

WATER QUALITY CERTIFICATION

(P.L. 92-500, Section 401)

in the matter of: Dr. and Mrs. Robert Ruhl
174 Coldbrook Road
Wilmington, VT 05363
Application for hydroelectric
generation facilities on Cold Brook.

The Water Quality Division of the Vermont Department of Water Resources and Environmental Engineering has examined the information submitted by the applicant and made the following findings:

1. The applicant, Dr. and Mrs. Ruhl are proposing to construct a low concrete dam on Cold Brook in the Town of Wilmington for the purpose of diverting flow through a 24-inch diameter penstock to a powerhouse for power generation using a 2 kw and a 5 kw generator. Flow diverted to the powerhouse would be returned to the stream via the tailrace channel about 700 feet downstream of the dam. The 30'X5' dam would impound approximately 22,500 cubic feet. The drainage area at the site is 8.9 square miles. The project location is the former Childs Saw Mill site about 0.3 mile upstream of the confluence with the North Branch of the Deerfield River.

2. Cold Brook is considered an important element in the State's landlocked salmon introduction program for Harriman Reservoir, acting as a nursery for stocked salmon fry. The brook also supports a good population of self-sustaining native brook trout. Maintenance of sufficient flow in the bypassed section and construction of a properly designed fish ladder are essential to mitigating adverse impacts on the fisheries. In order to give the fish proper orientation, it is also important that proportionally greater flow be maintained in the natural channel during the fall

salmonid migration period as compared to the tailrace channel. The applicant is proposing to pass 2.0 cfs into the bypassed section, when available and to install a fish ladder.

3. As proposed, operation of the facility would be on a run-of-the-river basis, with instantaneous inflows to the project equalling instantaneous outflows below the project. The facility would not be operating from storage to supplement generation capability.

4. The applicant states that no future maintenance action will be necessary to desilt the impoundment; however, the plans indicate that a waste gate will be incorporated into the structure.

CONDITIONS

The Department of Water Resources and Environmental Engineering certifies that this project will meet Vermont Water Quality Standards with the following conditions:

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 Game. The ladder shall be constructed prior to operation of this facility.

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. During the months of October and November, during which period the salmonid run normally occurs, all inflows shall be maintained in the natural channel with no generation. If spawning migration should occur earlier, the fishway shall be put into operation upon notification of the Vermont Department of Fish and Game.

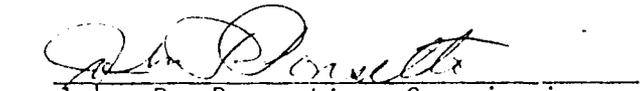
D. At least one week prior to commencing construction the applicant shall provide the Department of Water Resources and Environmental Engineering with a schedule for completion of the project.

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 of Water Resources and Environmental Engineering for prior review and approval.

G. The waste gate shall not be opened for the purpose of venting any silt accumulation without the written prior approval of the Department of Water Resources and Environmental Engineering by issuance of an order under Title 10, §1272, if applicable.

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.



John R. Ponsetto, Commissioner
Department of Water Resources
and Environmental Engineering

Dated at Montpelier, Vermont
this 5th day of June 1981.