STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY
Northwest Regional Office, 3190 - 160th Ave S.E. • Bellevue, Washington 98008-5452 • (206) 649-7000

October 19, 1992

CERTIFIED MAIL

Mr. Lon G. Covin
Hydro West Group, Inc.
1422 130th Avenue NE
Bellevue, WA 98005

Dear Mr. Covin:

The Hydro West Group, Inc. filed an application for a license for a major water project with the Federal Energy Regulatory Commission (FERC) in June, 1991, under FERC No. 10416 for the Anderson Creek Water Power Project.

Ecology finds that adequate information necessary to make an informed decision on the merits of the request for water quality certification, has been provided.

This agency certifies that the project described above complies with the applicable provisions of section 301, 302, 303, 306, and 307 of the Federal Water Pollution Control Act, as amended. This certification is subject to the following conditions:

I. General Requirements

A. An Oil Spill Prevention, Containment, and Countermeasure Plan must be prepared that covers all oil filled equipment to be installed and utilized at the site. This equipment includes the turbine/generator set, all oil filled transformers and capacitors to be installed at the project, and all mobile maintenance equipment to be utilized at the project.

B. Care must be taken to prevent any petroleum products, paint, chemicals, or other harmful materials from entering the water.

C. Work in or near the waterway shall be done so as to minimize turbidity, erosion, other water quality impacts, and stream bed deformation.

D. Mobile equipment that enters the water shall be maintained such that a visible sheen from petroleum products does not appear.

E. A Short Term Water Quality Standards Modification shall be obtained from the Department of Ecology prior to the start of construction work in the waterway. The plan of work for the portion of the work within the waterway shall accompany the request. The request shall also include a copy of the Hydraulics Project Approval secured from the Department of Fisheries or Wildlife for the project, and an explanation of how SEPA has been addressed for the project.

F. Discharge of process wastewater to waters of the state without a permit is prohibited. A plan for the treatment and disposal of process wastewater generated by the facility must be approved by the Department of Ecology prior to operation of the final facility.

G. The construction activities must comply with all conditions of the Washington Department of Fisheries or Wildlife Hydraulic Project Approval.

H. The project shall comply with the primary instream flow requirements as set forth by agreement with the Washington Department of Wildlife. These flows are specified to be:

<u>Anderson Creek</u>:

October 1 - June 30	9 cfs
July 1 - July 15	22 cfs
July 15 - August 31	25 cfs
September 1 - September 30	22 cfs

<u>Four Mile Creek</u>:

January 1 - December 31	1 cfs

Instream flows shall be maintained in any bypass reach or downstream of the project, sufficient to meet water quality goals and standards for the waterway, as provided in WAC Chapters 173-201, 173-500, and Chapters 90.22 and 90.54 RCW.

Resident fish population studies as required by the Washington Department of Wildlife shall be undertaken in the bypass reach. If the fish populations show a decline as a result of project activities, the Washington Department of Wildlife and the project owner shall file a joint petition to the Federal Energy Regulatory Commission to establish adequate instream flows to protect the fishery resource.

II. Water Quality Criteria

A. At the point of discharge and within the bypass reach, the water shall not exceed the following criteria:

1) All water quality criteria as specified in WAC 173-201-045 for Class AA waters shall remain in effect. Nothing in this certification shall be construed as to allow the project operator to violate Washington State Water Quality laws (RCW 90.48, Chapter 173.201 WAC).

2) Toxic conditions resulting in dead or dying fish are not allowed. If these conditions exist, operation and/or construction shall cease immediately and the Department of Ecology, Northwest Regional Office shall be notified immediately by telephone at (206) 649-7000 (24-hour number).

