Fact Sheet

The U.S. Environmental Protection Agency (EPA)
Proposes to Reissue a National Pollutant Discharge Elimination System (NPDES) Permit to Discharge Pollutants Pursuant to the Provisions of the Clean Water Act (CWA) to:

Dworshak Dam

Public Comment Start Date: September 29, 2022
Public Comment Expiration Date: November 14, 2022

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EPA Proposes To Issue NPDES Permit
EPA proposes to issue the NPDES permit for the facility referenced above. The draft permit places conditions on the discharge of pollutants from the facility to waters of the United States. In order to ensure protection of water quality and human health, the permit places limits on the types and amounts of pollutants that can be discharged from the facility.

This Fact Sheet includes:
- information on public comment, public hearing, and appeal procedures
- a listing of proposed effluent limitations and other conditions for the facility
- a map and description of the discharge location
- technical material supporting the conditions in the permit

CWA §401 Certification
Since this facility discharges to tribal waters and the Tribe does not have Treatment as a State (TAS), EPA is the certifying authority for the permit. See Section VIII.A. As explained below, EPA's 401 certification includes a condition that will be added to the permit pursuant to CWA section 401(d). Comments regarding the intent to certify should be directed to the EPA technical contact listed above.

Public Comment
Persons wishing to comment on, or request a Public Hearing for, the draft permit for this facility may do so in writing by the expiration date of the Public Comment period. A request for a Public Hearing must state the nature of the issues to be raised as well as the requester's name, address and telephone number. All comments and requests for Public Hearings must be in writing and should be submitted to EPA as described below.

By the expiration date of the public comment period, all written comments and requests must be submitted to conner.abigail@epa.gov.

After the Public Notice expires, and all comments have been considered, EPA's Regional Director for the Water Division will make a final decision regarding permit issuance. If no substantive comments are received, the tentative conditions in the draft permit will become final, and the permit will become effective upon issuance. If substantive comments are received, EPA will address the comments and issue the permit. The permit will become effective no less than 30 days after the issuance date, unless an appeal is submitted to the Environmental Appeals Board within 30 days pursuant to 40 CFR 124.19.

Documents are Available for Review

The draft permit, fact sheet, draft 401 Certification and other information can also be found by visiting the Region 10 NPDES website at: https://www.epa.gov/npdes-permits/about-region-10s-npdes-permit-program.

The draft Administrative Record for this action contains any documents listed in the References section. The Administrative Record or documents from it are available electronically upon request by contacting Abigail Conner.

For technical questions regarding the Fact Sheet, contact Abigail Conner at (206) 553-6358 or conner.abigail@epa.gov.conner.abigail@epa.gov. Services can be made available to persons with disabilities by contacting Audrey Washington at (206) 553-0523.

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Acronyms

BAT	Best Available Technology economically achievable
BCT	Best Conventional pollutant control Technology
BE	Biological Evaluation
wBO or BiOp	Biological Opinion
BOD_5	Biochemical oxygen demand, five-day
BMP	Best Management Practices
BPT	Best Practicable
°C	Degrees Celsius
CFR	Code of Federal Regulations
CFS	Cubic Feet per Second
COD	Chemical Oxygen Demand
CWA	Clean Water Act
CWIS	Cooling Water Intake Structure
DMR	Discharge Monitoring Report
DO	Dissolved oxygen
EFH	Essential Fish Habitat
EPA	U.S. Environmental Protection Agency
ESA	Endangered Species Act
IDEQ	Idaho Department of Environmental Quality
LA	Load Allocation
mg/L	Milligrams per liter
ML	Minimum Level
NOAA	National Oceanic and Atmospheric Administration
NPDES	National Pollutant Discharge Elimination System
OC	On-Center Spacing
O&M	Operations and maintenance
QAP	Quality assurance plan
SPCC	Spill Prevention and Control and Countermeasure
s.u.	Standard Units
TMDL	Total Maximum Daily Load

TOC	Total Organic Carbon
TSD	Technical Support Document for Water Quality-based Toxics Control (EPA/505/2-90-001)
TSS	Total suspended solids
USACE	U.S. Army Corps of Engineers
USFWS	U.S. Fish and Wildlife Service
USGS	United States Geological Survey
WD	Water Division
WLA	Wasteload allocation
WQBEL	Water quality-based effluent limit
WQS	Water Quality Standards

I. Background Information

A. General Information

This fact sheet provides information on the draft National Pollutant Discharge Elimination System (NPDES) permit for Dworshak Dam:

Table 1. General Facility Information for Dworshak Dam

NPDES Permit #:	**ID0028586**		
Applicant:	Dworshak Dam		
Type of Ownership	Federal - United States Army Corps of Engineers		
Physical Address:	1428 Northfork Drive Ahsahka, Idaho 83520		
Mailing Address:	P.O. Box 48 Ahsahka, Idaho 83520		
Facility Contact:	Greg Parker Operations Project Manager (208) 476-1251		
Facility Location:	Latitude 45.515010 N Longitude 116.295879 W		
Receiving Water	North Fork Clearwater River, Idaho		
Facility Outfalls	Outfall 001 002 003 004 005 006	Latitude 45.861389 N 45.861111 N 45.860833 N 46.860278 N 46.860278 N 46.860278 N	Longitude 116.506389 W 116.506111 W 116.505278 W 116.505278 W 115.505278 W 116.505278 W

B. Permit History

This will be the first NPDES permit issued for point source discharges from Dworshak Dam. There is one other NPDES permit for the Dworshak Dam nutrient enhancement project. An NPDES application for permit issuance was submitted by the permittee on August 22, 2019. EPA determined that the application was complete.

C. Tribal Coordination and Consultation

EPA consults on a government-to-government basis with federally recognized tribal governments when EPA actions and decisions may affect tribal interests. Meaningful tribal consultation is an integral component of the federal government's general trust relationship with federally recognized tribes. The federal government recognizes the right of each tribe to self-government, with sovereign powers over their members and their territory. Executive Order 13175 (November 2000) entitled "Consultation and Coordination with Indian Tribal Governments" requires federal agencies to have an accountable process to assure meaningful and timely input by tribal officials in the development of regulatory policies on matters that have tribal implications and to strengthen the government-to-government relationship with Indian tribes. In May 2011, EPA issued the "EPA Policy on Consultation and Coordination with Indian Tribes" which established national guidelines and institutional controls for consultation.

The Dworshak Dam is located on the Nez Perce Reservation of the Nez Perce Tribe of Indians (Nez Perce). The Nez Perce Tribe does not have Treatment as a State (TAS), therefore EPA is the permitting and certifying authority.

EPA electronically mailed the Nez Perce Tribe on August 3, 2021 to request a review of the preliminary draft permit. EPA contacted tribal staff from the Confederated Tribes of the Colville Reservation, the Spokane Tribe of Indians, Nez Perce Tribe, Coeur d'Alene Tribe, Kootenai Tribe, Shoshone-Bannock Tribes, Kalispel Tribe of Indians, Cowlitz Indian Tribe, Confederated Tribes of Warm Springs, Confederated Tribes of Grand Ronde, Yakama Nation, and the Confederated Tribes of the Umatilla Reservation by electronic mail on September 1, 2021 to provide a status update on the permit. EPA electronically mailed letters to each of these 12 tribes on November 3, 2021 to invite them to initiate government-to-government tribal consultation and to request review of a pre-draft copy of the permit and technical fact sheet.

EPA coordinated with the Nez Perce Tribe during development of the draft permit and CWA 401 certification.

II. Facility Information

A. Geographic Area

The U.S. Army Corps of Engineers (USACE) owns and operates a hydroelectric generating facility that discharges to the North Fork Clearwater River on the Nez Perce Reservation at river mile 1.9. The facility is in Ahsahka, Idaho. The nearest large cities are Lewiston, Idaho and Clarkston, WA at 45 miles to the west and Pullman, WA and Moscow, ID at 60 miles to the northwest.

The facility is located at the mouth of the North Fork Clearwater River which winds through timbered canyons on the western slopes of the Bitterroot mountain range.

Appendix A includes a map of the facility.

B. Facility Operations and Types of Discharges

The congressionally authorized Dworshak Dam Project includes the dam facilities, Dworshak Reservoir lands, powerhouse, recreation facilities, wildlife mitigation and the

Dworshak National Fish Hatchery. The facility discharges to the North Fork Clearwater River within Nez Perce Tribal lands. The facility is the highest straight-axis concrete gravity dam in the United States, and the third-highest dam of any kind in the United States with a structural height of 717 feet and crest length of 3,287 feet. Operation of the facility as a hydroelectric facility began in 1973. The dam includes three power generating units.

The primary authorized purpose of the facility is flood damage reduction. The facility was constructed following the severe floods of 1948 and has capacity to protect up to a 100-year flood event. The dam is also authorized for other purposes, including navigation, hydropower, fish and wildlife management, and recreation. Construction of the facility and reservoir blocked the passage of anadromous fish upstream of the dam. A fish hatchery at the North Fork Clearwater River provides some upstream access for anadromous fish.

The facility generates electricity using falling or flowing water to drive turbines and generators. The types of discharges from the facility are cooling water, equipment and floor drain-related water, and equipment and facility maintenance-related water. Hydroelectric generating water may also be exposed to lubricants on hydroelectric generating equipment, such as wicket gates and lubricated wire rope, and other in-water equipment. Sanitary waste is not covered under this permit and is not discharged through outfalls associated with this permit. There is a separate nutrient enhancement permit for Dworshak Reservoir (Permit No. ID0028444). Appendix A includes a map of the facility and outfall locations, and process diagrams for the outfalls.

Cooling Water Discharges

The facility uses river water to cool equipment resulting in discharges of non-contact cooling water and direct cooling water to the river. Non-contact cooling water is defined as “water used for cooling which does not come into direct contact with any raw material, intermediate product, waste product or finished product” (40 CFR 401.11(n)). Non-contact cooling water is used in cooling the turbine bearings, guide bearings, air compressors, generators, HVAC chillers, and power transformers.

Related to cooling water discharges is the cooling water intake structure (CWIS) at the facility. The CWIS at the facility removes water directly from the Clearwater River from two submerged intakes at the tailrace of the reservoir. There are two CWIS at Dworshak, mounted in the tailrace, one that feeds a 12” intake pipe and one that feeds an 18” intake pipe. Each CWIS has a rectangular bar structures to remove debris. The 12” intake strainer has a 1”x1/4” bar spaced 1.5” on-center (OC) and the 18” intake strainer has a 1”x1/2” bar spaced 1.5” OC.

The water from the CWIS is then pumped to a header leading into the turbine bearing oil cooler, thrust bearing oil cooler and surface air cooler of each unit and discharged through Outfalls 001, 002, and 003. Each pump drawing water from the cooling water header has a basket strainer before the pump. The basket strainers are constructed out of steel mesh and have 1/8” perforated openings. The basket strainers are regularly checked and cleaned of moss and algae buildup.

Equipment Drainage and Floor Drainage Discharges

Dworshak Dam has a series of canal systems and tunnels within the dam, and like many hydroelectric generating facilities, there is a tendency for water to leak into and through the dam. Drainage water is collected by floor drains, trench drains, station sumps and spillway sumps and sump pumps are used to discharge this water – along with oil, grease and other water from equipment and floor drains – through discrete outfalls ("equipment and floor drain-related water"). These discharges can be intermittent and seasonal, and the outfalls in certain stations can be inaccessible for sampling purposes. The drainage sump (Outfall 004) is the primary source of potential oil and grease discharges at Dworshak Dam. The transformer sump (Outfall 006) is also a source of dam leakage flows. Cooling water discharges may enter into equipment and floor drains, resulting in a commingled discharge, which could increase outfall water temperatures. Heat increases from commingled discharges are likely to be small or immeasurable, however, since most drainage water is leakage water or other water with temperature the same as leakage water.

The facility uses planning, tracking, and monitoring protocols to prevent and detect oil releases. For equipment and floor drain related discharges, the facility also uses skimmers and gravity oil/water separators on sumps. These oil/water separators use the force of gravity to separate the lower density oils as a layer on top of the oil/water interface and the heavier particulate matter (sludge) as a layer on the bottom of the oil/water separator. The design of oil/water separators is based on the following parameters: water flow rate, density of oil to be separated, desired oil removal capacity, and operating temperature range.

