

SUPPLEMENTAL FACT SHEET

June 7, 2007

NPDES Permit Numbers:IDG-130000IDG-132000IDG-132000ID-002826-6ID-002826-6Public Notice Start Date:June 7, 2007Public Notice Expiration Date:July 9, 2007

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The United States Environmental Protection Agency (EPA) Region 10

Reproposes to Issue Two General Wastewater Discharge Permits,

One of them for

Aquaculture Facilities in Idaho, NPDES Permit # IDG-13-0000

One of them for

Fish Processors associated with Aquaculture Facilities in Idaho NPDES Permit # IDG-13-2000

and an individual permit for

Epicenter Aquaculture NPDES Permit # ID-002826-6 Fact Sheet for 2nd Public Notice Idaho Aquaculture Permits page 2 of 22

EPA Reproposes NPDES Permit Reissuance

EPA reproposes to issue two National Pollutant Discharge Elimination System (NPDES) general permits (GP) and one individual permit. One GP will cover rearing facilities discharging under wasteload allocations (WLAs) and one will cover fish processors associated with rearing facilities. EPA will also issue an individual permit for the sole warm-water facility that is not subject to a WLA, Epicenter Aquaculture (ID002826-6). Concurrently, EPA expects to issue a GP that will cover cold-water rearing facilities not subject to WLAs (NPDES Permit # ID-131000); that permit is not covered in this second public notice on the other three permits.

These permits replace the one NPDES GP in 1999 which previously authorized discharges from most of the Idaho aquaculture facilities. These general permits also will cover facilities currently operating under individual permits, thereby terminating the authorization to discharge under the individual permits. The draft permits set conditions on the discharge of pollutants from these facilities to waters of the U.S. in Idaho. In order to ensure protection of water quality and human health, the permits place limits on the types and amounts of pollutants that can be discharged and impose other requirements to minimize the discharge of pollutants.

This Fact Sheet includes:

- information on public comment, public hearing, and appeal procedures;
- information on changes to previously proposed effluent limitations;
- background information supporting the changes proposed for these permits.

The State of Idaho Certification of the Permits

The Idaho Department of Environmental Quality (IDEQ) provided considerable input in the preparation of these permits and about the changes proposed in this public notice. Before the permits are finalized, IDEQ will have the opportunity to certify (approve) the NPDES permits for Idaho aquaculture facilities and associated fish processors under provisions of Section 401 of the CWA, 33 U.S.C. § 1341. IDEQ may, as a condition of final certification, require that the proposed permits include more stringent limitations or monitoring requirements needed to comply with the CWA or State law. EPA is required to include any such limitation or requirement in the final permits.

Public Comments to EPA on the Draft Permits

If you wish to comment on the proposed requirements in the draft permits, you must do so before the end of the public comment period at the top of this notice. Comments will be most effective if they address specific permit requirements and include the justification for your recommendation. You must submit all comments to EPA as described in the <u>Public Comments</u> section of the attached public notice.

If you wish to request a public hearing, you must state the nature of the issues to be raised as they relate to the permits, as well as your name, address, e-mail address (if applicable), and telephone

Fact Sheet for 2nd Public Notice Idaho Aquaculture Permits page 3 of 22

#IDG-130000 #IDG-132000 #ID-0028266

number. You must submit your request for public hearing to EPA as described in the <u>Public Comments</u> section of the attached public notice. In considering whether to request a public hearing, where oral comments are submitted, please note that written comments submitted during the public comment period carry the same weight as oral comments entered at a public hearing.

If comments are submitted, EPA will prepare a response to comments, and, if necessary, will make changes to the proposed permits. After making any necessary changes, EPA will issue the permits with a response to comments unless issuance of new proposed permits is warranted pursuant to 40 CFR §124.14. If no substantive comments are received during the public comment period, the proposed conditions in the draft permits will be included in the final permits.

The proposed general permits will become effective thirty (30) days after the publication of the final permits in the *Federal Register*, unless an appeal is filed in the United States Circuit Court of Appeals and the Court issues a stay, in accordance with Section 509(b)(1) of the Clean Water Act (CWA). If there are no substantive comments received regarding the individual permit for Epicenter Aquaculture, this permit will become effective upon issuance. Otherwise, it will become effective no less than 30 days after the issuance date, unless a timely review is initiated under 40 CFR §124.19.

You may appeal one or more of the general permits to the Federal Court of Appeals, in accordance with Section 509(b)(1) of the Clean Water Act and 40 CFR §23.2. You may challenge the Epicenter Aquaculture permit as provided in 40 CFR §124.19.

Documents are Available for Review

The draft permits and fact sheets are posted on the Region 10 website at <u>http://yosemite.epa.gov/r10/WATER.NSF/NPDES+Permits/DraftPermitsID</u>.

Copies may be requested by writing to EPA at the Seattle address below, by e-mailing <u>washington.audrey@epa.gov</u>, or by calling Audrey Washington at 206-553-0523 or (800) 424-4372 ext 0523 (within Alaska, Idaho, Oregon, & Washington).

For technical questions regarding the permits or fact sheet, contact Carla Fromm or Sharon Wilson at the phone numbers or e-mail addresses at the top of this fact sheet. Those with impaired hearing or speech may contact a TDD operator at 1-800-833-6384 and ask to be connected to the appropriate phone number. Additional services can be made available to a person with disabilities by contacting Carla Fromm or Sharon Wilson.

