STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY
*PO Box 47775 • Olympia, Washington 98504-7775 • (360) 407-6300*

November 7, 2011

**REGISTERED MAIL: RE 130 215 507 US**

Mr. Frank Shrier
PacifiCorp
825 NE Multnomah
Portland, OR 97232

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|---|---|
| **Amended Order Docket #** | 8831 |
| **Order Docket #** | 3679 |
| **Site Location** | Swift No. 1 Dam Hydroelectric Project |

Re: Swift No. 1 Project

Dear Mr. Shrier:

The Department of Ecology (Ecology) has issued the enclosed amended Administrative Order (Order) No. 8831 requiring you to replace conditions of Administrative Order No. 3679 with the language contained in this Amended Order.

All correspondence relating to this document should be directed to Deborah Cornett at the Department of Ecology, Southwest Regional Office, PO Box 47775, Olympia, WA 98504-7775.

If you have any questions concerning the content of the document, please contact Deborah Cornett at 360-407-7269.

Sincerely,

Robert W. Bergquist, LEED© AP
Southwest Region Manager
Water Quality Program

RB:BR:sb

Enclosure

STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY

| | | |
|---|---|---|
| IN THE MATTER OF GRANTING A WATER QUALITY CERTIFICATION TO Mr. Frank Shrier with Chapter 90.48 RCW and the Rules and Regulations of the Department of Ecology | ) ) ) ) ) ) | AMENDMENT ORDER No. 8831 of Order No. 3679 |

To: Mr. Frank Shrier
PacifiCorp
825 NE Multnomah
Portland, OR 97232

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| **Amended Order Docket #** | 8831 |
| **Order Docket #** | 3679 |
| **Site Location** | Swift No. 1 Dam Hydroelectric Project |

The Department of Ecology (Ecology) has issued this amended Administrative Order (Order) Docket #8831 to amend Order Docket #3679 dated October 9, 2006, and issued to PacifiCorp.

This amendment is issued under the provisions of Chapter 90.48 RCW and Chapter 173-201A WAC.

## ADMINISTRATIVE ORDER AMENDMENTS

Administrative Order No. 3679, dated October 9, 2006, is hereby amended as follows.

1. Section 3.0 Findings *Compliance with standards* 6) the following text:

   "*Class A water quality standards apply downriver from Swift No. 1 in the canal to Swift No 2 and in the bypass reach to Yale Lake. Lake Class water quality standards apply in Yale Lake at 487 feet msl and in the Swift Creek Reservoir at 997 feet msl since Swift Creek Reservoir and Yale Lake are reservoirs with a mean detention times of greater than 15 days. Mean detention time is calculated by dividing the reservoir's mean annual minimum total storage by the thirty-day ten-year low-flow from the reservoir. Lake class conditions for temperature require that the licensee maintaining the highest attainable water quality condition that is feasible to achieve to best protect the biota.*" **shall be removed and replaced with the following:**

   "*Lake* water quality standards apply in Yale Lake at 490 feet msl and in the Swift Creek Reservoir at 1000 feet msl since Swift Creek Reservoir and Yale Lake are reservoirs with a mean detention times of greater than 15 days. Mean detention time is calculated by dividing the reservoir's mean annual minimum total storage by the thirty-day ten-year low-flow from the reservoir. *Core Summer Salmonid Habitat* water quality standards apply to all feeder streams to lakes and reservoirs with a mean detention time greater than fifteen days (WAC 173-201A-600(1)(a)(ii)). These standards apply to the Swift No.1 tailrace, the canal flowing downstream from Swift No. 1 to Swift No. 2, and the bypass reach."

2. Condition 4.1.1 the following text:

*"1) The project shall comply with all water quality standards approved by the Environmental Protection Agency (currently codified in ch. 173-201A WAC), ground water quality standards (currently codified in ch. 173-200 WAC), and sediment quality standards (currently codified in ch. 173-204 WAC) and other appropriate requirements of state law. The conditions below set forth adaptive management processes and measures to achieve full compliance with standards and constitute a water quality attainment plan under the 2003 WAC 173-201A-510(5) for TDG and temperature."* **shall be removed and replaced with the following:**

"1) The project shall comply with all water quality standards approved by the Environmental Protection Agency (currently codified in ch. 173-201A WAC), ground water quality standards (currently codified in ch, 173-200 WAC), and sediment quality standards (currently codified in ch. 173-204 WAC) and other appropriate requirements of state law. The project shall comply with the conditions of the compliance schedule for dams (WAC 173-201A-510(5)) where the project causes or contributes to a violation of the water quality standards."

