

## Response to Comments

General Permits for Aquaculture Facilities in Idaho Excluding Facilities Discharging into the Upper Snake-Rock Subbasin (IDG131000) and Aquaculture Facilities Located in Indian Country in Idaho (IDG133000)

NPDES Permit Numbers: IDG131000 and IDG133000

October 16, 2019

### Introduction

On June 6, 2019, the U.S. Environmental Protection Agency Region 10 (EPA) issued a public notice for the proposed reissuance of two draft National Pollutant Discharge Elimination System (NPDES) General Permits for Aquaculture Facilities in Idaho Excluding Facilities Discharging into the Upper Snake-Rock Subbasin (IDG131000) and Aquaculture Facilities Located in Indian Country in Idaho (IDG133000). The public comment period closed July 22, 2019.

During the public comment period, the EPA received comments from the following:

- Jamie Mitchell, Idaho Fish and Game, McCall Fish Hatchery (IDG131005)
- Steve Maggard, Simplot Land and Livestock, Ace Fish Facility (IDG130123)
- John R. MacMillan, Ph.D., Vice President, Clear Springs Foods Re:
  1. Soda Springs Brood Station (IDG130034)
  2. Lost River Brood Station (IDG130073)
- Matthew Nykiel, Idaho Conservation League
- Cassie Sundquist, Idaho Fish and Game Re:
  1. Mackay Fish Hatchery (IDG130030)
  2. Grace Fish Hatchery (IDG130035)
  3. Springfield Fish Hatchery (IDG130038)
  4. McCall Fish Hatchery (IDG131005)

This document presents the comments received and provides corresponding response to those comments. As a result of comments received the following revisions and clarifications were made to the permit:

- The EPA revised the proposed monthly phosphorus water quality based effluent limit for McCall Hatchery from 0.020 mg/L to 0.025 mg/L.
- The average monthly load calculation was changed back to the method from the 2007 permit, which uses only the flow value collected concurrently with the pollutant sample instead of the average monthly flow (see Section IV.D.2.). To reflect this change, EPA has added the following sentence to Section IV.D.2. of the final permit following the load calculation as follows: “Loading (in lb/d) is calculated by multiplying the concentration (in mg/L) by the flow (in cfs) measured the day of sampling and a conversion factor of 5.4. If the Permittee conducts more frequent monitoring using test procedures approved under 40 CFR Part 136, those results must be incorporated into the load calculation and reporting. See Part VIII.D.”

- The permit language in Section II.D.1. was changed from referencing monitoring requirements to reporting requirements: “The permittee must continue to follow the reporting requirements and all other permit conditions during periods of shutdown or inactivity.”
- In Section IV.C., Table 3 was not previously referenced so following statement was added: “Table 3 lists the AML and MDL, or annual limit in some cases, for all facilities with WLAs for TSS, TP, and/or temperature.
- All occurrences of “0.15°C Δ” in Table 3 were changed to “0.15°C increase.”
- The following footnote to Table 3 in Section IV.C. was added to clarify that the temperature limit is based on the influent temperature but the permit does not limit the influent temperature: “Effluent limit is based on the influent temperature. AML: If the influent temperature is less than or equal to 9°C, the AML is 9°C; if the influent temperature is greater than 9°C, the AML is equal to the influent temperature plus 0.15°C. MDL: If the influent temperature is less than or equal to 13°C, the MDL is 13°C; if the influent temperature is greater than 13°C, the MDL is equal to the influent temperature plus 0.15°C.”
- The EPA has clarified the receiving water temperature monitoring location in Section V.B.1., below Table 7, as follows: “Receiving water monitoring must be conducted in the facility’s immediate receiving water upstream of the discharge location.”
- For facilities with year-round sample periods in Table 7, the following footnote was added: “Monitoring required for part or all of the permit term must begin within 60 days of the date the EPA authorizes the discharge.”
- The EPA has clarified the language in Section V.C.2. regarding composite sampling to match that in Section XI.15 as follows: “Composite samples must consist of four (4) or more discrete samples taken at one-half hour intervals or greater in a 24-hour period. At least one fourth of the samples must be taken during quiescent zone or raceway cleaning.”
- The EPA has clarified references to quantity of drug/disinfectant/chemical use in the NOI “Drugs, Disinfectants & Other Chemicals” section and the Annual Report to read: “maximum daily active ingredients used”.
- The EPA has adding the following language to Section V.B.1., below Table 7 to clarify the location of the receiving water monitoring and address instances where there is no upstream flow because the receiving water is a spring-fed system that serves as the facility’s source water: “Receiving water monitoring must be conducted in the facility’s immediate receiving water upstream of the discharge location. Receiving water monitoring is not required if the headwaters of the receiving water is used as the facility’s source water.”
- Incorrect references to Boom Creek were corrected to Boone Creek.
- The EPA added the following clarifying footnote below Table 6 in the permit regarding quarterly monitoring: “This is the minimum frequency for facilities with an annual limit. See Table 3 and Part V.D.”

## CWA § 401 Certifications

As stated in the Fact Sheet (Section X.F.), the Coeur d'Alene Tribes denied CWA § 401 certification for Treatment as State (TAS) waters and the Shoshone Bannock Tribes transmitted a final CWA § 401 certification requiring notification if a Notice of Intent is filed for a facility discharging within the Fort Hall Reservation. These responses were provided to the EPA prior to the public comment period, and the associated requirements were incorporated into the draft permit.

Idaho Department of Environmental Quality (IDEQ) transmitted its final CWA § 401 certification to the EPA on October 16, 2019. Three changes were made to the permit pursuant to CWA § 401(d), as summarized below:

- One certification condition requires an individual permit from IDEQ for facilities proposing to discharge to an Outstanding Resource Water. No change was made to the permit because Part I.E.8. already precludes such facilities from being covered under the General Permit. As such, individual coverage must be sought for facilities seeking to discharge to waters designated as Outstanding Resource Waters by Idaho.
- In Part III.8., Prohibited Discharges and Practices, the clause: “as a result of high water, precipitation runoff, wind, storage facility failure, accidents in operation, or unauthorized third party activities” was added at the end of the following statement: “Storage, disposal, or accumulation of hazardous and deleterious materials adjacent to or in the immediate vicinity of waters of the U.S., unless adequate measures and controls are provided to ensure that those materials will not enter waters of the U.S.”
- In Part IV.A. Effluent Limits, the following requirement was added: 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).
- Regarding the compliance schedule for Ace Hatchery and Arraina Hatchery in Part VI.C., references to Table 1, Part I.C.1. were corrected to Table 3, Part IV.C. The following statement was added to the requirements for the monitoring plan in item 2: “The monitoring plan must include monitoring for upstream and downstream conditions.”

