FACT SHEET

The United States Environmental Protection Agency (EPA) proposes to issue a National Pollutant Discharge Elimination System (NPDES) General Permit to discharge pollutants pursuant to the provisions of the Clean Water Act, 33 USC §1251 et seq to:

Hydroelectric Generating Facilities
Permit Number: IDG360000

Public Comment Period
Start Date: April 27, 2018
End Date: June 11, 2018

Technical Contact
Contact: Dru Keenan
Email: keenan.dru@epa.gov
Phone: (206) 553-1219
1-800-424-4372 ext 1219 (within Alaska, Idaho, Oregon and Washington)

EPA PROPOSES NPDES PERMIT ISSUANCE

The U.S. Environmental Protection Agency (EPA) proposes to issue the NPDES General Permit for Hydroelectric Generating Facilities. The permit will place conditions on the discharge of pollutants from hydroelectric generating facilities to waters of the United States (U.S.) including tribal waters, in Idaho. In order to ensure the protection of water quality and human health, the General Permit establishes limits on the types and amounts of pollutants that can be discharged as well as other conditions on facilities authorized to discharge under the Permit.

This Fact Sheet includes:

- information on public comment, public hearing, and appeal procedures;
- descriptions of the types of facilities and discharges covered under the General Permit;
- a listing of proposed effluent limitations and other conditions; and
- technical material supporting the conditions in the Permit

CLEAN WATER ACT 401 STATE CERTIFICATION

The EPA is requested that the Idaho Department of Environmental Quality (IDEQ) certify this Draft NPDES Hydroelectric Generating Facilities general permit (General Permit), under provisions of Section 401 of the Clean Water Act (CWA), 33 USC § 1341. The State of Idaho has provided a draft certification for the Draft General Permit and is attached as Attachment D. Questions on the draft IDEQ Section 401 certification may be addressed to Loren Moore at (208) 373-0158 or loren.moore@deq.idaho.gov. Comments regarding the certification should be directed to:

Loren Moore
401 Program Coordinator
Idaho Department of Environmental Quality
1410 N. Hilton Street
Boise, ID 83706

PUBLIC COMMENT

Persons wishing to comment on the Draft General Permit may do so in writing by the expiration date of the public notice. All comments must be in writing and must include the commenter's name, address, telephone number, permit name, and permit number. Comments must include a concise statement of the basis and any relevant facts the commenter believes the EPA should consider in making its decision regarding the conditions and limitations in the final permit. All written comments and requests must be submitted to the attention of the EPA Regional Director, Office of Water and Watersheds at the following address: U.S. EPA, Region 10, 1200 6th Avenue, Suite155, OWW-191, Seattle, WA 98101. Alternatively, comments may be submitted by facsimile to (206) 553-0165; or submitted via e-mail to Dru Keenan at the above email address by the expiration date of the public comment period.

Persons wishing to request that a public hearing be held may do so, in writing, by the expiration date of this public comment period. A public hearing is a formal meeting whereby EPA officials hear the public's views and concerns about an EPA action or proposal. A request for a public hearing must state the nature of the issues to be raised, reference the NPDES permit name and permit number, and include the requester's name, address, and telephone number.

After the comment period closes, and all significant comments have been considered, the EPA will review and address all submitted comments. EPA's Regional Director for the Office of Water and Watersheds will then make a final decision regarding permit issuance. If no comments are received, the tentative conditions in the Draft General Permit will become final. Pursuant to Section 509(b)(1) of the Clean Water Act [33 USC 1369(b)(1)], any interested person may appeal the permit in the Ninth Circuit Court of Appeals within 120 days following notice of EPA's final decision for the permit.

DOCUMENTS ARE AVAILABLE FOR REVIEW

The Draft General Permit, fact sheet, and related documents can be reviewed or obtained by visiting or contacting the EPA Region 10 Operations Office in Boise between 8:30 a.m. and 4:00 p.m., (Mountain Time), Monday through Friday at the address below.

United States Environmental Protection Agency Region 10
Idaho Operations Office
950 W. Bannock Street, Suite 155
Boise, ID 83702
(206) 378-5746 or

Toll Free 1-800-424-4372 (within Alaska, Idaho, Oregon and Washington)

The Draft General Permit and fact sheet also are available at the following federal and state offices:

United States Environmental Protection Agency Region 10
1200 Sixth Avenue, Suite 155 (OWW-191)
Seattle, Washington 98101
(208) 553-0523 or 1-800-424-4372 and request x-0523

Idaho Department of Environmental Quality
Attn: 401 Program
State Office
1410 North Hilton Street
Boise, Idaho 83706
(208) 373-0502

Idaho Department of Environmental Quality
Boise Regional Office
1445 North Orchard Street
Boise, Idaho 83706-2239
(208) 373-0550

Idaho Department of Environmental Quality
Twin Falls Regional Office
650 Addison Avenue West, Suite 110
Twin Falls, ID 83301
(208) 736-2190

Idaho Department of Environmental Quality
Pocatello Regional Office
444 Hospital Way, #300
Pocatello, Idaho 83201
(208) 236-6160

Idaho Department of Environmental Quality
Lewiston Regional Office
1118 F. Street
Lewiston, Idaho 83501
(208) 799-4370

Idaho Department of Environmental Quality
Coeur d'Alene Regional Office
2110 Ironwood Parkway
Coeur d'Alene, Idaho 83814
(208) 769-1422

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

Idaho Falls, Idaho 83402
(208) 528-2650

The Draft General Permit, fact sheet, and other information also can be found by visiting the Region 10 website at https://www.epa.gov/npdes-permits/idaho-npdes-permits

For technical questions regarding the permit or fact sheet, contact Dru Keenan at the phone number or email listed above. Services can be made available to persons with disabilities by contacting Audrey Washington at (206) 553-0523.

Contents

ACRONYMS

AML	Average Monthly limit
APA	Administrative Procedures Act
BAT	Best Available Technology Economically Achievable
BCT	Best Conventional Pollutant Control Technology
BE	Biological Evaluation
BMPs	Best Management Practices
BO	Biological Opinion
BOD	Biological Oxygen Demand
BPJ	Best Professional Judgment
BPT	Best Practicable Control Technology Currently Available
CFR	Code of Federal Regulations
COC	Contaminant of Concern
Cfs	Cubic feet per second
CWA	Clean Water Act
DF	Dilution Factor
DMR	Discharge Monitoring Report
DWS	Domestic Water Supply – use designation in Idaho Water Quality Standards
EA	Environmental Assessment
EAL	Environmentally Acceptable Lubricant
EFH	Essential Fish Habitat
EIS	Environmental Impact Statement
ELG	Effluent Limitation Guidelines
EPA	United States Environmental Protection Agency
ESA	Endangered Species Act
GPD	Gallons per Day
GPM	Gallons per Minute
GP	Hydroelectric Generating Facilities General Permit
ICIS	Integrated Compliance Information System
IDA	Idaho Department of Agriculture
IDAPA	Idaho Administrative Procedures Act
IDEQ	Idaho Department of Environmental Quality
IDWR	Idaho Department of Water Resources
LA	Load Allocation
LTA	Long Term Average
MCL	Maximum Contaminant Level
MDL	Maximum Daily Limit or Method Detection Limit
µg/L	Micrograms per Liter
mg/L	Milligrams per Liter
MGD	Million Gallons per Day
ML	Minimum Level
MSGP	Stormwater Multi-Sector General Permit for Industrial Activities
NEPA	National Environmental Policy Act
NOAA-NMFS	National Oceanic and Atmospheric Administration- National Marine Fisheries Service
NOI	Notice of Intent
NPDES	National Pollutant Discharge Elimination System
NPDWR	National Primary Drinking Water Regulations

