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

December 17, 2008

REGISTERED MAIL RE 130 213 735 US

Larry Dunbar, Director of
City of Port Angeles
321 East Fifth Street
PO Box 1150
Port Angeles, WA 98362-0217

Re: Amendments to the 401 Certification for the Morse Creek Project

Dear Mr. Dunbar:

Enclosed are amendments to the Port Angeles, Morse Creek Project 401 Certification. The original certification was issued by The Department of Ecology (Ecology) in August 1985 as a letter. The amended certification, order number 6106, includes the instream flows developed by the Washington Department of Fish and Wildlife (WDFW), the lower Elwha Tribe, the City of Port Angeles, and Ecology, and ramping rates specified by WDFW.

All correspondence relating to this document should be directed to Eric Schlorff at:

Department of Ecology
Southwest Regional Office
PO Box 47775
Olympia, WA 98504-7775

Sincerely,

Garin Schrieve, P.E.
Southwest Regional Manager
Water Quality Program

Enclosure

cc: Chris Maynard, Ecology Water Resources
Curt Leigh, WDFW
Tom Young, ATG
Erich Gaedeke, Federal Energy Regulatory Commission
Mike McHenry, Lowes Elwha Klallam Tribe

STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY

IN THE MATTER OF GRANTING A WATER QUALITY CERTIFICATION TO City of Port Angeles for Morse Creek Hydropower Project with Chapter 90.48 RCW and the Rules and Regulations of the Department of Ecology	)))))))	ORDER No. 6106

To: Mr. Larry Dunbar
City of Port Angeles
321 East Fifth Street
PO Box 1150
Port Angeles, WA 98362-0217

This order amends the Clean Water Act 401 Certification issued to the Port Angeles Morse Creek Hydroelectric Project (FERC No. 6461) on August 8, 1985, for operation of the Morse Creek Hydroelectric Project. This order is issued under the provisions of Chapter 90.48 RCW and Chapter 173-201A WAC.

Through this order the prior certification is hereby amended and replaced by this certification. In the event of a conflict with the requirements of this amendment and the prior certification, the requirements of the amendment shall prevail, unless the Department of Ecology (Ecology) provides otherwise by written order.

1.0 Nature of Project

The Port Angeles Morse Creek project is a small 0.465 MW hydroelectric facility located on Morse Creek, which drains north to the Strait of Juan de Fuca and is approximately 1.5 miles east of Port Angeles, Washington. The Federal Energy Regulatory Commission (FERC) issued a license for the project in 1985. The project is owned by, managed and licensed to the City of Port Angeles, Washington. Major project features include:

(a) a diversion dam (10-foot high by 25-foot wide) located at river mile (RM) 7.2;

(b) an intake structure with fixed fish screens and trash rack;

(c) a 750-foot long concrete tunnel, an 11,400-foot long buried 24-inch diameter pipeline, and a 1,500-foot long high pressure penstock leading to the powerhouse at RM 4.3; and

(d) a single Pelton wheel turbine with a generating capacity of 465 kilowatt (kW).

A natural falls at RM 4.9 divides the watershed, posing an impassable barrier to anadromous fish. A resident population of rainbow trout occurs above the falls. The City operates the project in a run-of-river mode and it has no useable storage capacity. Consequently, the project can only operate when the natural river flow is significantly greater than the required bypass reach minimum flow.

2.0 Findings

Project background information related to the certification amendment

1. The project was shut down 1998 due to maintenance costs and the price of electric power revenue and restarted in 2004. The City of Port Angeles announced its intention to restart the project in October 2000 and notified FERC and other federal and state agencies at that time.

2. The lower Elwha Klallam Tribe, Ecology, and the Washington State Department of Fish and Wildlife (WDFW) conducted additional consultation and studies to increase flows during all months and to protect salmonid habitat, prior to restarting the project.

3. The Licensee evaluated the project for both temperature and dissolved gas, and the project did not appear to violate or have potential to violate the criteria for these parameters. Morse Creek flows north from the Olympic Mountain foothills and the bypass reach is well shaded which keeps the temperature low.

4. The agreed instream flows set forth below increases flows to protect habitat for Chinook Salmon and other salmonids in the lower reach, and for bull trout and other resident trout above and below natural obstructions. The bypass reach between the diversion dam and the powerhouse is approximately 3.0 miles long. A waterfall, considered impassable to anadromous salmon, is located at approximately river mile 4.9, resulting in a 0.7 mile anadromous reach affected by the hydropower diversion. To protect the resident trout populations in the bypass reach as well as anadromous fish potentially using the 0.7-mile lower section, this certification stipulates the minimum flows that the City of Port Angeles must meet. These flows are shown in Table 1, section 4.0.

5. These flows were proposed and agreed to by the Ecology, WDFW, the Lower Elwha Klallam Tribe and the City of Port Angeles.