### [Comments from Jamie Mitchell, Idaho Fish and Game, McCall Fish Hatchery \(IDG131005\)](#)

**Comment 1.** Table 3. Phosphorus Effluent Limits for Facilitates with TMDL WLA’s

McCall Hatchery was given Net TP limits of 0.02mg/L and an annual limit of 480.6 lbs/year

The staff at McCall Fish Hatchery noticed that the new limits are much lower than the previous limits on the old permit and we are concerned that these proposed limits are too low. The data collected and reported in 2018 would not comply with these limits and we would like to discuss increasing these limits. Thank you for your time.

**Response.** The limits in the permit are lower because the limits are based on a total maximum daily load (TMDL) wasteload allocation (WLA); the limits in the previous permit were not. The basis for the limits is described on p. 59 of the Fact Sheet in Appendix A. Pursuant to 40 CFR 122.44(d)(1)(vii), the EPA must ensure that the effluent limits meet applicable water quality standards and must ensure that the effluent limits are consistent with the assumptions and requirements of a WLA in a TMDL.

The Cascade Reservoir TMDL established a WLA for the facility.<sup>1</sup> The WLA is an annual limit of 218 kg/year (i.e. 481 lbs/year). This WLA was incorporated directly into the permit as an annual limit. The TMDL WLA is based on the annual load from the McCall Hatchery. Both phases of the TMDL (approved in 1996 and 1999) and the Five-Year Review completed in 2009 concluded the hatchery was meeting this WLA. The annual limit in the permit cannot be increased because doing so would not be consistent with the TMDL.

In response to this comment, the EPA reexamined the concentration-based average monthly limit (AML). The average monthly limit of 0.020 mg/L in the draft permit was based on the facility's long-term average effluent concentration from 2008 through 2012 (i.e., 0.008 mg/L). This time frame was used because of reporting errors since 2012. The permittee has subsequently corrected the reporting errors. Using the full data set from 2008 through 2018, the long-term average is 0.001 mg/L higher (i.e., 0.009 mg/L with a CV of 0.949), resulting in an AML of 0.024 mg/L, which is still less than the lake target from the TMDL of 0.025 mg/L. Since the TMDL explicitly set an annual WLA and the recalculated AML based on a more robust and recent dataset is very close to the water quality target from the TMDL, the final AML will correspond to the TMDL target.

The EPA revised the proposed monthly phosphorus water quality based effluent limit from 0.020 mg/L to 0.025 mg/L.

### [Comments from Steve Maggard, Simplot Land and Livestock, Ace Fish Facility \(IDG130123\)](#)

#### **Comment 2.** Periods of Inactivity/Shutdown p. 10

The first sentence seems confusing compared to the second sentence, in its reference to monitoring.

1. The permittee must continue to follow the monitoring requirements and all other permit conditions during periods of shutdown or inactivity.
2. If there is no discharge during the periods of shutdown or inactivity, the Permittee may report 'no discharge' on the DMR (NODI code c). If there is a discharge because of the source water but the facility is temporarily inactive or shutdown, the permittee may report that conditional monitoring is not required (i.e. NODI code 9)

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<sup>1</sup> IDEQ, 1996. [Cascade Reservoir Phase 1 Watershed Management Plan](#).

Maybe it should read:

The permittee must continue to follow the reporting requirements and all other permit conditions during periods of shutdown or inactivity.

**Response.** Comment noted. This clarification has been made.

The EPA changed the language regarding periods of inactivity and shutdown in Section II.D.1. on page 10 of the permit to read:

The permittee must continue to follow the reporting requirements and all other permit conditions during periods of shutdown or inactivity.

**Comment 3.** Compliance Schedule for Ace Hatchery and Arraina Hatchery p.20

The Ace facility has not been in production since mid-2015. Simplot currently has no plan to operate as a fish production facility, but in the future hopes to lease the facility to a new operator.

The EPA stated in the Fact Sheet for the draft permit that the Ace facility was able to comply with the TMDLs established for TP and TSS for the 2007 GP. "However, relative to the proposed revised limits, the only Ace samples that met it are those collected after it stopped operating in mid-2015"

The EPA also states, 'that neither facility can consistently meet the TP and TSS limits, particularly while operating at normal production levels"

Simplot feels that the 85% reduction of the TMDLs WLA is an extreme level and would make it difficult to lease the facility to someone knowing the operator will not be able to operate at a normal or high production level. We are unsure of the reasoning for the 85% WLA reduction based on 85% of the effluent being used during the irrigation season.

Simplot needs to be able to assure a new operator of the facility that DEQ will be willing to work with the operator to be able to operate the facility at a profitable production level. By re-evaluating the revised TMDL levels.

**Response.** The revised limits are consistent with the WLAs in the TMDL. Pursuant to 40 CFR 122.44(d)(1)(vii), when developing water quality-based effluent limits, the EPA must ensure that the effluent limits comply with applicable water quality standards and are "consistent with the assumptions and requirements of any available wasteload allocation for the discharge." As explained in the Fact Sheet, the WLAs for the facility were provided in IDEQ's *Jacks Creek Total Maximum Daily Load (TMDL) Modification of the Bruneau River Watershed Management Plan (Bruneau River TMDL)*, IDEQ, 2007 (2007 TMDL). The 2007 TMDL provides a WLA for the facility based on 15 percent of the annual WLA, stating: "The 85% effluent reuse for the fish farm wasteload allocations is based on the premise that 85% of the effluent discharge is reused as cropland irrigation; and therefore never reaches Jacks Creek. It is estimated that only 15% or less of the fish farm effluent discharges to Jacks Creek on an annual basis."

The effluent plumbing is explained on page 49 of the 2007 TMDL, “...During the winter, some of the water is pump for stockwater; but during the irrigation season the water is pumped for irrigation. According to both the owner of the fish farm and the water rights owner, approximately 85% of the water from the full flow settling pond is reused for cropland irrigation. Approximately 15% is returned to Jacks Creek.”

