



STATE OF IDAHO  
DEPARTMENT OF  
ENVIRONMENTAL QUALITY

1410 North Hilton • Boise, ID 83706 • (208) 373-0502  
[www.deq.idaho.gov](http://www.deq.idaho.gov)

Brad Little, Governor  
John H. Tippets, Director

October 16, 2019

Mr. Daniel Opalski, Director  
U.S. EPA, Region 10  
Office of Water and Watersheds  
NPDES Permits Unit (OWW-191)  
1200 Sixth Avenue, Suite 900  
Seattle, WA 98101

RE: Aquaculture Facilities in Idaho General Permit IDG131000

Dear Mr. Opalski:

The Idaho Department of Environmental Quality (DEQ) has reviewed the U.S. Environmental Protection Agency's final NPDES permit for the above-referenced General Permit, which was received September 23, 2019. Comments received during the public comment period did not result in significant modifications to the draft certification. The final 401 certification (attached) includes conditions necessary to comply with Idaho's Water Quality Standards and other state and federal laws intended to protect water quality.

Thank you for your time and consideration. If you have any questions or concerns, please direct your questions to Loren Moore by email ([loren.moore@deq.idaho.gov](mailto:loren.moore@deq.idaho.gov)) or at (208) 373-0158.

Sincerely,

A handwritten signature in blue ink that reads "Mary Anne Nelson".

Mary Anne Nelson, PhD  
Surface and Wastewater Division Administrator  
Idaho Department of Environmental Quality

MAN:LM:lf

Enclosed: Final 401 Certification for Aquaculture Facilities in Idaho General Permit

cc: Susan Poulosom, USEPA Region 10  
Lisa Kusnierz, USEPA Region 10  
Jason Pappani, DEQ Surface Water Program Manager  
Mark Cecchini-Beaver, Idaho Attorney General's Office  
DEQ Regional Administrators



## Idaho Department of Environmental Quality Final §401 Water Quality Certification

October 16, 2019

**NPDES Permit Number(s):** Aquaculture Facilities in Idaho General Permit IDG131000, Excluding Facilities Discharging into the Upper Snake-Rock Subbasin

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Pursuant to the provisions of Section 401(a)(1) of the Federal Water Pollution Control Act (Clean Water Act), as amended; 33 U.S.C. Section 1341(a)(1); and Idaho Code §§ 39-101 et seq. and 39-3601 et seq., the Idaho Department of Environmental Quality (DEQ) has authority to review National Pollutant Discharge Elimination System (NPDES) permits and issue water quality certification decisions.

Based upon its review of the above-referenced permit and associated fact sheet, DEQ certifies that if the permittee complies with the terms and conditions imposed by the permit along with the conditions set forth in this water quality certification, then there is reasonable assurance the discharge will comply with the applicable requirements of Sections 301, 302, 303, 306, and 307 of the Clean Water Act, the Idaho Water Quality Standards (WQS) (IDAPA 58.01.02), and other appropriate water quality requirements of state law.

This certification does not constitute authorization of the permitted activities by any other state or federal agency or private person or entity. This certification does not excuse the permit holder from the obligation to obtain any other necessary approvals, authorizations, or permits.

The Aquaculture General Permit (GP) provides permit coverage for concentrated aquatic animal production facilities. This permit covers fish rearing aquaculture facilities in the state of Idaho, including hatcheries, fish farms, or other facilities that contain, grow, or hold cold and warm water fish species. Facilities and discharges that are not authorized under this GP include the following:

- 1) Facilities discharging into the Upper Snake-Rock Subbasin are not covered.
- 2) Facilities intending to use pollutant trading to meet effluent limits. Currently no trading is proposed or authorized under the Aquaculture GP. DEQ guidance states that public pollutant trading should undergo a public review period. Any facility seeking to utilize this approach to meet effluent limits must apply for individual permit coverage.
- 3) Discharges that do not consist solely of process effluent from aquaculture facilities (e.g., in combination with domestic wastewater) prior to being discharged.
- 4) Discharges from aquaculture facilities where the GP does not adequately address the environmental concerns associated with the discharge, as determined by the EPA at the time a discharger seeks coverage under the GP.
- 5) Discharges to land or to publicly owned treatment works.

- 6) Discharges to waters that constitute an outstanding national resource, such as waters of national and state parks and wildlife refuges and waters of exceptional recreational or ecological significance.