B. Water Quality Monitoring and Reporting

1) Long-Term Facility Operations

Effective immediately with commencement of power generation by the facility, representative water quality samples shall be collected at upstream and downstream sampling locations approved by Ecology, in accordance with the annual schedule and methods which follow:

a) Two continuous water temperature recorders (once hourly readings at minimum) shall be installed, one in a representative and accessible area immediately above the diversion pool backwater, and one in a representative and accessible area at the low end of the bypass reach.

b) Commencing with facility power generation, monitoring shall be conducted once per week as specified in conditions c) through h), with the monitoring parameters and locations as follows:

Parameter	Location
Total Gas Saturation	*In situ* above diversion dam AND at tailrace.
Dissolved Oxygen, pH	*In situ* above diversion dam AND at lower bypass reach.

Temperature (in addition to continuous recorders)	*In situ* above diversion dam AND at lower bypass reach AND in tailrace.
Turbidity	Sample grab above diversion dam AND at lower bypass reach.
Total Suspended Solids (TSS)	Sample grab above diversion dam AND at lower bypass reach during the first week only.

c) From the date of closing the sluice gate at the diversion until the daily maximum temperature consistently falls below 12°C at the lower bypass continuous recorder station, monitoring will continue weekly as described in b). TSS will be measured at least once per calendar month during the period monitored.

d) After the sluice gate is opened for the seasonal low flow period and it is subsequently closed prior to normal fall or winter flows, monitoring will commence immediately and continue weekly as described in b) until either the sluice gate is reopened or conditions in e) take effect.

e) After the lower bypass daily maximum temperature consistently falls below 12°C, no monitoring other than the two continuous temperature recordings will occur through the end of December.

f) Weekly monitoring as described in b) will occur for a period of four weeks during January, unless unseasonably warm temperatures warrant delay. The Washington Department of Ecology, Northwest Regional Office, will be notified in advance if postponement of the four-week winter monitoring is proposed.

g) Subsequent to the four-week winter monitoring period, no monitoring other than the two continuous temperature recordings will occur through the end of May.

On the first of June or as soon as possible thereafter, the temperature data will be downloaded and evaluated for daily maxima above 12°C. Subsequent downloading will occur at maximum intervals of two weeks to check for daily maxima above 12°C.

h) Once the spring daily maximum temperature rises above 12°C, weekly monitoring as described in b) will be initiated. TSS will be measured at least once per calendar month during the period monitored. Weekly monitoring will continue all summer or until such time as the project is shut down and the sluice gate opened.

i) Suspension or modification of water quality monitoring as described in a) and c) through h) may be requested after a minimum of three (3) years of complete, reliable data collection after facility start up.

j) Water quality monitoring results obtained shall be reported to the Department of Ecology, Northwest Regional Office, on a quarterly basis. Data shall be summarized and reported in a format approved by the Department of Ecology. The report shall be submitted no later than the 15th day of the month following the reporting period.

k) Any observed values in violation of Class AA water quality standards (pH, temperature, dissolved oxygen, total gas saturation, and turbidity, all relative to the diversion inflow quality), shall be reported to the Washington Department of Ecology Northwest Regional Office within 48 hours with explanation for cause and notification of the course of action taken.

l) TSS lower bypass values greater than 120% of the diversion inflow values shall be reported within 48 hours to the Washington Department of Ecology Northwest Regional Office with explanation for cause and notification of the course of action taken.

m) Flow monitoring information obtained to validate the instream flow requirements shall be reported to the Department of Ecology, Northwest Regional Office on a once per year basis. Data shall be submitted in the format of weekly average flows.

n) The sediment and bedload passage study described in the 5 June 1991 Shannon & Wilson, Inc. report entitled Sediment Sampling During Small Hydroelectric Project Operation shall be conducted for a minimum of two (2) years after facility start up. A minimum of two sampling events will be performed in each year.

o) A more rigorous water quality sampling program for the listed parameters or additional parameters may be required by the Department of Ecology if necessary to protect water quality.