NSPS	New Source Performance Standards
O&M	Operation and Maintenance (of a treatment facility)
OMB	White House Office of Management and Budget
OWW	EPA Office of Water and Watersheds
QAP	Quality Assurance Plan
QA/QC	Quality Assurance/Quality Control
RFA	Regulatory Flexibility Act
SDWA	Safe Drinking Water Act
TAS	Treatment in a Manner Similar to a State (EPA-Tribal Government Process)
TBEL	Technology-Based Effluent Limitation
TMDL	Total Maximum Daily Load
TR	Total Recoverable (Metal Concentration)
TSD	EPA Technical Support Document for Water Quality-based Toxics Control
TSS	Total Suspended Solids
UMRA	Unfunded Mandates Reform Act
US	United States
USC	United States Code
USFWS	United States Fish and Wildlife Service
USGS	United States Geological Survey
WET	Whole Effluent Toxicity
WLA	Wasteload Allocation
WQBEL	Water Quality-Based Effluent Limitation
WQS	Water Quality Standards

DEFINITIONS

7Q10 flow (seven-day, ten-year low flow) means the lowest seven-day consecutive mean daily stream flow with a recurrence interval of ten years.

Administrator means the Administrator of the United States Environmental Protection Agency, or an authorized representative [40 CFR 122.2].

Average monthly limits means the highest allowable average of "daily discharges" over a calendar month, calculated as the sum of all "daily discharges" measured during a calendar month divided by the number of "daily discharges" measured during that month. It may also be referred to as the "monthly average limits"[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 (ELGs), 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, and oil and grease.

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

CAS registration number means the number assigned by the Chemical Abstract Service (CAS) to uniquely identify a chemical.

CFR means the Code of Federal Regulations, which is the official annual compilation of all regulations and rules promulgated during the previous year by the agencies of the United States government, combined with all the previously issued regulations and rules of those agencies that are still in effect.

Composite sample means a flow-proportioned mixture of not less than four discrete representative samples collected at the same discharge point within the same 24 hours.

Conventional pollutant means biological oxygen demand (BOD), total suspended solids (TSS), bacteria, oil and grease, and pH as defined in 40 CFR 401.16.

Continuous Discharge means a discharge which occurs without interruption throughout the operating hours of the facility, except for infrequent shutdowns for maintenance, process changes, or other similar activities [40 CFR 122.2].

CWA means the Clean Water Act in the United States Code (USC) (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 USC 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 those beneficial uses assigned to identified waters in Idaho Department of Environmental Quality Rules in the Idaho Administrative Procedures Act (IDAPA), IDAPA 58.01.02, "Water

Quality Standards," Sections 110 through 160, whether or not the uses are being attained [IDAPA 58.01.02.010.24].

The Director means the Regional Administrator of the EPA Region 10, or the Director of the EPA Region 10 Office of Water and Watersheds, the State of Idaho Department of Environmental Quality, 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:

Any addition of any "pollutant" or combination of pollutants to "waters of the United States" from any "point source," or 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 (ELG) means a regulation published by the Administrator under section 304(b) of CWA to adopt or revise "effluent limitations' [40 CFR 122.2].

Environmentally Acceptable Lubricant means lubricants that are "biodegradable" and "minimally-toxic" and are "not bioaccumulative" as defined in this permit. For purposes of the permit, products meeting this permit's definitions of being and "Environmentally Acceptable Lubricant" include those labeled by the following labeling programs: Blue Angel, European Ecolabel, Nordic Swan, the Swedish Standards SS 155434 and 155470, and EPA's Design for the Environment (DfE)

Excluded Waters, or prohibited waters, means water bodies not authorized as receiving waters to be covered under this general NPDES permit.

Facility means any NPDES point source or any other facility or activity (including land or appurtenances thereto) that is subject to regulation under the NPDES program.

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 water sample or measurement of water quality taken at a specific time.

Hazardous Material is defined in the IDAPA to mean 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 [IDAPA 58.01.02.010.46]. It is also defined at 40 CFR 122.2 to mean any substance designated in 40 CFR 116, pursuant to Section 311 of the CWA.

Indian Country as indicated by 18 USC §1151 means: (a) All land within the limits of any Indian reservation under the jurisdiction of the United States 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 United States 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 rights-of-way running through the same.

Indian Tribe means any Indian Tribe, band, group, or community recognized by the Secretary of the Interior and exercising governmental authority over a Federal Indian Reservation [40 CFR 122.2].

Influent means the water from upstream that enters the facility.

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].

Monthly Average Limit means the average of "daily discharges" over a monitoring month, calculated as the sum of all "daily discharges" measured during a monitoring month divided by the number of "daily discharges" measured during that month [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].

Nonconventional Pollutants means all pollutants that are not included in the list of conventional or toxic pollutants in 40 CFR 401. This includes pollutants such as chlorine, ammonia, COD, nitrogen, and phosphorous.

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 58.01.02.010.67].

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, which has been designated by the legislature and subsequently listed in this chapter (of IDAPA 58.01.02). ORW designation constitutes an outstanding national or state resource that requires protection from point and nonpoint source activities that may lower water quality [IDAPA 58.01.02.010.72].

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 USC 2011 et seq.)], heat, wrecked or discarded equipment, rock, sand, cellar dirt and industrial, municipal, and agricultural waste discharged into water [40 CFR 122.2].

Services means the United States Fish and Wildlife Service and/or the National Oceanic and Atmospheric Administration-National Marine Fisheries Service (NOAA Fisheries or NMFS)

Technology-based effluent limitation (TBEL) means 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. EPA is required to promulgate technology-based limitations and standards that reflect pollutant reductions that can be achieved by categories, or subcategories of industrial point sources using specific technologies that EPA identifies as meeting the statutorily prescribed level of control under the authority of CWA sections 301, 304, 306, 307, 308, 402, and 501 [33 USC § 1311, 1314,1316,1318,1342, and 1361].

Total Maximum Daily Load (TMDL) means the sum of the individual wasteload allocations (WLAs) for point sources, load allocations (LAs) for non-point sources, and natural background when allocating pollutant loading to a particular waterbody. Such load shall be established at a level necessary to implement the applicable water quality standards with seasonal variations and a margin of safety which takes into account any lack of knowledge concerning the relationship between effluent limitations and water quality [IDAPA 58.012.02.010.100].

Upset means an exceptional incident in which there is unintentional and temporary noncompliance with technology-based permit effluent limitations because of factors beyond the reasonable control of the Permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation [40 CFR 122.41(n)].

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].

I. Introduction

A. General Permits

Section 301(a) of the Clean Water Act (CWA), 33 USC § 1311(a), provides that the discharge of pollutants to waters of the U.S. is unlawful except in accordance with terms and conditions of an NPDES permit. 40 CFR 122.28 authorizes the issuance of general permits to categories of discharges [40 CFR 122.28].