Equipment and Facility Maintenance-Related Water Discharges

The equipment and facility maintenance-related water discharges include river water pumped from the facility during periods of equipment, station, and facility maintenance. Maintenance-related waters from the unwatering sump (Outfall 005) is discharged approximately 12 hours/day. During equipment maintenance operation, discharges occur from the dewatering of equipment containing river water such as the turbine, penstock, navigation locks, and dewatering sumps, which may contain residual oil and grease, detritus, or silt.

Equipment Using Lubricants

Various equipment in the facility are lubricated with grease. These include greased bushings, where grease is used to lubricate bushings on wicket gates that control the flow of water from the penstock to the turbine and other in-water equipment. The system automatically greases the bushings when the unit is operating per manufacturer's specifications. Through the greasing process, water may enter into the river. Lubricated wire rope is used throughout the facility over water and in direct contact with water and greased, based upon the facility's preventative maintenance schedule. In-water equipment, such as bearings, blocks, trucks, and guides, in or above the water, may also come into contact with water during rainfall. The facility has Francis turbines, which are used at dams with a large hydraulic head and use fewer lubricants than the Kaplan turbines at many other Columbia and Snake River Dams. Francis turbines are less likely to involve oil and grease discharges to hydroelectric generation water, but leaks are still possible.

C. Types of Pollutants Associated with Facility Discharges

This draft permit addresses wastewater discharged from Outfalls 001-006. The permit does not address waters that flow over the spillway or pass through the turbines[1,2]. The pollutants associated with wastewaters from the above discharges are oil, grease, excess heat (temperature), pH, debris and silt from the strainer's screens.

Most discharges that affect water quality are ancillary to the direct process of generating electricity at a hydroelectric generating facility and result mostly from oil spills, equipment leaks, and improper waste storage. The draft permit proposes permit limits for oil and grease and pH. It also proposes monitoring for temperature, flow, dissolved oxygen, and mercury. Mercury monitoring is required in the draft permit in accordance with Nez Perce Tribal Code. The draft permit also requires development and implementation of a Best Management Practices (BMP) Plan and Annual Report, Environmentally Acceptable Lubricants (EAL) Plan and Annual Report, PCB Management Plan and Annual Reports, and CWIS Annual Report. The BMP Plan establishes practices and procedures to prevent, minimize or eliminate the discharge of oil and grease.

The BMP Annual Report requires an update of BMPs installed, an evaluation of their effectiveness, and a description of how BMPs will be optimized to address oil and grease discharges. The USACE has developed oil spill prevention plans, oil tracking accountability plans, analysis, and evaluation reports to comply with other environmental regulations. These plans may be used to comply with part or all of the BMP Plan, so long as the conditions required in the BMP Plan in Appendix B of the permit are met, and the USACE provides documentation and references to how other reports meet the permit conditions.

EALs are biodegradable lubricants. For equipment that use non-EAL lubricants, have an oil-water interface, or have a high likelihood that lubricants would enter into water, the draft permit requires the use of EALs, unless technically infeasible. The draft permit also requires an EAL Annual Report, which is an inventory of equipment that should be considered for EALs, a technical feasibility evaluation of the equipment, and annual updates of EAL implementation on equipment (Section VI.C.). The USACE has conducted numerous EAL analyses as part of its internal efforts to move towards EALs.

Section 316(b) of the Clean Water Act (CWA) seeks to minimize adverse environmental effects from CWIS. The permit requires best technology available (BTA) to be used to ensure that these effects are minimized. The permit also requires a CWIS Annual Report, a status report of the BTA and any studies and optimization related to the use and effectiveness of the BTA on fish mortality.

D. Outfall Description

The facility has six outfalls. The maximum discharges and discharges under standard operations for the six outfalls and the normal discharge time for each is listed in Table 2.

[1] *National Wildlife Federation v. Consumers Power Company*, 862 F.2d 580 (6th Cir. 1988)
[2] *National Wildlife Federation v. Gorsuch*, 693 F.2d 156 (D.C. Cir. 1982).

Outfalls 001, 002 and 003 discharge cooling water to the North Fork Clearwater River. Water is pumped from a submerged intake in the tailrace area. The water travels through a header leading into the turbine bearing oil cooler, thrust bearing oil cooler and surface air cooler of each unit generator. After heat exchange, the water passes through a discharge header exiting above the water level in front of the powerhouse.

Outfall 004 is the drainage sump which receives all equipment drainage and floor drain discharges in the powerhouse, except for domestic waste, grey water and the oil storage room. The drainage sump is serviced by 2 pumps discharging its content into the tailrace. Another possible flow from this sump is through an 8-inch pipe connected to the unwatering sump (Outfall 5).

Outfall 005 is the unwatering sump, with water from the draft tubes and through the cross connect pipe from the drainage sump (Outfall 004). Outfall 005 has 2 pumps that service the sump and discharge into the tailrace.

Outfall 006 discharges excess stormwater from the transformer sump and dam leakage flows into an undeveloped portion of the powerhouse where generating units #4, #5 and #6 were originally planned but never built. There are 2 pumps that service this area discharging above the tailrace area. The transformer bay has a skimmer and an oil-water seperator system.

Below are descriptions of outfalls that discharge into waters on the Nez Perce Reservation.

Table 2. Dworshak Dam Outfall Description

Outfall	Outfall Description	Type of Discharge	Maximum Daily Discharge	Average Daily Discharge and Frequency
001	Main Unit 1 Turbine Bearing and Non-Contact Cooling Water	Cooling Water	1.3 MGD	1.3 MGD; 10 months/year
002	Main Unit 2 Turbine Bearing and Non-Contact Cooling Water	Cooling Water	1.3 MGD	1.3 MGD; 6 months/year
003	Main Unit 3 Thrust Bearing and Non-Contact Cooling Water	Cooling Water	3.0 MGD	3.0 MGD; 6 months/year

004	Powerhouse Drainage Sump	Equipment and floor drain discharges, drainage sump flows	3.6 MGD	1.8 MGD; 2.5 hours/day
005	Unwatering Sump	Maintenance-related discharges, equipment and floor drain discharges, unwatering sump flows	4.3 MGD	2.1 MGD; 12 hours/day
006	Skeleton Bay	Transformer Sump flows, Dam Leakage Flows	5.8 MGD	2.9 MGD; 7.5 hours/day
Source: Dworshak Dam Permit Application, Submitted February 19, 2019				

E. Effluent Characterization

To characterize the effluent, EPA evaluated the facility's application form. Table 3 below summarizes information from the permit application. Data are limited, and there is one sample point per outfall. The facility also conducted influent temperature monitoring. All data are provided in Appendix B.

Table 3. Summary of Pollutants Detected in Outfalls

Pollutant	Minimum	Maximum
Oil and grease	Non-detect	Non-detect
Total organic carbon (TOC)	2.25 mg/L	7.55 mg/L
Chemical oxygen demand	<5 mg/L	5.47 mg/L
Biochemical oxygen demand	<2 mg/L	2.48 mg/L
Total Suspended Solids	<1 mg/L	<1 mg/L
Temperature (summer)	7 ºC	12 ºC
pH	7.0 s.u.	8.5 s.u.
Source: Dworshak Dam Permit Application, Submitted February 19, 2019		

F. Compliance History

The draft permit is new so there are no past permit violations.

III. Receiving Water

In drafting permit conditions, EPA must analyze the effect of the facility's discharge on the receiving water. The details of that analyses are provided in this Fact Sheet. This section summarizes characteristics of the receiving water that impact that analysis.

A. Receiving Water

The facility discharges from Dworshak Reservoir to river mile 1.9 of the North Fork Clearwater River into Nez Perce tribal waters near Ahsahka, Idaho.

The outflow at the facility varies during the year. The 2016-2020 average hydrograph at the tailrace of the dam peaks at over 250 kilo cubic feet per second (kcfs) in July and August and on average drops to 40 kcfs in September and October. In addition to flow variation within a given year, there is variation in outflow between years, as seen in Figure 1. Cold-water fish releases contribute to high flows during the summer months.

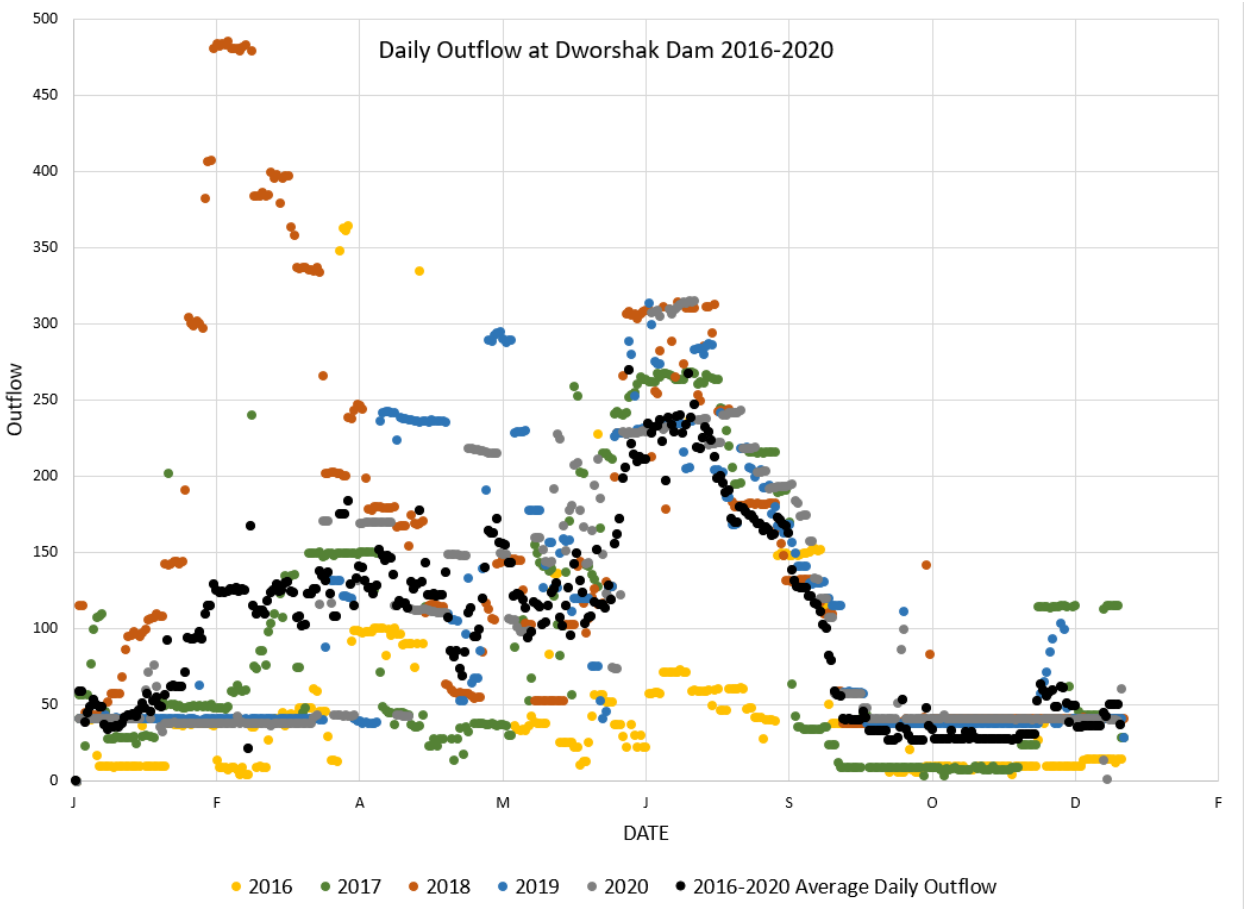

Figure 1. Average Daily Outflow, including spill, at Dworshak Dam 2016-2020
Data Source: Columbia River Data Access in Real Time, Columbia Basin Research, University of Washington.

Table 4 includes the 95th percentile of temperature and pH found in the receiving water.