3. Condition 4.1.18 the following text:
*"The Project shall meet the Class A narrative standards in the bypass reach and Canal, and the Lake Class standards in Swift Creek Reservoir and Yale Lake."* **shall be removed and replaced with the following:**

"The project shall meet *Core Summer Salmonid Habitat* standards in the bypass reach and canal and all fresh water *Lake* designated uses, and criteria listed in WAC 173-201A in Swift Creek Reservoir and Yale Lake."

4. The following new Condition 4.1.20 **shall be added**:

Post-Compliance Schedule: If implementing the compliance schedule does not result in compliance with water quality standards at the time the compliance schedule expires, the Licensee may explore other alternative approaches available in the water quality standards, including a second compliance schedule or alternative provided in WAC 173-201A-510(5)(g).

5. Condition 4.2 Instream Flows and Habitat Flows 1) the following text:

*In order to meet the Class A standards listed in WAC 173-201A-030(2..."* **shall be removed and replaced with the following:**

"In order to meet *Core Summer Salmonid Habitat* criteria for temperature and dissolved oxygen listed in WAC 173-201A-200(1)(c) and WAC 173-201A-200(1)(d), respectively..."

6. Condition 4.4.1 the following text:

*"The project shall not cause any violation of the temperature water quality criteria as specified for Class 'A' waters, WAC 173-201A-030(2)(c)(iv), in the Swift No. 1 tailrace, the canal or the bypass reach. The Licensee shall not cause these waters to exceed 18°C. If the presence or operation of the Dam causes violation of these criteria, the Licensee shall modify its operation to the extent necessary to ensure that the project does not cause such exceedance."* **shall be removed and replaced with the following:**

"The Project shall not cause any violation of *Core Summer Salmonid Habitat* criteria for temperature and dissolved oxygen in the Swift No. 1 tailrace, the canal or the bypass reach as required by WAC 173-201A-600(1)(a)(ii). The Licensee shall not cause these waters to exceed 16°C as a seven-day average of daily maximum temperatures, as listed in WAC 173-201A-200(1)(c)) nor dissolved oxygen concentrations to go below 9.5 mg/L as a 1-day minimum as listed WAC 173-201A-200(1)(d). If the presence or operation of the Dam causes violation of these criteria, the Licensee shall modify its operation to the extent necessary to ensure that the project does not cause such exceedance"

7. Condition 4.4.2 the following text:

*"The project shall not cause any violation of the temperature water quality criteria as specified for Lake Class waters in WAC 173-201A-030(5)(c)(iv) in Yale Lake or Swift Creek Reservoir. If the presence or operation of the dam causes violation of these criteria, the Licensee shall modify its operation to the extent necessary to ensure that the Project does not cause such exceedance."* **shall be removed and replaced with the following:**

"The Project shall not cause any violation of the fresh water *Lake* designated criteria for temperature, listed in WAC 173-201A-200(1)(c)(v). The *Lake* water quality criteria that apply to Swift Creek Reservoir and Yale Lake mandate that human actions considered cumulatively may not increase the 7-day average daily maximum (7-DADMax) temperature more than 0.3°C above natural conditions. If the presence or operation of the Swift No. 1 Dam causes violation of these criteria, the Licensee shall modify its operation to the extent necessary following the compliance schedule outlined below to ensure that the Project does not cause such exceedance."

8. Condition 4.4.3 sections a) and b) the following text:

*"a) The Licensee shall develop a Temperature Water Quality Attainment Plan (TWQAP) that provides a detailed strategy for maintaining the highest attainable water quality condition to best protect the biota with respect to temperature that is feasible to achieve. The TWQAP shall identify and evaluate potential reasonable operational and structural changes to improve temperature. Any changes that would conflict with other conditions of this Certification-Order require prior approval by Ecology. The plan shall also identify the temperature regime that is feasibly achievable, such that the temperature is protected to the highest degree feasible. A Responsiveness Summary shall be incorporated into the TWQAP that evaluates the effectiveness of the modifications (if any) and identifies follow-up studies and actions that can be performed to further improve temperature based on the initial findings.*

*b) A draft of the TWQAP shall be submitted to Ecology within one (1) year of obtaining information that water quality criteria for temperature have been exceeded. The TWQAP must include a reasonable schedule for carrying out an adaptive process for evaluating feasible technical and operational changes that will improve water quality protection within ten (10) years of license renewal. This process may include modeling and physical testing of operational changes, and modeling changes in structural revisions and testing those structural revisions that can reasonably be implemented within the ten year period. Significant structural or operational revisions that may impose potentially unreasonable costs or create potentially unreasonable societal effects may be evaluated as part of a formal Use Attainability Analysis consistent with the federal and state water quality regulations after the ten year compliance period has ended."* **shall be removed and replaced with the following:**

"The Licensee shall develop a Temperature Water Quality Attainment Plan (TWQAP) for the Project. TWQAP shall contain a detailed strategy for achieving compliance with temperature water quality criteria and include temperature and dissolved oxygen monitoring in the forebay and tailrace of Swift No. 1.The TWQAP shall follow the requirements of the compliance schedule for dams (WAC 173-201A-510(5)) and shall include attainment of temperature criteria in Swift Creek Reservoir, Yale Lake, and the canal or the bypass reach."