TABLE OF CONTENTS

| I. | Previous Public Notice of the Draft Permits | 5 |
|------------------|---|----------------------|
| II. | Purpose for Reopening the Public Comment Period | 5 |
| III. | Revised Technology-based Limits | 6 |
| A B | . Warm Water Aquaculture Facilities – Total Phosphorus Limits Fish Processors – Total Phosphorus Limits | 6 12 |
| IV. | New or Revised Limits based on Wasteload Allocations in approved TMDLs | 15 |
| A B C D | Portneuf River TMDL Springfield Hatchery (aka Crystal Springs Trout Farm), American Falls Reservoir TMDL Fall Creek and Rueger Springs Creek Facilities, Lake Walcott TMDL ACE Development USA and Arraina, Bruneau River TMDL | 15 16 16 18 |
| V. | Pollutant Trading | 19 |
| A B C | . Buying Restricted to Downstream Buyers . Trading with Non-Point Sources . Trading in Other Watersheds | 19 20 20 |
| VI. | Other Legal Requirements | 21 |
| E | ndangered Species Act | 21 |

I. Previous Public Notice of the Draft Permits

On June 19, 2006, EPA Region 10 issued public notice of its proposal to issue two general NPDES permits (GPs) for aquaculture facilities, one for facilities with wasteload allocations (WLAs) (the "WLA Permit") and the other for cold water facilities without WLAs (the "Cold Water Permit"). Between these two permits, coverage would be extended to about 100 facilities. At the same time, EPA proposed to issue a third GP for fish processing facilities associated with aquaculture facilities in Idaho (the "Fish Processor Permit") for four facilities and an individual NPDES permit for Epicenter Aquaculture, a warm water aquaculture facility without a WLA.

The June 19, 2006, notice of a 45 day comment period, ending August 3, 2006, was published in the *Federal Register* (71 FR 35269), the *Idaho Statesman*, and the Twin Falls *Times-News*. On July 25, 2006, notice of an extension of the public comment period to August 18, 2006, was published in the *Federal Register* (71 FR 42091), the *Idaho Statesman*, and the Twin Falls *Times-News*. On August 18, 2006, notice of a second extension of the public comment period to September 29, 2006, and of a public hearing on September 26, 2006, was published in the *Federal Register* (71 FR 48927), the *Idaho Statesman*, and the Twin Falls *Times-News*.

Copies of the previous versions of the draft permits and fact sheet can be found on the EPA Region 10 website at

http://yosemite.epa.gov/R10/WATER.NSF/NPDES+Permits/General+NPDES+Permits# Aquaculture .

II. Purpose for Reopening the Public Comment Period

In reviewing comments submitted to EPA during the 2006 public comment period on the permits, we noted that several warm water aquaculture facilities submitted comment and information about how their facilities differed from other warm water facilities. They also disagreed with our previous decision to continue the technology-based limit for total phosphorus from the previous general permit, with which they did not have a strong record of compliance. We were persuaded to recalculate the total phosphorus limits for these facilities. Details of their comments and our response are found below.

In addition, comments from fish processing facilities questioned the appropriateness of calculating one total phosphorus technology-based limit to apply to all four facilities, since they have very different wastewater treatment methods. We were persuaded to recalculate these limits for each facility. Details of their comments and our response are found below.

Because these are different approaches to deriving the limits for these facilities than was discussed or anticipated in the Fact Sheet that accompanied the draft permits, we are providing this additional opportunity for comment on these specific issues. Specifically,

we are seeking public comment on the revised technology-based limits for the warm water facilities (Ace Development, Arraina, Canyon Springs, Epicenter Aquaculture, First Ascent, and Fish Breeders of Idaho Catfish Farm) and for the fish processors (Clear Lakes Trout Co., Clear Springs Foods, Rainbow Filer, and SeaPac of Idaho).

In addition, we are providing public notice and opportunity for public comment on limits based on new or revised wasteload allocations developed by the IDEQ and approved by EPA, namely, those for Batise Springs Trout Farm and deletion of allocations for Papoose Springs Trout Ranch, both in the Portneuf River TMDL; for Springfield Hatchery (aka Crystal Springs Trout Farm) in the American Falls Reservoir TMDL; for Upper Falls Creek Facility, Lower Falls Creek Facility and American Falls Fish Hatchery, all in the Lake Walcott TMDL; and for Arraina and ACE Development USA in the Bruneau River TMDL.

We will provide response to comments received during this public comment period, as well as the one in 2006, to all commenters when the permits are finalized; the response will also be posted with the final permits on the EPA Region 10 website.

III. Revised Technology-based Limits

A. Warm Water Aquaculture Facilities – Total Phosphorus Limits

- 1. Development of TP Technology-Based Limit for Warm Water Facilities
 - a. Comments: We received comments that the technology-based limits for warm water facilities, which had been carried over from the previous permit, were not achievable since they had been based (in the 1999 permit) on data from only one facility. One commenter provided extensive discussion about how the warm water tilapia facilities on Jacks Creek differ substantially from the other warm water facilities. He requested a reevaluation of the TSS and TP limits taking into account the unique operating parameters of these systems.
 - b. Discussion: Phosphorus data from only one facility were available to EPA in 1999 for derivation of a warm water limit requested by the warm water facilities. As a result of the comments, we reconsidered our previous assumption regarding the ability of the warm water facilities to achieve compliance with the previously applied limit, even though the data seemed to show improvement in compliance more recently.

Using data submitted since 1999 from five warm water facilities (Fish Breeders of Idaho Catfish Farm (Catfish), Canyon Springs, First Ascent, Ace Development, and Arraina) and in response to comments that the facilities raising different species vary significantly in their effluent water quality, we have now calculated the long term averages (LTAs) and coefficients of variation (CVs) for the Jacks Creek facilities (Tilapia), for First Ascent and Canyon Springs (Tilapia), and for Catfish (catfish and Tilapia). Epicenter Aquaculture did not submit effluent data but was

deemed to be similar to Canyon Springs and First Ascent, because it raises Tilapia.