Table 4. Externally Collected Receiving Water Quality Data

Parameter	Units	Percentile	Value
Temperature[1]	°C	95th	10
pH[2]	s.u.	95th	7.89
Source: 1. DART DWQI, 2016-2021; 2. Data collected USGS Gauge Station 13340000, 1973-2018			

In addition to external monitoring data, the facility collected background water samples over two days. Table 5 includes the maximum values measured over these two days of sampling.

Table 5. Facility-Collected Receiving Water Sampling Data Maximum Values

Temp (oC)	pH	BOD (mg/L)	TSS	COD	TOC (mg/L)	Ammonia (mg/L)	Oil/Grease	PCB (mg/L)
27.2	7.76	<2.0	<1	<5	6.56	0.0594	ND	ND
Source: Dworshak Dam Permit Application, Submitted February 19, 2019								

B. Water Quality Standards

Overview

Section 301(b)(1)(C) of the CWA requires the development of limitations in permits necessary to meet water quality standards. 40 CFR 122.4(d) requires that the conditions in NPDES permits ensure compliance with the water quality standards of all affected States and Tribes. A State's or Tribe's water quality standards are composed of use classifications, numeric and/or narrative water quality criteria and an anti-degradation policy.

The use classification system designates the beneficial uses that each water body is expected to achieve, such as drinking water supply, contact recreation, and aquatic life. The numeric and narrative water quality criteria are the criteria deemed necessary by the State to support the beneficial use classification of each water body. The anti-degradation policy represents a three-tiered approach to maintain and protect various levels of water quality and uses.

The Nez Perce Tribe has not applied for the status of Treatment as a State (TAS) from EPA for purposes of the Clean Water Act. When the Nez Perce Tribe is granted TAS, and when it has Water Quality Standards (WQS) approved by EPA, those tribal WQS will be used for determining effluent limitations. In the meantime, the Idaho WQS were used as reference for setting permit limits to protect tribal waters and the downstream waters in the State of Idaho.

Designated Beneficial Uses

The facility discharges from the Dworshak Reservoir to river mile 1.9 of the North Fork Clearwater River in the Lower North Fork Clearwater Sub-basin (HUC: 17060308), Water Body Unit C-1. At the point of discharge, the North Fork Clearwater River is protected for the following designated uses:

- cold water communities
- salmonid spawning
- primary contact recreation
- domestic water supply

In addition, all waters in Idaho are protected for agricultural and industrial water supply, wildlife habitat and aesthetics (IDAPA 58.01.02.100.03 b and c, 100.04 and 100.05, respectively).

C. Surface Water Quality Criteria

The criteria are found in the following sections of the Idaho Water Quality Standards:

- All Freshwater. The numeric and narrative criteria applicable to all freshwaters of the State are found in: IDAPA 58.01.02.200 (General Surface Water Quality Criteria), IDAPA 58.01.02.250 (Surface Water Quality Criteria For Aquatic Life Designations), IDAPA 58.01.02.251 (Surface Water Quality Criteria For Recreation Use Designations), IDAPA 58.01.02.252 (Surface Water Quality Criteria For Water Supply Designations), and IDAPA 58.01.02.253 (Surface Water Quality Criteria For Wildlife Habitat and Aesthetics Use Designations).

- Dissolved Oxygen Below Dams. Dissolved oxygen criteria below dams are referenced in IDAPA 58.01.02.276. Table 02 (Dissolved oxygen standards for waters discharged from dams, reservoirs ad hydroelectric facilities). Although the numeric criteria described for dissolved oxygen standards in 250.02.a.(*DO Criteria for surface waters*) and 250.02.f.i (*DO criteria related to salmon spawning*) do not apply at the point of discharge below dams, reservoirs and hydroelectric facilities, they do apply downstream from the point of measurement where important salmonid spawning habitat is located (IDAPA 58.01.02.276).

- Dissolved Gas Concentration/Supersaturation. Numeric and narrative criteria relevant for dissolved gas concentration and gas supersaturation can be found in IDAPA 58.01.02.250.01b and IDAPA 58.01.02.300. Application of the gas supersaturation standard is under the authority of the director and may be applied to account for excess stream flow conditions, assure protection of the fishery resource, or ensure compliance of operational procedures such that operations do not increase juvenile fish mortalities or interfere with adult fish migration (IDAPA 58.01.02.300).

- Toxic Substances. The numeric and narrative criteria for toxic substances for the protection of aquatic life, primary contact recreation and domestic water supply can be found at IDAPA 58.01.02.200.02 (Toxic Substances) and IDAPA 58.01.02.210.01a and 210.01b (Tables: 01a Criteria for Protection of Aquatic Life and 01b Criteria for Protection of Human Health).

- Agricultural Waters. Water quality criteria for agricultural water supply can be found in EPA's Water Quality Criteria 1972, also referred to as the "Blue Book" (EPA R3-73-033)

The draft permit contains language for the following narrative criteria:

- Toxic Substances. Surface waters of the state shall be free from toxic substances in concentrations that impair designated beneficial uses. These substances do not include suspended sediment produced as a result of nonpoint source activities (IDAPA 58.01.02.200.02).

- Deleterious Materials. Surface waters of the state shall be free from deleterious materials in concentrations that impair designated beneficial uses. These materials do not include suspended sediment produced as a result of nonpoint source activities (IDAPA 58.01.02.200.03).

- Floating, Suspended, or Submerged Matter. Surface waters of the state shall be free from floating, suspended, or submerged matter of any kind in concentrations causing nuisance or objectionable conditions or that may impair designated beneficial uses (IDAPA 58.01.02.200.05).

D. Impaired Waters/TMDLS

Section 303(d) of the CWA requires states and eligible Indian Tribes to identify specific water bodies where water quality standards are not met. For all 303(d)-listed water bodies and pollutants, the State or Tribe, where applicable, must develop total maximum daily loads (TMDLs) that will specify wasteload allocations (WLAs) for specific pollutants for point sources and load allocations (LAs) for non-point sources of pollutants, as appropriate. No Idaho tribes have 303(d) lists or TMDLs and the Nez Perce has not assessed this water. Idaho's 2014 303(d) List has been approved by EPA and is available on IDEQ's website, as well as an interactive map with links to approved TMDLs, at http://www.deq.idaho.gov/water-quality/surfacewater/monitoring-assessment/integrated-report.aspx. IDEQ TMDL information can also be found at http://www.deq.idaho.gov/water-quality/surface-water/tmdls/table-of-sbas-tmdls/.

Total Dissolved Gas

Elevated total dissolved gas is caused by spill events, when quickly flowing water entrains total dissolved gas at high levels. In the case of hydroelectric generating facilities, these spill events are "pass through" water, which are not regulated by NPDES permits (*See National Wildlife Federation v. Consumers Power Company*, 862 F.2d 580 (6th Cir. 1988); *National Wildlife Federation v. Gorsuch*, 693 F.2d 156 (D.C. Cir. 1982). Idaho previously maintained 303(d) listings for tribal waters, including a listing for dissolved gas supersaturation on Dworshak Reservoir to the mouth of the North Fork Clearwater. However, the State did not have jurisdiction over the tribal waters and, as such, could not include tribal waters on the State's 303(d) list. Therefore, there are currently no 303(d) listings in tribal waters in Idaho. However, in tribal coordination meetings on the permit with the Nez Perce Tribe, the Tribe indicated concerns about the impacts to fish from TDG that is produced by the dam. See Section VIII.A of the fact sheet for more information on proposed permit conditions for TDG.

IV. Effluent Limitations and Monitoring

Table 6 presents the effluent limits and monitoring requirements for the facility.

Table 6. Effluent Limitation and Monitoring Requirements for Outfalls 001, 002, 003, 004, 005, 006: Non-Contact Cooling Water, Drainage Sump, Unwatering Sump, and Skeleton Bay

Parameter	Units	Effluent Limitations	Monitoring Requirements		
			Sample Location	Sample Frequency	Sample Type
Parameters With Effluent Limits					
pH	std units	Between 6.5 – 9	Effluent	1/week or 1/month[2]	Grab
Oil and grease	mg/L	5 (daily maximum[1])	Effluent	1/week or 1/month[2]	Grab
Report Parameters					
Flow	mgd	Report	Effluent	1/month	Measurement/Calculation
Temperature	°C	Report 7DADM[3], daily maximum, and daily average.	Effluent	Continuous or 1/month[4]	Measurement/Calculation
Visible Oil Sheen, Floating, Suspended, or Submerged Matter	--	See Paragraph I.B.4 of this permit.			Visual Observation
Dissolved Oxygen	mg/L	Report	Effluent	1/quarter	Grab
Mercury and Methylmercury[5]	µg/L	Report	Effluent	2/year[6]	24-hour composite

Notes

1. Maximum daily effluent limit is the highest allowable daily discharge. The daily discharge is the average discharge of a pollutant measured during a calendar day. Calculate the daily discharge as the total mass of the pollutant discharged over the day.
2. In the first year of the permit, if there are no exceedances of the pH limit or oil and grease limit in an outfall, the required monitoring frequency for that pollutant is reduced to 1/month for that outfall. If there are exceedances in the first year of the permit, the frequency will remain 1/week for the remainder of the permit term for that outfall.
3. 7-day average daily maximum (7DADM). This is a rolling 7-day average calculated by taking the average of the daily maximum temperatures. The 7-day average daily maximum for any individual day is calculated by averaging that day's daily maximum temperature with the daily maximum temperatures of the three days prior and the three days after that date.
4. See Paragraph I.B.10. In the first six months of the effective date of the permit, monthly sampling is required, Continuous monitoring is required after the first six months of the effective date of the permit.
5. Requirement of the 401 Certification
6. See Permit I.B.11.

A. Statutory Requirements for Determining Effluent Limitations

Section 301(a) of the CWA prohibits the discharge of pollutants to waters of the United States unless the discharge is authorized pursuant to an NPDES permit. Section 402 of the CWA authorizes EPA, or an approved state NPDES program, to issue NPDES permits that authorize discharges subject to limitations and requirements imposed pursuant to CWA Sections 301, 304, 306, 401 and 403. Accordingly, NPDES permits typically include effluent limits and requirements that require the permittee to (1) meet national standards that reflect levels of currently available treatment technologies; (2) comply with EPA-approved state water quality standards in state waters; and (3) prevent unreasonable degradation of the surface water quality.

In general, the CWA requires that the effluent limits for a particular pollutant be the more stringent of either technology-based effluent limits or water quality-based effluent limits. Technology-based limits are set according to the level of treatment that is achievable using available technology. A water quality-based effluent limit is designed to ensure that the water quality standards applicable to a waterbody are being met and may be more stringent than technology-based effluent limits.

EPA first determines which technology-based effluent limits apply to a discharge in accordance with applicable national effluent limitation guidelines and standards (ELGs). Where ELGs have not been promulgated for a specific category of discharge, case-by-case technology-based effluent limits based on best professional judgment (BPJ) are developed. EPA further determines which water quality-based effluent limits apply to a discharge based upon an assessment of the pollutants discharged and a review of state water quality standards. Monitoring requirements must also be included in the permit to determine compliance with effluent limitations. Effluent and ambient monitoring may also be required to gather data for future effluent limitations or to monitor effluent impacts on receiving water quality.

B. Pollutants of Concern

Pollutants of concern are those that either have technology-based effluent limits or may need water quality-based limits. EPA identifies pollutants of concern for the discharge based on those which:

- Have a technology-based limit
- Have an assigned WLA from a TMDL
- Had an effluent limit in the previous permit
- Are present in the effluent monitoring. Monitoring data are reported in the application and DMR and any special studies
- Are expected to be in the discharge based on the nature of the discharge

A review of the discharges of hydroelectric generating facilities permitted by other states and information gathered from the permit application, facilities, and other sources reveal that the pollutants of concern are as follows:

- pH

- oxygen demanding pollutants (BOD and COD)
- oil and grease
- toxics
- total suspended solids (TSS)

C. Technology-based Effluent Limitations

Section 301(b) of the CWA requires technology-based controls on effluents. All NPDES permits must contain effluent limitations which: (a) control toxic pollutants and nonconventional pollutants through the use of "best available technology economically achievable" (BAT), and (b) control conventional pollutants through the use of "best conventional pollutant control technology" (BCT). In no case may BAT or BCT be less stringent than the "best practical control technology currently achievable" (BPT), which is the minimum level of control required by Section 301(b)(1)(A) of the CWA.