The WLA was incorporated directly into the permit. The EPA included a compliance schedule recognizing that the facility may have difficulty in meeting the new limits immediately upon the effective date of the permit. Any revisions to the effluent limits would need to be addressed through a revision to the TMDL. TMDL revisions should be directed to the Surface Water Quality Program at IDEQ's Boise Regional Office. No changes have been made to the permit as a result of this comment.

**Comments from John R. MacMillan, Ph.D., Vice President, Clear Springs Foods, Soda Springs Brood Station (IDG130034) & Lost River Brood Station (IDG130073)**

**Comment 4.** Page 5 of 39, Schedule of Submissions, Reports and Forms. Item 8. Drug, Pesticide, and Chemical Use Report.

EPA proposes to receive a record of drug, pesticide, and chemical use only as part of an annual report. Yet, records of drug and chemical use have historically been provided to EPA as part of our monthly Discharge Monitoring Report (DMR) submissions. This has seemed efficient due to the frequent use of drugs and chemicals in fish farming and our perceived need for EPA and IDEQ to timely identify concerns. Our annual report would then highlight maximum amounts of each drug, pesticide, and chemical used during the year. We are not opposed to an annual accounting as described in the draft permit but seek re-affirmation.

**Response.** Drug, pesticide, and chemical use reporting is required as part of the Notice of Intent (NOI) and the annual report. Although permittees may report drug and chemical use monthly, this was not a requirement of the 2007 permit. The annual report was changed from the 2007 permit to only require reporting of usage information for products with use changes relative to the NOI instead of reporting for all products. This annual report change was made to reduce the reporting burden on permittees and because the EPA determined that that the following permit conditions are sufficient, thus more frequent reporting is not necessary:

- 1) applicable best management practices (BMPs) for drugs, pesticides, and chemicals,
- 2) reporting requirements in the NOI, and
- 3) recordkeeping/reporting required as part of permit conditions (including the annual report).

No changes have been made to the permit as a result of this comment.

**Comment 5.** Page 8 of 39, D. Authorized Discharges.

The draft authorization to discharge does not authorize the discharge of any waste streams that are not part of the normal operation of the facility as disclosed in the Permittee's NOI, or any

“pollutant” that are not ordinarily present in such waste streams. Pollutant is then defined on page 37 of 39. As part of that definition “biological materials” are identified. Fish respire producing carbon dioxide, potentially a type of biological material. We suggest carbon dioxide and other factors associated with fish physiology or their biology are ordinarily present in our waste stream. Should they be identified in our NOI? We seek clarification as to the meaning of “biological materials”.

**Response.** The statement in Section I.D. of the permit means that only wastewater associated with aquatic animal production and a facility's operations as described on the NOI is authorized. Carbon dioxide and other factors associated with fish physiology, like wastes, are inherently part of the typical waste stream and do not need to be explicitly identified on the NOI. No changes have been made to the permit as a result of this comment.

**Comment 6.** Page 11 of 39, Effluent Limits. Table 1 footnote. “Permittee will be in compliance with the effluent limits if the reported concentration (i.e. total residual chlorine, TRC) is at or below the compliance level of 50 µg/L”. Also, Page 17 of 39, Minimum Levels.

EPA recognizes the analytical difficulty associated with field measurements of TRC and have published an Operating Procedure for “Field Screening of Total Residual Chlorine (SESDPROC-112-RS, 2017). The anticipated method detection limit is not defined. We are aware that in some wastewater NPDES permits, including the current permit for Fish Processors associated with Aquaculture Facilities in Idaho, requiring TRC monitoring that a compliance evaluation level of 100 µg/L is used. We request a compliance evaluation level of 100 µg/L be provided in the proposed permit.

**Response.** The method detection limit for total residual chlorine (TRC) has decreased since the Fish Processors General Permit was issued. As stated in Section V.E. of the permit, a sufficiently sensitive analytical method that can achieve a minimum level of 50 µg/L is required. No changes have been made to the permit as a result of this comment.

**Comment 7.** It is not clear how soon after sample collection for TRC concentration determination analysis must occur. Our literature review provided some variation. We request EPA provide guidance.

**Response.** Residual chlorine is highly reactive in water and decreases rapidly in low concentrations. Analysis of samples for TRC should be begin within 15 minutes of sample collection. This is set forth in the Maximum Holding Time column within Table II of 40 CFR Part 136. These regulations are the basis for the monitoring procedures in Part VIII.C. of the permit. No changes have been made to the permit as a result of this comment.

**Comment 8.** Section IV.C. Page 12 of 39. Table 3. Effluent Limits for Facilities with TMDL WLAs.

The temperature effluent limits for Lost River Trout Hatchery are somewhat confusing since both influent and effluent limits are delimited. We suggest narrative be provided in the Fact Sheet that elaborates how the limits are to be applied. When the influent temperature is at or

below 9° C, the AML is also 9° C. When the influent water temperature exceeds 9° C, the AML for the effluent can only raise the water temperature by 0.15° C as per the Lost River TMDL.

We recommend that in Section IV.C, where Table 2 is referenced, Table 3 should also be referenced.

**Response.** In Appendix A of the fact sheet there is a discussion about how the temperature limit applies (starting on p.57). The permit was further clarified as indicated below.

In Section IV.C., the following reference to Table 3 was added:

Table 3 lists the AML and MDL, or annual limit in some cases, for all facilities with WLAs for TSS, TP, and/or temperature.

All occurrences of “0.15°C Δ” in Table 3 were changed to “0.15°C increase.” Additionally, the following footnote to Table 3 was added to clarify that the temperature limit is based on the influent temperature but the permit does not limit the influent temperature:

“Effluent limit is based on the influent temperature. AML: If the influent temperature is less than or equal to 9°C, the AML is 9°C; if the influent temperature is greater than 9°C, the AML is equal to the influent temperature plus 0.15°C. MDL: If the influent temperature is less than or equal to 13°C, the MDL is 13°C; if the influent temperature is greater than 13°C, the MDL is equal to the influent temperature plus 0.15°C.”

