



STATE OF MAINE
DEPARTMENT OF ENVIRONMENTAL PROTECTION



PAUL R. LEPAGE
GOVERNOR

PATRICIA W. AHO
COMMISSIONER

February 6, 2014

Mr. Lewis Loon
KEI (Maine) Power Management (I), LLC
37 Alfred Plourde Parkway, Suite 2
Lewiston, ME 04240
lewis.loon@kruger.com

*Transmitted via electronic mail
Delivery confirmation requested*

RE: Maine Pollutant Discharge Elimination System (MEPDES) Permit #ME0036625
Maine Waste Discharge License (WDL) Application #W008080-5R-E-R
Proposed Draft Permit

Dear Mr. Loon,

Enclosed is a **proposed draft** MEPDES permit and Maine WDL (permit hereinafter) which the Department proposes to issue as a final document after opportunity for your review and comment. By transmittal of this letter you are provided with an opportunity to comment on the proposed draft permit and its conditions (special conditions specific to this permit are enclosed; standard conditions applicable to all permits are available upon request). If it contains errors or does not accurately reflect present or proposed conditions, please respond to this Department so that changes can be considered.

By copy of this letter, the Department is requesting comments on the proposed draft permit from various state and federal agencies, as required by our new regulations, and from any other parties who have notified the Department of their interest in this matter.

All comments must be received in the Department of Environmental Protection office on or before the close of business **Monday, March 10, 2014**. Failure to submit comments in a timely fashion will result in the final document being issued as drafted. Comments in writing should be submitted to my attention at the following address:

Maine Department of Environmental Protection
Bureau of Land & Water Quality
Division of Water Quality Management
17 State House Station
Augusta, ME 04333

AUGUSTA
17 STATE HOUSE STATION
AUGUSTA, MAINE 04333-0017
(207) 287-3901 FAX: (207) 287-3435
RAY BLDG., HOSPITAL ST.

BANGOR
106 HOGAN ROAD
BANGOR, MAINE 04401
(207) 941-4570 FAX: (207) 941-4584

PORTLAND
312 CANCO ROAD
PORTLAND, MAINE 04103
(207) 822-6300 FAX: (207) 822-6303

PRESQUE ISLE
1235 CENTRAL DRIVE, SKYWAY PARK
PRESQUE ISLE, MAINE 04769-2094
(207) 764-6477 FAX: (207) 764-1507

If you have any questions regarding the matter, please feel free to call me at 215-1579.

Sincerely,



Yvette M. Meunier
Division of Water Quality Management
Bureau of Land and Water Quality

Enc.

cc: Beth DeHaas, DEP/CMRO
Barry Mower, DEP/CMRO
Pamela Parker, DEP/CMRO
David Webster, EPA
Alex Rosenberg, EPA
David Pincumbe, EPA
Olga Vergara, EPA
Susanne Meidel, DEP/CMRO
Gail Wippelhauser, MeDMR
Oliver Cox, MeDMR
Environmental Reviewer, MeDIFW
Ivy Frignoca, CLF

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DEPARTMENT ORDER

IN THE MATTER OF

KEI (MAINE) POWER MANAGEMENT (I), LLC)	MAINE POLLUTANT DISCHARGE
EUSTIS, FRANKLIN COUNTY, MAINE)	ELIMINATION SYSTEM PERMIT
COOLING WATER DISCHARGE)	AND
EUSTIS HYDRO PROJECT)	
#ME0036625)	WASTE DISCHARGE LICENSE
#W008080-5R-E-R)	RENEWAL
		APPROVAL

Pursuant to the provisions of the *Federal Water Pollution Control Act*, Title 33 USC, § 1251, *Conditions of licenses*, 38 M.R.S.A. § 414-A, *Regulations Relating to Temperature*, 06-096 CMR 582 (effective date February 18, 1989), and applicable regulations, the Department of Environmental Protection (Department) has considered the application of KEI (Maine) Power Management (I), LLC (KEI) with its supportive data, agency review comments, and other related materials on file and FINDS THE FOLLOWING FACTS:

APPLICATION SUMMARY

On January 31, 2014, the Department accepted as complete for processing, a renewal application from KEI for Waste Discharge License (WDL) #W008080-5R-D-R/Maine Pollutant Discharge Elimination System (MEPDES) permit #ME0036625, which was issued on April 15, 2009 for a five-year term. The 4/15/09 permit authorized the daily maximum discharge of 7,200 gallons per day of non-contact cooling water from one outfall (Outfall #001) from the Eustis Hydro Project to the North Branch Dead River, Class A, in Eustis, Maine.