## Antidegradation Review

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

- Tier I 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 I review is performed for all new or reissued permits or licenses (IDAPA 58.01.02.052.07).
- Tier II 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 III Protection. The third level of protection applies to water bodies that have been designated outstanding resource waters and requires that activities not cause a lowering of water quality (IDAPA 58.01.02.051.03; 58.01.02.052.09).

DEQ employs a water body by water body approach to implementing Idaho's antidegradation policy. This approach means that any water body fully supporting its beneficial uses will be considered high quality (IDAPA 58.01.02.052.05.a). Any water body not fully supporting its beneficial uses will be provided Tier I protection for that use, unless specific circumstances warranting Tier II protection are met (IDAPA 58.01.02.052.05.c). The most recent federally approved Integrated Report and supporting data are used to determine support status and the tier of protection (IDAPA 58.01.02.052.05).

## Pollutants of Concern

Aquaculture facilities discharge pollutants attributed to fish waste, feed, drug and chemical residuals that maintain and restore animal health, as well as chemical residuals related to cleaning products and water quality enhancers.

The pollutants of concern associated with aquaculture facilities include: five-day biochemical oxygen demand (BOD<sub>5</sub>), biological wastes, floating and submerged matter, total suspended solids (TSS), settleable solids, nutrients (phosphorus and nitrogen), ammonia, chlorine, temperature, and therapeutic drugs and chemicals. Aquaculture facilities are not considered sources of pathogens (*Escherichia coli*) which affect human health.

Numeric effluent limits have been developed for the discharge of TSS, TP, and total residual chlorine at all covered facilities. Temperature limits are required for facilities discharging into a water body that has a thermal impairment and temperature monitoring is required for all aquaculture facilities. Numeric effluent limits are not proposed for BOD<sub>5</sub>, biological wastes, floating and submerged matter, settleable solids, ammonia, and therapeutic drugs and chemicals.

However, the permit does include narrative effluent limitations that require development and implementation of a Best Management Practices (BMP) plan and that prohibit the following:

- (1) Discharge of untreated cleaning wastewater (e.g., obtained from a vacuum or standpipe bottom drain system or rearing/holding unit disinfection) is prohibited;
- (2) Discharge of any toxic substances, including drugs, pesticides, disinfectants, or other chemicals in concentrations that impair designated uses are prohibited;
- (3) Discharge of copper sulfate and chelated copper compounds to waters of the U.S. is prohibited;
- (4) Discharge of floating, suspended or submerged matter, including solids, foam, fish guts, blood or dead fish, in amounts causing nuisance or objectionable conditions or that may impair designated beneficial uses in the receiving water is prohibited;
- (5) Removal of dam boards in raceways or ponds which allow accumulated solids in excess of the limits to be discharged to waters of the U.S. is prohibited;
- (6) Sweeping, raking, or otherwise intentionally discharging accumulated solids from raceways or ponds to waters of the U.S. is prohibited; and
- (7) Containing, growing, or holding fish within an Off-line Settling Basin is prohibited; this prohibition does not apply to basins or ponds where fish are used as part of the waste treatment system.

### ***Receiving Water Body Level of Protection***

All waters in Idaho that receive discharges authorized under the Aquaculture GP will receive, at minimum, Tier I antidegradation protection because Idaho's antidegradation policy applies to all state waters. Water bodies that fully support their aquatic life or recreational uses are considered *high quality waters* and will receive Tier II antidegradation protection, in addition to Tier I protection. In addition to these uses, all waters of the state are protected for agriculture and industrial water supply, wildlife habitat, and aesthetics (IDAPA 01.02.100).

Although Idaho does not currently have any Tier III designated outstanding resource waters (ORWs), it is possible for a water body to be designated as an ORW during the life of this permit. Because of this potential, this antidegradation review will also assess whether the permit complies with the ORW requirements of Idaho's antidegradation policy.

To determine the support status of the receiving water body, the most recent EPA-approved Integrated Report, available on Idaho DEQ's website, is to be used:  
<http://www.deq.idaho.gov/water-quality/surface-water/monitoring-assessment/integrated-report/>.

High quality waters are identified in Categories 1 and 2 of the Integrated Report. If a water body is in either Category 1 or 2, it is a Tier II water body.

Unassessed waters are identified in Category 3 of DEQ's Integrated Report. These waters require a case-by-case determination to be made by DEQ based on available information at the time of the application for permit coverage.