6. The City operator determines the water level at the diversion weir using a sonic sensor. The actual flow must be interpreted by the operator from a chart based on gauged flows. The operator must adjust the turbine load to meet the minimum flow requirement and to control ramping rates in the reach below the tailrace.

3.0 General Conditions and Requirements

1) In the event of a conflict between the conditions and requirements of this amendment and those of the prior certification, issued on August 8, 1985, the conditions and requirements of this amendment shall prevail, unless Ecology provides otherwise by written order.

2) 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.

3) In the event of changes or amendments to the state water quality, ground water quality, or sediment standards, or changes in or amendments to the state Water Pollution Control Act (RCW 90.48), or changes in or amendments to the Clean Water Act, such provisions, standards, criteria, or requirements shall apply to this project and any attendant agreements, orders or permits. Ecology will notify the Licensee through an Administrative Order of any such changes or amendments applicable to its project.

4) Discharge of any solid or liquid waste to the waters of the state of Washington without prior approval from Ecology is prohibited.

5) The Licensee shall obtain Ecology review and approval before undertaking any change to the project or project operations that might violate water quality or affect compliance with any applicable water quality standard (including designated uses) or other appropriate requirement of state law.

6) This Certification-Order does not exempt the Licensee from compliance with other statutes and codes administered by federal, state, and local agencies.

7) A Hydraulic Project Approval (HPA) (under 77.55 RCW) shall be acquired from the WDFW prior to any work in waters of the State.

8) Ecology retains the right, by further Order, to modify schedules or deadlines provided under this Order or provisions it incorporates.

9) Ecology retains the right by Administrative Order to require additional monitoring studies or measures if it determines there is likelihood that violations of water quality standards or other appropriate requirements of state law have occurred or may occur, or insufficient information exists to make such determination.

10) This order is based on the currently available data and analysis for different parameters of concerns. Ecology specifically reserves the right to make further modifications to this order based upon future water quality findings or allocations of pollutant load.

11) Ecology reserves the right to amend this Order if it determines that the provisions hereof are no longer adequate to provide reasonable assurance of compliance with applicable water quality standards or other appropriate requirements of State law. Any such amended Order shall take effect immediately upon issuance, unless otherwise provided in the amended Certification-Order, and may be appealed to the Pollution Control Hearings Board (PCHB) under ch. 43.21B RCW.

12) Ecology reserves the right to issue orders, assess or seek penalties, and to initiate legal actions in any court or forum of competent jurisdiction for the purposes of enforcing the requirements of this Order.

13) The conditions of this Order shall not be construed to prevent or prohibit the Licensee from either voluntarily or in response to legal requirements imposed by a court, the FERC, or any other body with competent jurisdiction, taking actions which will provide a greater level of protection, mitigation, or enhancement of water quality or of existing or designated uses.

14) Copies of this Order and associated permits, licenses, approvals and other documents shall be kept on the Project site and made readily available for reference by the Licensee, its contractors and consultants, and by Ecology.

15) The Licensee shall allow Ecology access to inspect the project and project records required by this Order for the purpose of monitoring compliance with its conditions. Access shall occur after reasonable notice, except in emergency circumstances.

16) The Licensee shall, upon request by Ecology, fully respond to all reasonable requests for materials to assist Ecology in making determinations under this Order and any resulting rulemaking or other process.

17) Any work that is out of compliance with the provisions of this Order, or conditions that result in distressed, dying or dead fish, or any discharge of oil, fuel, or chemicals into state waters, or onto land with a potential for entry into state waters, or violation of turbidity criteria is prohibited. If these conditions occur, the Licensee must immediately take the following actions:

    a) Cease operations at the location of the violation to the extent such operations may reasonably be causing or contributing to the problem.

    b) Assess the cause of the water quality problem and take appropriate measures to correct the

problem and/or prevent further environmental damage.

c) Notify Ecology of the failure to comply. Oil or chemical spill events shall be reported immediately to Ecology's 24-Hour Spill Response Team at (360) 407-6300 within 24 hours. Other non-compliance events shall be reported to Ecology's Federal Permit Manager at (800) 424-8802.

d) Submit a detailed written report to Ecology within five (5) days that describes the nature of the event, corrective action taken and/or planned, steps to be taken to prevent a recurrence, results of any samples taken, and any other pertinent information.

e) Observed violations at the project shall be highlighted an annual monitoring report due by November 15 of each year.

18) The project operation must meet the temperature requirements for supplemental spawning and incubation criteria listed in WAC 173-201A-200 (Salmon and Trout Spawning) for August 1 through June 15, which is a maximum temperature of 13°C. For the rest of the year the project must meet a maximum temperature of 16°C, and for all other parameters throughout the year, the project must meet the conditions listed in WAC 173-201A-200 (Core Summer Salmonid Habitat).