PERMIT SUMMARY

This permitting action carries forward all the terms and conditions established in the previous permitting action.

CONCLUSIONS

BASED on the findings in the attached Proposed Fact Sheet dated February 6, 2014, and subject to the Conditions listed below, the Department makes the following conclusions:

1. The discharge, either by itself or in combination with other discharges, will not lower the quality of any classified body of water below such classification.
2. The discharge, either by itself or in combination with other discharges, will not lower the quality of any unclassified body of water below the classification which the Department expects to adopt in accordance with state law.
3. The provisions of the State's antidegradation policy, 38 M.R.S.A. § 464(4)(F), will be met, in that:
 - (a) Existing in-stream water uses and the level of water quality necessary to protect and maintain those existing uses will be maintained and protected;
 - (b) Where high quality waters of the State constitute an outstanding national resource, that water quality will be maintained and protected;
 - (c) Where the standards of classification of the receiving water body are met or, where the standards of classification of the receiving water body are not met, the discharge will not cause or contribute to the failure of the water body to meet the standards of classification;
 - (d) Where the actual quality of any classified receiving water body exceeds the minimum standards of the next highest classification, that higher water quality will be maintained and protected; and
 - (e) Where a discharge will result in lowering the existing quality of any water body, the Department has made the finding, following opportunity for public participation, that this action is necessary to achieve important economic or social benefits to the State.
4. The discharge will be subject to effluent limitations that require application of best practicable treatment as defined in 38 M.R.S.A. § 414-A(1)(D).

ACTION

THEREFORE, the Department APPROVES the application of the KEI (MAINE) POWER MANAGEMENT (I), LLC to discharge a daily maximum of 7,200 gallons per day of non-contact cooling water at a temperature not to exceed 95 degrees Fahrenheit from Outfall #001 from the Eustis Hydro Project to the North Branch Dead River, Class A, in Eustis, Maine, SUBJECT TO THE FOLLOWING CONDITIONS, and all applicable standards and regulations including:

1. “*Maine Pollutant Discharge Elimination System Permit Standard Conditions Applicable To All Permits,*” revised July 1, 2002, copy attached.
2. The attached Special Conditions, including any effluent limitations and monitoring requirements.
3. This permit becomes effective upon the date of signature below and expires at midnight five (5) years after that date. If a renewal application is timely submitted and accepted as complete for processing prior to the expiration of this permit, the terms and conditions of this permit and all subsequent modifications and minor revisions thereto remain in effect until a final Department decision on the renewal application becomes effective. [*Maine Administrative Procedure Act, 5 M.R.S.A. § 10002 and Rules Concerning the Processing of Applications and Other Administrative Matters, 06-096 CMR 2(21)(A) (last amended August 25, 2013)*]

DONE AND DATED AT AUGUSTA, MAINE, THIS _____ DAY OF _____, 2014.

COMMISSIONER OF ENVIRONMENTAL PROTECTION

BY: _____
PATRICIA W. AHO, Commissioner

Date filed with Board of Environmental Protection: _____

PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES

Date of initial receipt of application _____ January 31, 2014.

Date of application acceptance _____ January 31, 2014.