In accordance with 40 CFR 122.28, the EPA is authorized to issue a general permit to numerous facilities when the facilities:

-Are located within the same geographic area;
-Involve the same or substantially similar types of operations;
-Discharge the same types of waste;
-Require the same effluent limits or operating conditions;
-Require the same or similar treatment technologies or monitoring requirements, and
-In the opinion of the EPA, are more appropriately controlled under a general permit rather than an individual permit.

The EPA is proposing this Draft Hydroelectric Generating Facility General Permit (General Permit) for hydroelectric facilities discharging to waters of U.S. in Idaho pursuant to the EPA's authority under CWA Section 402. The Draft General Permit meets the criteria for general permits for the following reasons:

Geographic area
All of the discharges authorized by the General Permit will be into waters of the U.S. within the State of Idaho, unless otherwise restricted. See Permit Part I.A.

Involves the Same or Substantially Similar Types of Operations
All facilities covered by this general permit are hydroelectric generating facilities. A hydroelectric generating facility includes the generating station (station), dam(s), reservoir(s), canal system or tunnel system at certain facilities, and associated equipment and structures used in the generation of hydroelectric power. These facilities represent both river projects and pump storage projects. The typical hydroelectric facility generates electricity through the use of falling or flowing water to drive turbine(s) and generator(s), thus, the facilities have essentially the same type of operation and discharges.

Discharge the Same Types of Waste
The principle wastewaters produced in hydroelectric generating facilities include equipment cooling water, equipment and floor drain water, equipment backwash strainer water, and specific maintenance waters from the hydroelectric facility. The pollutants associated with these wastewaters are oil, grease, excess heat, pH, and backwash water from cleaning of river debris and silt from the strainer's screens.

Require Same Effluent limits or Operating Conditions
The Draft General Permit proposes the same effluent limits, monitoring requirements and other operating conditions for all hydroelectric generating facilities subject to the General Permit.

Same or Similar Treatment Technologies or Monitoring Requirements
The Draft General Permit does not propose the use of specific treatment technologies. Oil-water separators are typically employed at most hydroelectric generating facilities for wastewaters generated at the facility. Most wastewaters are directed to a sump prior to discharge.

Monitoring requirements are consistent across hydroelectric generating facilities for specific waste streams.

Appropriateness
Because of the factors discussed above, the EPA has determined that the majority of the hydroelectric generating facilities in Idaho are more appropriately controlled under a general permit than under individual NPDES permits. The similarity of the operations resulting in the discharge of similar waste streams and treatment has prompted the EPA to issue this General Permit.

II. Background Information

A. Types of Discharges Associated with Hydroelectric Facilities

The General Permit authorizes discharges according to five categories. All five discharge categories may not be present at each facility.

1. The General Permit establishes effluent limitations for pH, oil and grease, and monitoring requirements for temperature and flow for discharges of noncontact cooling water and equipment-related cooling water systems.

2. The General Permit establishes effluent limitations for pH, oil and grease, and monitoring requirements for flow for discharges from equipment and floor drains.

3. The General Permit establishes effluent limitations for pH, oil and grease, and monitoring requirements for flow for discharges from equipment and facility maintenance – related water.

4. The General Permit establishes effluent limitations for pH, oil and grease, and monitoring requirements for flow for discharges from maintenance-related water during flood/high water events and equipment related backwash water from the strainer screens.

5. The General Permit establishes effluent limitations for pH, oil and grease and monitoring requirements for flow and temperature for discharges from any combination of the following: equipment-related cooling water, equipment and floor drain water, maintenance-related water, maintenance-related water from flood/high water events and for equipment related backwash strainer water.

Cooling Water Discharges
Facilities use river water to cool equipment resulting in discharges of noncontact cooling water and direct cooling water to the river. Noncontact cooling water is "water used for cooling which does not come into direct contact with any raw material, intermediate product, waste product or finished product" as defined in the regulations at 40 CFR 401.11(n). The non-contact cooling water is used in cooling the turbine bearings, guide bearings, air compressor, generators, and at some stations, the power transformers. At the pump storage projects, non-contact cooling water is used in cooling additional equipment which includes the air compressors, air handlers, air conditioner, and rheostats. Direct cooling water is used to directly cool the bearings. A facility may divert certain equipment-related cooling waters to the equipment and floor drain water drainage system.

Equipment and Floor Drain Discharges
Equipment and floor drain operation discharges primarily represent the discharge from the various collection points of internal station drainage. Drainage is collected by floor drains, trench drains, wheel pit drains, and station sumps. These drainage collection systems drain water from compressor blowdowns, leakage from turbines and penstocks, housing leakage, packing boxes leakage, lower guide bearing and other bearing-related discharges, equipment and seal leakage, gate stems, turbine and scroll case access doors, tunnel pumpage, and water from ground water infiltration and surface water seepage. The station drainage system may include treatment units such as oil/water separators, oil flotation wells, or station sumps with some functioning as oil/water separators. These discharges can be intermittent and seasonal and the outfalls in certain stations can be inaccessible for sampling purposes.

At some facilities, the equipment and floor drain water operation includes the discharge of cooling water. A separate equipment operation is the strainer operation on the cooling water intake line. This operation produces backwash water discharges during cleaning of river debris and silt from the strainer's screens.

Equipment and Facility Maintenance-Related Water Discharges
The equipment and facility maintenance-related water operation includes river water pumped from the facility during periods of equipment, station, and facility maintenance. During equipment maintenance operation, discharges occur from the dewatering of equipment containing river water such as the turbine, penstock, and dewatering sumps.

Equipment and Facility Maintenance-Related Water During Flood/High Water Events and Equipment related Backwash Strainer Water Discharges
During flood and high water events, the station maintenance operation results in discharges from flood water pumps and high water sump pumps. During these events, there may be discharges from miscellaneous flood/high water collection devices such as floor drains, siphon hoses, and access manway areas. These discharges are intermittent and can occur seasonally. Facility maintenance during flood or high waters can result in the collection of internal dam or headwall drainage discharging directly to the receiving water without an oil/water separator installed in the drainage collection system. The potential for oil and grease or other pollutants to be present in these discharges is insignificant.

B. Types of Pollutants Associated with Hydroelectric Facilities

This proposed General Permit only addresses wastewater discharged from outfalls in the hydroelectric facilities described above. The pollutants associated with wastewaters from the above discharges are oil, grease, excess heat (temperature), pH, and 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 facility and result mostly from oil spills, equipment leaks, and improper waste storage. The General Permit is proposing to require development and implementation of a Best Management Practices (BMP) Plan to minimize or eliminate the discharge of oil and grease and an annual self-certification report demonstrating compliance with the BMP Plan.

C. Type of Treatment

Gravity oil/water separator is a common treatment for equipment, sump, and floor drain related discharges at hydroelectric generating facilities. 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.

III. Receiving Waters Covered by this Permit

A. Water Quality Standards

Section 301 (b)(1)(C) of the Clean Water Act (CWA) requires the development of limitations in permits necessary to meet water quality standards. Federal regulations at 40 CFR 122.4(d) require 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.