Compliance with these requirements does not relieve the Licensee from responsibility to maintain continuous compliance with the terms and conditions of this Certification-Order or the resulting liability from failure to comply.

4.0 Conditions relating to flow and ramping.

Licensee must discharge at least the following continuous minimum instream flows from the Morse Creek Project diversion weir, for the protection of aquatic resources in Morse Creek:

Table 1: Minimum Instream Flows measured at the diversion dam.

Month	**Hydro Operational Instream Flow (cfs)**
January	48
February 1-14	48
February 15-29	50
March	50
April	55
May	61
June	61
July 1-15	61
July 16-31	50
August 1-15	50
August 15-31	58
September	No Generation
October 1-15	69

October 16-31	60
November	48
December	48

The minimum flow may be temporarily modified if required by operating emergencies beyond the control of the Licensee, or for short periods upon mutual agreement between the Licensee and Ecology. Ecology reserves the authority to require modification of the minimum flows and ramping rates if new information or analysis shows that the flows are inadequate to protect designated instream uses.

The licensee must not exceed the following ramping rates in the anadromous portion of Morse Creek:

Season	**Daylight Rates**[3]	**Night Rate**
February 16 to 15[1]	No Ramping	2 inches/hour
June 16 to October 31[2]	1 inch/hour	1 inch/hour
November 1 to February 15	2 inches/ hour	2 inches/hour
[1] Salmon fry are present [2] Steelhead fry are present [3] Daylight is defined as one hour before sunrise to one hour after sunset		

5.0 Conditions relating to Construction Projects, Miscellaneous Discharges, and Habitat Modifications

The following applies to all in-water or over-water work related to the project that can impact surface-water or ground-water quality. This includes, but is not limited to, construction, operation, and maintenance of fish screens, fish collection structures, generation, turbines, penstocks, the tailrace, transportation facilities, portable toilets, transmission corridors, structures, and staging areas. This also includes emergencies for all activities related to project operation.

1. If water quality excursions are predicted as being unavoidable during construction or maintenance of a project, the Licensee must apply for a short-term modification in writing to Ecology at least three months prior to project initiation. If any project has a long-term impact on a regulated water quality parameter, characterization monitoring must be performed for the impacted parameter(s), and a monitoring plan must be outlined in the Water Quality Protection Plan discussed below. This may require additional management practices to minimize impacts over the license period.

2. A Water Quality Protection Plan (WQPP) must be prepared, and followed, for all project-related work that is in or near water that has the potential to impact surface, and/or groundwater quality. The WQPP must include control measures to prevent contaminants from entering surface water and ground water, and must include, but not be limited to, the following elements:

   a) A Stormwater Pollution Prevention Plan (SWPPP) must specify the Best Management Practices (BMPs) and other control measures to prevent contaminants entering the project's surface water and groundwater. The SWPPP shall address the pollution control measures for the Licensee's activities that could lead to the discharge of stormwater or other contaminated water from upland areas. The SWPPP must also specify the management of chemicals, hazardous materials and petroleum (spill prevention and containment procedures), including refueling procedures, the measures to take in the event of a spill, and reporting and training requirements.

b) An In-Water-Work Protection Plan (IWWPP) must be consistent with the SWPPP and must specifically address the BMPs and other control measures for the Licensee activities that require work within surface waters. Turbidity and dissolved oxygen must be monitored upstream and downstream of the location where in-water construction occurs. Samples must be taken at least once each day during construction in or adjacent to any water bodies within the project area that may be affected by the construction. The IWWPP must include all water quality protection measures consistent with a Hydraulic Project Approval (HPA) for the project.

c) The WQPP must include procedures for monitoring water quality, actions to implement the plan if a water quality excursion occurs, and procedures for reporting any water quality violations to Ecology. The WQPP must include all water quality protection measures consistent with an HPA for the project. The Licensee must submit the WQPP to Ecology for review and approval at least three months prior to project initiation, and the on-site construction manager must possess a copy of the WQPP, and have it available for review by Ecology staff, whenever construction work is under way.

d) When a construction project meets the coverage requirements of the National Pollution Discharge Elimination System (NPDES) permit and State Waste Discharge General Permit for stormwater discharges associated with construction activity, the Licensee must either, at Ecology's discretion, apply for this permit and comply with the terms and conditions of the permit or apply for and comply with the terms of an individual NPDES permit.

3. Best Management Practices

a) Work in or near the diversion dam, water behind the dam, the river, or any wetlands must include all reasonable measures to minimize the impacts of construction activity on waters of the state. Water quality constituents of particular concern are turbidity, suspended sediment, settleable solids, oil and grease, and pH. These measures include the use of BMPs to control erosion and sedimentation, proper use of chemicals, oil and chemical spill prevention and control, clean-up of surplus construction supplies, and other solid wastes.

b) During construction, all necessary measures must be taken to minimize the disturbance of existing riparian, wetland or upland vegetation.

c) All construction debris must be properly disposed of on land so that the debris cannot enter a waterway or cause water quality degradation to any state waters. Retention areas or swales must be used to prevent discharging of water from construction placement areas.

d) The Licensee must ensure that any fill materials that are placed for proposed habitat improvement in any waters of the state do not contain toxic materials in toxic amounts.