This Order prepared by Yvette M. Meunier, Bureau of Land and Water Quality

SPECIAL CONDITIONS

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

1. The discharge from Outfall #001 is limited to a daily maximum flow of 7,200 gallons per day and a daily maximum temperature of 95°F.
2. The permittee must not discharge wastewater that contains a visible oil sheen, foam, or floating solids at any time that would impair the designated uses or habitat characteristics of the receiving waters or would otherwise lower the quality of the receiving water below its assigned classification.
3. The permittee must not discharge wastewater that imparts color, taste, turbidity, toxicity, or other properties that would impair the designated uses or habitat characteristics of the receiving waters or would otherwise lower the quality of the receiving water below its assigned classification.
4. The permittee must notify the Department immediately of the discharge of any pollutants other than heat from the facility. The permittee must also notify the Department of any changes in facility design, operation or generating capacity that may affect the flow or temperature of the cooling water discharge.
5. All miscellaneous facility leakage and lubrication waters that may become contaminated with oil or grease are subject to Best Management Practices (BMPs) designed to prevent the release of contaminants to the waters of the State. **Within 90 days of permit issuance**, the permittee must develop BMPs and must make the BMPs available in writing for the Department to review and comment upon request. BMPs must consist of, but not be limited to, the following, as appropriate: development and implementation of a spill prevention plan; use of oil absorbent pads or booms and/or physical berms to contain spills or leaks of hydraulic and lubrication oils; and the treatment of water collected in floor drains and sumps through an oil/grease trap or oil-water separator. Where bearing cooling water is used, BMPs must include the maintenance of a written log or record of bearing oil levels and maintenance activities. Where floor drains and sumps are used, BMPs must include (1) written procedures for the cleaning and maintenance of any oil-grease trap, oil skimmer or oil-water separator and (2) maintenance of a written log or record of visual inspections of sumps for oil and grease and of actions taken to prevent the discharge of oil or grease from the facility.

B. AUTHORIZED DISCHARGES

The permittee is authorized to discharge only in accordance with the terms and conditions of this permit. Discharges of wastewater from any other point source(s) are not authorized by this permit, and must be reported by the permittee in accordance with Standard Condition B(5) (*Bypass*) of this permit.

SPECIAL CONDITIONS

C. NOTIFICATION REQUIREMENT

In accordance with Standard Condition D, the permittee must notify the Department of any substantial change in the volume or character of pollutants being discharged.

D. REOPENING OF PERMIT FOR MODIFICATIONS

In accordance with 38 M.R.S.A. § 414-A(5) and based upon site inspections, additional site-specific or any other pertinent information or test results obtained during the term of this permit, the Department may, at any time and with notice to the permittee, modify this permit to establish limitations or require additional monitoring, inspections and/or reporting based on the new information.

E. SEVERABILITY

In the event that any provision(s), or part thereof, of this permit is declared to be unlawful by a reviewing court, the remainder of the permit will remain in full force and effect, and will be construed and enforced in all respects as if such unlawful provision, or part thereof, had been omitted, unless otherwise ordered by the court.

**MAINE POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT
AND
MAINE WASTE DISCHARGE LICENSE**

**PROPOSED
FACT SHEET**

DATE: **February 6, 2014**

PERMIT NUMBER: **#ME0036625**

LICENSE NUMBER: **#W008080-5R-E-R**

NAME AND ADDRESS OF APPLICANT:

**KEI (MAINE) POWER MANAGEMENT (I), LLC
37 ALFRED PLOURDE PARKWAY, SUITE 2
LEWISTON, MAINE, 04240**

NAME, ADDRESS, AND COUNTY WHERE DISCHARGE(S) OCCUR(S):

**KEI (MAINE) POWER MANAGEMENT (I), LLC
EUSTIS HYDRO PROJECT
12 DAY ROAD
EUSTIS, MAINE 04073**

COGNIZANT OFFICIAL CONTACT INFORMATION:

**LEWIS LOON
(207) 786-8834
EMAIL: lewis.loon@kruger.com**

1. APPLICATION SUMMARY

Application: On January 31, 2014, the Department of Environmental Protection (Department) accepted as complete for processing, a renewal application from KEI (Maine) Power Management (I), LLC (KEI) for Waste Discharge License (WDL) #W008080-5R-D-R/Maine Pollutant Discharge Elimination System (MEPDES) permit #ME0036625, which was issued on April 15, 2009 for a five-year term. The 4/15/09 permit authorized the daily maximum discharge of 7,200 gallons per day of non-contact cooling water from (Outfall #001) from KEI's Eustis Hydro Project North Branch Dead River, Class A, in Eustis, Maine.

2. PERMIT SUMMARY

- a. History: The most current relevant regulatory actions include:

February 23, 1999 - The Department issued new license #W008080-5R-A-N to Ridgewood Maine Hydro Partners, LP for a five-year term.

January 12, 2001 – The State of Maine received authorization from the United States Environmental Protection Agency (USEPA) to administer the National Pollutant Discharge Elimination System (NPDES) permitting program in Maine.