We decided that if it made sense to do this for TP, it also made sense to do it for TSS. Thus, we have developed mass-based TBELs for these warm water facilities to be more consistent with the approach that we have used for other facilities.

c. Action: Using the CVs and LTAs as indicators of the long-term performance of the facilities, we calculated new performance-based (technology-based) limits that the facilities should be able to comply with at least 95% of the time for the AML and at least 99% of the time for the MDL. These limits are based on an assumption that the permittees can continue to operate the facilities as they have in the last permit cycle with no additional cost.

See note on next page.

| Table 1 LTAs, CVs and Concentration TBELs for Warm Water Facilities | | | | | | | | | |
|---|----------------|-----------------------------|--------------|--------------|------|--|--|--|--|
| Facility Name & | | Coefficient of Variation | Long-term | TBELs (mg/l) | | | | | |
| Permit Number | Parameter | (CV) | (LTA) (mg/l) | AML | MDL | | | | |
| Ace Development. | TSS | 0.77 | 20.39 | 33.3 | 79.2 | | | | |
| (IDG130123) | TP | 0.60 | 0.27 | 0.4 | 0.8 | | | | |
| A .: (DC120120) | TSS | 0.56 | 14.72 | 21.8 | 43.4 | | | | |
| Affailia (ID0130122) | TP | 0.44 | 0.19 | 0.3 | 0.5 | | | | |
| Canyon Springs | TSS | 0.60 | 4.64 | 7.0 | 14.5 | | | | |
| (IDG130104) | TP | 0.62 | 0.08 | 0.1 | 0.2 | | | | |
| Epicenter Aquaculture ¹ | TSS | 0.83 | 7.58 | 12.7 | 31.5 | | | | |
| (ID0028266) | TP | 0.53 | 0.13 | 0.2 | 0.4 | | | | |
| First Ascent | TSS | 0.73 | 10.06 | 16.2 | 37.3 | | | | |
| (IDG130116) | TP | 0.35 | 0.16 | 0.2 | 0.3 | | | | |
| Fish Breeders of Idaho (Catfish Farm) | TSS Mar—Aug | 0.66 | 5.72 | 8.9 | 19.4 | | | | |
| (IDG130041) | TSS Sep—Feb | 0.39 | 4.32 | 5.8 | 9.7 | | | | |

| Table 1 LTAs, CVs and Concentration TBELs for Warm Water Facilities | | | | | | | | | |
|---|----------------|------|-------------------------|-----|-----|--|--|--|--|
| Eacility Name & Coefficient of Long-term TBE | | | | | | | | | |
| Permit Number | Parameter | (CV) | Average (LTA) (mg/l) | AML | MDL | | | | |
| Fish Breeders of Idaho (Catfish Farm) (cont.) | TP Mar—Aug | 0.31 | 0.20 | 0.2 | 0.4 | | | | |
| | TP Sept—Feb | 0.29 | 0.23 | 0.3 | 0.4 | | | | |

¹ In the absence of Epicenter Aquaculture data, limits were derived from a compilation of data from Canyon Springs and First Ascent, which both raise only Tilapia, as does Epicenter.

These limits were converted to mass-based limits (pounds per day) using each facility's average monthly flow and the maximum daily flow, respectively, in the following equation. The limits are included in Table RTC-4, below.

 $X \underline{\text{mg}} x 28.3 \underline{\text{liters}} x Y \underline{\text{Cu. ft}} x 86,400 \underline{\text{secs}} x 2.2046 \underline{\text{lbs}} = \underline{\text{lbs/day}} \\ l & cu. ft. & sec. & day 10^6 \text{ mg} \end{bmatrix}$

Because the different WLAs were assigned to FBI Catfish depending on the season, we recalculated the TBELs from the data corresponding the specific seasons by which the WLAs were set, i.e. March – August and September -- February.

| Table 2Conversion of Concentration TBELs to Mass-based TBELsfor Warm Water Facilities | | | | | | | | | |
|---|-----------|-----------------|--|--------------------|---------------|-----------------|---------------|--|--|
| | | Concer TBELs | ConcentrationAverage FlowTBELs (mg/l)(cfs) | | | Mass 7 (lbs/ | FBELs day) | | |
| Facility Name & Permit Number | Parameter | AML | MDL | Monthly Average | Daily Max. | AML | MDL | | |
| Ace Development. | TSS | 33.3 | 79.2 | 2.70 2.72 | 485.6 | 1162.7 | | | |
| (100130123) | TP | 0.4 | 0.8 | 2.70 | 2.72 | 5.9 | 12.2 | | |
| Arraina | TSS | 21.8 | 43.4 | 4 4 4 | 4 40 | 520.7 | 1050.7 | | |
| (IDG130122) | TP | 0.3 | 0.5 | 4.44 | 4.49 | 6.3 | 11.3 | | |

| Table 2 | | | | | | | | | | | |
|--|----------------|------|------|--------------------|---------------|-------|--------|--|--|--|--|
| Conversion of Concentration TBELs to Mass-based TBELs for Warm Water Facilities | | | | | | | | | | | |
| Concentration Average Flow Mass TBELs TBELs (mg/l) (cfs) (lbs/day) | | | | | | | | | | | |
| Facility Name & Permit Number | Parameter | AML | MDL | Monthly Average | Daily Max. | AML | MDL | | | | |
| Canyon Springs | TSS | 7.0 | 14.5 | 11.82 | 11.83 | 446.1 | 922.3 | | | | |
| (100130104) | TP | 0.2 | 0.3 | 11.85 | 11.05 | 7.3 | 15.4 | | | | |
| First Ascent | TSS | 16.2 | 37.3 | £ 00 | 7.08 | 592.9 | 1425.0 | | | | |
| (IDG130116) | TP | 0.2 | 0.3 | 0.80 | | 7.8 | 13.0 | | | | |
| | TSS Mar—Aug | 8.9 | 19.4 | 11.42 | 11.44 | 547.3 | 1195.1 | | | | |
| Fish Breeders of Idaho | TSS Sep—Feb | 5.8 | 9.7 | 10.58 | 10.76 | 329.2 | 561.4 | | | | |
| (IDG130041) | TP Mar—Aug | 0.2 | 0.4 | 11.42 | 11.44 | 15.4 | 23.5 | | | | |
| | TP Sept—Feb | 0.3 | 0.4 | 10.58 | 10.76 | 16.6 | 25.2 | | | | |

We rechecked the WLAs against Appendix B-4 of the Upper Snake Rock TMDL and made some minor corrections to the TSS WLAs (the previous numbers are in parentheses in Table 3, below).