ELGs have not yet been developed by EPA for hydroelectric generating facility discharges.

D. Water Quality-Based Effluent Limitations

Statutory and Regulatory Basis

CWA Section 301(b)(1)(C) requires the development of limitations in permits necessary to meet WQSs. Discharges to State or Tribal waters must also comply with conditions imposed by the State or Tribe as part of its certification of NPDES permits under CWA Section 401. 40 CFR 122.44(d)(1) implementing CWA Section 301(b)(1)(C) requires that permits include limits for all pollutants or parameters which are or may be discharged at a level which will cause, have the reasonable potential to cause, or contribute to an excursion above any State or Tribal WQS, including narrative criteria for water quality. Effluent limits must also meet the applicable water quality requirements of affected States other than the State in which the discharge originates, which may include downstream States (40 CFR 122.4(d), 122.44(d)(4), see also CWA § 401(a)(2)).

The regulations require the permitting authority to make this evaluation using procedures which account for existing controls on point and nonpoint sources of pollution, the variability of the pollutant in the effluent, species sensitivity (for toxicity), and where appropriate, dilution in the receiving water. The limits must be stringent enough to ensure that WQSs are met and must be consistent with any available wasteload allocation for the discharge in an approved TMDL. If there are no approved TMDLs that specify wasteload allocations for this discharge; all of the WQBELs are calculated directly from the applicable WQSs.

Reasonable Potential Analysis and Need for Water Quality-Based Effluent Limits

EPA uses the process described in the *Technical Support Document for Water Quality-based Toxics Control* (*TSD*) to determine reasonable potential. To determine if there is reasonable potential for the discharge to cause or contribute to an exceedance of water quality criteria for a given pollutant, EPA compares the maximum projected receiving water concentration to the water quality criteria for that pollutant. If the projected receiving water concentration

exceeds the criteria, there is reasonable potential, and a water quality-based effluent limit must be included in the permit.

In some cases, a dilution allowance or mixing zone is permitted. A mixing zone is a limited area or volume of water where initial dilution of a discharge takes place and within which certain water quality criteria may be exceeded (EPA, 2014). While the criteria may be exceeded within the mixing zone, the use and size of the mixing zone must be limited such that the waterbody as a whole will not be impaired, all designated uses are maintained, and acutely toxic conditions are prevented.

The Idaho Water Quality Standards at IDAPA 58.01.02.060 provides Idaho's mixing zone policy for point source discharges. This permit does not authorize a mixing zone.

pH

The effluent limitation for Hydrogen Ion (pH) proposed in the draft permit for cooling water, sumps, drainage, and dewatering discharges is established to meet the Idaho water quality standards established for the protection of aquatic life. pH violations can be an indicator for problems with operations and maintenance if large amounts of chemicals or other pollutants were released. pH in Idaho surface waters is to fall within the range of 6.5 to 9.0 for all aquatic life designated uses (IDAPA 58.01.02.250.01a.).

Effluent pH data were compared to the water quality criteria. The measured range of pH from the facility's outfalls is 7.0 – 8.5, which falls within the range of Idaho water quality standards.

Biochemical Oxygen Demand (BOD), Chemical Oxygen Demand (COD), Dissolved Oxygen (DO)

BOD and COD are measures of the amount of degradable material that may deplete oxygen. The Idaho water quality standard for dissolved oxygen should exceed 6 mg/L at all times for cold water communities (IDAPA 58.01.02.250.02a). Other than narrative criteria stating that Ida ho surface waters "shall be free from oxygen-demanding materials in concentrations that would result in an anaerobic water condition (IDAPA 58.01.02.200.07)," there are no water quality standards in Idaho for BOD or COD. Oil and grease are oxygen-demanding substances. The drainage sump may also concentrate oxygen-demanding substances that may be present in pass through water. Therefore, BOD and COD could be present in sump discharges, and to a lesser degree, unwatering and cooling water discharges.

The permittee reported one sample for BOD and one sample for COD at each outfall. BOD concentrations at the facility ranged from <2.0 mg/L to 2.5 mg/L; COD concentrations at the facility ranged from <5.0 mg/L to 5.5 mg/L. Although these concentrations are low, there is not sufficient information to determine the impact of oxygen-demanding substances in the facility's discharges to dissolved oxygen in the North Fork Clearwater River. Therefore, the permit requires DO monitoring.

Oil and Grease

The oil and grease limits are derived from the narrative water quality criteria in the state water quality standards, which states that "waters shall be free from hazardous, toxic, deleterious, radioactive, floating, suspended or submerged matter that would impair designated uses (IDAPA 58.01.02.200.01-200.05);"

EPA interprets these narrative criteria as prohibiting a discharge to these waters that would cause an oil sheen. Although effluent concentrations are low for oil and grease, these are the primary pollutants introduced by facility operations and could be present in discharges from the outfalls. EPA has established daily maximum oil and grease limitations of 5 mg/L to represent the concentration at which there is an oil sheen on surface waters. This limit is consistent with several NPDES permits for other federal dams in Washington that EPA issued (see https://www.epa.gov/npdes-permits/draft-discharge-permits-federal-hydroelectric-projects-lower-snake-river). In addition, the State of Washington has included this limit in permits issued to shipyards[3] where a 5 mg/L limit was established to control for no visible oil sheen. This concentration was based on best professional judgment and on the detection limit for oil and grease, which is 5 mg/L. A daily maximum effluent limit of 5 mg/L will ensure the narrative WQS for deleterious, aesthetic, and no visible oil sheen are met. EPA believes this limit is reasonable to implement the narrative criteria.

The draft permit requires the permittee to develop and implement a BMP Plan and BMP Annual Reports, which includes tracking and accountability of oil use in the facility, minimization of any oil spills, proper operation and maintenance of all equipment that may release oil, and identification of and contingency planning for site-specific vulnerabilities for oil spills such as lack of secondary containment. For lubricants such as oil and grease, the permit requires the use of EALs to replace oil and grease, unless technically infeasible, to reduce the potential of oil and grease entering the river. The permit also requires an EAL Annual Report to track the progress of implementation and a 24-hour notification of any oil spills or visible oil sheen that require emergency action or notification under the facility's Spill Prevention Control and Countermeasure (SPCC) plan.

Toxics

Idaho has narrative criteria in their water quality standards at IDAPA 58.01.02.200.02 that prohibit toxic discharges in concentrations that impair designated beneficial uses.

Non-contact cooling water discharges do not contain or come into contact with raw materials, intermediate products, finished products, or process wastes. There is no information on whether discharges from the facility contain toxic or hazardous pollutants other than oil and grease.

To ensure that toxic discharges do not occur, the permit establishes narrative effluent limitations for toxic pollutants in Part I.B.2 of the permit. The permit does not allow for the

[3] Barnacle Point Shipyards WA-003099-6, Dakota Creek Industries WA-003141-1, Vigor Shipyards, Incorporated WA-000261-5, Everett Shipyard, Piers 1, 3 and Adjacent Areas WA-003200-0.

addition of toxic materials or chemicals and prohibits the discharge of PCBs. The permit requires the use of paints, caulk, and lubricants free of PCBs, unless technically infeasible. Further, additives used to control biological growth in such cooling systems are prohibited due to their inherent toxicity to aquatic life.

Total Suspended Solids (TSS)

The Idaho water quality standards have narrative criteria that apply to TSS: "Surface waters of the state shall be free from floating, suspended, or submerged matter of any kind in concentrations causing nuisance or objectionable conditions or that may impair designated beneficial uses (IDAPA 58.01.02.200.05)."

Suspended solids in water can cause turbidity and interfere with salmonid migration and growth. In the hydroelectric generating facility, water originates from the upstream river which may contain solids that pass through the operation. TSS is most likely present in sumps and floor drains, where they may accumulate. The cooling water intakes at the facility have rectangular bar structures covering the intake pipes and basket strainers before the pumps that draw water from the cooling water header to remove most sediment. TSS levels at the facility were measured at less than 1 mg/L.

The BMP Plan requires inspection and maintenance procedures with recordkeeping for the basket strainers because proper operation of the basket strainers is necessary to maintain low TSS concentrations in the discharge. The BMP Plan further requires facilities to clean intake screens and racks to reduce sediment that may enter the project. EPA has determined that TSS limits and monitoring are not needed for TSS because of relatively low levels of TSS in the discharge.

Temperature

The water quality standard for temperature in Idaho surface waters for cold water communities is 22°C or less with a maximum daily average of no greater than 19°C, while it is 13°C or less with a maximum daily average no greater than 9°C in salmonid spawning habitat (IDAPA 58.01.02.250.02b and IDAPA 58.01.02.250.02fii, respectively).

As previously explained, the North Fork Clearwater is not impaired for temperature below the facility. The USACE is required to take action to maintain and improve water temperatures for fish passage under the Endangered Species Act (ESA). These actions include maintaining the temperature at Lower Granite Dam on the Snake River below 68 degrees, if possible, using available reservoir-system management methods. To achieve this, cold water is released from the facility through the summer, contributing to the high flows during summer months. Since the facility provides cold water that cools the North Fork Clearwater River at the point of discharge, there is no reasonable potential at the point of discharge and the permit does not include temperature limits. However, downstream of the facility the river exceeds the temperature criteria. Therefore, due to the downstream impairment, the draft permit requires continuous effluent temperature monitoring in accordance with Permit Section I.B. This will allow for further evaluation of temperature for the next permit issuance.

Water Quality Based Effluent Limitations Summary

In summary, the following WQBELs in Table 7 will be applied in this permit.

Table 7. Proposed Water Quality Based Effluent Limitations

Parameter	Units	Effluent Limits	Designated Uses in Idaho WQS Linked to Specific Water Quality Criteria Used as Basis for Limits
pH	standard units	Not less than 6.5 or greater than 9 standard units (s.u.)	Aquatic Life
Oil and Grease	mg/L	5 (daily maximum)	Aquatic Life

E. Minimum Levels

All water samples must be analyzed using EPA-approved analytical methods and must be analyzed using a sufficiently sensitive method that will detect the concentration of the parameter if it is present.

Table 8. Minimum Levels Applicable for Dworshak Dam

Parameter	ML/Interim ML
Dissolved Oxygen	+/- 0.2 mg/L
Mercury, Total	0.0005 µg/L
Methylmercury	0.06 ng/L
pH	N/A
Temperature	+/- 0.2ºC
Oil and Grease	5 mg/L

F. Anti-degradation

The WQS contain an antidegradation policy providing three levels of protection to water bodies in Idaho (IDAPA 58.01.02.051).

- Tier 1 Protection. The first level of protection applies to all waters subject to the jurisdiction of the Clean Water Act and ensures that the existing in stream water uses and the level of water quality necessary to protect the existing uses shall be maintained and protected (IDAPA 58.01.02.051.01)
- Tier 2 Protection. The second level of protection applies to those water bodies considered high quality and ensures that no lowering of water quality will be allowed unless deemed necessary to accommodate important economic or social development (IDAPA 58.01.02.051.02).
- Tier 3 Protection. The third level of protection applies to water bodies that have been designated outstanding resource waters (ORWs) and requires water quality shall be

maintained and protected from the impacts of point and nonpoint source activities (IDAPA 58.01.02.051.03).

EPA is required under Section 301(b)(1)(C) of the CWA and implementing regulations (40 CFR 122.4(d) and 122.44(d)) to establish conditions in NPDES permits that ensure compliance with state and tribal water quality standards. A facility must meet antidegradation requirements to ensure that all existing and designated uses are maintained and protected. No degradation may be allowed that would interfere with, or become injurious to, existing or designated uses, except as provided for in Chapter 173-201A WAC and at 40 CFR 131.35(e)(2).

The effluent limits in the draft permit contain limits for oil and grease and pH. The permit also prohibits discharges of toxic substances, including PCBs, in toxic amounts that may cause or contribute to an impairment of designated uses in violation of the State of Idaho water quality standards. The permit requires additional monitoring for flow and temperature in the effluent.