April 1, 2004 – The Department issued combination MEPDES permit #ME0036625/WDL #W008080-5R-B-R to Ridgewood Maine Hydro Partners, LP for a five-year term.

April 15, 2009 – The Department issued combination MEPDES permit ME0036625/WDL #W008080-5R-C-R to Ridgewood Maine Hydro Partners, LP for a five-year term.

November 20, 2009 - The Department issued global transfer order #W008080-5R-D-T, transferring WDL #W008080-5R-C-R from Ridgewood Maine Hydro Partners, LP to KEI.

January 31, 2014 – KEI submitted a timely application for renewal of MEPDES permit #ME0036625 / #W008080-5R-D-R, which was accepted as complete for processing on January 31, 2014.

- b. Source Description: The source of the discharge is a hydroelectric generating facility. The discharge consists of non-contact cooling water. The discharge flow rate is variable, depending on cooling needs, up to a maximum flow of 7,200 gallons per day (maximum cooling system capacity, based on information from applicant). The discharge occurs from a single outfall.

Other miscellaneous discharges from Outfall 001 consist of shaft lubrication waters, foundation leakage waters, and/or leakage from wicket gates and other equipment. In the event of leaks, spills or equipment failure, these sources may become contaminated with hydraulic or lubrication oil and grease.

All miscellaneous facility leakage and lubrication waters that may become contaminated with oil or grease are subject to Best Management Practices (BMPs) designed to prevent the release of contaminants to the waters of the State. Within 90 days of permit issuance, the permittee must develop written BMPs and must make the BMPs available to the Department for review and comment upon request. BMPs must consist of, but not be limited to, the following, as appropriate: development and implementation of a spill prevention plan; use of oil absorbent pads or booms and/or physical berms to contain spills or leaks of hydraulic and lubrication oils; and the treatment of water collected in floor drains and sumps through an oil/grease trap or oil-water separator. Where bearing cooling water is used, BMPs must include the maintenance of a written log or record of

2. PERMIT SUMMARY (cont'd)

bearing oil levels and maintenance activities. Where floor drains and sumps are used, BMPs must include (1) written procedures for the cleaning and maintenance of any oil-grease trap, oil skimmer or oil-water separator and (2) maintenance of a written log or record of visual inspections of sumps for oil and grease and of actions taken to prevent the discharge of oil or grease from the facility.

See **Attachment A** of this Fact Sheet for a flow schematic for the facility.

3. CONDITIONS OF PERMITS

Conditions of licenses, 38 M.R.S.A. § 414-A, requires that the effluent limitations prescribed for discharges, including, but not limited to, effluent toxicity, require application of best practicable treatment (BPT), be consistent with the U.S. Clean Water Act, and ensure that the receiving waters attain the State water quality standards as described in Maine's Surface Water Classification System. In addition, *Certain deposits and discharges prohibited*, 38 M.R.S.A. § 420 and *Surface Water Toxics Control Program*, 06-096 CMR 530 (effective March 21, 2012) require the regulation of toxic substances not to exceed levels set forth in *Surface Water Quality Criteria for Toxic Pollutants*, 06-096 CMR 584 (last amended July 29, 2012), and that ensure safe levels for the discharge of toxic pollutants such that existing and designated uses of surface waters are maintained and protected.

4. RECEIVING WATER QUALITY STANDARDS

Classification of major river basins, 38 M.R.S.A. § 467(4)(D)(2) classifies the “tributaries of the Dear River as Class A unless otherwise specified, for which the North Branch Dead River is not further classified”, which includes the reach of river subject to KEI’s discharge, as Class A. *Standards for classification of fresh surface waters*, 38 M.R.S.A., § 465(2) describes the standards for Class A waters.

Direct discharges into Class A waters licensed after January 1, 1986, are permitted only if, in addition to satisfying all other statutory requirements, the discharged effluent will be equal to or better than the existing water quality of the receiving waters. Prior to issuing a discharge license, the Department shall require the applicant to objectively demonstrate to the Department’s satisfaction that the discharge is necessary and that there are no other reasonable alternatives available. The Applicants have submitted information regarding reasonable alternatives to the current discharge (email correspondence dated February 4, 2014 from Lewis Loon to Yvette Meunier). The Department concludes that no reasonable alternative exists and that the Applicant has satisfied this requirement.