B. Designated Beneficial Uses

The beneficial uses for many surface waters in Idaho are contained in IDAPA 58.01.02 Sections 110-160. Surface waters that are not designated in these sections are protected for cold water aquatic life and primary or secondary contact recreation. Because the receiving waters contemplated by the general permit include all possible use designations and are subject to all possible water quality criteria, EPA has established effluent limitations and other requirements of the permits to maintain the most stringent possible water quality criteria. In this manner, the permits will be protective of all possible receiving water uses.

C. Surface Water Quality Criteria

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

- The narrative criteria applicable to all surface waters of the State are found in IDAPA 58.01.02.200 (General Surface Water Quality Criteria).
- The numeric criteria for toxic substances for the protection of aquatic life and primary contact recreation are found at IDAPA 58.01.02.210 (Numeric Criteria for Toxic Substances for Waters Designated for Aquatic Life, Recreation, or Domestic Water Supply use).
- Additional numeric criteria necessary for the protection of aquatic life can be found at IDAPA 58.01.02.250 (Surface Water Quality Criteria for Aquatic Life Use Designations).
- Numeric criteria necessary for the protection of recreation uses can be found at IDAPA 58.01.02.251 (Surface Water Quality Criteria for Recreation Use Designations).
- Water quality criteria for agricultural water supply can be found in the EPA's Water Quality Criteria 1972, also referred to as the "Blue Book" (EPA R3-73-033) (See IDAPA 58.01.02252.02)

The General Permit contains the following narrative criteria:

> Toxic Substances. Surface waters of the State shall be free of toxic substances in concentrations that impair designated beneficial uses. These substances do not include suspended sediment produced as a result of nonpoint source activities.
>
> Deleterious. Surface waters of the State shall be free of deleterious materials in concentrations

that impair designated beneficial uses. These materials do not include suspended sediment produced as a result of nonpoint source activities.

Floating, Suspended, or Submerged Matter. Surface waters of the State shall be free of floating, suspended, or submerged matter of any kind in concentrations causing nuisance or objectionable conditions or that may impair designated beneficial uses. This matter does not include suspended sediment produced as a result of nonpoint source activities.

D. Impaired Waters/TMDLs

Section 303(d) of the CWA requires states to identify specific water bodies where water quality standards are not expected to be met after implementation of technology-based effluent limitations by point sources. For all 303(d)-listed water bodies and pollutants, states must develop and adopt TMDLs that will specify wasteload allocations for point sources and load allocations for non-point sources, as appropriate. EPA is responsible for issuing TMDLs for Tribal waters. The TMDL allocations for point sources are "wasteload allocations" (WLAs) and are implemented through limitations incorporated in NPDES permits. There are a number of water bodies across the state that are listed on the 303(d) list for temperature and a few are listed for oil and grease.

The EPA recently approved IDEQ's 2014 303(d) list. The link to the 2014 Integrated Report may be found at the following web link:

http://www.deq.idaho.gov/media/60179654/idaho-2014-integrated-report.pdf

Of the known hydroelectric facilities, 17 are located in waters listed on the 303(d) for temperature (IDEQ 2014 Integrated Report). One facility is found in waters listed for oil and grease. See Table 1 below for a list of hydroelectric facilities found in waters impaired for temperature and oil and grease. Of the few TMDLSs developed for temperature and oil and grease listed waters, none assign wasteload allocations to hydro-electric facilities.

Table 1 Hydro-Electric Facilities Overlap with 303(d) Listed Waters From Idaho Department of Environmental Quality 2014 Integrated Report

Hydroelectric Facility Name	Waterbody	Impaired Segment	Listed Parameter (Oil and Grease, Temperature, pH)	TMDL with Wasteload Allocation (WLA)Facilities
Swan Falls	Snake River	Segment ID17050103SW006_07b	Multiple parameters, (MP) & Temperature	No Temperature TMDL
Marsh Valley	Portneuf Marsh Valley Canal	Discharge to Portneuf, Segment ID17040208SK016_05	MP & Oil and Grease, Temperature	No TMDL for segment
Cabinet Gorge	Clark Fork River	Segment ID17010213PN003_08	MP and Temperature	No Temperature. TMDL
Moyie River/ Moyie Springs	Moyie River	Segment ID17010105PN001_05	Temperature	No TMDL
Smith Creek (Smith Falls)	Smith Creek	Segment ID17010104PN005_04	Temperature	TMDL for T but no WLA for facility
Grace	Bear River	Segment ID16010202BR009_06	MP and Temperature	TMDL but not Temperature
Last Chance Canal	Bear River	Segment ID16010202BR009_06	MP and Temperature	TMDL but Not for Temperature
Soda (Soda Point)	Bear River	Segment ID16010202BR009_06	MP and Temperature	TMDL but Not for Temperature
Jim Ford Creek (Ford Hydro LP)	Jim Ford Creek	Segment ID17060306CL035_04	MP and Temperature	TMDL but Not for Temperature
Oneida	Bear River	Segment ID16010202BR006_06	MP and Temperature	TMDL but Not for Temperature
Koyle Ranch 1	Big Wood River.	Discharge to Little Wood, Segment ID17040221SK001_05b	MP and Temperature	TMDL but NOT for Temperature
Geo-Bon No. 2 (Notch Butte)	Little Wood River	Segment ID17040221SK001_05a	MP and Temperature	TMDL but NOT for Temperature
C.J. Strike	Snake River	Segment ID17050103SW006_07	Temperature	No TMDL for Temperature
Lateral No. 10	Lateral No. 10 Canal	Discharge to Salmon Falls Creek, Segment ID17040213SK001_06	MP and Temperature	TMDL but NOT for Temperature
Little Mac (Cedar Draw)	Cedar Draw	Segment ID17040212SK012_03	MP and Temperature	TMDL but NOT for Temperature
Milner Dam	Snake River	Segment ID17040212SK020_07	MP and Temperature	TMDL but NOT for Temperature
Brownlee	Snake River.	Segment ID17050201SW003_08	MP and Temperature	TMDL for temperature but no WLA for Brownlee

IV. Applicability and Coverage

A. Facilities Eligible for Coverage

Discharges authorized include direct and noncontact cooling water, equipment and floor drain water, equipment backwash strainer water, and equipment and facility maintenance waters. The General Permit does not cover discharges of sanitary wastewater or water discharged over or through the dam.

B. Facilities Excluded from Coverage

Certain facilities will not be eligible for coverage under this General Permit. Facilities that meet one of the following conditions described below must apply for an individual permit include:

1. Hydroelectric facilities that employ chemicals with toxic properties will need to seek coverage for an individual permit. The proposed General Permit does not establish effluent limits for toxic substances used in concentrations that impair the designated beneficial uses of the receiving water;

2. Hydroelectric facilities that discharge to waters within the Nez Perce Reservation, the Coeur d'Alene Reservation, the Kootenai Reservation, the Shoshone Bannock Tribe or the Duck Valley Reservation. The EPA will be addressing facilities that discharge to tribal waters separately;

3. Hydroelectric facilities that have cooling water intake structures with a design intake flow of greater than 2 mgd or use more than 25% of the withdrawn water for cooling purposes. Facilities that meet this condition are subject to promulgated best technology available (BTA) effluent guidelines. See CWA Section 316(b);

4. Hydroelectric facilities that discharge is to an "Outstanding Natural Resource Water" identified in the WQS [IDAPA 58.01.02];

5. Hydroelectric facilities that are new or have expanded their discharge since July 1, 2011;

6. Hydroelectric facilities with waste load allocations from a TMDL for pH, oil and grease and/or temperature.

Provisions 3, 4, 5 and 6 above (related to facilities that use at least 25% of the total water withdrawn for cooling water, discharge to Outstanding Natural Resource Waters, facilities new or expanded since July 1, 2011, and facilities with waste load allocations from a TMDL) are set forth as conditions in IDEQ's draft 401 certification. Thus, the EPA is required to include these conditions pursuant to Clean Water Act Section 401(d).