9. Condition 4.5.2(b) In-Water-Work Protection Plan (IWWPP) the following text:

*"(as defined in WAC 173 201A-110(3)(a-d))"* **shall be removed and replaced with the following:**

"(as defined in WAC 173-201A-200 (1) (d) (e) and 201A-400 Mixing Zones)"

10. Condition 4.5.4 Maintain Turbidity Standards the following text:

*"a) Certification of this project does not authorize the Licensee to exceed the turbidity standard beyond the mixing zone described below. Turbidity in Class A waters of the bypass reach and canal shall not exceed 5 NTU over background turbidity when turbidity is 50 NTU or less, or have more than a 10 percent increase in turbidity when the background turbidity is more than 50 NTU. Turbidity in Lake Class waters of Swift Creek Reservoir and Yale Lake shall not exceed 5 NTU of background turbidity.*

*b) For Class A waters, a mixing zone is established within which the turbidity standard is waived, consistent with WAC 173-201A-100(7) and –110(3). The mixing zone is established to allow only temporary exceedances of the turbidity criteria during and immediately after in-water work. The temporary turbidity mixing zone shall be as follows:*

*i. For waters up to 10 cfs flow at the time of construction, the point of compliance shall be 100 feet downstream from activity causing the turbidity exceedance.*

*ii. For waters above 10 cfs up to 100 cfs flow at the time of construction, the point of compliance shall be 200 feet downstream from activity causing the turbidity exceedance.*

*iii. For waters above 100 cfs flow at the time of construction, the point of compliance shall be 300 feet downstream from activity causing the turbidity exceedance.*

*c) For Lake Class waters, certification of this Project does not authorize the Licensee to exceed the turbidity standard beyond the mixing zone described in (d) and (e) below.*

*d) Step 1. Mixing zones shall not be allowed unless it can be demonstrated to the satisfaction of Ecology that:*

*i. Other siting, technological, and managerial options that would avoid the need for a lake mixing zone are not reasonably achievable;*

*ii. Overriding considerations of the public interest will be served; and*

*iii. All technological and managerial methods available for pollution reduction and removal that are economically achievable would be implemented prior to discharge*

*e) Step 2. Mixing zones, singularly or in combination with other mixing zones, shall comply*

*with the most restrictive combination of the following:*

*i. Not exceed ten percent of the waterbody volume;*

*ii. Not exceed ten percent of the waterbody surface area (maximum radial extent of the plume regardless of whether it reaches the surface); and*

iii. *Not extend beyond fifteen percent of the width of the waterbody."* **shall be removed and replaced with the following:**

"a. Certification of this project does not authorize the Licensee to exceed the turbidity standard beyond the mixing zone described below. The Aquatic life turbidity criteria for the use category of Core summer salmonid habitat listed in WAC 173-201A-200 (1)(e) applies to the waters of the bypass reach, canal, Swift Creek Reservoir and Yale Lake. In Core summer salmonid habitat waters turbidity shall not exceed 5 NTU over background turbidity when turbidity is 50 NTU or less, or have more than a 10 percent increase in turbidity when the background turbidity is more than 50 NTU. Fresh water use designations for the Lewis River watershed are listed in WAC 173-201A-600, 173-201A-602, and the supplemental spawning and incubation map for WRIA 27 (Ecology publication #06-10-038) (See Table Below).

**Table 200 (1)(e) Aquatic Life Turbidity Criteria in Fresh**

| Water Category | NTUs |
|---|---|
| Char Spawning and Rearing | Turbidity shall not exceed:<br>• 5 NTU over background when the background is 50 NTU or less; or<br>• A 10 percent increase in turbidity when the background turbidity is more than 50 NTU. |
| Core Summer Salmonid Habitat | Same as above. |
| Salmonid Spawning, Rearing, and Migration | Same as above. |

(i) The turbidity criteria established under WAC 173-201A-200 (1)(e) shall be modified, without specific written authorization from the department, to allow a temporary area of mixing during and immediately after necessary in-water construction activities that result in the disturbance of in-place sediments. This temporary area of mixing can occur only after the activity has received all other necessary local and state permits and approvals, and after the implementation of appropriate best management practices to avoid or minimize disturbance of in-place sediments and exceedances of the turbidity criteria. A temporary area of mixing is also subject to the constraints of WAC 173-201A-400 (4) and (6) listed below:

(4) No mixing zone shall be granted unless the supporting information clearly indicates the mixing zone would not have a reasonable potential to cause a loss of sensitive or important habitat, substantially interfere with the existing or characteristic uses of the water body, result in damage to the ecosystem, or adversely affect public health as determined by the department.