Impaired waters are identified in Categories 4 and 5 of the Integrated Report. Category 4(a) contains impaired waters for which a Total Maximum Daily Load (TMDL) has been approved by EPA. Category 4(b) contains impaired waters for which controls other than a TMDL have been approved by EPA. Category 5 contains waters which have been identified as “impaired”, for which a TMDL is needed. These waters are Tier I waters, for the use which is impaired. However, an impaired water body will receive Tier II protection for its aquatic life uses if the following conditions are met: (1) the aquatic life impairment is due to dissolved oxygen, pH, or temperature and (2) the biological or aquatic habitat parameters show a healthy, balanced biological community (IDAPA 58.01.02.052.05.c.i).

DEQ’s webpage also has a link to the state’s map-based Integrated Report which presents information from the Integrated Report in a searchable, map-based format:

<http://www.deq.idaho.gov/assistance-resources/maps-data/>.

Water bodies can be in multiple categories for different causes. If assistance is needed in using these tools, or if additional information/clarification regarding the support status of the receiving water body is desired, please contact your nearest DEQ regional office or the State Office (Table 1).

**Table 1. Idaho DEQ regional and state office contacts.**

<b>Regional and State Office</b>	<b>Address</b>	<b>Phone Number</b>	<b>Email</b>
Boise	1145 N. Orchard St., Boise 83706	208-373-0550	kati.carberry@deq.idaho.gov
Coeur d’Alene	2110 Ironwood Parkway, Coeur d’Alene 83814	208-769-1422	thomas.herron@deq.idaho.gov
Idaho Falls	900 N. Skyline Dr., Suite B, Idaho Falls 83402	208-528-2650	troy.saffle@deq.idaho.gov
Lewiston	1118 F St., Lewiston 83501	208-799-4370	sujata.connell@deq.idaho.gov
Pocatello	444 Hospital Way, #300, Pocatello 83201	208-236-6160	lynn.vanevery@deq.idaho.gov
Twin Falls	650 Addison Avenue West, Suite 110, Twin Falls 83301	208-736-2190	sean.woodhead@deq.idaho.gov
State Office	1410 North Hilton St., Boise 83706	208-373-0502	loren.moore@deq.idaho.gov

### ***Protection and Maintenance of Existing Uses (Tier I Protection)***

A Tier I review is performed for all new or reissued permits or licenses, applies to all waters subject to the jurisdiction of the Clean Water Act, and requires demonstration that existing and designated uses and the level of water quality necessary to protect existing and designated uses shall be maintained and protected. In order to protect and maintain existing and designated beneficial uses, a permitted discharge must comply with narrative and numeric criteria of the Idaho WQS, as well as other provisions of the WQS such as Section 055, which addresses water quality limited waters. The numeric and narrative criteria in the WQS are set at levels that ensure protection of existing and designated beneficial uses.

Water bodies not supporting existing or designated beneficial uses must be identified as water quality limited, and a total maximum daily load (TMDL) must be prepared for those pollutants causing impairment. A central purpose of TMDLs is to establish wasteload allocations (WLAs) for point source discharges, which are set at levels designed to help restore the water body to a condition that supports existing and designated beneficial uses. Discharge permits must contain limitations that are consistent with wasteload allocations in the approved TMDL. A permit with effluent limitations consistent with TMDL wasteload allocations will provide the level of water quality necessary to support existing and designated uses and therefore satisfies Tier I antidegradation requirements.

DEQ is in the process of revising the Upper Snake-Rock TMDL. The revision may result in changes to the existing WLAs for facilities subject to that TMDL. Therefore, facilities with WLAs in the Upper Snake-Rock Subbasin will not be eligible for coverage under this GP. However, facilities with wasteload allocations in the Upper Snake-Rock Subbasin will retain permit coverage under the 2007 Aquaculture GP (IDG-130000), which EPA has administratively extended.

The water quality-based effluent limitations and requirements contained in the Aquaculture GP, coupled with the conditions set for this in this certification, are designed to ensure compliance with the narrative and numeric criteria in Idaho WQS. As a condition of the general permit special conditions (Part VI.A & B), applicants will be required to develop and implement a Quality Assurance Plan (QAP) to properly operate and maintain the facility and a BMP Plan to minimize or eliminate the generation and potential release of pollutants from the facility to waters of the United States. Covered facilities must certify that both the QAP and BMP Plan have been developed and are being implemented.

All facilities covered under the Aquaculture GP must implement Best Management Practices (BMPs) to minimize the discharge of pollutants. BMPs for pond and flow-through systems focus on increased settling time and reducing sediment disturbance. Recirculating production systems continuously treat a portion of facility flow before it is returned to the system. EPA has included narrative discharge prohibitions in this general permit to address the discharge of solid wastes and organic residues which could contribute oxygen-demanding materials and nutrients into Idaho's water bodies. Furthermore, covered facilities are required to manage nutrient inputs into aquaculture systems and to ensure the proper storage and use of drugs and chemicals.