With the recalculation of TBELs, the AML for TP for the months between March and August, inclusive, is the WQBEL of 13.0 lbs/day, which is below the TBEL of 17.3 lbs/day. Therefore, FBI Catfish Farm will be allowed to buy phosphorus credits up to the limit of 17.3 lbs/day during those months. It will not be able to buy credits above its AML for TP between September and February, since that is its TBEL, which may not be exceeded.

Canyon Springs and First Ascent now have lower TBELs for total phosphorus than their WLAs; therefore, their discharges are limited at the TBELs and they will not be able to buy phosphorus credits.

IDEQ did not grant a WLA for Epicenter Aquaculture, since it does not discharge to a water quality-limited stream with a TMDL. We did not convert its concentration based limits to mass based limits because we did not have

any flow data with which to do so. We are requiring flow monitoring in this permit so that mass based limits can be imposed in the next permit cycle.

The following table shows both the WQBELs and TBELs, with the more stringent limits shown in **bold**. These more stringent limits are applied in the revised draft WLA permit and in the draft Epicenter Aquaculture permit.

| Table 3Proposed Effluent Limitations for Warm Water Facilities | | | | | | | | | |
|--|---------------|------------------------------------|------------------------------------|--|--|--|--|--|--|
| Facility Name & | | Water Qualit | y-based limits | Technology | Technology-based limits | | | | |
| Permit Number | Parameter | AML | MDL | AML | MDL | | | | |
| ACE Development | TSS | | | 485.6 lbs/day (15 mg/l) ² | 1162.7 lbs/day (25 mg/l) | | | | |
| | TP | 0.27 lbs/day | 0.57 lbs/day | 5.9 lbs/day | 12.2 lbs/day | | | | |
| Arraina IDG130122 | TSS | | | 520.7 lbs/day (15 mg/l) | 1050.7 lbs/day (25 mg/l) | | | | |
| | TP | 0.31 lbs/day | 0.66 lbs/day | 6.3 lbs/day | 11.3 lbs/day | | | | |
| Canyon Springs | TSS | 317.8 lbs/day | 893.0 lbs/day | 446.1 lbs/day | 922.3 lbs/day | | | | |
| IDG130104 | TP | 12.1 lbs/day | 25.6 lbs/day | 7.3 lbs/day | 15.4 lbs/day | | | | |
| Epicenter | TSS | | | 12.7 mg/l | 31.5 mg/l | | | | |
| ID0028266 | TP | | | 0.2 mg/l | 0.4 mg/l | | | | |
| First Ascent IDG130116 | TSS | 180.8 lbs/day | 508.1 lbs/day | 592.9 lbs/day | 1425.0 lbs/day | | | | |
| | TP | 7.2 lbs/day | 15.3 lbs/day | 7.8 lbs/day | 13.0 Ibs/day | | | | |
| Fish Breeders of Idaho | TSS MarAug | 274.0 lbs/day (274.0-334.8) | 769.9 lbs/day (769.9-940.8) | 547.3 lbs/day | 1195.1 lbs/day | | | | |
| (Catfish Farm) IDG130041 | TSS SepFeb | 335.3 lbs/day (274.0334.8) | 942.3 lbs/day (769.9-940.8) | 329.2 lbs/day | 561.4 lbs/day | | | | |

| Table 3Proposed Effluent Limitations for Warm Water Facilities | | | | | | | | |
|--|--------------|--------------|----------------|---|---|--|--|--|
| Facility Name & | | Water Qualit | y-based limits | Technology-based limits | | | | |
| Permit Number | Parameter | AML | MDL | AML | MDL | | | |
| Fish Breeders of Idaho (Catfish Farm) | TP MarAug | 13.0 lbs/day | 27.6 lbs/day | 15.4 lbs/day (12.2) | 23.5 lbs/day (17.8) | | | |
| (20111) | TP SepFeb | 19.6 lbs/day | 41.6 lbs/day | 16.6 lbs/day (12.2) | 25.2 lbs/day (17.8) | | | |

² Numbers in parentheses were in the draft WLA permit and Fact Sheet; they have been corrected using Appendix B-4 of Upper Snake Rock TMDL or through the recalculation of the TBELs, as described above.