**Comment 9.** Section IV.D. Effluent Calculations. Page 13 of 39.

The draft permit requires calculation of AML lb/d by multiplying the concentration determined for one sample by the average flow based on multiple (weekly) measures of water flow. For facilities with water flows that do not vary this approach may be reasonable but for facilities in which water flow can significantly vary over a month, considerable bias could be introduced. For example, if concentration of a pollutant is determined at high flow, but the average flow is considerably less, the mathematic of the calculation would lead to an underestimate of the actual average monthly load. We suggest expanding the option for effluent calculation to include potential for more frequent simultaneous determination of both pollutant and flow, calculating the load each time, and then determining the average from those determinations.

**Response.** The current permit (i.e., 2007 GP) requires once monthly flow sampling and pollutant sampling ranging from semi-annual to monthly. The EPA determined that monthly flow sampling without corresponding pollutant data was not informative and required extra reporting for facilities that do not monitor monthly. Flow monitoring was changed for the proposed permit to be collected weekly but only during months of sampling for sediment and total phosphorus (TP). Although there is some potential for bias, the EPA wanted to obtain a better characterization of the average monthly load while also keeping sampling costs down by incorporating additional flow measurements into the load calculation during the sampling month(s).



Upon reconsideration of this approach, the EPA has decided to maintain the weekly flow monitoring requirement for reporting but has decided to change the load calculation to match the existing permit, which uses paired flow and pollutant values from a single day. Per the NPDES regulations and Part VIII.D. of the Permit, *Additional Monitoring by Permittee*, “If the Permittee monitors any pollutant more frequently than required by this permit, using test procedures approved under 40 CFR Part 136 or as specified in this permit, the Permittee must include the results of this monitoring in the calculation and reporting of the data submitted in the DMR.” Further per the NPDES regulations and Part VIII.A. of the Permit, *Representative Sampling (Routine and Non-Routine Discharges)*, ...” the Permittee must collect additional samples at the appropriate outfall whenever any discharge occurs that may reasonably be expected to cause or contribute to a violation that is unlikely to be detected by a routine sample.”

Therefore, if a permittee conducts additional paired flow/pollutant samples in accordance with test procedures under 136 and includes that in the reported average monthly load, standard language in the permit in Section D requires the results of more frequent monitoring to be included in discharge monitoring report (DMR) calculations. The EPA has included a clarifying sentence in Section IV.D.2. of the final permit following the load calculation as follows:

Loading (in lb/d) is calculated by multiplying the concentration (in mg/L) by the flow (in cfs) measured the day of sampling and a conversion factor of 5.4. If the Permittee conducts more frequent monitoring using test procedures approved under 40 CFR Part 136, those results must be incorporated into the load calculation and reporting. See Part VIII.D.

**Comment 10.** Section V. Facility Monitoring Requirements. Table 5. Monitoring Requirements for OLSBs.

The draft permit requires quarterly TRC sampling if chloramine-T is discharged. Chloramine-T would not likely be used in an OLSB but could be used in raceways. Further, the organic matter content present in OLSBs is extreme making the chlorine demand equally extreme. If chloramine-T were introduced into an OLSB during a raceway treatment, it is highly unlikely there would be any discharge of chloramine-T (as measured by TRC). Further, if TRC monitoring of OLSBs is required, we are greatly concerned that background color and other interferences would significantly impair the assay making such analyses grossly inaccurate. Please clarify if TRC monitoring of OLSB effluent is required.

**Response.** The amount of organic matter and holding time differs among off line settling basins (OLSBs), resulting in differing biogeochemistry and potential for discharge in association with the usage of chloramine-T. The EPA acknowledges discharge is less likely from OLSBs than full flow settling basins, but as shown in Table 5, monitoring is required if chloramine-T may be discharged. Because facility-specific variables influence the potential for chloramine-T to be discharged, the permittee will need to determine if there is the potential for it to be discharged. The EPA can be contacted for assistance in making that determination. No changes have been made to the permit as a result of this comment.

**Comment 11.** Section V. B. Temperature Monitoring Requirements. Page 15 of 39.

The draft permit requires influent, effluent, and receiving water temperature monitoring May 1-November 30 at our Soda Springs Hatchery (Table 7). The Fact Sheet, page 33 of 67, Table 9 identifies receiving water as Big Springs Creek and Bear River. Sampling Big Springs Creek where our Soda Springs Hatchery directly discharges to is practical. Sampling the Bear River near where Big Springs Creek enters the river does not appear practicable. Access to the river is through private property, the terrain is perilous (a rock cliff), and summer recreationists on the river would likely tamper with a monitoring thermistor. Additionally, Little Spring Creek flows into Big Spring Creek prior to discharge into the Bear River. At times, non-point sources also discharge into Clear Springs waste stream and into Big Spring Creek. We request reference to Clear Springs Foods monitoring of the Bear River be deleted.

**Response.** The receiving water column in Table 9 of the fact sheet included additional information on the downstream waters, instead of just the immediate receiving water. The receiving water sampling should occur in the immediate receiving water so it can be evaluated relative to the effluent monitoring at the facility. For the Soda Springs Hatchery, this would mean that the facility should conduct receiving water monitoring in Big Springs Creek.

The EPA has clarified this in the permit in Section V.B.1., below Table 7 as follows:

Receiving water monitoring must be conducted in the facility's immediate receiving water.

**Comment 12.** Section V.B. Temperature Monitoring Requirements. Page 15 of 39, Table 7.

Clear Springs Foods Lost River Hatchery is required to conduct year around water temperature monitoring on the facilities influent and effluent water for the “term of the permit.” Section V.B.3 and 5 add additional requirements prior to temperature monitoring (e.g. submission of Appendix C of the Fact Sheet to EPA and IDEQ). The “Permit Term” is interpreted to mean starting when authorization to discharge is received or on the effective date of this permit. Required re-submission of an NOI is required within 90 days of the effective date of this permit. We request 90 days be allowed to initiate temperature monitoring following the effective date of this permit.

**Response.** The “term of the permit” is intended to begin when the authorization to discharge is granted, which will be in the form of a written notice from the EPA (see Section I.A.1. of the permit). To allow those facilities who must monitor for the entire permit term or first two years of the permit term the flexibility to meet the additional requirements and because the earliest an authorization letter will be issued is 30 days after the effective date of the permit, the monitoring start date for those facilities was clarified in the permit with the following footnote to Table 7:

Monitoring required for part or all of the permit term must begin within 60 days of the date the EPA authorizes the discharge.

