

WATER QUALITY CERTIFICATE AMENDMENT
(P.L. 92-500, Section 401)

In the matter of: Dr. and Mrs. Robert Ruhl
174 Coldbrook Road
Wilmington, Vermont 05363
Application for certification amendment
for hydroelectric generation facility on
Cold Brook

The Water Quality Division of the Vermont Department of Environmental Conservation (the Department) has reviewed a water quality certification amendment application dated November 4, 1992 and filed by Dr. Robert Ruhl (the applicant). The Department, based on the application and record before it, makes the following findings:

1. On June 5, 1981, the Department issued a water quality certification to the applicant for the construction and operation of a hydroelectric facility on Cold Brook in Wilmington, Vermont.
2. The applicant has applied for an amendment to Condition C of the project's certification to allow for generation during the months of October and November. Operation during those two months is presently prohibited under the certification.
3. During the months of October and November when migratory landlocked Atlantic salmon and/or brown trout (hereinafter referred to as migratory salmonids) normally run into Cold Brook, Condition C requires all project inflows to be maintained in the stream channel below the dam with no generation. If spawning migration should occur earlier, the project's fishway is to be put into operation upon notification of the Department of Fish and Wildlife. This condition provides for adequate flows to attract migrating fish in the project's bypass and to operate the project's fish ladder.
4. The certification provides for downstream passage as well. Provisions include screening of the penstock intake to minimize entrainment; and a fish ladder which provides downstream migrating salmonids a means to move past the dam during fall migration. Such downstream movements also occur in the spring, at which time spillage over the dam may provide adequate conveyance without operation of the ladder.

5. Cold Brook in the project vicinity supports wild, self-sustaining populations of brook trout, and to a lesser extent, brown trout.
6. Future fisheries management in the Cold Brook vicinity may include migratory salmonids. These fish may be stocked in the project vicinity or elsewhere in the watershed, such that adult fish will migrate through the project area during the spawning season. Juvenile migratory salmonids occurring above the project, either as a result of stocking or natural reproduction, will emigrate downstream through the project area as smolts or pre-smolts.
7. Salmon are not currently being stocked in Cold Brook. The Department of Fish and Wildlife's landlocked Atlantic salmon introduction program for Harriman Reservoir was discontinued in 1986 due to poor fish growth and returns to the Harriman Reservoir recreational fishery. The program to reestablish landlocked Atlantic salmon and/or migratory trout may be resumed in the future.
8. Presently, no juvenile, migratory salmonids are being stocked upstream of the project and adults are not known to occur at the project.

ACTION OF THE DEPARTMENT

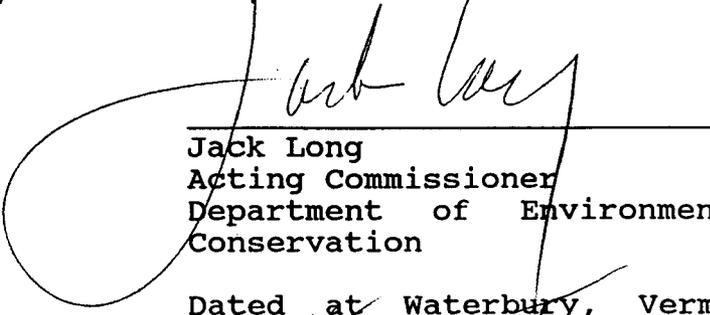
Based on its review and findings, the Department hereby amends the project's water quality certification by changing Condition C to read as follows below and adding conditions I, J, K, L, M, and N. (For clarity, the original certification conditions are repeated.) The Department finds that there is reasonable assurance that operation in accordance with the following conditions will not cause a violation of Vermont Water Quality Standards and will be in compliance with sections 301, 302, 303, 306, and 307 of the Federal Clean Water Act, P.L. 92-500, as amended¹.

- A. The applicant shall construct, operate, and maintain a fish ladder meeting design and specifications approved by the Commissioner of the Vermont Department of Fish and Wildlife (formerly the Department of Fish and Game).
- B. The applicant shall screen the penstock intake in order to minimize turbine mortality to fish.
- C. An instantaneous stream flow of at least 2.0 cfs shall be released at all times into the natural channel directly below the dam when available from inflow to the impoundment. When inflow rates fall below 2.0 cfs, the instantaneous outflow rate passed into the natural channel shall equal the instantaneous inflow rate.
- D. At least one week prior to commencing construction, the applicant shall provide the Department (formerly known as the Department of Water Resources and Environmental Engineering) with a schedule for completion of the project.
- E. The applicant shall insure that every reasonable precaution is taken during construction to limit the discharge of petro chemicals, wet concrete and debris to state waters.
- F. Any significant changes to the project including the operational scheme must be submitted to the Department for prior review and approval.
- G. The wastegate shall not be opened for the purpose of venting any silt accumulation without the written prior approval of the Department by issuance of an order under Title 10, §1272, if applicable.

¹The applicant has complied with conditions D and E.

- H. Any trash or debris removed at the dam shall be properly disposed of at a site sufficiently remote from the stream to preclude its reentering during high water.
- I. Upon receipt of written notification by the Department of Fish and Wildlife that management of migratory salmonids has resumed in Cold Brook, the applicant shall maintain all inflows in the natural channel directly below the dam with no generation during the salmonid spawning run and shall install, operate and maintain the project's fish ladder. The salmonid run normally occurs during the months of October and November but may occur earlier or later. Notification shall be based on either of the following triggers:
- Adult migratory salmonids are expected to seek passage upstream past the project, or
 - Juvenile migratory salmonids are stocked upstream of the project, such that downstream passage must be provided.
- J. The facility shall be operated in a true run-of-the-river mode where instantaneous flows below the tailrace shall equal instantaneous inflow to the impoundment at all times. The impoundment shall not be drawn down below the dam crest without prior Department approval. When the facility is not operating, all flows shall be spilled at the dam.
- K. The applicant shall allow the Department to inspect the project area at any time to monitor compliance with certification conditions.
- L. Any change in operation which would in any way alter any condition of this certification constitutes a material impact on water quality.
- M. The applicant shall incorporate certification conditions in any conveyance -- by lease, sale, or otherwise -- of its interests so as to legally assure compliance with said conditions for as long as the project operates.

- N. The Department maintains continuing jurisdiction over the project and may modify this certification at any time, subject to Vermont A.P.A. Rule 13.11, when necessary to assure compliance with Vermont Water Quality Standards and sections 301, 302, 303, 306, and 307 of the Federal Clean Water Act, P.L. 92-500, as amended.



Jack Long
Acting Commissioner
Department of Environmental
Conservation

Dated at Waterbury, Vermont
this 18 day of January, 1993.

EAM:AMD:amd