The effluent limits and monitoring requirements contained in the permit ensure compliance with the narrative and numeric criteria in the water quality standards. Therefore, it was determined that the permit will protect and maintain existing and designated beneficial uses in compliance with the Tier 2 provisions for all pollutants.

G. Anti-backsliding

Section 402(o)(2) of the Clean Water Act and federal regulations at 40 CFR 122.44 (l) generally prohibit the renewal, reissuance or modification of an existing NPDES permit that contains effluent limits, permit conditions or standards that are less stringent than those established in the previous permit (i.e., anti-backsliding) but provides limited exceptions. This is a new permit; therefore, backsliding is not an issue.

V. Monitoring and Reporting Requirements

A. Basis for Effluent and Surface Water Monitoring

Section 308 of the CWA and 40 CFR 122.44(i) require monitoring in permits to determine compliance with effluent limitations. Monitoring may also be required to gather effluent and surface water data to determine if additional effluent limitations are required and/or to monitor effluent impacts on receiving water quality.

The permittee is responsible for conducting the monitoring and for reporting results on DMRs or on the application for renewal, as appropriate, to EPA. The permittee must analyze water samples using sufficiently sensitive EPA-approved analytical methods.

B. Monitoring Locations

Discharges authorized by this permit must be monitored at each outfall identified in the permit. All facilities are required to monitor for applicable parameters and pollutants after the last point in the treatment train before the treated effluent leaves the facility for compliance

with the permit limitations described in Section IV of this fact sheet ("Effluent Limitations and Monitoring").

C. Monitoring Frequencies

Monitoring frequencies are based on the nature and effect of the pollutant, as well as a determination of the minimum sampling necessary to adequately monitor the facility's performance. The permittee has the option of taking more frequent samples than are required under the permit. These samples must be used for averaging if they are conducted using EPA-approved test methods (generally found in 40 CFR Part 136) or as specified in the permit.

The monitoring frequency is established for flow, oil and grease, and pH at once per week in the first year for Outfalls 001-006. For oil and grease and pH, if there are no detections in an outfall in the first year, the monitoring frequency of the respective pollutant is reduced to once per month. The permit requires flow to be reported by measurement or calculation at each outfall. The permittee may report the outfall design flow or measure flows collected by a meter. The permittee may also calculate flow particularly for those outfalls that operate intermittently, such as by multiplying pump rates and operating time.

The measurement frequency for temperature monitoring is required at once per month during the first six months of the effective date of the permit. Continuous monitoring is required after the first six months of the effective date of the permit.

The monitoring frequency for dissolved oxygen monitoring is once per quarter, and the monitoring frequency for mercury and methylmercury monitoring is twice per year (see Part VIII.A), for Outfalls 001-006.

D. Submission of Discharge Monitoring Reports

The permit requires that the permittee submit DMR data electronically using NetDMR. NetDMR is a national web-based tool that allows DMR data to be submitted electronically via a secure Internet application.

EPA currently conducts free training on the use of NetDMR. Further information about NetDMR, including upcoming trainings and contacts, is provided on the following website: https://netdmr.epa.gov. The permittee may use NetDMR after requesting and receiving permission from EPA Region 10.

Part III.B of the Permit requires that the Permittee submit a copy of the DMRs to the Nez Perce Tribe. Currently, the permittee may submit a copy to the Nez Perce Tribe by one of three ways: (1) a paper copy may be mailed, (2) the email address for the Nez Perce Tribe may be added to the electronic submittal through NetDMR, or (3) the permittee may provide the Nez Perce viewing rights through NetDMR.

VI. Special Conditions

A. Quality Assurance Plan (QAP)

40 CFR 122.41(e) requires the permittee to develop a QAP to ensure that the monitoring data submitted are accurate and to explain data anomalies if they occur. The draft permit proposes

that hydroelectric generating facilities complete and implement a QAP within 180 days of their authorization to discharge from EPA.

The permittee is required to follow specific sampling procedures [i.e., EPA-approved quality assurance, quality control, 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) throughout all sample collection and analysis activities to ensure that quality data are collected.

The QAP must consist of standard operating procedures that the permittee must follow for collecting, handling, storing and shipping samples, laboratory analysis, and data reporting. It must be available on-site for inspection at the request of EPA.

40 CFR 122.41(e) requires the permittee to properly operate and maintain their facilities, including "adequate laboratory controls and appropriate quality assurance procedures." To implement this requirement, the permit requires that the permittee develop or update a QAP that ensures that the monitoring data submitted to EPA is complete, accurate, and representative of the environmental or effluent conditions.

B. Best Management Practices (BMP) Plan

Pursuant to Section 402(a)(1) of the Clean Water Act, development and implementation of a BMP Plan may be included as a condition in NPDES permits. Section 402(a)(1) authorizes EPA to include miscellaneous requirements in permits on a case-by-case basis, which are deemed necessary to carry out the provisions of the Act. BMPs, in addition to effluent limitations, are required to control or abate the discharge of pollutants in accordance with 40 CFR 122.44(k). The BMP Plan requirement has also been incorporated into the permit in accordance with EPA BMP guidance (EPA, 1993).

The permit requires the development and implementation of a site-specific BMP Plan, which prevents or minimizes the generation and potential release of pollutants from the facility to the waters of the United States through BMPs. This includes, but is not limited to, oil accountability tracking; site-specific measures to prevent the escape of grease and heavy oils used for lubrication and hydraulics; identification of site-specific vulnerabilities, ways to address these vulnerabilities, and contingency planning for potential oil releases from these vulnerabilities; and measures to reduce the need for lubricants for all facility equipment that come in contact with river water.

The BMP Plan shall identify potential sources of pollution which may reasonably be expected to affect the quality of discharges associated with day-to-day work activity at the facility from equipment and floor drain-related water, maintenance-related water (collectively referred to as the "internal facility drainage water"), and any other facility-related water. The BMP Plan shall describe and ensure the implementation of practices which are to be used to eliminate or reduce the pollutants in internal facility drainage water discharges and facility-related water associated with operations at the facility and to assure compliance with the terms and conditions of this permit. The BMP Plan should incorporate

elements of pollution prevention as set forth in the Pollution Prevention Act of 1990 (42 U.S.C. § 13101).

Dworshak Dam is also subject to the Oil Pollution Prevention Act and must develop a SPCC plan as described at 40 CFR Part 112. EPA and Ecology administer this through a separate regulation outside of NPDES. However, similar to the SPCC plan, the BMP Plan is intended to prevent oil spills from the facility. An SPCC plan requires a facility to list locations of oil containers, types of oil and storage capacity, preventive measures to ensure safe handling of oils, secondary containment of oil storage, methods of disposal, contacts at the National Response Center, and emergency measures that will be taken if an oil spill occurs. The BMP Plan reinforces and complements requirements from the SPCC plan. To the extent that requirements from the SPCC plan fulfill BMP Plan requirements, the BMP Plan may cite to portions of the SPCC plan where appropriate.

The permittee must develop a BMP Plan within 180 days of the effective date of the permit and certify to EPA and the Nez Perce Tribe in writing, the development and implementation of the BMP Plan. The certification must be signed in accordance with the Signatory Requirements in the permits. The permit also requires a BMP Annual Report. The purpose of the report is to evaluate the effectiveness of the implementation of BMPs, identify which BMPs have been effective, evaluate BMPs which have been ineffective, and use the information to inform adaptive management of the BMPs. The BMP Annual Report should describe any changes in the facility or in the operation of the facility which materially increases the potential for an increased discharge of pollutants. The BMP Annual Report must be submitted to EPA and the Nez Perce Tribe by February 28 following the first calendar year of permit coverage, and annually thereafter. The BMP Plan must be amended whenever there is a change in the facility or in the operation of the facility which materially increases the potential for an increased discharge of pollutants. The BMP Annual Report may serve as an addendum to update the BMP Plan.

C. EAL Plan and EAL Annual Reports

Pursuant to Section 402(a)(1) of the Clean Water Act, development and implementation of an EAL Annual Report may be included as a condition in NPDES permits. Section 402(a)(1) authorizes EPA to include miscellaneous requirements in permits on a case-by-case basis, which are deemed necessary to carry out the provisions of the Act. EALs, in addition to effluent limitations, are required to control or abate the discharge of pollutants in accordance with 40 CFR 122.44(k).

The permit requires the use of EALs for all equipment with oil to water grease interfaces, unless technically infeasible. EPA's 2011 Environmentally Acceptable Lubricants report defines EALs as "lubricants that have been demonstrated to meet standards for biodegradability, toxicity, and bioaccumulation potential that minimize their likely adverse consequences in the aquatic environment, compared to conventional lubricants." The permit requires that EALs used in hydroelectric generating facilities are consistent with the definition of EALs in EPA's 2011 Environmentally Acceptable Lubricants report. The permit defines technically infeasible for EALs as follows: no EAL products are approved for use in a given application that meet manufacturer specifications for that equipment; products which

come pre-lubricated (e.g., wire ropes) and have no available alternatives manufactured with EALs; or products meeting a manufacturer's specifications are not available.

The permittee must also develop an EAL Annual Report, which will require an evaluation of equipment that are candidates for EAL use, whether EALs are technically feasible, and a timeline for which EALs will be implemented. It also requires the report to be updated annually. The USACE has completed a series of reports on the feasibility of EALs and prioritization of EALs. Several of these reports may fulfill a part of the permit requirements. Any of these reports may be used and if needed, supplemented, to fulfill the permit requirements.

Wicket gates, in-line equipment, lubricated wire ropes, and Francis turbines all use lubricants which may come into contact with water. This may result in release of lubricants into water. Currently, oil and grease are the primary lubricants used for equipment. However, EALs are an alternative lubricant that are biodegradable and less harmful to aquatic life species. EALs also offer a reasonable alternative to longer-term, but costly solutions such as oil-free turbines. EALs prevent or minimize the generation and potential release of pollutants from the facility to the waters of the United States.

The USACE has completed several reports evaluating EALs, comparing cost and feasibility with oil and grease lubricants, or mineral oils. An August 2015 study conducted by the USACE by Medina found that while EALs may be more costly in the short-term compared to mineral oils, EALs may last longer and need to be applied less. In addition, some EALs may be more effective than conventional mineral oil-based lubricants. Therefore, EALs in the long-term may be more cost effective. However, there are still some cases where EALs or other equivalent alternatives may be technically infeasible or are unknown. The information from the EAL Annual Report will help to inform the next permit cycle on the feasibility of using EALs to address potential releases from oil and grease lubricants.

D. PCB Management Plan and PCB Annual Reports

Section 402(a)(2) of the Clean Water Act allows EPA to include requirements in permits on a case-by-case basis, which are deemed necessary to carry out the cited provisions of the CWA. 40 CFR 122.44(k) allows the permitting authority to include requirements to implement BMPs in NPDES permits to control or abate the discharge of pollutants whenever necessary to achieve effluent limitations and standards or to carry out the purposes and intent of the CWA. BMPs are important tools for waste minimization and pollution prevention.

There are a range of potential sources of PCBs at dams, including transformers, transformer oil, other equipment oil, bushings, paints and caulks. In accordance with 40 CFR 122.44(k) the permit requires BMPs to control or abate the discharge of PCBs from the facility through the development and implementation of a PCB Management Plan (PMP).

The permittee must develop a PMP during the first year of the five-year permit cycle. The purpose of the PMP is to:

- Identify potential sources of PCBs and potential pathways for PCB discharges.

- Document actions that have been and will be established to limit the likelihood of PCB discharges through removal, containment or other mechanisms.
- Identify outfalls associated with potential PCB discharges.

The USACE has completed a series of internal reports on PCBs and has internal systems for tracking the disposal of equipment with PCBs. Several of these reports may fulfill a part of the permit requirements. Information from any of these reports may be used and if needed, supplemented, to fulfill the permit requirements.

Following the development of the PMP, the permittee must conduct two consecutive years of characterization monitoring for outfalls associated with potential PCB discharges. The permit requires monitoring once in the winter and once in the summer during the two consecutive years of the permit cycle. Monitoring in the winter and in the summer is required because the weathering of PCBs can be a function of river temperature, so monitoring results from both of these temperature conditions provide a more comprehensive characterization of annual PCB discharges. Monitoring during warm and cool river conditions during two consecutive years should be sufficient to capture any PCB discharges.