C. Coverage Under an Individual NPDES Permit

A facility that is eligible for coverage under an NPDES general permit and then decides that an individual permit is desired, the facility may request per federal regulations at 40 CFR 122.28(b)(3)(iii), to be excluded from the coverage under the general permit by applying for an individual NPDES permit. To get individual permit coverage, the owner or operator must submit the appropriate NPDES permit application forms to EPA Region 10, with the justification supporting a request for an individual NPDES permit. For new facilities, applications must be submitted no later than 180 days prior to the anticipated date of commencing to discharge. The request for an individual NPDES permit will be

reviewed and processed in accordance with federal regulations at 40 CFR Part 124, once the application is deemed timely and complete. The request will be granted by the issuance of an individual NPDES permit if the reasons cited by the owner or operator clearly demonstrate that inclusion under the general permit is inappropriate.

The EPA may also require any person authorized by a general permit to apply for and obtain an individual permit. In accordance with federal regulations at 40 CFR 122.28(b)(3)(iv), the applicability of the general permit is automatically terminated on the effective date of the individual permit.

D. Pollutants Authorized by this General Permit

The General Permit will authorize discharges of excess heat (temperature), pH and oil and grease in limited amounts and/or with monitoring requirements, to the waters of the U.S. within the State of Idaho.

The 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. In instances where discharges include chemicals other than the pollutants covered by the General Permit, the owner/operator may need to submit an application for an individual NPDES permit. See Part I.C.

E. Continuation of Permit Coverage

In accordance with 40 CFR 122.46(a), NPDES permits shall be effective for a fixed term not to exceed five (5) years. Therefore, this General Permit will expire five years from the effective date of the final permit. If the General Permit is not reissued prior to the expiration date and a covered facility submits a timely NOI as set forth in the General Permit, the facility may continue to operate under an administrative extension of the General Permit until the earlier of:

1. Authorization for coverage under reissuance or replacement of this GP following timely and appropriate submittal of a complete NOI requesting authorization to discharge under the new permit and compliance with requirements of the new permit;
2. The Permittee's submittal of a Notice of Termination;
3. The issuance of an individual NPDES permit; or,
4. A formal permit decision by the Director not to reissue this general permit, at which time the Permittee must seek coverage under an alternative general or individual permit (Part VI.D of the General Permit).

V. Notification Requirements

Facilities seeking coverage under this General Permit must submit to EPA a written NOI to be covered. In accordance with 40 CFR 122.28(b)(2)(i), a discharger who fails to submit a timely and complete NOI in accordance with the terms of a general permit is not authorized to discharge. A complete and timely NOI fulfills the requirements of a permit application for purposes of 40 CFR 122.6 and 122.21.

When a hydroelectric generating facility is owned by one person or company, and is operated by another person or company, it is the operator’s responsibility to apply for and obtain permit coverage [40 CFR 122.21(b)]. For owners/operators of multiple facilities, a separate NOI must be completed for each site.

A. NOI

Any discharger seeking coverage under the General Permit must submit an NOI to the EPA, IDEQ State Office and applicable IDEQ regional office and, if discharging to tribal waters to the office of the Tribal

government. The NOI must include certain information in order to receive authorization to discharge under this NPDES permit. The NOI requirements are found in Parts I.H and I.G. of the Draft General Permit and include the following requirements:

B. Facility Information.

1. Discharge information.
2. Line Drawing/Flow Schematic showing water flow through the facility
3. All Discharge Outfalls.
4. Chemical Additives**.**
5. Supplemental Information.
6. Additional Information required by the EPA or IDEQ.
7. Signatory and Certification Requirements from 40 CFR 122.22.

IDEQ requested in their draft 401 Certification that the EPA include a requirement that hydroelectric facilities discharging to waters listed on IDEQ's most recent 303(d) list for temperature and for which a temperature TMDL has not been approved must submit the following data with their NOI.:

8. Continuous temperature data collected for one season with season defined as May 1st through November 1st.

C. Submitting the NOI and Supporting Information to EPA and Relevant Offices

The NOI must be sent to the following locations as well as to the appropriate IDEQ Regional Office or tribal government office address. See Appendix B for the latest addresses:

U.S. Environmental Protection Agency, Region 10
Office of Water and Watersheds, NPDES Permits Unit
1200 Sixth Avenue, OWW-191
Suite 155
Seattle, Washington 98101

Idaho Department of Environmental Quality, State Office
1410 North Hilton Street
Boise, Idaho 83706

D. Authorization to Discharge

Applicants will be authorized to discharge as of the date of the written notification that the EPA has granted coverage under the General Permit.

E. Notice of Termination of Discharge

In accordance with 40 CFR 122.64, the EPA may terminate coverage or deny a renewal of coverage under the General Permit, for the following reasons:

1. Noncompliance by the Permittee with any condition of the permit;
2. The Permittee's failure in the application or during the permit issuance process to disclose fully all relevant facts, or the Permittee's misrepresentation of any relevant facts at any time;
3. A determination that the permitted activity endangers human health or the environment and can only be regulated to acceptable levels by permit modification or termination; or
4. A change in any condition that requires either a temporary or permanent reduction

or elimination of any discharge (for example, plant closure or termination of discharge.).

The Permittee may also request termination of coverage under the General Permit in accordance with 40 CFR 122.64 and 122.22(d). The request must include a certification that the Permittee is not subject to any pending State or Federal enforcement actions including citizen suits brought under State or Federal law. The notification must be in writing and signed in accordance with the signatory requirements identified in 40 CFR 122.22. The notification must include the date that the discharger ceased operation, and the permit number assigned by the EPA. In cases of temporary shutdowns, a facility should not submit a notice of discharge termination, as this action results in the termination of NPDES coverage.

Termination of permit coverage under the General Permit will become effective 30 days after the Permittee receives written notification from EPA.

F. Idaho NPDES Authorization

In 2014, the Idaho Legislature revised the Idaho Code to direct the Idaho Department of Environmental Quality (IDEQ) to seek authorization from the EPA to administer the NPDES permit program for the State of Idaho. On August 31, 2016, IDEQ submitted a program package pursuant to CWA Section 401(b) and 40 CFR 123.21.

IDEQ is seeking authorization for a phased NPDES permit program that would begin July 1, 2018. Assuming that IDEQ'S request for authorization is approved, IDEQ would obtain permitting for General Permits on July 1, 2020. At that point in time, all documentation required by the permit would be sent to IDEQ rather than to the EPA and any decision under the permit stated to be made by the EPA or jointly between the EPA and IDEQ will be made solely by IDEQ. Permittees will be notified by IDEQ when this transition occurs.