**Comment 13.** Section V. C. Sample type, timing, and location. Page 16 of 39.

The draft permit defines a composite sample as consisting of “four (4) or more discrete samples taken at one-half hour intervals or greater in a 24-hour period when the pollutant being measured

is anticipated to be at its highest concentration”. For those with a specific pollutant WLA based on a daily load (24 hour), emphasizing “highest concentration” unfairly biases the WLA estimate. We request the first sentence in C.2 be changed to state as follows:

“Composite samples must consist of four (4) or more discrete samples taken at one-half hour intervals or greater in a 24-hour period and must include at least one sample when the pollutant being measured is anticipated to be at its highest concentration.”

**Response.** The definition of composite sample in the Definitions Section (Permit Section XI.15.) does not mention highest concentration. The definition says, “a combination of four (4) or more discrete samples taken at one-half hour intervals or greater over a 24-hour period; at least one fourth of the samples must be taken during quiescent zone or raceway cleaning.” The intent of the statement in Section V.C.2. (p. 16) is to ensure that the permittee captures at least one sample during cleaning, which is typically when pollutant concentrations are expected to be greatest.

The EPA has clarified the language in Section V.C.2. to match that in Section XI.15 and no longer references the highest concentration as follows:

Composite samples must consist of four (4) or more discrete samples taken at one-half hour intervals or greater in a 24-hour period. At least one fourth of the samples must be taken during quiescent zone or raceway cleaning.

**Comment 14.** Permit Appendix D. Drug and Chemical User Reporting Log Sheet, Annual Report of Operation for Year \_\_\_\_\_, and NOI.

The Raceway Treatment Use Reporting Log Sheet requires a calculated Environmental Introduction Concentration in mg/L. The EIC is based on total quantity of active ingredients. The NOI and the Annual Report of Operations VIII. Chemical Usage for Drugs, Pesticides or Chemicals that are released to waters of the U.S. requests, among other things, identification of the maximum daily amount to be used. It is not clear whether the “amount to be used” is active ingredient or drug or chemical. We request the NOI and the Annual Report should also specify “active ingredient” rather than simply state maximum daily amount to be used or maximum amount in effluent.

**Response.** Thank you for your comment. The EPA agrees that this should be clarified. The EPA has clarified this in the NOI “Drugs, Disinfectants & Other Chemicals” section of the NOI to read:

maximum daily active ingredients to be used.

The EPA has clarified this in the Annual Report requirements to read:

maximum daily active ingredients used.

**Comment 15.** Clear Springs Foods appreciates the efforts EPA has undertaken to remove non-essential or material elements in the permit (e.g. de minimis flow, and various OLSB and

receiving quality water monitoring).

(Commenter: John R. MacMillan, Ph.D. – Clear Springs Foods)

**Response.** Thank you for your comment.

### Comments from Matthew Nykiel, Idaho Conservation League

#### **Comment 16.** Clearwater Hatchery and Dworshak Hatchery Require Individual NPDES Permits

ICL requests that the EPA require individual NPDES permits for the discharges from the Idaho Fish and Game Clearwater Hatchery (“Clearwater Hatchery”) and the U.S. Fish and Wildlife Service Dworshak National Fish Hatchery (“Dworshak Hatchery”) because the annual production and maximum monthly flow rates at these facilities are in some instances double or triple the rates that characterize most of the other facilities considered in this general permit. Authorizing the pollutant discharges from the Clearwater Hatchery and Dworshak Hatchery under the draft general permit would set effluent limits and operating conditions that inappropriately ignore the quantitative differences between these two facilities and the other, more similar, concentrated aquatic animal production (“CAAP”) facilities considered in the general permit.

The Clearwater Hatchery is the only CAAP facility considered in the general permit that maintains an annual production rate over 500,000 lbs per year. And, the Dworshak Hatchery’s 200.1 cfs maximum monthly flow is an order of magnitude higher than any other CAAP facility considered in the general permit – double that of any other hatchery in Idaho.

The Clearwater and Dworshak Hatcheries are in a league of their own and ought to have effluent limits and operating conditions that reflect this in an individual permit. Otherwise EPA’s proposed concentration-based limits will allow these CAAP facilities to disproportionately pollute the Clearwater River.

We request EPA remove the Clearwater and Dworshak Hatcheries from this general permit and require these facilities apply for individual NPDES permits. If EPA declines this request, we further request EPA explain in detail why the Clearwater and Dworshak Hatcheries qualify for general permit authorization according to 40 CFR §122.28(a)(2)(ii)(C) and how the concentration-based limits proposed in the general permit will be protective of water quality, when applied to facilities that produce and discharge at rates double and triple that of other facilities authorized in the general permit.

**Response.** Although the majority of the facilities that may be covered under these general permits are smaller facilities, the operating conditions and effluent limits are similar across all eligible facilities. *See* 40 CFR § 122.28(a)(2)(ii)(C). In addition, the EPA has included requirements for larger facilities pursuant to the effluent limitation guidelines (ELGs) for CAAPs. These ELGs are primarily BMP-based and do not differ with higher production volumes. For these reasons, the EPA has determined both hatcheries referenced in the comment are eligible to apply for coverage under the general permit. If/when these hatcheries apply for coverage, the EPA will determine if they are eligible to be authorized for coverage under the general permit.

No changes have been made to the permit as a result of this comment.

**Comment 17.** Facilities Excluded from General Permit Coverage

EPA's Fact Sheet at pages 15 and 16 states that discharges and facilities cannot be covered under a general permit when a facility "...[d]ischarges to waters that constitute an outstanding resource, such as waters of national and state parks and wildlife refuges and waters of exceptional recreational or ecological significance." Each of the water resources listed below qualify, based on federal legislation, as waters of exceptional recreational and ecological significance. We request EPA explain why it maintains the following facilities can be covered by a general permit despite the water resources into which the facilities discharge:

1. Kooskia National Fish Hatchery – discharges less than 2,000 feet from the Middle Fork of the Clearwater River, which is designated a Wild and Scenic River under the National Wild and Scenic Rivers Act;
2. Cabinet Gorge Hatchery – discharges into critical habitat for bull trout, a federally listed species; and
3. Clearwater and Dworshak Hatcheries – discharge into critical habitat for chinook salmon and steelhead, both federally listed species.