The permit requires characterization monitoring using EPA Method 608.3 (https://nepis.epa.gov/Exe/ZyPURL.cgi?Dockey=P100LVIY.txt) on the effluent for outfalls identified in the PMP as having potential PCB discharges. EPA Method 608.3 is appropriate for sampling dam discharge water because it is an EPA-approved method for PCBs and analyzes for PCB Aroclors. The range of potential sources of PCBs at dams are likely to exhibit Aroclor patterns if present in discharge water, in contrast to PCB congeners which may indicate background PCBs present in the North Fork Clearwater or sources of inadvertently produced PCBs within the dam. Since the PCB requirements in this permit are focused on sources of PCBs from the dam, sampling methods for Aroclors are more appropriate. The reporting limit for this method and matrix is expected to be 0.1 µg/L, which is sufficient to capture PCB discharges associated with PCB sources in the dam.

The permit requires a PCB Annual Report following the development of the PMP (years 2-5 of the permit cycle). For the two-year sampling window only, the annual report will include the results of the characterization monitoring conducted during these two years of the permit cycle, including sampling date, analysis method, analysis date and lab. In addition, the PCB Annual Report must report the progress on source identification investigations, BMP implementation, and current and future actions to adapt and refine BMP approaches during the five-year permit cycle.

E. CWIS Plan, Evaluation Report, and BTA Annual Certification

Section 316(b) of the CWA requires that facilities with CWIS ensure that the location, design, construction, and capacity of the structure reflect the best technology available (BTA) to minimize adverse impacts on the environment from impingement and entrainment of fish and other aquatic organisms.

The 2014 Section 316(b) regulations for cooling water intake structures at existing facilities establish, among other things, substantive requirements for cooling water intake structures meeting certain thresholds.[1] The Agency has determined that, in light of the text, structure, history and purpose of the regulation, in the case of hydroelectric facilities, the rule is ambiguous as to application of the substantive requirements and that EPA never intended that the rule's substantive provisions would apply to them. Rather, pursuant to 40 CFR 125.90(b), all cooling water intake structures at hydroelectric facilities are subject to best professional judgment (BPJ) Section 316(b) cooling water intake structure conditions (EPA, 2021). This provision provides that a cooling water intake structure not subject to substantive provisions under the existing facility rule (40 CFR 125.94-99) or another 316(b) requirements rule must meet requirements established on a case-by-case, BPJ basis. Consequently, EPA is today proposing to establish case-by-case, BPJ 316(b) conditions for these hydroelectric facilities.

To determine if BTA requirements are satisfied, EPA used the framework outlined in EPA's 2022 memo, "Transmittal of the Revised Framework for Best Professional Judgment for Cooling Water Intake Structures at Hydroelectric Facilities." The memo states that four factors can be considered "technologies" that could minimize adverse environmental impacts from the use of a CWIS at hydroelectric facilities. EPA may use any of the four factors below, or other facility-specific factors, in its BPJ analysis to determine whether BTA requirements have been satisfied. Any combination of one or more of the factors below may be used to address entrainment and impingement. As described in EPA's 2022 memo, EPA generally expects that a hydroelectric facilities' existing controls are technologies that can be determined to satisfy the BTA requirement to minimize entrainment and impingement mortality.

Factors applicable to all facilities:

1) Volume of cooling water used relative to other power generation facilities and relative to total water use at the facility
2) Cooling water withdrawn relative to waterbody volume or flow
3) Location of the intake structure
4) Technologies at the facility

For this facility, EPA relied on factor 2, cooling water withdrawn relative to waterbody volume or flow to meet the entrainment requirement, and factor 4, technologies at the facilities, to meet the impingement requirement. EPA's 2022 memo describes guidelines to evaluate these four factors.

The memo explains that in previous rulemakings, EPA stated that using a low percentage of the waterbody flow or volume that is used for cooling could be a factor that informs the degree of potential entrainment. Facilities that use a low percentage of the mean annual flow of a river or stream may meet BTA requirements to minimize entrainment. At the facility the

[1] The final section 316(b) existing facilities rule states that the substantive provisions of the rule apply to any facility that is 1) a point source 2) with a cooling water intake structure with a design intake flow greater than 2 MGD, 3) using 25 percent of the withdrawn water for cooling. 40 C.F.R. § 125.91(a).

minimum outflow of the dam into the North Fork Clearwater between 2016-2021 on record is 1.00 kcfs, or 646 MGD. The maximum CWIS intake is 17.9 MGD. The percentage of waterbody flow used for cooling is thus 2.8%. The low percentage minimize the potential for entrainments at the facility and satisfies the entrainment requirement.

To meet the impingement requirement, EPA considered the strainers and structures over the intake pipes. The rectangular bar structures mounted over the intake pipes for the CWIS prevent large debris and species from entering the pipe.

There are also basket strainers for each pump that draws water from the cooling water header. The basket strainers are constructed out of steel mesh and have 1/8" perforated openings. These basket strainers are regularly checked and cleaned of moss and algae. These strainers must be checked and cleaned in accordance with the BMP Plan in Appendix B of the permit.

To resolve uncertainty around any possible impingement and to better understand CWIS BTA at the facility to inform the next permit cycle, the draft permit requires a CWIS Evaluation Report. By one (1) year from the effective date of the final permit, the permittee must provide EPA and the Nez Perce Tribe with a CWIS Evaluation Report. The CWIS Evaluation Report must include the locations of the cooling water intake structures, an evaluation of strainers and fish presence, information on current fish impingement and entrainment, and an evaluation of additional operations or technologies to minimize fish impingement and entrainment.

In addition, the permit requires the permittee to submit a CWIS Annual Certification by February 28 after the first full calendar year of permit coverage and annually thereafter. This Annual Certification must verify that BTA has been properly operated and maintained and document any changes to the facility. These conditions and annual certification requirements will help ensure that fish impingement mortality and entrainment at CWIS are minimized, and that CWIS are maintained and optimized throughout the permit cycle.

As described above, EPA generally expects that a hydroelectric facilities' existing controls are technologies that can be determined to satisfy the BTA requirement to minimize entrainment and impingement mortality.

VII. Environmental Justice Considerations

As part of the permit development process, EPA Region 10 conducted a screening analysis to determine whether this permit action could affect overburdened communities. "Overburdened" communities can include minority, low-income, tribal, and indigenous populations or communities that potentially experience disproportionate environmental harms and risks. EPA used a nationally consistent geospatial tool that contains demographic and environmental data for the United States at the Census block group level. This tool is used to identify permits for which enhanced outreach may be warranted.

The facility is not located within or near a Census block group that is potentially overburdened. The permit does not include any additional conditions to address environmental justice.

Regardless of whether a facility is located near a potentially overburdened community, EPA encourages permittees to review (and to consider adopting, where appropriate) Promising Practices for Permit Applicants Seeking EPA-Issued Permits: Ways To Engage Neighboring Communities (see https://www.federalregister.gov/d/2013-10945). Examples of promising practices include: thinking ahead about community's characteristics and the effects of the permit on the community, engaging the right community leaders, providing progress or status reports, inviting members of the community for tours of the facility, providing informational materials translated into different languages, setting up a hotline for community members to voice concerns or request information, follow up, etc. For more information, please visit https://www.epa.gov/environmentaljustice and Executive Order 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations.

VIII. Other Legal Requirements

A. CWA § 401 Certification

CWA Section 401 requires the state in which the discharge occurs to certify that the permit meets the enumerated provisions of the CWA and "other appropriate requirements of State [or tribal] law." 33 USC § 1341(d). Since this facility discharges to tribal waters and the Tribe has not been approved for TAS from EPA, EPA is the certifying authority. EPA is taking comment on EPA's intent to certify this permit with the conditions explained below.

Total Dissolved Gas

As discussed in Section III.D, TDG can become elevated downstream of the facility during spill events. The Idaho WQS for TDG is 110%, as TDG levels over this level are detrimental to the health of aquatic life. As described in the 2022 Fish Passage Plan, Dworshak Dam is operated to maintain downstream TDG levels below 110% whenever possible. Recent exceedances have occurred due to outfall repair (Summer 2017), and high volumes of spring runoff (Spring 2022). Due to the exceedances of the TDG standard at the dam and the harmful effects of exceedances, the Nez Perce Tribe is concerned about the harmful effects of the exceedances on downstream aquatic life.

As such, the draft 401 Certification requires that the Corps notify the Director of Water Resources at the Nez Perce Tribe in the case of planned operations that are expected to result in an exceedance of the 110% TDG standard. The Corps must also provide the Director of Water Resources at the Nez Perce Tribe with notification within 24 hours when TDG downstream of the dam exceeds 110%.

Mercury Monitoring

Atmospheric deposition is the primary source of mercury (Hg) to aquatic ecosystems. Under certain conditions, Hg may be converted to methylmercury (MeHg) (Benoit et al., 2002; Eckely and Hintelmann, 2006; Gilmour and Henry, 1991; Hintelman et al., 2000).

Methylmercury bioaccumulates and biomagnifies in food webs, and exposure to MeHg may cause severe human health effects (Mergler et al., 2007).

Biogeochemical conditions in reservoirs have been shown to promote the conversion of deposited Hg into MeHg. MeHg has also been shown to accumulate within fish tissue samples. MeHg accumulates at depth within a reservoir and may be discharged through dam outfalls into downstream waters.

The conditions that create and discharge MeHg into downstream waters may exist at Dworshak Dam. Because of the potential for the discharge of Hg and MeHg into downstream waters, the Nez Perce Tribe requested that EPA include mercury monitoring in the permit. Nez Perce Tribal Code § 4-30-50(a)(4)(E) states that "[a] person commits a water infraction if he …. Operates a point source … in a manner which interferes with any right of the Nez Perce Tribe…." The Tribe has treaty fishing rights at usual and accustomed places within the Clearwater River. There is a lack of information regarding Hg and MeHg in the discharge from the outfalls at Dworshak Dam. Therefore, to ensure that tribal treaty rights are protected and Tribal Code § 4-30-50(a)(4)(E) is not violated, EPA has included Hg and MeHg monitoring as a condition in the draft 401 Certification.

The Corps must monitor at all 6 outfalls twice a year. The samples will be taken twice a year in March and August, beginning in March 2024. The timing of monitoring may be modified if agreed upon by EPA, Nez Perce Tribe, and the permittee. The permittee must also notify the Nez Perce Tribe of planned sampling dates, 30 days prior to such dates.

B. Endangered Species Act

Section 7 of the Endangered Species Act requires federal agencies to consult with National Oceanic and Atmospheric Administration Fisheries (NOAA Fisheries) and the U.S. Fish and Wildlife Service (USFWS) if their actions could beneficially or adversely affect any threatened or endangered species. The threatened or endangered species in the area of discharge are Chinook and Steelhead Salmon (Snake River fall-run ESU) and Bull Trout are in the area of discharge. EPA is developing a Biological Evaluation (BE) to evaluate potential impacts to ESA species.

C. Essential Fish Habitat

Essential fish habitat (EFH) is the waters and substrate (sediments, etc.) necessary for fish to spawn, breed, feed, or grow to maturity. The Magnuson-Stevens Fishery Conservation and Management Act (January 21, 1999) requires EPA to consult with NOAA Fisheries when a proposed discharge has the potential to adversely affect EFH (i.e., reduce quality and/or quantity of EFH). A review of the Essential Fish Habitat documents shows that Bull trout, Chinook and Steelhead Salmon are present in the area of discharge.

The EFH regulations define an adverse effect as any impact which reduces quality and/or quantity of EFH and may include direct (e.g. contamination or physical disruption), indirect (e.g. loss of prey, reduction in species' fecundity), site specific, or habitat-wide impacts, including individual, cumulative, or synergistic consequences of actions. EPA is in the

process of working with the NOAA Fisheries on the EFH assessment. EPA has provided NOAA Fisheries with copies of the draft permit and fact sheet during the public notice period. Any comments received from NOAA Fisheries regarding EFH will be considered prior to issuance of these permits.