2) Construction Activities

Water quality sampling requirements will entail a more rigorous program during the construction phase of the project. These monitoring requirements will be defined in the Short-Term Water Quality Modification(s) issued by the Department of Ecology, after a review of the plan and schedule for construction activities.

III. Oil Spill Prevention and Control

A. RCW 90.56 prohibits any discharge of oil, fuel or chemicals into state waters, or onto land with a potential for entry into state waters.

B. Visible floating oils released from construction or project operation shall be immediately contained and removed from the water.

C. All oil, fuel or chemical storage tanks shall be diked and located on impervious surfaces so as to prevent spills from escaping to surface waters or ground waters of the state.

D. Fuel hoses, oil drums, oil or fuel transfer valves and fittings, etc., shall be checked regularly for drips or leaks, and shall be maintained and stored properly to prevent spills into state waters. Proper security shall be maintained to prevent vandalism.

E. 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, containment and clean-up efforts shall begin immediately and be completed as soon as possible, taking precedence over normal work. Clean-up shall include proper disposal of any spilled material and used clean-up materials.

F. No emulsifiers or dispersants are to be used in waters of the state without prior approval from the Department of Ecology, Northwest Regional Office.

G. Spills into state waters, spills onto land with a potential for entry into state waters, or other significant water quality impacts, shall be reported immediately to the Department of Ecology, Northwest Regional Office at 649-7000 (24-hour phone number).

IV. Construction Activities

A. The construction contractor shall use 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 use of Best Management Practices (BMP's) 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, use of flow deflectors when working within the stream channel, adequate operation and maintenance of sedimentation ponds, and land application of sedimentation pond effluent where possible.

B. Temporary sediment traps shall be cleaned out and the settled sediments removed or otherwise stabilized before the ponds are decommissioned. Settled sediments shall not be allowed to enter state ground or surface waters due to water or runoff flows that may occur after construction is completed.

C. Proper erosion and sediment control practices shall be used on the construction site and adjacent areas to prevent upland sediments from entering the stream channel. All planned sediment and erosion control measures shall be adjusted to meet field conditions at the time of construction.

D. Periodic inspection and maintenance of all sediment control structures must be provided. Sediment control measures shall be in working condition at the end of each working day. After any significant rainfall, sediment control structures shall be inspected for integrity. Any damaged devices shall be repaired immediately.

E. Fresh, uncured concrete in direct contact with the water is toxic to aquatic life. All concrete shall be poured in the dry, or within confined waters not being dewatered, and shall be allowed to cure a minimum of seven (7) days before contact with water.

F. Properly dispose of all construction debris on land in such a manner that it cannot enter into the waterway or cause water quality degradation to state waters.

G. Dredge spoils and/or excess excavated material shall be transported and disposed of in a manner that prevents the spoils from entering state waters and prevents leachates or drainage from the spoils from degrading water quality.

H. Extreme care shall be taken to prevent any petroleum products, fresh cement, lime, or concrete, chemicals, or other toxic or deleterious materials from entering the water in any manner.

I. Mobile equipment that enters the water shall be maintained such that a visible sheen from petroleum products will not appear.

J. A full time Pollution Control Inspector shall be made available to supervise implementation of the Erosion and Sediment Control Plan.

V. Additional Requirements

The activities must comply with all conditions contained in the Washington Department of Fisheries or Wildlife Hydraulic Project Approval.

This certification does not relieve the applicant from the responsibility of meeting applicable regulations of other agencies.

If you have any questions, you may contact Robert Newman at 649-7046.

Sincerely,

John Glynn, Supervisor
Water Quality Program
Northwest Regional Office

JG:RN:tm

cc: Mike Llewelyn, Water Quality Program Manager
Hedia Adelsman, Water Resources Program Manager
Steve Hirschey, Water Resources Supervisor, NWRO
Rodney Sakrison, Hydropower Coordinator, Water Resources Program
Secretary, FERC, Washington, D.C.
Project Engineer, FERC, Portland, Oregon