The following table shows both the limits that were proposed in June 2006 along with the limits we are proposing in this public notice, which are shown in **bold**.

| Table 4Comparison between Previously Proposed and Newly ProposedEffluent Limits for Warm Water Facilities | | | | | | | | | |
|---|-----------|---------------|---------------|------------------|-------------------|--|--|--|--|
| Facility Name & | | Previously Pr | oposed limits | Newly Prop | oosed limits | | | | |
| Permit Number | Parameter | AML | MDL | AML | MDL | | | | |
| ACE Development | TSS | 15 mg/l | 25 mg/l | 485.6 lbs/day | 1162.7 lbs/day | | | | |
| IDG130123 | TP | 0.27 lbs/day | 0.57 lbs/day | 3 | 3 | | | | |
| Arraina | TSS | 15 mg/l | 25 mg/l | 520.7 lbs/day | 1050.7 lbs/day | | | | |
| IDG130122 | TP | 0.31 lbs/day | 0.66 lbs/day | 3 | 3 | | | | |
| Canyon Springs IDG130104 | TSS | 317.8 lbs/day | 893.0 lbs/day | 3 | 3 | | | | |
| | TP | 12.1 lbs/day | 25.6 lbs/day | 7.3 lbs/day | 15.4 lbs/day | | | | |

| Table 4Comparison between Previously Proposed and Newly ProposedEffluent Limits for Warm Water Facilities | | | | | | | | |
|---|---------------|--|--|-----------------------|------------------|--|--|--|
| Facility Name & | | Previously Pr | oposed limits | Newly Proposed limits | | | | |
| Permit Number | Parameter | AML MDL | | AML | MDL | | | |
| Epicenter Aquaculture | TSS | 15 mg/l | 25 mg/l | 12.7 mg/l | 31.5 mg/l | | | |
| ID0028266 | ТР | 0.2 mg/l | 0.32 mg/l | 3 | 0.4 mg/l | | | |
| First Ascent | TSS | 180.8 lbs/day | 508.1 lbs/day | 3 | 3 | | | |
| IDG130116 | TP | 7.2 lbs/day | 15.3 lbs/day | 3 | 13.0 lbs/day | | | |
| Fish Breeders of Idaho | TSS MarAug | 334.8 lbs/day (Mar-May) 274.0 lbs/day (Jun-Aug) | 940.8 lbs/day (Mar-May) 769.9 lbs/day (Jun-Aug) | 274.0 lbs/day | 769.9 lbs/day | | | |
| (Catfish Farm) IDG130041 | TSS SepFeb | 274.0 lbs/day (Sep-Nov) 334.8 lbs/day (Dec-Feb) | 769.9 lbs/day (Sep-Nov) 940.8 lbs/day (Dec-Feb) | 329.2 lbs/day | 561.4 lbs/day | | | |
| | TP MarAug | 12.2 lbs/day | 17.8 lbs/day | 13.0 lbs/day | 23.5 lbs/day | | | |
| | TP SepFeb | 12.2 lbs/day | 17.8 lbs/day | 16.6 lbs/day | 25.2 lbs/day | | | |

³ No changes were made in these limits.

B. Fish Processors – Total Phosphorus Limits

1. Aggregating fish processor effluent data for developing TBELs

a. Comment: Several commenters questioned the appropriateness of developing phosphorus limits for the fish processors based on averages across all four facilities, since they use different technologies to treat their effluent. Clear Springs Foods (CSF) provided a statistical analysis and discussion of the processor data suggesting that the data from disparate facilities should not be combined to develop one TBEL for the Idaho fish processors industry. Also, CSF provided an engineer's analysis of the effluent data from the four facilities which suggested that the imputed

variations in their treatment systems advised against treating them similarly and developing a single limit that applied to all four. They also questioned EPA's use of data collected only quarterly for calculating an AML and MDL.

b. Response: After analysis of the material provided in the comments, EPA re-evaluated the fish processor TP data, summarizing the data from each processor separately. Based on historical TP effluent data, EPA calculated a long-term average for each plant, as well as a coefficient of variation. Also, EPA considered information collected during a tour of the facilities, noting that each facility discharges in a non-continuous manner. 40 CFR §122.45(e) requires that EPA limit non-continuous discharges differently than continuous ones. The discharge data collected by each facility quarterly in the last permit cycle shows a high degree of variability in the flow and volume of discharge and in the number of fish processed each day or each week. This results in a variable time period of discharge and thus a variable load of pollutants. Therefore, we are establishing a concentration-based TBEL for TP for each facility rather than a mass limit in pounds of pollutant per unit of flow (40 CFR §122.45(e)(4)), which would have to be based on an average flow for each facility. This concentration limitation is expressed as a Maximum Daily Limit for each facility and applies whenever the facility is discharging. In applying each MDL based on the performance at each facility, we are taking into account the differences in treatment systems among the facilities. See Table 5, below for the factors and limits for each facility.

Because the TBELs are concentration limits in mg/l, they are not directly comparable to the WQBELs in lbs/day without further conversion, using the highly variable processor flow data. Therefore, EPA is applying both limits to the facilities, protecting the State water quality standards with the WLA AML and associated MDL and at the same time ensuring that facilities continue using existing treatment technology at the historical levels of treatment to meet the MDL TBEL. A commonly stated concern with concentration limits is that permittees may substitute dilution for treatment. EPA believes this will not be possible with this industry since TBELs for other pollutants must be met, as well as the mass-based WQBEL for TP.

c. Action: We changed the FP permit based on this comment (p.8, Table 1). In Table 6, below, we compare the limits that we proposed in 2006 with those we are now proposing.

| Table 5Revised Derivations of Individual TP TBELs for Fish Processors | | | | | | | | | |
|--|-----|------|------|------|--|--|--|--|--|
| Long-term AverageCoefficientMDLMaximum Dail Limit (mg/l)Facility(mg/l)of VariationMultiplierLimit (mg/l) | | | | | | | | | |
| Clear Lakes Trout Co. | 3.9 | 0.33 | 2.0 | 7.8 | | | | | |
| Clear Springs Foods | 8.8 | 0.32 | 1.97 | 17.4 | | | | | |
| Rainbow Filer | 4.9 | 0.38 | 2.2 | 10.8 | | | | | |
| SeaPac | 3.8 | 0.75 | 3.78 | 14.4 | | | | | |