VI. Rationale for Effluent Limitations and Standards

A. Statutory Requirements for Determining Effluent Limitations

Section 301(a) of the CWA, 33 USC § 1311(a), 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, 33 USC § 1342, authorizes the 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, 33 USC §§ 1311, 1314, 1316, 1341 and 1343. 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 the 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 limits for a particular pollutant be the more stringent of either technology-based effluent limits or water quality-based effluent limits. Technology-based effluent limits are set according to the level of treatment that is achievable using available technology. Water quality-based effluent limits are designed to ensure that the state adopted, EPA approved, water quality standards of a waterbody are being met and they 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. Where effluent limitation guidelines have not been promulgated for a specific category of discharge, case-by-case technology-based effluent

limits based on best professional judgment 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. Technology-based Effluent Limitations

Section 301(b) of the CWA, 33 USC § 1311(b), 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, 33 USC § 1311(b)(1)(A).

Effluent limitation guidelines have not yet been developed by the EPA for hydroelectric generating facility discharges.

C. Water Quality-based Effluent Limitations

Section 301(b)(1)(C) of the CWA and implementing regulations at 40 CFR § 122.44(d) require permits to include limits for all pollutants or parameters, which are or may be, discharged at a level which will cause, or contribute to an excursion above any State/Tribal water quality standard, including State/Tribe narrative criteria for water quality. If such water quality based effluent limits (WQBELs) are necessary, they must be stringent enough to ensure that water quality standards are met, and they must be consistent with any available waste load allocation. For pollutants with technology-based limits, EPA must include the more stringent of the technology-based effluent limit or water quality based effluent limit.

A review of the discharges of hydroelectric facilities permitted by other states and information gathered from other sources reveal that the pollutants of concern in the discharges are pH, and oil and grease, and potentially temperature. There are no industrial processes going on which would contribute other pollutants to the wastewater. The draft permit includes WQBELS for pH and oil and grease.

Additional WQBELs are not being imposed based on the finding that the discharges eligible for coverage under these permits do not contain additional pollutants in amounts which would have the reasonable potential to cause or contribute to violations of the applicable state or tribal water quality standards. If, using available information or information submitted in the NOI, it is determined by the EPA or the applicable State/Tribe that this determination is not correct, the discharger will not be granted coverage under the General Permit. For those discharges that are not granted coverage under this permit because the discharge contains pollutants in quantities that represent a reasonable potential to cause or contribute to violations of water quality standards, the discharger must apply for an individual NPDES permit

pH

The effluent limitation for Hydrogen Ion (pH) proposed in the draft permit is established to meet the State of Idaho's water quality standards for the protection of aquatic life. The water quality criterion for pH is found in IDAPA 58.01.02.250.01.a. and states the concentration of pH values must be within the range of 6.5 – 9.0 standard units at all times. To ensure that surface waters do not exceed this range from the discharges from hydroelectric facilities, the General Permit proposes pH limit not less than 6.5 and not more than 9.0 standard units.

Oil and Grease

The oil and grease limits are derived from the narrative water quality criteria in the state water quality standards at IDAPA 58.01.02.200.05 which states that surface waters shall be free from floating matter of any kind in concentrations causing nuisance or objectionable conditions or that may impair designated beneficial uses. The Region interprets these narrative criteria as prohibiting a discharge to these waters that would cause an oil sheen. EPA has established average monthly oil and grease limitations of 10 mg/L to represent the concentration at which there is an oil sheen on surface waters. This limit will ensure the narrative water quality standards for floating matter is met. The Region believes that this limit is a reasonable standard for facilities that have a reasonable potential for oil and grease discharge. Oregon and Washington have similar narrative criteria for oil and grease and both have used 10 mg/l monthly average as effluent limits for oil and grease.

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. The General Permit establishes a narrative effluent limitation for toxic pollutants in Part III.A.2. The draft general permit does not allow for the addition of toxic materials or chemicals. Further, additives used to control biological growth in such cooling systems are prohibited due to their inherent toxicity to aquatic life. Noncontact cooling water discharges do not contain or come in contact with raw materials, intermediate products, finished products, or process wastes. Therefore, it is assumed that these discharges do not contain toxic or hazardous pollutants or oil and grease. Nevertheless, toxic effects may still occur as a result of toxic source water or due to dissolution of the piping in cooling water systems. Any cooling water discharge (noncontact or direct) which would violate water quality criteria established for toxic and hazardous pollutants would not qualify for this general permit and an individual permit would be required.

Total Suspended Solids (TSS)

The General Permit does not establish effluent limitations for TSS for discharges authorized by the General Permit. EPA believes effluent limitations and monitoring requirements for TSS are not necessary, given the nature of the operation of hydroelectric generating facilities.

The BMP Plan requires inspection and maintenance procedures with record keeping for the backwash strainer because proper operation of the backwash strainer is necessary to continue the existing low TSS concentrations in the discharge. Backwash water contains naturally occurring solids that accumulate on intake screens prior to the water entering the facility since these screens are located on the upstream side of the plant. Any TSS present, in a discharge of facility backwash water, is naturally occurring and not a contaminant that results from plant operations.

Temperature

In this first issuance of the General Permit, the EPA is proposing only a monitoring requirement for temperature. The EPA does not believe temperature discharges will cause an exceedance of the temperature standard based on review of similar facilities' monitoring reports. The EPA will review the collected temperature data from the monitoring reports and determine if an effluent is necessary when the General Permit is up for renewal five years after it is issued.

Table 2. Proposed Water Quality Based Effluent Limitations and Bases

Parameter	Units	AML	Designated Use 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 9.0 standard units (s.u.)	Aquatic Life

Parameter	Units	AML	Designated Use in Idaho WQS Linked to Specific Water Quality Criteria Used as Basis for Limits
Temperature	°C	[1]	Aquatic Life
Oil and Grease	mg/L	10	Aquatic Life

[1] Refer to discussion in Part VI.C, above.

D. 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 3. Minimum Levels Applicable in the Idaho Hydroelectric Facilities General Permit

Parameter	ML/Interim ML
pH	N/A
Temperature	0.2°C
Oil and Grease	5 mg/L

E. Anti-degradation and Clean Water Act Section 401 Certification

The WQS contain an anti-degradation 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 water bodies subject to Clean Water Act jurisdiction and ensures that existing uses of a water body and the level of water quality necessary to protect those existing uses will be maintained and protected [IDAPA 58.01.02.051.01; 58.01.02.052.01]. Additionally, a Tier 1 review is performed for all new or reissued permits or licenses (IDAPA 58.01.02.052.07).
>
> 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; 58.01.02.052.08].
>
> Tier 3 Protection. The third level of protection applies to water bodies that have been designated outstanding resource waters (ORWs) and requires that activities not cause a lowering of water quality (IDAPA 58.01.02.051.03; 58.01.02.052.09).

The EPA has reviewed Idaho's anti-degradation analysis in the 401 certification and finds that it is consistent with the State's anti-degradation implementation procedures. Comments on the 401 certification, including the anti-degradation analysis, can be submitted to the IDEQ as set forth above (see the State Certification Section at the beginning of this document). See Appendix A for the State's draft 401 water quality certification.