To ensure discharges from covered facilities do not violate Idaho's general surface water quality criteria, the permit expressly prohibits the discharge of floating, suspended or submerged matter in amounts causing nuisance or objectionable conditions or that may impair designated beneficial uses; the deliberate discharge of accumulated solids from ponds and raceways in excess of effluent limits; copper sulfate and chelated copper compounds; and untreated cleaning wastewater. Additionally, permittees must utilize drugs and registered pesticides in accordance with label directions. The discharge of toxic substances (cleaning chemicals, drugs, and pesticides) is prohibited in concentrations that impair designated uses.

The effluent limitations, monitoring requirements, BMP and QAP requirements, and associated obligations contained in the Aquaculture Facilities Permit, coupled with the conditions in this certification, ensure compliance with the narrative and numeric criteria in the WQS. Therefore, DEQ has determined the permit will protect and maintain existing and designated beneficial uses

and is in compliance with the Tier I provisions of Idaho's WQS (IDAPA 58.01.02.051.01 and 58.01.02.052.07).

### ***Protection of High-Quality Waters (Tier II Protection)***

Water bodies that fully support their beneficial uses are recognized as high quality waters and are provided Tier II protection in addition to Tier I protection. Water quality parameters applicable to existing or designated beneficial uses must be maintained and protected under Tier II, unless a lowering of water quality is deemed necessary to accommodate important economic or social development. For general permits, DEQ conducts an antidegradation review, including any Tier II analysis, at the time at which general permits are certified (IDAPA 58.01.02.052.03).

For a new permit, the effect on water quality is determined by reviewing the difference between the existing receiving water quality and the water quality that would result from the activity or discharge as proposed in the new permit (IDAPA 58.01.02.052.03).

Facilities operating prior to July 1, 2011 seeking coverage under this general permit are considered existing discharges under IDAPA 58.01.02.010.37. If the facility has not increased the discharge for which it is seeking coverage under this general permit from operations prior to July 1, 2011, then the discharge will not cause significant degradation to the receiving water (IDAPA 58.01.02.052.03) and no further Tier II antidegradation analysis is necessary. The following hatcheries discharge to a Tier II, fully supporting water body: American Falls (IDG130031), McCall (IDG131005), Sawtooth (IDG131010), and Rapid River (IDG131009). The Upper (IDG130078) and Lower Fall Creek (IDG130085) hatcheries discharge into AU ID17040209SK007\_02 & 03, which is unassessed in the current Integrated Report; however, downstream segments in the Snake River (Rock Creek to Raft River) are fully supporting both aquatic life and contact recreation beneficial uses and so DEQ will also provide Tier II protection for Fall Creek.

The current aquaculture general permits require hatcheries to report any planned operational changes that would result in alterations to the facility discharge in their annual reporting. None of the facilities covered under the current general permits, including those discharging to Tier II waters, provided EPA notice of modification since July 1, 2011. Therefore DEQ has reasonable assurance that these existing facilities or discharges in Tier II waters are not causing degradation because the facility has not changed operation of the discharge activity from July 1, 2011 onward.

As stated previously, aquaculture facilities are not considered significant sources of pathogenic *E. coli* bacteria strains and will not negatively impact the human health designated uses in Idaho's water bodies.

Based upon the limits set in the permit, and the terms and conditions of this certification, DEQ believes that the discharge from covered aquaculture facilities is not likely to cause adverse changes in water quality and has concluded that as long as permittees operate consistent with the terms of the NPDES discharge permit and the requirements set forth in this certification, there is reasonable assurance that existing and designated beneficial uses will be protected and maintained and there will be no lowering of water quality in any high quality waters (IDAPA 58.01.02.051.02 and IDAPA 58.01.02.052.08).

## ***Protection of Outstanding Resource Waters (Tier III Protection)***

Idaho's antidegradation policy requires that the quality of outstanding resource waters (ORWs) be maintained and protected from the impacts of point and nonpoint source activities (IDAPA 58.01.02.051.03). As mentioned previously, no water bodies in Idaho have been designated as ORWs.

As a condition of this certification, DEQ is requiring any applicant proposing to discharge to an ORW, should one become designated during the term of this permit, to obtain an individual IPDES permit from DEQ. This condition will ensure compliance with Idaho's antidegradation provisions concerning ORWs.