| Table 6 Comparison between Previously Proposed and Newly Proposed Effluent Limits Total Phosphorus for Fish Processors | | | | | | | | | | |
|---|------------------------------|-------------------------|----------------|---|---------------|--|--|--|--|--|
| | Previously p (<i>lbs</i> | roposed limits /day) | New | ly Proposed Lin ((<i>lbs/day</i>) ⁴ | mits | | | | | |
| Facility Name & Permit Number | AML | MDL | AML (WQBEL) | MDL (WQBEL) | MDL (TBEL) | | | | | |
| Clear Lakes Trout Co. IDG130011 | 2.1 | 6.1 | 3.3 | 6.4 | 7.8 mg/l | | | | | |
| Clear Springs Foods, IDG130125 | 11.8 | 21.5 | 20.2 | 39.2 | 17.4 mg/l | | | | | |
| Rainbow Trout Farms IDG130028 | 2.5 | 5.0 | 2.5 | 4.8 | 10.8 mg/l | | | | | |
| Seapac of Idaho IDG130046 | 4.5 | 12.7 | 4.7 | 9.1 | 14.4 mg/l | | | | | |

⁴ Except where units of mg/l are noted

IV. New or Revised Limits based on Wasteload Allocations in approved TMDLs

A. Portneuf River TMDL

- 1. Batise Springs Trout Farm
 - a. Total Phosphorus

(1) Comment: IDEQ pointed out that, although the text of the FS on page 42 said that the total phosphorus limits for Batise Springs Trout Farm were derived from the 2001 Total Maximum Daily Load (TMDL) for the Portneuf River, the actual AML was not correct.

(2) Response: EPA appreciates this correction; in the draft permit, we had based the limits on revisions to the 2001 WLAs that we anticipated would be approved prior to finalizing the permits. IDEQ has decided not to revise the TMDL at this time; therefore, we are applying the 2001 WLAs as follows.

We calculated the TP AML at 13.0 lbs/day, based on the WLA of 2.37 tons/year; the maximum daily limit (MDL) is 19.2 lbs/day, using the same MDL multiplier used for all other TP MDLs in these permits. (see page 24 of Appendix B of the Fact Sheet).

- (3) Action: We inserted the corrected limits into Table 8 of the WLA permit.
- b. Total Inorganic Nitrogen

(1) Comment: IDEQ pointed out that the total inorganic nitrogen limits for Batise Springs Trout Farm were not based on the 2001 Total Maximum Daily Load (TMDL) for the Portneuf River, which assigned a WLA of 5.42 tons/year, based on a target concentration of 0.16 mg/l.

(2) Response: EPA appreciates this correction; in the draft permit, we had based the limits on revisions to the 2001 WLAs that we anticipated would be approved prior to finalizing the permits. IDEQ has decided to not revise the TMDL at this time; therefore, we will apply the 2001 WLAs as follows.

We calculated the TIN AML to be 29.7 lbs/day, based on the WLA of 5.42 tons/year; the maximum daily limit (MDL) is 62.7 lbs/day, using the MDL multiplier explained on page 24 of Appendix B of the Fact Sheet.

(3) Action: We inserted the corrected limits into Table 8 in the WLA permit.

2. Papoose Springs Trout Ranch, Portneuf River

a. Comment: IDEQ has informed EPA that Papoose Springs will not have WLAs in the revised Portneuf River TMDL.

b. Response: Since we can only cover facilities with WLAs in approved TMDLs under the WLA permit, we cannot cover Papoose Springs Trout Farm under the WLA permit, as was anticipated when we published the draft permit. Because this facility would discharge to a water quality limited stream with a TMDL that does not provide it with a WLA, this facility also cannot be covered under the Cold Water Permit.

c. Action: We have removed Papoose Springs Trout Farm from Table 8 in the WLA permit and made other minor adjustments consistent with this removal.

| Table 7 Changes in Effluent Limits for Batise Springs Trout Farm | | | | | | | | | | |
|--|-----------|---------------------------------|-------------------------------|---------------------------------|-------------------------------|--|--|--|--|--|
| | | Previously | proposed | Newly Pr | oposed | | | | | |
| Facility Name | Parameter | Average Monthly (lbs/day) | Maximum Daily (lbs/day) | Average Monthly (lbs/day) | Maximum Daily (lbs/day) | | | | | |
| Batise Springs | Net TP | 8.4 | 12.4 | 13.0 | 19.2 | | | | | |
| IDG130043 | Net TIN | 35.3 | 74.5 | 29.7 | 62.7 | | | | | |

B. Springfield Hatchery (aka Crystal Springs Trout Farm), American Falls Reservoir TMDL

1. Comment: IDEQ pointed out an error in the calculated AML for Net TP for this facility; the corrected AML should be 6.7 lbs/day.

2. Response: EPA acknowledges an error in this calculation due to using an imprecise version of the WLA.

3. Action: In Table 9 of the WLA permit, the AML for TP is changed 6.6 to 6.7 lbs/day; the corresponding MDL is changed from 9.7 to 9.9 lbs/day. These same corrections would also apply to Table 16 on page 43 of the Fact Sheet; see statement in the introduction about modifications to the Fact Sheet.