F. 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 general permit, therefore, backsliding is not an issue. Most of the hydroelectric facilities eligible for coverage under this General Permit will be permitted for the first time, thus, there are no

backsliding issues. For the very few facilities that have individual NPDES permits, the permit conditions are either the same or more stringent; therefore, there are no backsliding issues.

VII. Monitoring and Reporting Requirements

A. Basis for Effluent and Surface Water Monitoring

Section 308 of the CWA and the federal regulation found at 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. IDEQ is requesting in their draft 401 Certification of this General Permit that the EPA include a requirement that the permittee monitor the intake water at the point of intake or control gate for temperature.

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

B. Monitoring Location(s)

Discharges authorized by this permit must be monitored at each outfall identified in the NOI. All facilities are required to monitor for applicable parameters and pollutants at the last point in the treatment train before the treated effluent leaves the facility for compliance with the permit limitations described in Section V of this fact sheet.

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. Permittees have 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 the EPA-approved test methods (generally found in 40 CFR 136) or as specified in the permit.

The measurement frequency is established at once per month for discharges of equipment and floor drain water, and discharges that are a combination of equipment and floor drain water, maintenance-related water, equipment-related backwash strainer water, and maintenance-related water during flood/high water events. This frequency for these discharges is to provide representative data on the monthly variability of each parameter. The measurement frequency for cooling water discharges is hourly done using a continuous monitoring probe. This frequency captures the variability of water temperature. The measurement frequency for discharges of equipment and station maintenance-related water and facility maintenance-related during flood/high water events is established at once per event. This frequency was established due to the intermittent nature of these discharges.

D. Submission of Discharge Monitoring Reports

Facilities covered by the General Permit will be required to submit DMRs to EPA Region 10, and the appropriate IDEQ Regional Office. The Draft General Permit includes a provision to require the Permittee to submit DMR data electronically via a secure internet application using NetDMR, a national web-based tool, within six months of the effective date of the Permit. NetDMR allows participants to discontinue mailing in the paper forms that are required under 40 CFR 122.41. The Permittee may use NetDMR after requesting and receiving permission from EPA Region 10.

VIII. Special Conditions

A. Quality Assurance Plan (QAP)

The federal regulation at 40 CFR 122.41(e) requires the Permittee to develop a Quality Assurance Plan (QAP) to ensure that the monitoring data submitted are accurate and to explain data anomalies if they occur. The Draft General Permit proposes that hydroelectric generating facilities complete and implement a QAP within 60 days of their authorization to discharge from the EPA.

The Permittee is required to follow specific sampling procedures [i.e., the 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 in order 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.

Federal regulations at 40 CFR §122.41(e) require Permittees to properly operate and maintain their facilities, including “adequate laboratory controls and appropriate quality assurance procedures.” In order to implement this requirement, the draft General Permit Part III.A, 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 this General Permit in accordance with EPA BMP guidance (EPA, 1993).

The Draft General Permit, Part III.B, requires the development and implementation of a BMP Plan, which prevents or minimizes the generation and potential release of pollutants from the facility to the waters of the United States through best management practices. This includes, but is not limited to, measures to prevent the escape of grease, and heavy oils used for lubrication and hydraulics; measures to reduce the need for lubricants for all facility equipment that come in contact with river water; and use of environmentally acceptable lubricants unless technically infeasible.

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, and facility maintenance-related water during flood high water events (collectively referred to as the "internal facility drainage 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 associated with work-related 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).

Permittees must develop a BMP Plan within 90 days of the effective date of this General Permit and certify to EPA and IDEQ in writing, the development and implementation of the BMP Plan. The certification must be signed in accordance with the Signatory Requirements in Part VI.H of this General

Permit. 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 Plan is an enforceable condition of the General Permit; therefore, a violation of the BMP Plan is a violation of the Permit.

C. Cooling Water Intake Structure.

Section 316(b) of the CWA requires that facilities with cooling water intake structures (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. The rule establishes BTA standards to reduce impingement and entrainment of aquatic organisms at existing power generating and manufacturing facilities. Impingement occurs when fish or shellfish become entrapped on the outer part of intake screens and entrainment occurs when fish or shellfish pass through the screens and into the cooling water system.

On August 15, 2014, the EPA promulgated regulations (40 CFR 125.90) to implement CWA section 316(b) requirements at existing facilities with CWIS with a design intake flow greater than 2 million gallons per day (MGD) and use at least twenty-five percent of the withdrawn water for cooling purposes. These regulations establish requirements for minimizing adverse environmental impacts associated with CWIS and procedures, including permit application requirements, for establishing the appropriate technology requirements. Together these requirements represent BTA for minimizing adverse environmental impacts associated with the use of CWIS.

For facilities requiring an NPDES permit with design intake flows of 2 MGD or less and less than twenty-five percent used exclusively for cooling the regulations at 40 CFR 125.90(b) require the Director to use best professional judgment (BPJ) for determining BTA for minimizing adverse environmental impacts. This proposed General Permit will only cover facilities that fall below the 2 MGD 25% threshold therefore the requirements to minimize adverse impacts will be based on BPJ.

The EPA Region 10 drew on several sources to inform the proposed requirements in the General Permit. The EPA reviewed relevant requirements from the States of Idaho, Oregon, and Washington as well as from federal wildlife agencies. The fish and wildlife agencies of the three states and the National Marine Fisheries Agency have developed guidelines for fish screen design criteria and are found in Anadromous Salmonid Passage Facility Design, NMFS- Northwest Region, July 2011. http://www.westcoast.fisheries.noaa.gov/publications/hydropower/fish_passage_design_criteria.pdf. These guidelines represent the best information on intake screen design for the Pacific Northwest and the EPA believes facilities using these design standards would reduce the adverse impacts of CWIS.

The EPA also considered the practices identified in the EPA's 316(b) regulations for facilities with CWIS withdrawing greater than 2 MGD and using at least 25% for cooling water - -standards for impingement mortality §125.94(c) and BTA standards for entrainment at existing facilities §125.94(d)). Finally, the EPA considered the requirements used by EPA Region 1 in their NPDES general permit for noncontact cooling water facilities and the requirements the Washington State Department of Ecology includes included in their permits issued to facilities with CWIS.

Informed by the above sources, the Region is taking a three prong approach for determining BTA to minimize adverse environmental effects (impingement and entrainment) for the General Permit. The General Permit proposes requiring facilities to properly operate and maintain any existing technologies used to minimize impingement and entrainment; monitor and report any entrained or impinged fish retaining the reports for inspection; and prepare and submit information consistent with NPDES permit application requirements for cooling water intake structures in 40 CFR 122.21(r) (2)-(8). EPA is requiring the submittal of this information at the time of permit renewal. EPA will use this information to assess the potential for impingement and entrainment at the CWIS, evaluate the appropriateness of

any proposed technologies or mitigation measures, and determine any additional requirements to place on the facility's CWIS in the next permit cycle.

