



ANTHONY D. CORTESE, Sc. D.
Commissioner

*Booth
3150*

The Commonwealth of Massachusetts

Executive Office of Environmental Affairs

Department of Environmental Quality Engineering

Division of Water Pollution Control

One Winter Street, Boston 02108

BT 401.5.4

E C O	
Eastern District	
AUG 5 '83	
C-	
To	A
CAC	L

July 27, 1983

Carol H. Cunningham, P.E.
International Engineering Co., Inc.
777 Post Road
Darien, Connecticut 06820

Re: Water Quality Certification
EOEA No. 03766
Lowell Hydroelectric
Merrimack River
Lowell

Dear Miss Cunningham:

This Water Quality Certification replaces the Certification dated July 26, 1982, and is issued following changes in the plans made since that date for the operation of a hydroelectric facility known as Booth Mills, located on the Merrimack River in Lowell.

Changes in the proposed location of the powerhouse, including the excavation of additional quantities of rock ledge and the shortening of the tailrace, are not expected to change the project's effect on water quality.

In accordance with the provisions of Section 401 of the Federal Water Pollution Control Act as amended (Public Law 95-217), this Division issues the following Water Quality Certification relative to this project, subject to the following conditions:

1. The staff of this Division has determined that a minimum low flow of 905 c.f.s. must be released from the facility to the Merrimack River on a continuous basis. Flows in excess of this may be released at any time; however, flows less than this will not be permitted unless the river flow directly upstream of the facility is run-of-the-river operation. That is, releases over the Pawtucket Dam or through the fish passage facilities must equal the adjacent upstream flow.

As stated in the Final Environmental Impact Report, the release of water will occur at the following locations when the adjacent upstream river flow is equal or greater than 905 c.f.s.:

- a. 280 c.f.s. or greater at fish passage locations or over the dam, or as leakage through the dam
- b. 620 c.f.s. through the proposed powerhouse off of Northern Canal


- c. other irregular flow will also be released at the John Street Power Station, and at various points of leakage
2. Also, as stated in the Environmental Impact Statment for this project, a water quality sampling study will be conducted by the applicant. This two-year study will serve to determine what effect, if any, the operation of this facility will have on the river's water quality in the vicinity of this project, which is categorized as Class B by this Division.

Design and implementation of this water quality sampling study is to be reviewed and approved by this Division prior to implementation of the study. It is recommended that contact be maintained with the Technical Services Branch of this Division at the Westview Building, Westboro, MA 01581 (617) 366-9181 for final approval.

3. The building and removal of the cofferdam in the Merrimack River and the laying of the 6-inch diameter transmission cable in one-half mile of the Concord River could result in a violation of water quality standards adopted by this Division. Therefore, reasonable care and diligence shall be taken by the contractor to assure that the proposed activity will be conducted in a manner which will minimize violations of said standards.

Should any violation of the water quality standards or the terms of this certification occur as a result of the proposed activity, the Division will direct that the condition be corrected. Non-compliance on the part of the permittee will be cause for this Division to recommend the revocation of the permit(s) issued therefor or to take such other action as is authorized by the General Laws of the Commonwealth. This certification does not relieve the applicant of the duty to comply with any other statutes or regulations.

Very truly yours,


Thomas C. McMahon
Director

TCM/JP/wp

cc: Anthony D. Cortese, Sc.D., Commissioner, Department of Environmental Quality Engineering, One Winter Street, Boston 02108
William Lawless, Chief, Permits Branch, Corps of Engineers, 424 Trapelo Road, Waltham 02154
John J. Hannon, Director, Division of Waterways, Department of Environmental Quality Engineering, One Winter Street, Boston 02108
Richard Cronin, Director, Division of Fisheries & Wildlife, 100 Cambridge Street, Boston 02202
Philip Coates, Director, Division of Marine Fisheries, 100 Cambridge Street, Boston 02202
Arthur Johnson, DWPC, Westboro 01581
Kim Simpson, DWPC, Westboro 01581