D. National Environmental Policy Act (NEPA) [42 USC § 4321 et.seq.]

Regulations at 40 CFR 122.49, list the federal laws that may apply to the issuance of permits i.e., ESA, National Historic Preservation Act, the Coastal Zone Act Reauthorization Amendments (CZARA), NEPA, and Executive Orders, among others. The NEPA compliance program requires analysis of information regarding potential impacts, development and analysis of options to avoid or minimize impacts; and development and analysis of measures to mitigate adverse impacts.

Since hydroelectric generating facilities are not new sources (i.e., they do not have any EPA-promulgated ELGs or new source performance standards (NSPS) specific to their operation), EPA determined that no Environmental Assessments (EAs) or Environmental Impact Statements (EISs) are required under NEPA.

E. Historic Preservation Act

This permit will not authorize the construction of any water resources facility or the impoundment of any water body or have any effect on historical property.

F. Paperwork Reduction Act [44 USC § 3501 et seq.]

The information collection required by this permit has been approved by OMB under the provisions of the Paperwork Reduction Act, 44 U.S.C.3501 et seq., in submission made for the NPDES permit program and assigned OMB control numbers 2040-0086 (NPDES permit application) and 2040-0004 (discharge monitoring reports). Additionally, the draft permit requires electronic reporting for discharge monitoring reports to reduce reporting time and paper mailing costs.

G. Standard Permit Provisions

Specific regulatory management requirements for NPDES permits are contained in 40 CFR 122.41. These conditions are included in the permits as standard regulatory language that must be included in all NPDES permits. The standard regulatory language covers requirements such as monitoring, recording, reporting requirements, compliance responsibilities, and other general requirements.

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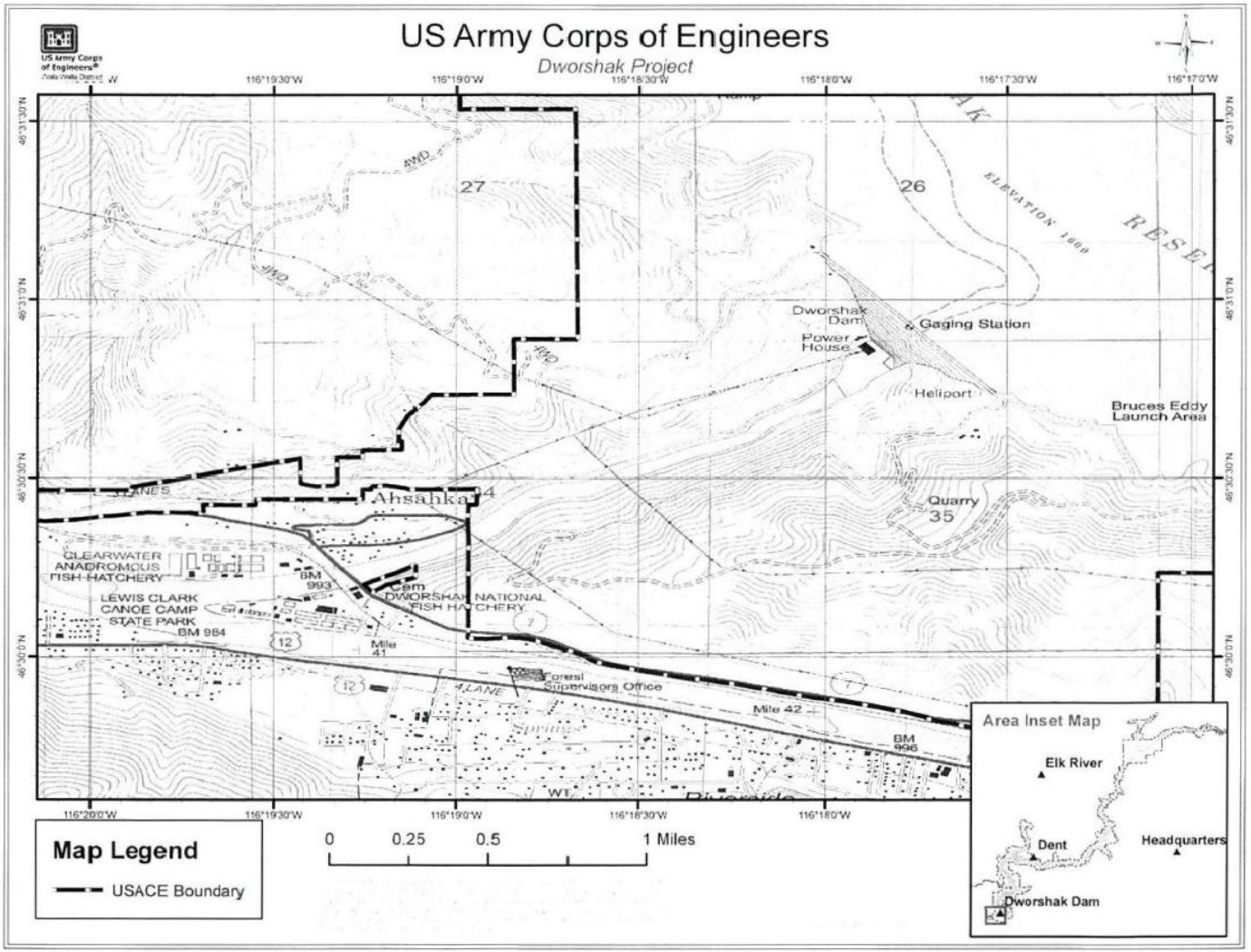
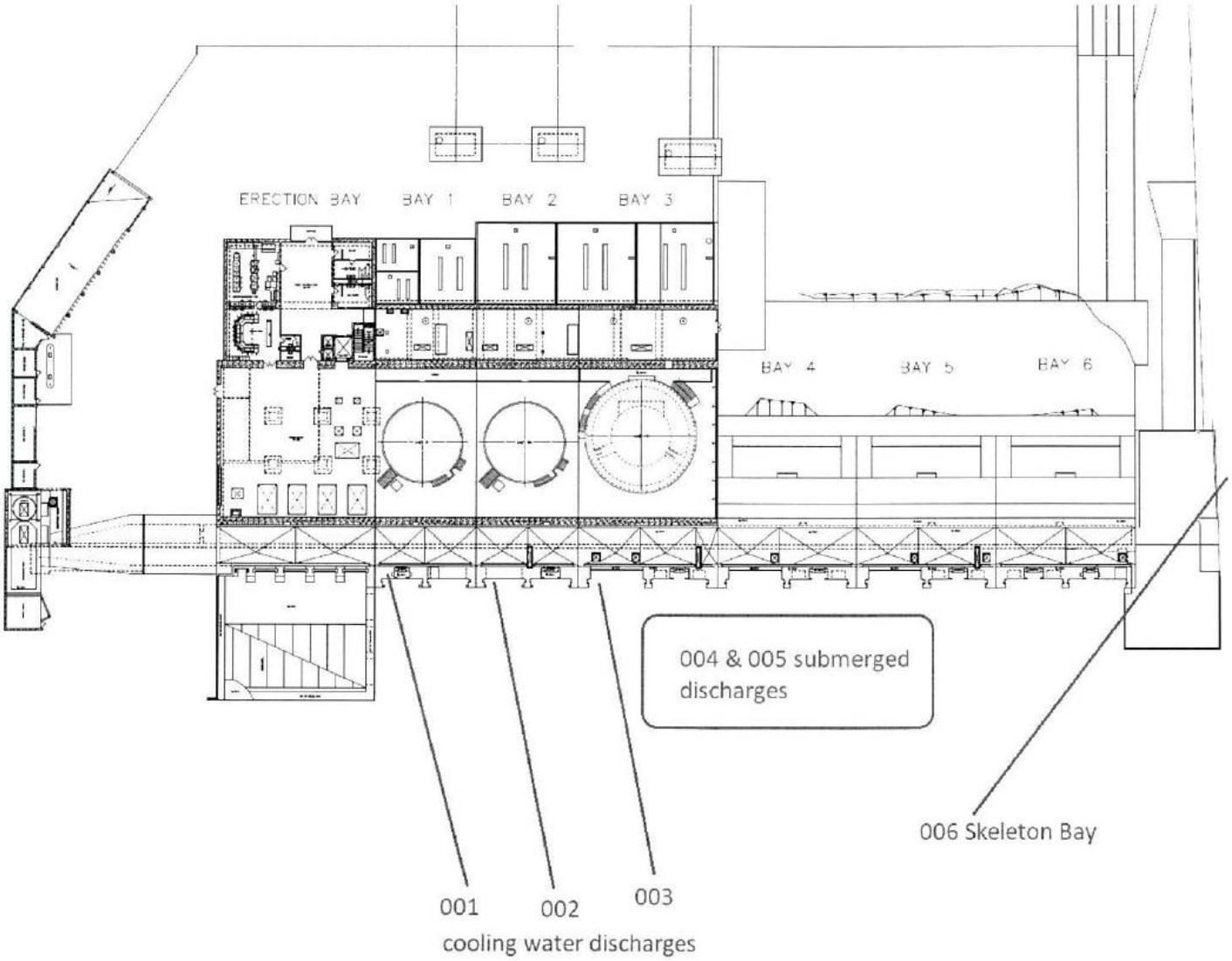
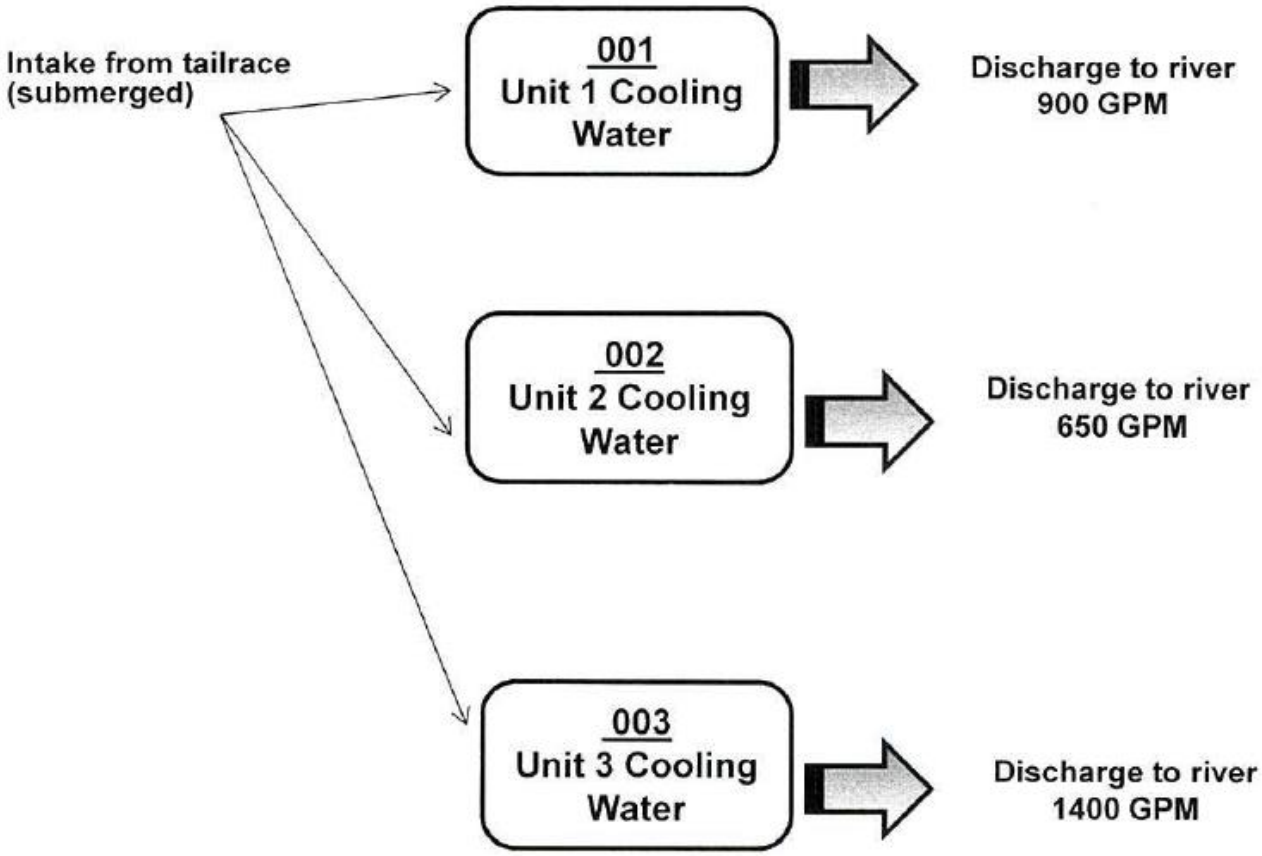
Appendix A. Facility Information