IX. Environmental Justice Considerations

Executive Order 12898, *Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations*, directs each federal agency to "make achieving environmental justice part of its mission by identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects of its programs, policies, and activities." The EPA strives to enhance the ability of overburdened communities to participate fully and meaningfully in the permitting process for EPA-issued permits, including NPDES permit. "Overburdened" communities can include minority, low-income, tribal, and indigenous populations or communities. For more information, please visit http://ww.epa.gov/compliance/ej/plan-ej/.

As a part of the General Permit development process, the EPA Region 10 conducted a screening analysis to determine whether this permit action could affect overburdened communities. The EPA used a nationally consistent geospatial tool that contains demographic and environmental data for which enhanced outreach may be warranted. As part of the screening process, it was determined that only one facility was near an overburdened community. We determined that the General Permit for Hydro-electric facilities did not overlap with the environmental issues associated with the area.

Regardless of whether a facility is located near a potentially overburdened community, the 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/articles/2013/05/09/2013-10945/epa-activities-to-promote-environmental-justice-in-the- permit-application-process#p-104. 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, and other activities.

X. Other Legal Requirements

A. State Certification

Section 401 of the CWA, 33 USC 1341, requires EPA to seek a certification from the state that the conditions of the Draft General Permit are stringent enough to comply with Idaho WQS, including the state antidegradation policy, before issuing the final permit. Federal regulations at 40 CFR 124.53 allow for the state to stipulate more stringent conditions in the permit, if the certification sites the CWA or state law upon which that condition is based.

The regulations require a certification to include statements of the extent to which each condition of the permit can be made less stringent without violating the requirements of state law.

EPA previously requested that the IDEQ review the Draft General Permit and provide a preliminary certification pursuant to 40 CFR 124.53. IDEQ, provided EPA with their draft CWA § 401 Certification for the draft General Permit on **March 29, 2018**. See Appendix A.

After the public comments have been evaluated and addressed, a preliminary final General Permit will be sent to the State to begin the final certification process. If the state authorizes different or additional conditions as part of the certification, the permit may be changed to reflect these conditions.

B. Endangered Species Act [16 USC § 1531 et al.]

Section 7 of the Endangered Species Act (ESA) 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 EPA developed a Biological Evaluation (BE) [see Appendix C] to evaluate potential impacts to ESA species. The EPA believes that the proposed permit would have ***not likely to adversely affect*** Bull trout, Chinook salmon, Sockeye salmon, Steelhead, Banbury Springs limpet, Bliss Rapids snail, Snake River physa snail, and Ute Ladies' Tresses, and ***no effect*** for the remaining ESA species listed below. Table 4 lists the threatened or endangered species in Idaho and the EPA's determinations.

Table 4. List of Threatened/Endangered Species in Idaho and EPA's Determination

Species	Present Status	EPA Determination
Mammals		
Grizzly bear *(Ursus arctos horribilis)*	Threatened	No Effect
Canada lynx *(Lynx canadensis)*	Threatened	No Effect
Northern Idaho ground squirrel *(Spermophilus brunneus brunneus)*	Threatened	No Effect
Southern Idaho ground Squirrel *(Spermophilus brunneus endemicus)*	Candidate	No Effect
Woodland caribou *(Rangifer tarandus caribou)*	Endangered	No Effect
Birds		
Greater sage-grouse *(Centrocercus urophasianus)*	Candidate	No Effect
Yellow-billed cuckoo *(Coccyzus americanus)*	Proposed Threatened	No Effect
Fish		
Bull trout *(Salvelinus confluentus)*	Threatened	**Not Likely to Adversely Affect**
Chinook salmon (*Oncorhynchus tshawytscha)*		**Not Likely to Adversely Affect**
Snake River Sockeye salmon (*Oncorhynchus nerka*)		**Not Likely to Adversely Affect**
Snake River Steelhead (*Oncorhynchus mykiss)*		**Not Likely to Adversely Affect**
Kootenai River White sturgeon *(Acipenser transmontanus)*	Endangered	No Effect
Amphibians		
Columbia spotted frog *(Rana luteiventris)*	Candidate	No Effect
Invertebrates		
Banbury Springs limpet *(Lanx sp.)*	Endangered	**Not Likely to Adversely Affect**

Bliss Rapids snail *(Taylorconcha serpenticola)*	Threatened	**Not Likely to Adversely Affect**
Bruneau hot springsnail *(Pyrgulopsis bruneauensis)*	Endangered	No Effect
Snake River physa Snail *(Physa natricina)*	Endangered	**Not Likely to Adversely Affect**
Plants		
Whitebark pine *(Pinus albicaulis)*	Threatened	No Effect
MacFarlane's Four-o'clock *(Mirabilis macfarlanei)*	Threatened	No Effect
Spalding's catchfly *(Silene spaldingii)*	Threatened	No Effect
Ute ladies'-tresses *(Spiranthes diluvialis)*	Threatened	**Not Likely to Adversely Affect**
Water howellia *(Howellia aquatilis)*	Threatened	No Effect
Goose Creek milkvetch *(Astragalus anserinus)*	Candidate	No Effect
Slickspot peppergrass *(Lepidium papilliferum)*	Proposed Endangered	No Effect

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 the 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).

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. The EPA has prepared an EFH assessment as part of the Biological Evaluation which appears in Appendix C.

The EPA has determined that issuance of this permit is not likely to adversely affect EFH within the State of Idaho. The 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 reissuance of this permit.

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. Coastal Zone Management Act

Idaho is not located in the coastal zone, so CZARA does not apply either.

F. Historic Preservation Act
The General 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.

G. 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, this proposed permit requires electronic reporting for discharge monitoring reports, so it will save some reporting time and paper mailing costs.

H. Standard Permit Provisions
Specific regulatory management requirements for NPDES permits are contained in 40 CFR 122.41. These conditions are included in the Draft General Permit in Parts IV-VI as standard regulatory language that must be included in all NPDES permits. Since that language is a recitation of existing regulations, it is not open for comment and cannot be challenged in the context of this permitting action. The standard regulatory language covers requirements such as monitoring, recording, reporting requirements, compliance responsibilities, and other general requirements.

REFERENCES

EPA. 1991. Technical Support Document for Water Quality-Based Toxics Control. U.S. Environmental Protection Agency, Office of Water, EPA/505/2-90-001, March 1991. http://www.epa.gov/npdes/pubs/owm0264.pdf

EPA. 2010. U.S. EPA NPDES Permit Writers' Manual. U.S. Environmental Protection Agency, Office of Water, EPA-833-K-10-001, September 2010. http://cfpub.epa.gov/npdes/writermanual.cfm?program_id=45

IDEQ. 2013. Idaho Water Quality Standards (IDAPA 58.01.02) web site. http://adminrules.idaho.gov/rules/current/58/0102.pdf. Accessed December 16, 2014.

USFWS. Information, Planning, and Conservation System (IPaC) Current List of Endangered and Threatened Species in the State of Idaho. http://www.ecos.fws.gov/ipac. Accessed December 19, 2014.

APPENDIX A. IDEQ PRELIMINARY CWA SECTION 401 CERTIFICATION

APPENDIX B. EPA, IDEQ AND TRIBAL OFFICE CONTACT INFORMATION

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APPENDIX C: BIOLOGICAL EVALUATION

A copy of the Biological Evaluation will be available upon request or from EPA Region 10 https://www.epa.gov/npdes-permits/idaho-npdes-permits