5. RECEIVING WATER CONDITIONS

The State of Maine 2010 Integrated Water Quality Monitoring and Assessment Report, prepared by the Department pursuant to Sections 303(d) and 305(b) of the Federal Water Pollution Control Act, lists the segment where the discharge occurs in the North Branch Dead River as ABD Assessment Unit ID ME0103000201_307R in the following categories:

Category 2: Attains some of the designated uses; no use is threatened; and insufficient data or no data and information is available to determine if the remaining uses are attained or threatened (with presumption that all uses are attained).

Category 4-A: Rivers and Streams with Impaired Use, TMDL Complete. Impairment in this context refers to a statewide fish consumption advisory due to elevated levels of mercury in some fish tissues. The Report states, "All freshwaters are listed in Category 4A (TMDL Completed) due to USEPA approval of a Regional Mercury TMDL. Maine has a fish consumption advisory for fish taken from all freshwaters due to mercury. Many waters, and many fish from any given water, do not exceed the action level for mercury. However, because it is impossible for someone consuming a fish to know whether the mercury level exceeds the action level, the Maine Department of Health and Human Services decided to establish a statewide advisory for all freshwater fish that recommends limits on consumption. Maine has already instituted statewide programs for removal and reduction of mercury sources."

The Department has no information that the discharge from KEI's Eustis Hydro Project, as permitted, causes or contributes to non-attainment of applicable water quality standards.

6. REGULATIONS RELATING TO TEMPERATURE

Regulations Relating to Temperature 06-096 CMR 582 (last amended February 18, 1989), states that no discharge must cause the ambient temperature of any freshwater body to be raised more than 5 degrees Fahrenheit, nor must any discharge cause the temperature of any waters to exceed the USEPA national ambient water quality criteria established to protect all species of fish that are indigenous to the receiving waters. When the ambient temperature of any body of water naturally exceeds the applicable USEPA criteria, no thermal discharge may be allowed which alone or in combination with other discharges would raise the ambient temperature of the receiving water more than 0.5 degrees Fahrenheit.

The Department has established that cold water fish species are indigenous to all Maine rivers and streams. USEPA has established maximum temperatures for the protection of growth and survival of cold water fish as follows: a weekly average temperature of 66 degrees Fahrenheit; and a daily maximum temperature of 73 degrees Fahrenheit.

7. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

The USEPA has not promulgated National Effluent Guidelines for non-contact cooling water. The Department has made a best professional judgment (BPJ) determination that BPT for hydro project cooling water is no treatment, unless treatment to control thermal loading is determined to be required.

The Department has calculated that, under worst case conditions of maximum cooling water flow (7,200 gallons per day), maximum cooling water temperature (assumed 95 degrees Fahrenheit, based on staff analysis of industry data), and 7Q10 receiving water flow (17.5 cfs), and without any treatment to reduce thermal loading, the discharge will raise the ambient temperature of the receiving water by less than 4/100th of a degree Fahrenheit. Therefore, the Department has determined that neither effluent limitations nor monitoring requirements are necessary to ensure that applicable water quality standards are met and that the “equal to or better than” standard for Class A waters is satisfied.

However, the discharge will be subject to effluent limitations that require application of best practicable treatment as defined in 38 M.R.S.A. § 414-A(1)(D). Within 90 days of permit issuance, the permittee must develop BMPs and must make the BMPs available in writing for the Department to review and comment upon request.

8. PUBLIC COMMENTS

Public notice of this application was made in the Lewiston Sun Journal on or about January 15, 2014. The Department receives public comments on an application until the date a final agency action is taken on that application. Those persons receiving copies of draft permits must have at least 30 days in which to submit comments on the draft or to request a public hearing, pursuant to *Application Processing Procedures for Waste Discharge Licenses*, 06-096 CMR 522 (effective January 12, 2001).