**Response.**

1. The facility is not discharging directly into the MF Clearwater. The facility discharges to Clear Creek and the Clearwater River. If the Kooskia National Fish Hatchery applies for permit coverage, the EPA will determine whether authorization can be granted. However, it appears that the facility will not be ineligible due to the location of its discharge. Additionally, this facility was created to help preserve the resource when it was authorized by Congress in August 1961 to rear spring chinook salmon for release into the Clearwater River basin, including the Middle Fork Clearwater River.
2. Discharging to a receiving water that contains species listed under the Endangered Species Act or that contains critical habitat is not a reason for exclusion of coverage under this permit. Additionally, as stated in Section IX.B. of the fact sheet, the EPA received concurrence from both NMFS and the U.S. Fish and Wildlife Service (FWS) that this permit action "may affect but is not likely to adversely affect" the listed aquatic species or essential fish habitat in the permit coverage area. This concurrence is inclusive of waters that are designated as critical habitat. Therefore, discharging into waters designated as critical habitat is not grounds for excluding them from coverage under this general permit.
3. Same as above.

No changes have been made to the permit as a result of this comment.

**Comment 18.** Compliance Issues at Dworshak Hatchery

We request EPA require an individual NPDES permit for Dworshak Hatchery because this facility has maintained at least 8 quarters of significant noncompliance under its current NPDES permit.

EPA's summary of DMR data at page 11 of the Fact Sheet glosses over continuing Clean Water Act violations at the Dworshak Hatchery, which warrant EPA requiring an individual NPDES permit, pursuant to 40 CFR 122.28(a)(3)(i)(A). DMR data submitted to EPA indicates the Dworshak Hatchery has been violating its Clean Water Act permit for the past two years. These violations show no indication of stopping. Moreover, Dworshak has violated its effluent limits by 357% in some cases. DMR data also indicate the Dworshak Hatchery has failed to submit certain DMR data over the past 8 quarters, and the State of Idaho has issued two informal enforcement actions under the Safe Drinking Water Act, both in February 2018.

Because of these violations we request EPA require the Dworshak Hatchery apply for an individual NPDES permit rather than be authorized under the proposed general permit. If EPA declines our request, we further request EPA explain when and how the Dworshak Hatchery will return to compliance and why this facility qualifies for authorization under the general permit.

**Response.** The general permit contains the effluent limitations and conditions that a facility must comply with during the permit term. The EPA recognizes that Dworshak has had noncompliance issues in the past. These noncompliance issues include both effluent limit violations as well as reporting issues. The EPA has addressed these noncompliance issues through a federal facility compliance agreement; the facility has resolved most of the compliance issues and continues to work on the remaining issues. The Safe Drinking Water Act alleged violations are outside the scope of this permit issuance. When/if Dworshak National Fish Hatchery submits an NOI for coverage under this general permit, the EPA will determine whether the facility is eligible for coverage.

No changes have been made to the permit as a result of this comment.

#### **Comment 19.** Temperature Monitoring

We request EPA to increase the continuous temperature monitoring requirement from May through November to April through November. In other NPDES permits, EPA requires temperature monitoring be inclusive of fish spawning and incubation periods, which generally includes the month of April for some species. We request EPA increase temperature monitoring to include April to ensure fish species are adequately protected throughout their lifecycle.

In addition, we request EPA require temperature monitoring for the full term of the general permit rather than a single year. Under the draft general permit, EPA proposes only requiring the cold water facilities listed in Table 9 of the Fact Sheet to monitor temperature for one year, between May and November. But, collecting only a year's worth of temperature data would not be representative of annual temperature variability. With only a year's worth of data, EPA and the State of Idaho have no way to tell whether water and effluent temperatures represent average conditions or whether the temperatures represent the influence of an abnormal heat wave or heavy snowpack. Accordingly, we request EPA require continuous temperature monitoring for the duration of the general permit, in effect 5 years assuming the State of Idaho timely renews the permit.

**Response.** This time period was selected at IDEQ's request to cover the timeframe when beneficial uses are most likely to be harmed. Since this comment was received, DEQ reaffirmed that May is an appropriate month to begin temperature monitoring. While more data is preferable in most situations, deploying, maintaining, and retrieving loggers can be time-intensive, and the EPA must balance the monitoring requirements with the burden to the permittee. In this case, the EPA determined that particularly since the requirement is for continuous data, one year is sufficient for facilities that do not need to demonstrate effluent limit compliance and will allow for facilities to potentially coordinate and share data loggers. No changes have been made to the permit as a result of this comment.

**Comment 20. Phosphorus Monitoring**

We request EPA require a minimum total phosphorus (“TP”) monitoring frequency of once per week from June through September. TP is most likely to impair water quality during hot summer months, when TP can cause nuisance aquatic growth such as macrophytes or harmful algal blooms. This nuisance aquatic growth violates Idaho’s Water Quality Standards (IDAPA 58.01.02.200.05). But, the EPA’s draft general permit does [not] require TP monitoring at a frequency that would ensure water quality is protected during the most vulnerable months for nuisance aquatic growth. In fact, under EPA’s current proposal a majority of the CAAP facilities would only be required to monitor TP once per calendar quarter, despite the fact that most facilities that discharge TP in Idaho are required to monitor TP from June through September, if not longer. And, this is problematic as Idaho’s water bodies statewide are experiencing an increasing trend in nutrient pollution.

As such, we request EPA increase the TP monitoring frequency to a minimum of once per week from June through September.

We also request EPA increase the TP monitoring frequency for CAAP facilities, such as the Clearwater and Dworshak Hatcheries, that are clustered together and whose discharges may have cumulative impacts. Under EPA’s current scheme, monitoring frequency is determined based on a facility’s annual production volume, but this scheme ignores circumstances where CAAP facilities are located adjacent to or near one another. Discharges from facilities clustered like this will likely have cumulative impacts that warrant more frequent monitoring to ensure water quality is not impaired.

