbons (TPH)					5 mg/l Method 1664
Benzene (B) - 71432 -	0.5 ug/l Method 602	2 ug/l Method 624			Method 8260C <sup>2</sup>
Total BTEX	0.5 ug/l Method 602	2 ug/l Method 624			Method 8260C <sup>2</sup>
Ethylene Dibromide (EDB) (1,2- Dibromoethane) - 106934 -	1.0 ug/l , Method 618; 0.01 ug/l Method 504.1	0.1 ug/l Methods 524.2 & 1624			Method 8260C <sup>2</sup>
Methyl-tert-Butyl Ether (MTBE)	0.5 µg/l Method 602 <sup>4</sup>	5.0 ug/l Method 524.2			Method 8260C <sup>2</sup>
Naphthalene - 91203 -	10 ug/l Method 610 GC/FID	2 ug/l Method 625 5 ug/l, Method 524.2	0.2 ug/l Method 610 HPLC		Method 8260C <sup>2</sup> Method 8270D <sup>3</sup>
Carbon Tetrachloride - 56235 -	0.5 ug/l Method 601	2 ug/l Methods 624,1624			Method 8260C <sup>2</sup>
1,4 Dichlorobenzene (p-DCB) - 106467 -	0.5 ug/l Methods 601, 602	2 ug/l Methods 624, 625			Method 8260C <sup>2</sup>
1,2 Dichlorobenzene (o-DCB) - 95501 -	0.5 ug/l Methods 601, 602	2 ug/l Methods 624, 625			Method 8260C <sup>2</sup>
1,3 Dichlorobenzene (m-DCB) - 541731 -	0.5 ug/l Methods 601, 602	2 ug/l Methods 624, 625			Method 8260C <sup>2</sup>
1,1 Dichloroethane (DCA) - 75343 -	0.5 ug/l Method 601	1 ug/l Method 624			Method 8260C <sup>2</sup>
1,2 Dichloroethane (DCA)- 107062 -	0.5 ug/l Method 601	2 ug/l Method 624			Method 8260C <sup>2</sup>

**Table B-1. Minimum Levels**

PARAMETER (CAS #)	Minimum Levels and Test Methods <sup>1, 2, 3</sup>				
	GC	GCMS	LC	FAA	Other
1,1 Dichloroethylene (DCE) - 75354 -	0.5 ug/l Method 601	2 ug/l Method 624			Method 8260C <sup>2</sup>
cis-1,2 Dichloro-ethylene (DCE) -156592-	0.5 ug/l Method 601	2 ug/l Method 624			Method 8260C <sup>2</sup>
Dichloromethane (Methylene Chloride)- 75092 -	0.5 ug/l Method 601	2 ug/l Method 624			Method 8260C <sup>2</sup>
Tetrachloroethylene (PCE) - 127184 -	0.5 ug/l Method 601	2 ug/l Method 624			Method 8260C <sup>2</sup>
1,1,1 Trichloro-ethane (TCA) - 71556 -	0.5 ug/l Method 601	2 ug/l Method 624			Method 8260C <sup>2</sup>
1,1,2 Trichloro-ethane (TCA) - 79005 -	0.5 ug/l Method 601	2 ug/l Method 624			Method 8260C <sup>2</sup>
Trichloroethylene (TCE) - 79016 -	0.5 ug/l Method 601	2 ug/l Method 624			Method 8260C <sup>2</sup>
Vinyl Chloride - 75014 -	0.5 ug/l Method 601	2 ug/l Method 624			Method 8260C <sup>2</sup>
Pentachlorophenol (PCP) - 87865 -	1.0 ug/l Method 604 GCFID	5 ug/l Methods 625, 1625			Method 8270D <sup>3</sup>
Bis (2-Ethylhexyl) Phthalate - 117817 -	10 ug/l Method 606	5 ug/l Method 625			Method 8270D <sup>3</sup>
Benzo(a) Anthracene -56553-	10 ug/l Method 610 GC	5 ug/l Method 625	0.05 ug/l Method 610 HPLC		Method 8270D <sup>3</sup>
Benzo(a) Pyrene -50328 -		10 ug/l Method 625	0.1 ug/l Method 610 HPLC		Method 8270D <sup>3</sup>
Benzo(b)Fluoranthene - 205992 -		10 ug/l Method 625	0.05 ug/l Method 610 HPLC		Method 8270D <sup>3</sup>
Benzo(k)Fluoranthene - 207089 -		10 ug/l Method 625	0.1 ug/l Method 610 HPLC		Method 8270D <sup>3</sup>