9. DEPARTMENT CONTACTS

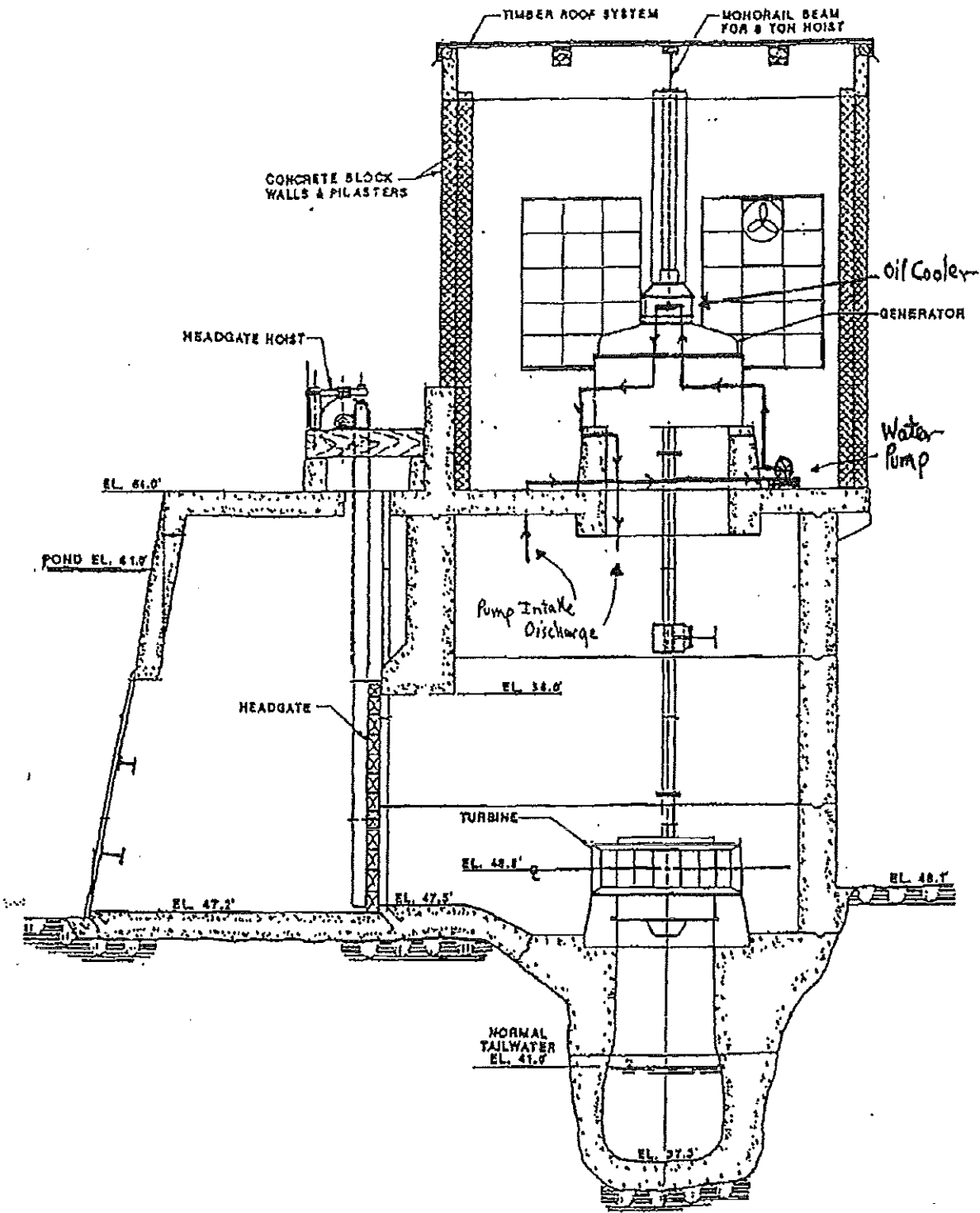
Additional information concerning this permitting action may be obtained from and written comments should be sent to:

Yvette Meunier
Department of Environmental Protection
Bureau of Land and Water Quality
Division of Water Quality Management
17 State House Station
Augusta, Maine 04333-0017 Telephone: (207) 215-1579 Fax: (207) 287-3435
yvette.meunier@maine.gov

10. RESPONSE TO COMMENTS

Reserved until the close of the formal 30-day public comment period.

ATTACHMENT A



0 2 4
SCALE IN FEET

Eustis Hydroelectric Project
Non-contact cooling water