

STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY

WATER QUALITY CERTIFICATION TO:)	Amended Order No. 9389
Lake Chelan Hydroelectric Project)	Amended 401 Certification
(FERC No. 637))	Lake Chelan Hydroelectric Project
In accordance with 33 U.S.C. 1341)	Chelan County, Washington
FWPCA § 401, RCW 90.48.260)	
and Chapter 173-201A WAC)	

TO: Ms. Michelle Smith
Licensing and Compliance Manager
Public Utility District No. 1 of Chelan County
PO Box 1231
Wenatchee, WA 98807-1231

On November 19, 2008, the Public Utility District No. 1 of Chelan County (Chelan PUD) was issued a Clean Water Act Section 401 water quality certification (401 certification) as Ecology Order No. 6215 for a hydropower plant at the mouth of the Chelan River (Lake Chelan Hydroelectric Project). That 401 certification (issued as Ecology Order No. 6215) indicated that the maximum hydraulic flow of the hydropower plant would be 2,500 cubic feet per second (cfs). On May 31, 2012, Washington State Department of Ecology (Ecology) received a letter from Chelan PUD requesting an amendment to that 401 certification (issued as Ecology Order No. 6215). Chelan PUD has requested that the certification be modified to indicate that the maximum hydraulic flow of the hydropower plant will be 2,600 cfs. This amended 401 certification, now issued as Amended Ecology Order No. 9389, modifies the information in the 401 certification issued as Ecology Order No. 6215, and is issued under the provisions of 33 USC 1341 (FWPCA § 401), certifying that modification to the Lake Chelan Hydroelectric Project will comply with applicable provisions of 33 USC 1311, 1312, 1313, 1316, 1317 and with any other appropriate requirement of state law.

1.0 NATURE OF PROJECT

The Project includes a diversion dam at the head of the Chelan River, near the city of Chelan. The diversion dam is 40 feet high and 490 feet long. Water for hydropower is conveyed from the intake at the dam to the powerhouse through a 14-foot-diameter, 2.2-mile-long power tunnel. The tunnel transitions to 12 feet in diameter prior to bifurcating to form two penstocks, 90 feet in length, before entering the powerhouse. The powerhouse empties into a tailrace, just south of the mouth of the Chelan River.

Chelan PUD is requesting an amendment to the 401 certification issued as Ecology Order No. 6215, which described the hydraulic capacity as 2,500 cfs, to describing the project as having a hydraulic capacity of 2,600 cfs.

2.0 AUTHORITIES

In exercising authority under 33 USC 1341 and RCW 90.48.260, Ecology has investigated this application pursuant to the following:

- 1) Conformance with all applicable water quality-based, technology-based, and toxic or pretreatment effluent limitations as provided under 33 USC Sections 1311, 1312, 1313, 1316, and 1317 (FWPCA Sections 301, 302, 303, 306, and 307);
- 2) Conformance with the state water quality standards as provided for in Chapter 173-201A WAC authorized by 33 USC 1313 and by Chapter 90.48 RCW, and with other appropriate requirements of state law; and,
- 3) Conformance with any and all applicable provisions of Chapter 90.48 RCW and of using all known, available and reasonable methods to prevent and control pollution of state waters as required by RCW 90.48.010.

3.0 WATER QUALITY STANDARDS

- 1) The goals of the State of Washington are to “maintain the highest possible standards to ensure the purity of all waters of the state consistent with public health and public enjoyment thereof, the propagation and protection of wild life, birds, game, fish and other aquatic life, and the industrial development of the state, and to that end require the use of all known available and reasonable methods by industries and others to prevent and control the pollution of the waters of the state of Washington” (RCW 90.48.010).
- 2) Under the State’s water quality standards, approved by the U.S. Environmental Protection Agency in February 2008, the designated uses for the Chelan River includes salmonid spawning, rearing and migration (WAC 173-201A-600(1).)

4.0 FINDINGS

- 1) On June 1, 2004, Ecology issued a 401 certification for the Lake Chelan Hydroelectric Project, under Ecology Order No. 1233. The proposed Project would generate 48 megawatts (MW) of hydropower, with a hydraulic capacity of 2,308 cfs. Chelan PUD subsequently received a license from FERC license to operate the Project for 50 years (FERC Order 117 FERC ¶62,129.)
- 2) At the same time Chelan PUD was preparing its application for the FERC license, the PUD was working with multiple stakeholders to develop shared management objectives and implementation measures for Lake Chelan and the Chelan River. The result was the Lake Chelan Settlement Agreement (Chelan Agreement). Signers included federal, state and tribal fish management agencies. Chapter 7 of the Chelan Agreement is the Chelan River Biological Evaluation and Implementation Plan (CREIP). Section 4.0, Tables 7-9 and 7-10, of the chapter provides the criteria for attaining the biological objectives.
- 3) In 2008, Chelan PUD proposed to replace the two 24-megawatt (MW) turbine generators (a total of 48 MW) with two new generators, each with a nameplate rating of 29.6 MW. The hydraulic capacity was expected to increase by 192 cfs to 2,500 cfs. On November 19, 2008, Ecology issued the 401 certification under Ecology Order No. 6215 and FERC subsequently issued a non-capacity license amendment for the Project.