As described above, we request EPA require weekly TP monitoring between June and September, but if EPA declines this request, we further request EPA require monthly TP monitoring for the clustered CAAP facilities listed below. Otherwise, a facility that contributes to cumulative production rates in a single water body over 500,000 pounds per year or between 100,000 pounds and 500,000 pounds per year may avoid monitoring at a frequency sufficient to prevent water degradation.

1. Dworshak Hatchery;
2. BCT LLC – Bear River Trout Farm;

3. IDFG Grace Fish Hatchery;
4. Clear Springs Foods Inc. – Soda Springs Hatchery;
5. Lower Fall Creek Hatchery;
6. Upper Fall Creek Hatchery; and
7. IDFG American Falls Hatchery.

**Response.** This general permit is largely BMP-based, thus, the monitoring requirements are in place to allow a facility to determine whether the BMPs are working effectively, and to determine compliance with any applicable numeric effluent limits. The tiered monitoring frequency in Table 6 of the draft General Permit is expected to be adequate for capturing noncompliance with BMPs over time. Further, increasing monitoring to once per week would be an unnecessary burden to place on permittees relative to the marginal added value of more frequent data.

The permit is written so that discharges will not cause or contribute to an exceedance of water quality standards. With the exception of the Dworshak facility, all of the facilities listed in the comment have TP effluent limits based on TMDL WLAs. TMDLs consider the cumulative loading from point sources (as well as nonpoint sources).

No changes have been made to the permit as a result of this comment.

**[Comments from Cassie Sundquist , Idaho Fish and Game, Mackay Fish Hatchery \(IDG130030\), Grace Fish Hatchery \(IDG130035\), Springfield Fish Hatchery \(IDG130038\), McCall Fish Hatchery \(IDG131005\) and General Comments](#)**

**Comment 21.** Regarding: Table 3. Effluent Limits for Facilities with TMDL WLAs  
(Commenter: Cassie Sundquist – Idaho Fish and Game Re: Mackay IDG130030)

The Idaho Department of Fish and Game and Lost River Hatchery Waste Load Allocation Modification (HUC 17040218; Attachment 2), issued in March 2015, states: “The IDFG facility does not appreciably impact Warm Springs Creek temperatures and the facility should not have a WLA assigned for temperature which is unattainable. Four factors suggest the hatchery is currently implementing the most practicable best management practices (BMPs).”

Additionally it states: “Based on the collected data, the hatcheries do not raise the temperature of the spring sources before they are discharged from the present day outfall structure. The current WLA for both hatcheries is to meet the numeric state WQS including salmonid spawning temperatures during spring and fall months. This is not possible since the source water (11°C at IDFG) already exceeds the 9°C daily average for salmonid spawning. However, in order to protect salmonid spawning to the extent practicable, DEQ will modify the current temperature WLA for the hatcheries to 13°C daily maximum temperature as outlined in IDAPA 58.01.0250.02f.ii. The WLA also reflects the actual natural background conditions for temperature and is consistent with Idaho’s WQS. Upon approval of this modification the temperature WLAs in the 2004 TMDL will no longer apply and the new WLAs will become part of the next General Aquaculture Permit.”



**Response.** The 2015 TMDL quoted in the comment is no longer applicable, as it has been superseded by the 2019 TMDL addendum. Please see the [Big Lost River Subbasin TMDL: 2019 Addendum and Five-Year Review](#), which was approved by the EPA in June 2019 and discussed in Appendix A of the Fact Sheet. Both of these documents discuss the limit in more detail. No changes have been made to the permit as a result of this comment.

**Comment 22.** Fact Sheet page 56/64 and Permit Table 3

Suggest rewording temperature WLAs of AML for clarity for Mackay and Lost River Hatcheries: “If influent temp is  $\leq$  to 9 then the WLA is equal to 9 C; when influent temperature is  $\geq$  9, then the WLA is equal to the sum of the measured influent value and 0.15 C”

**Response.** Appendix A of the Fact Sheet includes information as set out by the commenter. See the Response to Comment 8 for clarifying language added as a footnote to Table 3.

**Comment 23.** Regarding: Table 3. Effluent Limits for Facilities with TMDL WLAs

Why are AML and MDL limits referred to as influent when the table is titled effluent?

**Response.** The AML and MDL limits in the table are not influent limits. Since the effluent limit is different depending on influent temperature, the influent temperature associated with each effluent limit was included in the table. See Response to Comment 22. No changes have been made to the permit as a result of this comment.

**Comment 24.** Regarding Table 3. Effluent Limits for Facilities with TMDL WLAs (Specifically Net TP AML and MDL)

It is our understanding that IDFG Grace Fish Hatchery TMDL WLA effluent limits are based on flows from the years 2000, 2001, 2002 and 2004 (BEAR RIVER/MALAD RIVER SUBBASIN ASSESSMENT AND TOTAL MAXIMUM DAILY LOAD PLAN for HUCs 16010102, 16010201, 16010202, 16010204. Table C-2, pgs. 324-325. [https://www.deq.idaho.gov/media/449895-bear\\_river\\_entire.pdf](https://www.deq.idaho.gov/media/449895-bear_river_entire.pdf)).

Our data suggests that the flows these WLAs are based on do not represent realistic average annual flows recorded at the facility and that the hatchery has more water available and the water right for that water than the flows the TMDL WLAs are based on (See Next Page: Appendix 1. Grace Fish Hatchery average monthly and annual flows (cfs), 1994-2018).

Specifically:

2000 = 96% of annual average

2002 = 76% of annual average

2003 = 78% of annual average

2004 = 78% of annual average

Furthermore, the hatchery has water rights for fish propagation totaling 30.85 cfs, which far exceeds flows that the TMDL WLAs are based on.

Grace Fish Hatchery Water Rights

Water Right Amount and Use

Water Right # 13-02153

20 cfs for fish propagation

Water Right # 13-04001

7 cfs for fish propagation

Water Right # 13-07022

3.85 cfs for fish propagation

Because flow amount is a key variable in calculating wasteload allocations, should a hatchery experience flows greater than those the TMDL WLAs are based on (while still being within the facilities water rights), a facility risks permit non-compliance from potential increased flows alone. We are currently working with DEQ to address, and potentially revise, the TMDL WLAs for the Grace Fish Hatchery. This will ensure water quality standards continue to be met and permit compliance maintained as IDFG works in the public's interest to meet angler demands.