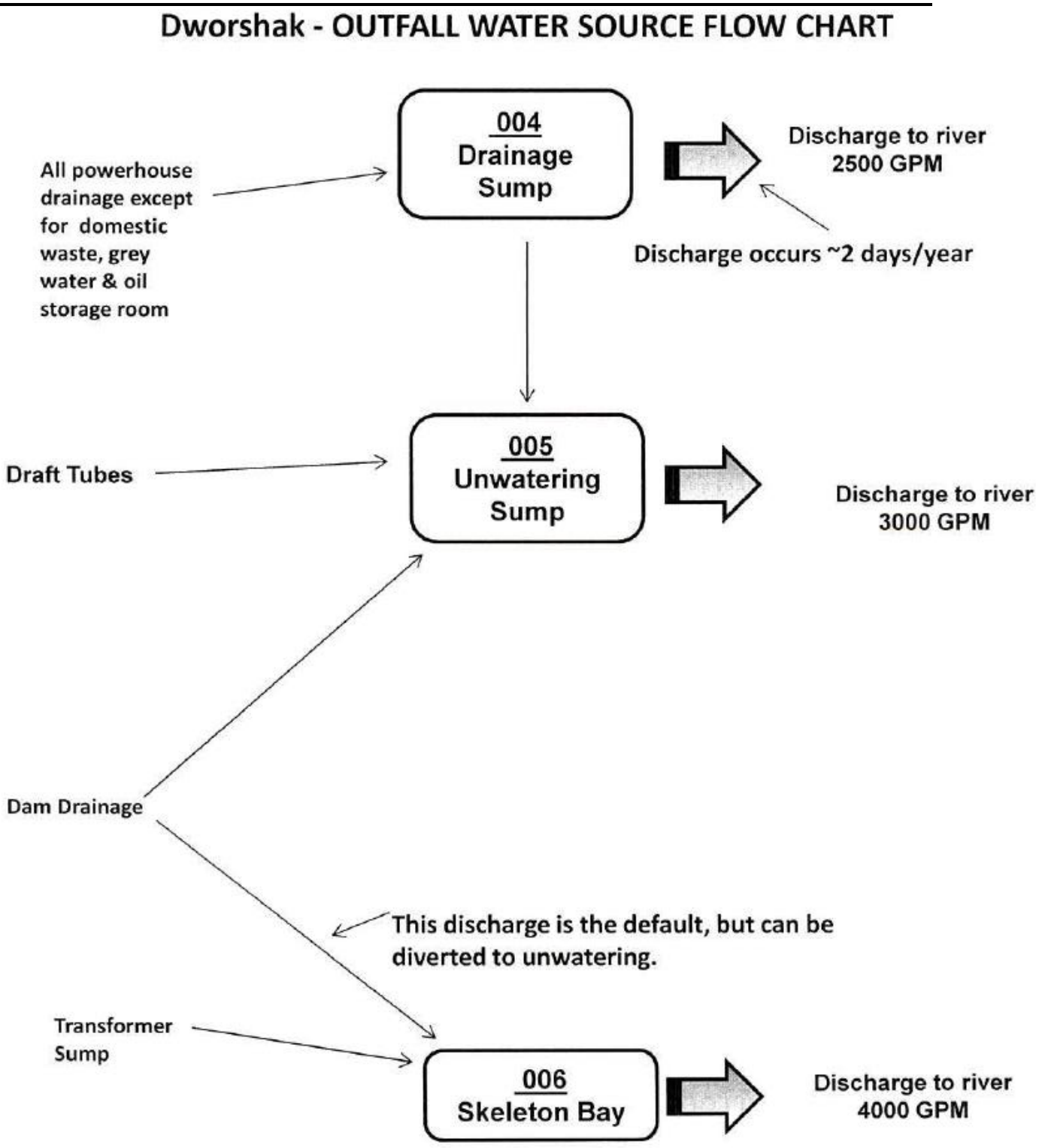

Cavendish
Teakean
Nez Perce
Boundary
Bruce Eddy
Dworshak Dam
Ahsahka
12
12
Konkolville
Orofino
Peck
Blake
12
1 mi


ERECTION BAY
BAY 1
BAY 2
BAY 3
BAY 4
BAY 5
BAY 6
004 & 005 submerged discharges
006 Skeleton Bay
001
002
003
cooling water discharges

Dworshak - OUTFALL WATER SOURCE FLOW CHART



Water is pumped from a submerged intake in the tailrace area. The water travels through a header leading into the turbine bearing oil cooler, thrust bearing oil cooler & surface air cooler of each unit. After heat exchange, the water passes through a discharge header exiting above water level in front of the powerhouse.


Dworshak - OUTFALL WATER SOURCE FLOW CHART
All powerhouse drainage except for domestic waste, grey water & oil storage room
004 Drainage Sump
Discharge to river 2500 GPM
Discharge occurs ~2 days/year
Draft Tubes
005 Unwatering Sump
Discharge to river 3000 GPM
Dam Drainage
This discharge is the default, but can be diverted to unwatering.
Transformer Sump
006 Skeleton Bay
Discharge to river 4000 GPM

Appendix B. Summary of Effluent Water Quality Data

Outfall Number	Outfall Description	Discharge Flow Rate (MGD)	Max Discharge Flow Rate (MGD)	Max Daily BOD (lbs)	Max Daily BOD (mg/L)	Avg Daily BOD (lbs)	Avg Daily BOD (mg/L)	Max Daily TSS (lbs)	Max Daily TSS (mg/L)	Avg Daily TSS (lbs)	Avg Daily TSS (mg/L)	Fecal (lbs)	Fecal (mg/L)	TRC (lbs)	TRC (mg/L)	Max Daily Oil and Grease (lbs)	Max Daily Oil and Grease (mg/L)	Avg Daily Oil and Grease (lbs)	Avg Daily Oil and Grease (mg/L)
001	Main Unit 1 Turbine Bearing and Non-Contact Cooling Water	1.296	1.3	26.81	2.48	26.81	2.48	0	<1	0	<1	-	-	0	0	0	0	0	0
002	Main Unit 2 Turbine Bearing and Non-Contact Cooling Water	-	1.3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
003	Main Unit 3 Turbine Bearing and Non-Contact Cooling Water	2.02	3.0	0	<2	0	<2	0	<1	0	<1	-	-	0	0	0	0	0	0
004	Drainage Sump	-	3.6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
005	Unwatering Sump	1.08	4.3	0	<2	0	<2	0	<1	0	<1	-	-	0	0	0	0	0	0
006	Skeleton Bay	1.92	5.8	0	<2	0	<2	0	<1	0	<1	-	-	0	0	0	0	0	0
			Average	6.7	2.5	6.7	2.5	0	<1	0	<1	-	-	0	0	0	0	0	0
			Minimum	0	2.5	0	2.5	0	<1	0	<1	-	-	0	0	0	0	0	0
			Maximum	26.8	2.5	26.8	2.5	0	<1	0	<1	-	-	0	0	0	0	0	0

Outfall Number	Outfall Description	Max Daily COD (lbs)	Max Daily COD (mg/L)	Avg Daily COD (lbs)	Avg Daily COD (mg/L)	Max Daily TOC (lbs)	Max Daily TOC (mg/L)	Avg Daily TOC (lbs)	Avg Daily TOC (mg/L)	Max Daily Ammonia as N (lbs)	Max Daily Ammonia as N (mg/L)	Avg Daily Ammonia as N (lbs)	Avg Daily Ammonia as N (mg/L)	pH	Summer Temp (°C)
001	Main Unit 1 Turbine Bearing and Non-Contact Cooling Water	0.0	<5	0.0	<5	52.5	4.9	52.5	4.9	0.8	0.1	52.5	0.1	7.0 - 8.5	6.9
002	Main Unit 2 Turbine Bearing and Non-Contact Cooling Water	-	-	-	-	-	-	-	-	-	-	-	-	-	-
003	Main Unit 3 Turbine Bearing and Non-Contact Cooling Water	91.9	5.5	91.9	5.5	127.1	7.6	127.1	7.6	0.0	0.0	0.0	0.0	7.0 - 8.5	12.1
004	Drainage Sump	-	-	-	-	-	-	-	-	-	-	-	-	-	-
005	Unwatering Sump	0.0	<5	0.0	<5	40.5	2.3	20.3	2.3	0.0	0.0	0.0	0.0	7.0 -8.5	7.3
006	Skeleton Bay	0.0	<5	0.0	<5	169.1	3.5	56.4	3.5	2.5	0.1	0.8	0.1	7.0 - 8.5	7.2
	Average	23.0	5.5	23.0	5.5	97.3	4.5	64.1	4.5	0.8	0.0	13.3	0.0	NA	8.4
	Minimum	0.0	5.5	0.0	5.5	40.5	2.3	20.3	2.3	0.0	0.0	0.0	0.0	7.0	6.9
	Maximum	91.9	5.5	91.9	5.5	169.1	7.6	127.1	7.6	2.5	0.1	52.5	0.1	8.5	12.1

Source: Dworshak Dam Permit Application, Submitted February 19, 2019

Appendix C. DRAFT 401 Certification

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 10
1200 Sixth Avenue, Suite 155
Seattle, WA 98101-3188

WATER DIVISION

Clean Water Act (CWA) Section 401 Certification for Discharger Located within Tribal Boundaries

Facility:	Dworshak Dam
NPDES Permit Number:	ID0028586
Location:	Nez Perce Tribe
Receiving Water:	North Fork Clearwater River
Facility Location:	Ahsahka, ID 83520

EPA hereby certifies that the conditions in the National Pollutant Discharge Elimination System (NPDES) permit for Dworshak Dam, are necessary to assure compliance with the applicable provisions of Sections 301, 302, 303, 306, and 307 of the CWA. See CWA Section 401(a)(1), 33 U.S.C. 1341(a)(1); 40 CFR 124.53(e).

The State in which the discharge originates is responsible for issuing the CWA Section 401 certification pursuant to CWA Section 401(a)(1). When a NPDES permit is issued on Tribal Land, the Tribe is the certifying authority where the Tribe has been approved by EPA for Treatment as a State (TAS) pursuant to CWA Section 518(e) and 40 CFR § 131.8. Where a Tribe does not have TAS, EPA is the certifying authority. The Nez Perce Tribe does not have TAS for this facility discharging into the North Fork Clearwater River. Therefore, EPA is responsible for issuing the CWA Section 401 Certification for this permit.

EPA certifies that the NPDES permit for Dworshak Dam complies with the applicable provisions of the CWA and Nez Perce Tribal law if the following conditions are met:

1. Mercury and Methylmercury Monitoring (Nez Perce Tribal Code § 4-30-50(a)(4)(E))
    a) The permittee must conduct mercury and methylmercury sampling twice a year during March and August from each of the outfalls. Sampling must begin in March 2024. The timing of monitoring may be modified if agreed upon by EPA, the Nez Perce Tribe, and the Permittee.
    b) The permittee must notify the Nez Perce Tribe Director of Water Resources of planned sampling dates at least 30 days prior to the planned sampling dates.

2. TDG Notification
    a) The permittee must notify the Nez Perce Tribe Director of Water Resources in the case of planned operations that are expected to exceed 110% TDG downstream of Dworshak Dam.
    b) The permittee must notify the Nez Perce Tribe Director of Water Resources within 24 hours when TDG downstream of the dam exceeds 110%. The notification must be made once per exceedance event.

3. Notifications must be made to the Nez Perce Tribe Director of Water Resources at the following:

    Director of Water Resources
    Nez Perce Tribe
    waterresources@nezperce.org
    208-843-7368

D R A F T

Daniel D. Opalski
Director