C. Fall Creek and Rueger Springs Creek Facilities, Lake Walcott TMDL

1. Comment: On March 23, 2007, EPA approved the Fall Creek TMDL Addendum and the Rueger Springs Creek TMDL Addendum, both of the Lake Walcott TMDL, both of which were submitted to EPA on January 30, 2007. They included the following allocations for aquaculture facilities.

| Table 5Wasteload Allocations for Lake Walcott Facilities | | | | | |
|--|--|----------------------------------|--|--|--|
| Facility | Total Suspended Solids (lbs/day) | Total Phosphorus (lbs/day) | | | |
| Upper Falls Creek Facility | 577.8 | 6.73 | | | |
| Lower Falls Creek Facility | 672.3 | 4.03 | | | |
| American Falls Fish Hatchery | 534.6 | 8.55 | | | |

2. Response: Using the method detailed in Appendix B of the Fact Sheet on pages 20 - 22, we developed the following limits for these facilities. The MDL multiplier for TSS is 1.90; the MDL multiplier for TP is 1.48.

| Table 6Effluent Limitations for Lake Walcott Facilities | | | | | | |
|---|------------------|-----------|---------------------------------|-------------------------------|--|--|
| Facility Name | Permit Number | Parameter | Average Monthly (lbs/day) | Maximum Daily (lbs/day) | | |
| Fall Creek Hatchery—Upper | IDG130078 | Net TP | 6.7 | 9.9 | | |
| | | Net TSS | 577.8 | 1097.8 | | |
| Fall Creek Hatchery—Lower | IDG130085 | Net TP | 4.0 | 5.9 | | |
| | | Net TSS | 672.3 | 1277.4 | | |
| American Falls Fish Hatchery | IDG130031 | Net TP | 8.6 | 12.7 | | |
| | | Net TSS | 534.6 | 1015.7 | | |

3. Action: We inserted the new limits in Table 10 of the WLA permit.

D. ACE Development USA and Arraina, Bruneau River TMDL

1. Comment: Prior to finalizing the WLA permit, IDEQ expects to submit to EPA for approval a modification to the Bruneau River TMDL with the following allocations for aquaculture facilities.

| Table 7Wasteload Allocations for Bruneau River Facilities | | | | |
|---|-------|----------------------------------|--|--|
| TotalSuspended SoFacility(lbs/day) | | Total Phosphorus (lbs/day) | | |
| ACE Development USA | 218.7 | 2.9 | | |
| Arraina | 356.4 | 4.8 | | |

2. Response: Using the method detailed in Appendix B of the Fact Sheet on pages 20 - 22, we developed the following limits for these facilities. The MDL multiplier for TSS is 2.81; the MDL multiplier for TP is 2.12.

| Table 8Effluent Limitations for Bruneau River Facilities | | | | | | |
|--|---------------|-----------|--|--|--|--|
| Facility Name | Permit Number | Parameter | Average Monthly Limit (lbs/day) | Maximum Daily Limit (lbs/day) | | |
| ACE Development USA | IDG130123 | Net TP | 2.9 | 6.2 | | |
| | | Net TSS | 218.7 | 614.5 | | |
| Arraina | IDG130122 | Net TP | 4.8 | 10.2 | | |
| | | Net TSS | 356.4 | 1001.5 | | |

3. Action: If the modified TMDL is finalized by IDEQ and approved by EPA prior to issuance of the final WLA permit, we will insert the new limits in Table 6 of the WLA permit. Otherwise the limits for these facilities will be those in the draft WLA permit.

V. Pollutant Trading

A. Buying Restricted to Downstream Buyers

1. Comment: Several commenters expressed concern about the restriction to limit a buyer to purchasing credits only from sellers upstream of its outfall; they asserted that such a restriction is inconsistent with federal and State trading guidance, is arbitrary and capricious, and is unfair to the uppermost aquaculture facility discharging to the river. They referred to an IDEQ study, the Localized Impact Analysis, that indicated that buying from a downstream seller would not cause water quality problems. Finally, several commenters, including IDEQ, recommended that trading be allowed both upstream and downstream between all eligible facilities as long as there are no detrimental water quality impacts and as long as beneficial uses and water quality standards are protected.

2. Response: The pollutant trading language in the draft permit was written in consultation with IDEQ to ensure consistency with IDEQ's Pollutant Trading Guidance ("Guidance"), including its Appendix C -- Middle Snake River. In its comments on the draft permits, IDEQ encouraged EPA to provide for trades between upstream buyers and downstream sellers as long as the ambient water quality between the parties is not adversely impacted. It has requested that we omit the requirement that a purchasing facility must be downstream of a selling facility. IDEQ's Localized Impact Analysis (for the Middle Snake River) did not evaluate the effects of trading on local impacts to water quality; however, in recent discussions between the agencies, IDEQ said that its annual monitoring of the Snake River should reveal any ambient water quality problems resulting from future trading between facilities (see page 9 of the Guidance: "Monitoring will be conducted to verify that the limits on trading are supporting the maintenance of desired water quality"). Any ambient problems found in a segment of stream would be used by the State to modify its Guidance to disallow trading in the affected segment, since trading would not comply with the Guidance (see page 4 of the Guidance: "Trades must be implemented so that the overall water quality of the watershed is protected. ...localized adverse impacts to water quality are not allowed.").

The State is required to seek public comment on modified Guidance prior to finalizing it. EPA will not modify these permits to reflect the modified Guidance, but trades eligible under the modified Guidance could not occur until the Guidance was deemed final by the State. IDEQ's CWA Section 401 certification is expected to specify that the permit will protect water quality standards even if

buyers are upstream of sellers, because of the agency's monitoring efforts and Guidance requirements.

3. Action: EPA has modified the WLA and Fish Processors permits to allow for trading to occur between any <u>eligible</u> permittees, pursuant to the requirements in IDEQ's Pollutant Trading Guidance, and has eliminated the language that restricted buyers to those downstream of sellers.

B. Trading with Non-Point Sources

1. Comment: IDEQ and others commented that trading should be allowed between nonpoint sources and point sources.

2. Response: The draft permits only allowed point source to point source trading because Appendix C of the Guidance does not provide a list of approved BMPs for generating marketable credits to sell in the Middle Snake River watershed (see page 12: "Nonpoint sources generate transferable water quality credits by implementing approved best management practices (BMPs). A list of approved BMPs, by watershed, can be found in the Appendices [except Appendix C]. This list sets out which BMPs can be used for trading, as well as each BMP's procedures for determining the amount of credits and its monitoring and maintenance requirements.") In recent conversations between the agencies, IDEQ staff has indicated that it is feasible for them to assist nonpoint sources in the Middle Snake River watershed with developing a list of approved BMPs. Once that is accomplished, IDEQ would modify its Guidance with the list, so that trades between nonpoint sources and point sources could then occur.