(6) The size of a mixing zone and the concentrations of pollutants present shall be minimized.

A temporary area of mixing shall be as follows:

i. For waters up to 10 cfs flow at the time of construction, the point of compliance shall be 100 feet downstream from activity causing the turbidity exceedance.

ii. For waters above 10 cfs up to 100 cfs flow at the time of construction, the point of compliance shall be 200 feet downstream from activity causing the turbidity exceedance.

iii. For waters above 100 cfs flow at the time of construction, the point of compliance shall be 300 feet downstream from activity causing the turbidity exceedance.

iv. For projects working within or along lakes, ponds, wetlands, or other nonflowing waters, the point of compliance shall be at a radius of one hundred fifty feet from the activity causing the turbidity exceedance.

b. Water quality exceedances beyond the temporary area of mixing listed above, that are predicted as being unavoidable during construction or maintenance of a project, will be subject to all criteria listed in WAC 173-201A-400 Mixing zones. A request for an alternative mixing zone that meets the criteria listed in WAC 173-201A-400 may be submitted to Ecology for approval as part of the project-specific In-Water Work Protection Plan required by Section 4.5 of Certification (Order No. 3679)."

11. All references to Washington Surface Water Quality Standards of Chapter 173-201A WAC shall be followed according to the dispositions now listed in the 2006 codified version of this Chapter and subsequent versions.

No other condition or requirement of this Certification (Order No. 3679) is affected by this amendment.

Ecology retains continuing jurisdiction to make modifications hereto through supplemental order, if it appears necessary to protect the public interest.

## FAILURE TO COMPLY WITH THIS ORDER

Failure to comply with this Order may result in the issuance of civil penalties or other actions, whether administrative or judicial, to enforce the terms of this Order.

## YOUR RIGHT TO APPEAL

You have a right to appeal this Order to the Pollution Control Hearing Board (PCHB) within 30 days of the date of receipt of this Order. The appeal process is governed by Chapter 43.21B RCW and Chapter 371-08 WAC. "Date of receipt" is defined in RCW 43.21B.001(2).

To appeal you must do the following within 30 days of the date of receipt of this Order:

1. File your appeal and a copy of this Order with the PCHB (see addresses below). Filing means actual receipt by the PCHB during regular business hours.
2. Serve a copy of your appeal and this Order on Ecology in paper form - by mail or in person. (See addresses below.) E-mail is not accepted.

You must also comply with other applicable requirements in Chapter 43.21B RCW and Chapter 371-08 WAC.

Your appeal alone will not stay the effectiveness of this Order. Stay requests must be submitted in accordance with RCW 43.21B.320.

## ADDRESS AND LOCATION INFORMATION

| Street Addresses | Mailing Addresses |
|---|---|
| **Department of Ecology**<br>Attn: Appeals Processing Desk<br>300 Desmond Drive SE<br>Lacey, WA 98503<br><br>**Pollution Control Hearings Board**<br>1111 Israel Rd SW<br>STE 301<br>Tumwater, WA 98501 | **Department of Ecology**<br>Attn: Appeals Processing Desk<br>PO Box 47608<br>Olympia, WA 98504-7608<br><br>**Pollution Control Hearings Board**<br>PO Box 40903<br>Olympia, WA 98504-0903 |

## CONTACT INFORMATION

Please direct all questions about this Order to:

Deborah Cornett
Department of Ecology
Southwest Regional Office
PO Box 47775, Olympia, WA 98504-7775
Phone (360) 407-7269

## MORE INFORMATION

**Pollution Control Hearings Board Website**
www.eho.wa.gov/Boards_PCHB.aspx

**Chapter 43.21B RCW - Environmental Hearings Office – Pollution Control Hearings Board**
http://apps.leg.wa.gov/RCW/default.aspx?cite=43.21B

**Chapter 371-08 WAC – Practice And Procedure**
http://apps.leg.wa.gov/WAC/default.aspx?cite=371-08

**Chapter 34.05 RCW – Administrative Procedure Act**
http://apps.leg.wa.gov/RCW/default.aspx?cite=34.05

**Laws:** www.ecy.wa.gov/laws-rules/ecyrcw.html

**Rules:** www.ecy.wa.gov/laws-rules/ecywac.html

## SIGNATURE

Robert W. Bergquist, LEED© AP
Southwest Region Manager
Water Quality Program

11/7/2011
Date