- 4) After installing the new turbines, Chelan PUD recognized that the units had a higher maximum hydraulic capacity than expected. Chelan PUD is now requesting, in a letter dated May 31, 2012, an amendment to the 401 certification issued as Ecology Order No. 6215 to reflect this actual hydraulic capacity. This would be for a total hydraulic capacity of 2,600 cfs, 100 cfs more than the predicted 2,500. The new capacity demonstrates a total increase of 292 cfs from the original 401 certification issued under Ecology Order No. 1233 and the FERC license, for a total 13% increase above 2,308 cfs.
- 5) In their letter requesting this amendment to the 401 certification issued as Ecology Order No. 6215, Chelan PUD included results of a HECRAS (hydraulic model) study showing the impacts of increased flow on water depths and velocities in the fish habitat constructed in the tailrace. The PUD stated that the proposed hydraulic capacity will not result in any significant adverse environmental impacts. The PUD also included responses from various members of the Chelan River Fish Forum who had reviewed the results. The Washington State Department of Fish and Wildlife and the US Fish and Wildlife Service representatives expressed acceptance of the change, provided the PUD would a) document any changes in spawning distribution and b) ensure criteria as outlined in the Chelan Agreement for salmon and steelhead in the tailrace and Reach 4 are maintained.
- 6) On July 16 2012, Ecology issued a 401 certification as Ecology Order No. 9389. Ecology now amends Ecology Order No. 9389.

5.0 WATER QUALITY CERTIFICATION CONDITIONS

In view of the foregoing and in accordance with Section 401 of the Clean Water Act (33 USC 1341), RCW 90.48.260 and WAC Chapter 173-201A, Ecology finds reasonable assurance that the Lake Chelan Hydroelectric Project, operating under the new hydraulic capacity of 2,600 cfs, will comply with state and federal water quality standards and other relevant requirements of state law provided the following conditions are met.

5.1 General Conditions

- 1) The conditions in the 401 certification, and issued as Ecology Order No. 1233, dated June 1, 2004; as amended by Ecology Order No. 6215, dated November 19, 2008; and as under this Certification issued as Amended Ecology Order No. 9389, shall be complied with.
- 2) Operation under the new hydraulic capacity shall not negatively affect temperature, turbidity, dissolved oxygen, total dissolved gas, or designated uses in the tailrace, the Chelan River (bypass reach) or Lake Chelan.
- 3) If the project is operated in a manner not consistent with this Certification, this Certification shall be deemed denied.
- 4) Ecology retains the right to require additional monitoring or studies if necessary to provide reasonable assurance of compliance with water quality standards or other appropriate requirements of state law.

- 5) Ecology reserves the right to amend this Certification by further order if it determines that the provisions hereof no longer provide reasonable assurance that the proposed FERC license will comply with water quality standards or other appropriate requirements of state law. Any such amended certification shall take effect immediately upon issuance of such order, unless otherwise provided in the order, and may be appealed to the Pollution Control Hearings Board (PCHB) under RCW 43.21B.

5.2 Specific Conditions

- 1) Chelan PUD must continue to document any changes in spawning distribution in the tailrace in accordance with the Lake Chelan Hydroelectric Project Agreement, Chapter 7, Section 5.4.3, including by number and by species.
- 2) Chelan PUD must continue to ensure compliance with the criteria identified in the Lake Chelan Hydroelectric Project Agreement, Chapter 7, Tables 7-9 and 7-10.

6.0 PENALTIES AND APPEALS

Any person who fails to comply with any provision of this Certification shall be liable for criminal and civil penalties as provided under state and/or federal law.

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).

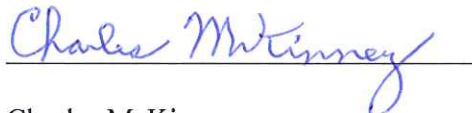
To appeal, you must do the following within 30 days of the date of receipt of this Final Order:

- i) File your appeal and a copy of this Order with the PCHB (see address and location information). Filing means actual receipt by the PCHB during regular business hours.
- ii) 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.
- iii) You must also comply with other applicable requirements in Chapter 43.21B RCW and Chapter 371-08 WAC.

ADDRESS AND LOCATION INFORMATION

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

Dated this 28th day of August 2012, at Yakima, Washington.



Charles McKinney
Section Manager
Water Quality Program
Central Regional Office
Department of Ecology