**Response.** Pursuant to 40 CFR 122.44(d)(1)(vii), when developing water quality-based effluent limits, the EPA must ensure that the effluent limits comply with applicable water quality standards and are "consistent with the assumptions and requirements of any available [WLA] for the discharge." The EPA agrees flow is a key variable in establishing WLAs and understands that increased flow alone can cause a violation of a load-based limit. However, the EPA must incorporate the WLA into the permit. While the EPA acknowledges that Idaho Fish and Game (IDFG) is working with IDEQ to potentially change the WLA in the TMDL, until that occurs, the EPA is required to establish effluent limitations in the permit based upon the WLA in the TMDL. No changes have been made to the permit as a result of this comment.

**Comment 25.** Regarding: Table 7. Temperature Monitoring Requirements

In order to access Receiving Water for monitoring, IDFG staff would need to enter private property and we do not have an easement. The Receiving Water component should not be a requirement. Furthermore, the receiving water immediately downstream of the hatchery is not indicative of the natural flowing creek. Rather, it is a large, shallow, backwater impoundment developed by the private landowner downstream of the hatchery.

**Response.** Section VII.E. of the fact sheet states that the receiving water monitoring must be conducted upstream of the facility, not downstream. However, receiving water monitoring should not be conducted in a location that is not well mixed, or if access is not possible or unsafe. Additional communication with IDFG following this comment indicated the source water for one or more of its hatcheries, including Grace, is where the receiving water originates (i.e., a spring-fed creek). The EPA has clarified the monitoring location and addressed these situations by adding the following language to Section V.B.1., below Table 7:

Receiving water monitoring must be conducted in the facility's immediate receiving water upstream of the discharge location. Receiving water monitoring is not required if the headwaters of the receiving water is used as the facility's source water.

**Comment 26.** Receiving water is Boone Creek, American Falls Reservoir NOT Boom Creek.

**Response.** The EPA has made this correction in the permit. Thank you for your comment.

**Comment 27.** Regarding Appendix A section c.v. Cascade Reservoir Subbasin: McCall Hatchery of the Fact Sheet: On page 60 it states that McCall will be required to monitor TP on a quarterly basis now to better assess compliance. I do not see where it states this requirement in the actual permit.

**Response.** Section V.D of the permit states that all facilities with an annual limit must monitor at least quarterly. For clarification, the following footnote was also added below Table 6 in the permit:

<sup>1</sup>This is the minimum frequency for facilities with an annual limit. See Table 3 and Part V.D.

**Comment 28.** Regarding discharge sample temperature requirements

Many of the IDFG fish hatcheries are located within a short distance of the laboratory (<30 minute drive) and are on spring water sources. Our standard operating protocol has always been to place the samples on ice and get the completed discharge samples to the laboratory as soon as possible. Many of these facilities are on spring water which average ~15°C. The samples are immediately placed on ice but coupled with the short drive time to the laboratory it is extremely difficult to get the sample cooled to the required <6 °C when delivered to the laboratory. To work around this issue many of our hatcheries are choosing to keep the sample overnight, refrigerate it, then deliver it to the laboratory the next morning after it has cooled to <6 °C. This is not the preferred method as we would prefer to get the sample delivered to the laboratory the same day. We recommend waiving the temperature requirement if the sample can be delivered within a certain amount of time that is approved by EPA.

**Response.** The preservative criteria as listed in 40 CFR Part 136 are not limits or requirements of the conditions that a sample must meet prior to laboratory analysis but rather the requirements of how a sample should be stored prior to sample analysis. Therefore, in the case described above, the permittee is storing the samples correctly. The criteria state that the sample should be maintained cool until analysis; therefore, by immediately placing the sample on ice, the permittee is meeting the sampling requirements set forth in 40 CFR Part 136. While in laboratory custody, the sample should be stored in a refrigerator to maintain a temperature of ≤6°C as this will ensure it is properly preserved, but the sample does not necessarily need to arrive at the laboratory at ≤6°C due to the extremely short transit time. If the chain of custody form indicates the short turnaround from sample collection to delivery to the lab and there is proper preservation along the way (e.g., on ice), then the sample temperature upon receipt should not be identified as an area of concern or violation. This has been verified with the EPA Region 10 Enforcement and Compliance Assurance Division and as a result of this comment, this information was also communicated to the DEQ's IPDES Compliance and Enforcement program.

No changes have been made to the permit as a result of this comment.

**Comment 29.** Section IV. B. Use of Chloramine-T or Chlorine

For facilities that use Chloramine-T; if the effluent from the raceways flows through the settling basin before discharging to waters of the U.S. do effluent waters still need to be monitored for Total Residual Chlorine? A sentence to explain this would be helpful.

**Response.** The permit states that if Chloramine-T “is or may be” discharged to waters of the U.S., then Table 1 is applicable (i.e., monitoring must be conducted). The typical treatment for hatcheries with raceways is to use a full-flow and/or offline settling basin, but it is up to each permittee to determine if there is potential for it to be discharged. If it's a full-flow settling basin then it seems possible Chloramine-T will be in the effluent, in which case Chloramine-T should be monitored. No additional clarification will be added to the permit because the determination is at the discretion of the permittee and depends on site-specific conditions. EPA can be contacted for assistance in making that determination. No changes have been made to the permit as a result of this comment.

**Comment 30.** Significant Figures and Rounding

All facilities effluent limit concentrations should be rounded to the same decimal place to provide consistency in calculations. We had an incident in 2018 where depending on how you rounded the facility would either have been in compliance or not. Consistency in decimal places in effluent limitations and guidance for calculations is needed.

**Response.** It is not possible in this case for all of the effluent limits to be expressed with the same significant figures because they vary depending upon the precision of the analytical methods used, as well as by TMDL WLA. In general, concentration values should be reported based on the results of the laboratory or field measurement, and calculations should be reported based on the factor with the fewest significant figures, but there are exceptions to these generalizations. [\*Standard Methods for the Examination of Water and Wastewater\*](#), Method 1050B Expression of Results (2017) provides a reference for additional guidance. Specific questions regarding your reporting obligations should be directed to the EPA's Enforcement and Compliance Division, or your regional IDEQ office after July 1, 2020 if the facility is permitted under IDG131000. Contact information is provided in Section VII.A. of the permit.

No changes have been made to the permit as a result of this comment.