## **Conditions Necessary to Ensure Compliance with Water Quality Standards or Other Appropriate Water Quality Requirements of State Law**

### ***Compliance Schedule***

Pursuant to IDAPA 58.01.02.400.03, DEQ may authorize compliance schedules for water quality-based effluent limits issued in the permit for the first time. Ace and Arraina hatcheries cannot immediately achieve compliance with the effluent limits for TSS or TP; therefore, DEQ authorizes a compliance schedule with interim effluent limits (Table 2) set forth below. This compliance schedule provides the permittee a reasonable amount of time to achieve the final effluent limits specified in the GP. At the same time, the schedule ensures that compliance with final water quality-based effluent limits is accomplished as soon as possible.

**Table 2. TSS & TP: Interim Limits for Ace and Arraina Hatcheries.**

<b>Facility</b>	<b>Parameter</b>	<b>Units</b>	<b>Average Monthly Limit</b>	<b>Maximum Daily Limit</b>
Ace	TSS	lbs/day	218.7	614.5
	TP	lbs/day	2.9	6.2
Arraina	TSS	lbs/day	356.4	1001.5
	TP	lbs/day	4.8	10.2

A five (5) year compliance schedule is authorized for new TP and TSS effluent limits defined in the *Jacks Creek Total Maximum Daily Load* (DEQ 2007) and implemented in the current general permit. In the interim, Ace and Arraina hatcheries must comply with existing effluent limits and perform the tasks outlined in Table 3 below. The compliance schedule and annual reporting requirements will allow for the collection of site specific data to produce a more accurate assessment of treatment performance in the Bruneau Subbasin for these constituents.

**Table 3. Tasks required under the Schedule of Compliance for TP and TSS.**

Task No.	Completion Date	Activity
1	Six (6) months from the Authorization Date of the Permit (EDP)	Submit to DEQ a facility Monitoring Plan (inclusive of the Quality Assurance Plan, Permit VI.A) which will include monitoring for upstream and downstream conditions. The plan must be approved by the DEQ Boise Regional office.
2	EDP + one (1) year and annually thereafter for the term of the permit	Submit to DEQ an Annual Progress Report detailing the facilities progress toward achieving final effluent limits. (see Permit section VI.C)
3	EDP + five (5) years	Achieve compliance with final effluent limits (Permit Part IV.C, Table 3).

### ***Best Management Practices***

Best management practices must be designed, implemented, and maintained by the permittee to fully protect and maintain the beneficial uses of waters of the United States and to prevent exceedances of the state water quality standards (IDAPA 58.01.02.200; 33 U.S.C. § 1311).

### ***Outstanding Resource Waters***

Any permittee proposing to discharge to an outstanding resource water will not be covered under this General Permit (Permit Part I.E.8) and is required to apply for an individual IPDES permit from DEQ (IDAPA 58.01.02.052.09).

### ***Hazardous and Deleterious Material Storage***

Hazardous and deleterious materials must not be stored, disposed of, or accumulated adjacent to or in the immediate vicinity of state waters unless adequate measures and controls are provided to ensure that those materials will not enter state waters as a result of high water, precipitation runoff, wind, storage facility failure, accidents in operation, or unauthorized third party activities (IDAPA 58.01.02.800).

### **Other Conditions**

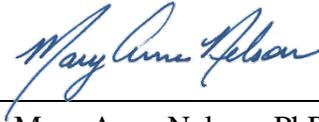
Pursuant to 33 U.S.C. § 1341, this certification is conditioned upon the requirement that any material modification of the permit or the permitted activities—including without limitation, significant changes to the Aquaculture Facilities General Permit, any modifications of the permit to reflect new or modified TMDLs, wasteload allocations, site-specific criteria, variances, or other new information—shall first be provided to DEQ for review to determine compliance with Idaho WQS and to provide additional certification pursuant to Section 401.

### **Right to Appeal Final Certification**

The final Section 401 Water Quality Certification may be appealed by submitting a petition to initiate a contested case, pursuant to Idaho Code § 39-107(5) and the “Rules of Administrative

Procedure before the Board of Environmental Quality” (IDAPA 58.01.23), within 35 days of the date of the final certification.

Questions or comments regarding the actions taken in this certification should be directed to Loren Moore, DEQ State Office, at (208) 373-0158 or via email at [loren.moore@deq.idaho.gov](mailto:loren.moore@deq.idaho.gov).



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Mary Anne Nelson, PhD  
Surface and Wastewater Division Administrator  
DEQ State Office