The State is required to seek public comment on modified Guidance prior to finalizing it. EPA will not modify these permits to reflect the modified Guidance, but trades eligible under the modified Guidance could not occur until the Guidance was deemed final by the State. IDEQ is expected to certify under CWA Section 401 that the permit will protect water quality standards even if trades are allowed between nonpoint sources and point sources discharging under these permits.

3. Action: EPA has modified the WLA and Fish Processors permits in Appendix C to reflect that eligible facilities include nonpoint sources. Permittees should be aware that trading can only occur pursuant to IDEQ's Guidance. Change to the Guidance to include the list of approved BMPs within the Upper Snake Rock or other watersheds may not occur until some time after the permits become final.

C. Trading in Other Watersheds

As of the issuance date of the final permit, trading is only expected to occur between facilities and nonpoint sources in the Upper Snake Rock watershed, since it is the only watershed with aquaculture facilities included in the Guidance. EPA has

#IDG-130000 #IDG-132000 #ID-0028266

modified the WLA permit to provide for trading in other watersheds, pursuant to the Guidance, in case IDEQ changes its Guidance to allow trading elsewhere. If trading does become an option in other watersheds during the life of these general permits, the alternate technology-based limit applicable as the upper limit of trading to the facilities in the other watersheds can be found in the Fact Sheet (except for TP; see Table 1 of the WLA Permit).

The State is required to seek public comment on modified Guidance prior to finalizing it. EPA will not modify these permits to reflect the modified Guidance, but trades eligible under the modified Guidance could not occur until the Guidance was deemed final by the State. IDEQ is expected to certify under CWA Section 401 that the permit will protect water quality standards even if trades are allowed in other watersheds under its trading guidance.

VI. Other Legal Requirements

Endangered Species Act

Section 7 of the Endangered Species Act requires federal agencies to request a consultation with the NOAA Fisheries and the U.S. Fish and Wildlife Service (USFWS) regarding potential effects that a federal action, such as permitting, may have on species listed as endangered or threatened. The U.S. Fish and Wildlife Service (USFWS) identified the following federally-listed endangered and threatened species in the watersheds where aquaculture facilities are located:

Endangered Species:

- Gray wolf (Canis lupus) experimental
- Sockeye salmon (Oncorhynchus nerka)
- Utah valvata snail (Valvata utahensis)
- Snake River physa snail (*Physa natricina*)
- Idaho spring snail (*Pyrgulopsis idahoensis*)
- Bruneau Hot Springsnail (Pyrgulopsis bruneauensis)
- Banbury Springs lanx (*Lanx sp.*)

Threatened Species:

- Bald eagle (Haliaeetus leucocephalus)
- Grizzly Bear (Ursus arctos horribilis)
- Bull trout (*Salvelinus confluentus*)
- Spring/summer Chinook salmon (*Oncorhynchus tshawytscha*)
- Macfarlane's four-o'clock (Mirabilis macfarlanei)
- Bliss Rapids snail (Taylorconcha serpenticola)
- Canada lynx (*Lynx canadensis*)

Proposed Threatened Species:

- Northern Idaho Ground Squirrel (Spermophilis brunneus brunneus)
- Steelhead (Oncorhynchus mykiss)

- Fall Chinook salmon (*Oncorhynchus tshawytscha*)
- Spalding=s catchfly (*Silene spaldingii*)

Tables 25, 26, and 27 in the June 14, 2006, Fact Sheet provide the lists of species by counties which have discharging aquaculture facilities and the determination of level of effect, if any, for each species.

After considerable dialogue with staff of USFWS and NOAA Fisheries and further analysis of effects of permitted concentrations of TSS, Phosphorus, Disease Control Chemicals, Dissolved Oxygen, Temperature, and Ammonia on listed fish species, we have changed the determinations for some of the species.

- EPA concludes that issuance of the permits for aquaculture facilities is **not likely to adversely affect** the Bull trout, Fall Chinook Salmon, Snake River spring/summer Chinook salmon, Sockeye salmon or Steelhead or their critical habitat.
- EPA concludes that issuance of the processor permit and WLA permit is **likely to adversely affect** the Utah valvata snail, Snake River physa snail, Idaho springsnail, Banbury Springs Lanx or the Bliss Rapids Snail, due to possible impairment of the water quality needs of the snails through TSS and TP additions to receiving waters in the mid-Snake subbasin. The mid-Snake River is water quality impaired for TSS and TP and listed on the State's 303(d) list; therefore, EPA determined that continuing discharges of TSS and TP had the potential to harm the listed species.
- EPA has determined that the issuance of the WLA permit for three warm water facilities in Gooding and Twin Falls counties is **likely to adversely affect** the Idaho springsnail, Utah valvata snail, Snake River physa, Banbury Springs Lanx and Bliss Rapids snail. Increased temperature discharges from warm water facilities may result in possible impacts on listed snail habitat due to elevated temperature.
- EPA has determined that, due to location of the snails relative to the aquaculture facilities, the general permits for aquaculture facilities are **not likely to adversely affect** the Bruneau Hot Springsnail.
- EPA has determined that, looking at potential effects on terrestrial mammalian and plant species, issuance of the permits would have **no effect** on the following species: Canada Lynx, Grizzly Bear, Gray Wolf, Northern Idaho Ground Squirrel, Bald Eagle, McFarlane's Four-o'clock, Ute ladies' tresses and Spalding's catchfly.