**Table B-1. Minimum Levels**

PARAMETER (CAS #)	Minimum Levels and Test Methods <sup>1, 2, 3</sup>				
	GC	GCMS	LC	FAA	Other
Chrysene - 218019 -		10 ug/l Method 625	1 ug/l Method 610 HPLC		Method 8270D <sup>3</sup>
Dibenzo(a,h) anthracene		10 ug/l Method 625	0.1 ug/l Method 610 HPLC		Method 8270D <sup>3</sup>
Indeno(1,2,3-cd) Pyrene - 193395 -		10 ug/l Method 625	0.15 ug/l Method 610		Method 8270D <sup>3</sup>
Acenaphthene - 83329 -	1 ug/l Method 610 GC/FID	1 ug/l Method 625	0.5 ug/l Method 610 HPLC		Method 8270D <sup>3</sup>
Acenaphthylene - 208968 -		10 ug/l Method 625	0.2 ug/l Method 610 HPLC		Method 8270D <sup>3</sup>
Anthracene - 120127 -		10 ug/l Method 625	2 ug/l Method 610 HPLC		Method 8270D <sup>3</sup>
Benzo(ghi) Perylene - 191242 -		5 ug/l Method 625	0.1 ug/l Method 610 HPLC		Method 8270D <sup>3</sup>
Fluoranthene - 206440 -	10 ug/l Method 610 GC/FID	1 ug/l Method 625	0.5 ug/l Method 610 HPLC		Method 8270D <sup>3</sup>
Fluorene - 86737 -		10 ug/l Method 625	0.1 ug/l Method 610 HPLC		Method 8270D <sup>3</sup>
Naphthalene - 91203 -	10 ug/l Method 610 GC/FID	2 ug/l Method 625 5 ug/l, Method 524.2	0.2 ug/l Method 610 HPLC		Method 8270D <sup>3</sup> Method 8260C <sup>2</sup>
Phenanthrene - 85018 -		5 ug/l Method 625	0.05 ug/l Method 610 HPLC		Method 8270D <sup>3</sup>

**Table B-1. Minimum Levels**

PARAMETER (CAS #)	Minimum Levels and Test Methods <sup>1, 2, 3</sup>				
	GC	GCMS	LC	FAA	Other
Pyrene - 129000 -		10 ug/l Method 625	0.05 ug/l Method 610 HPLC		Method 8270D <sup>3</sup>
Total Polychlorinated Biphenyls (PCBs)	0.5 ug/l Method 608				Method 8082 Method 1668A

**Table B-1. Minimum Levels (Cont)**

METALS	Flame AA	ICP	Furnace AA	Other
Antimony	200 ug/l	50 ug/l	5 ug/l	
Arsenic		5 ug/l	2 ug/l	
Cadmium	10 ug/l	5 ug/l	0.5 ug/l	
Chromium (total)	50 ug/l Method 218.8	10 ug/l Method 200, 1620	5 ug/l Method 200.9	50 µg/l
Chromium VI (hexavalent)				10 µg/l Method 218.6, 1636
Copper	20 ug/l	5 ug/l	3 ug/l	
Lead	100 ug/l	40 ug/l	3 ug/l	
Mercury (cold vapor)				0.2 ug/l
Nickel	30 ug/l	10 ug/l	5 ug/l	
Selenium		50 ug/l	5 ug/l	
Silver	50 ug/l	10 ug/l	2 ug/l	
Zinc	30 ug/l	10 ug/l		
Iron		Method 6010B, 200.7 <sup>5</sup>		
Cyanide (CN) - 57125 -				5 ug/l Method 335.3

Table B-1 Notes: GC - Gas Chromatography; GCMS - Gas Chromatography/Mass Spectrometry; LC - High Pressure Liquid Chromatography; FAA - Flame Atomic Absorption; ICP - Inductively Coupled Plasma; HPLC - High Purity Liquid Chromatography.

1. Minimum Level (ML) is the lowest level at which the analytical system gives a recognizable signal and acceptable calibration point for the analyte. The ML represents the lowest concentration at which an analyte can be measured with a known level of confidence. The ML is calculated by multiplying the laboratory determined method detection limit (MDL) by 3.18 (see 40 CFR part 136, Appendix B). Where the ML is listed but a test method is not specified, the permittee may use any of the available methods approved under 40 CFR 136, including alternatives approved by this permit that meet the ML. For further information, see EPA's *Methods and Guidance for the Analysis of Water* at [www.epa.gov/waterscience/methods/](http://www.epa.gov/waterscience/methods/). Where test methods are specified but no ML is identified for that method, the lowest ML for listed methods must be used before the concentration can be considered "non-detect".
2. For measuring the concentration of volatile organic compounds, Method 8260C (or the latest version) may be used as a substitute for CWA Methods 524.2, 602, 624, or 1624. Method 8260C must be preceded by Method 5030 as the preparation method. Any method changes must be accompanied by documented QA/QC test results to prove that the analytical measuring process can achieve the lower detection limit of Method 8260C.
3. For measuring the concentration of semivolatile organic compounds (including PAHs), Method 8270D may be used as a substitute for CWA Methods 610, 625, or 1625. Method 8270D must be preceded by Method 3535 or Method 3520C as the sample preparation method. In either case, the QC requirements of Method 3500B must be taken into account. The sample preparation method must be specified with the data analysis records. Method 8270D may be modified to provide lower detection limits using Selected Ion Monitoring (SIM). Any method changes must be accompanied by documented QA/QC test results to prove that the analytical process can achieve the lower detection limits of Method 8270D.
4. For measuring fuel oxygenates, Method 602 must be modified to include a heated purge.
5. Methods 6010b and 200.7 for metals may only be used when the sample is prepared with the SW-846 digestion method, Method 3010.