6.0 Conditions relating to Oil Spill Prevention and Control

1) The Licensee must not allow discharge of oil, fuel, or chemicals into waters of the state, or onto land with a potential for entry into waters of the state as prohibited by Ch. 90.56 RCW and Ch. 90.48 RCW.

2) The Licensee must contain and remove from the water, visible floating oils released from construction or project operation. The Licensee must take the following actions:

a) In the event of a discharge of oil, fuel or chemicals into state waters, or onto land with a potential for entry into state waters, immediately begin and complete containment and clean-

up efforts. Clean-up will take precedence over normal work and must include proper disposal of any spilled material and used clean-up materials.

b) Do not use emulsifiers or dispersants in waters of the state without prior approval from Ecology, Southwest Regional Office.

c) Within three months of receiving the amended license from FERC, establish an Ecology-approved on-site spill cleanup material inventory. Maintain this on-site inventory and a complete inventory list.

d) Project Operators must be familiar with and trained in the use of oil spill cleanup materials. In the event of an oil spill, properly dispose of used/contaminated materials and oil and as soon as possible restock new supplies. Include records of proper disposal in the oil consumption records and keep copies of disposal records of contaminated cleanup supplies on-site for inspection.

e) Keep spill prevention containment and control (SPCC) Plans as required and historical spill records on-site. Provide these to Ecology immediately upon request.

f) Identify and map floor drains. Post these maps at the Project in a conspicuous location for use by Operators and other personnel in the event of an oil spill. Seal floor drains that are no longer needed.

3) Transformers

a) Transformer containment area surfaces must be impervious. Conduct periodic inspections and re-surface areas, fill cracks, caulk metal plate footings or otherwise ensure that containment areas will contain all spill fluids.

b) Obtain prior approval from Ecology before breaching containment areas for reasons other than containment area maintenance.

c) Conform to industry standards for protecting water quality and preventing and containing spills when transporting transformers and transformer oil.

d) Conduct weekly inspections of transformer containment area including an inspection of the drains for freeze-up conditions. Remove any observed rainwater pooling in the containment areas.

4) Oil, fuel and chemical storage containers, containment areas, and conveyance systems

a) Provide proper containment around each storage container (including transformers and emergency generator fuel supplies) or around a combination of storage containers as appropriate.

b) Regularly check all fuel hoses, oil drums, oil or fuel transfer valves and fittings, etc, for drips and leaks. Maintain and properly store them to prevent spills into state waters.

c) Do not refuel equipment within 50 feet of rivers, creeks, wetlands, or other waters of the state.

d) The Licensee must implement the BMPs for spills of oil or hazardous substances from the Department of *Ecology's Stormwater Management Manual for Western Washington (SWMM)* or equivalent manual.

e) Contain wash water containing oils, grease, or other hazardous materials resulting from wash-down of equipment or working areas for proper disposal, and do not discharge this water into state waters.

7.0 Order

Any person who fails to comply with any provision of this Order No. 6106 shall be liable under the Clean

Water Act for a penalty of up to twenty (20) thousand dollars per day and under the state Water Control Act, for a penalty of up to ten (10) thousand dollars per day per violation or such other amount as may be authorized under state law as exists now or may be amended during the term of the license.

You have the right to appeal this Order to the Pollution Control Hearings Board. Pursuant to chapter 43.21B RCW, your appeal must be filed with the Pollution Control Hearings Board, and served on the Department of Ecology, within thirty (30) days of the date of your receipt of this document.

To appeal this order, your notice of appeal must contain a copy of the Ecology Order you are appealing.

You must file your appeal with the Pollution Control Hearings Board.

Mail your appeal to:
The Pollution Control Hearings Board
P.O. Box 40903
Olympia WA 98504-0903

OR

Deliver your appeal in person to:
The Pollution Control Hearings Board
4224 6th Ave. SE Rowe Six, Bldg. 2
Lacey, WA, 98504-0903

Your appeal must also be served on

The Department of Ecology
Appeals Coordinator
P.O. Box 47608
Olympia, WA 98504-7608

In addition, please send a copy of your appeal to:
Eric Schlorff
SWRO Water Quality Program
PO Box 47775
Olympia, WA 98504-7775

For additional information: Environmental Hearings Office Website: http://www.eho.wa.gov

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

DATED December 17, 2008, at Olympia, Washington

Garin Schrieve, P.E.
Water Quality Section Manager
Southwest Regional Office
Water Quality Program