



STATE OF MAINE
DEPARTMENT OF ENVIRONMENTAL PROTECTION



PAUL R. LEPAGE
GOVERNOR

PATRICIA W. AHO
COMMISSIONER

January 27, 2014

Mr. Jason Seyfried
Brookfield White Pine Hydro, LLC
26 Katherine Drive
Hallowell, ME. 04347
Jason.seyfried@brookfieldrenewable.com

RE: Maine Pollutant Discharge Elimination System (MEPDES) Permit #ME0036722
Maine Waste Discharge License (WDL) Application #W007582-5R-F-R
Preliminary Draft Permit

Dear Mr. Seyfried:

Enclosed is a **preliminary draft** MEPDES permit/WDL (permit hereinafter) which the Department proposes to issue as a formal proposed draft document after opportunity for your review and comment. By transmittal of this letter you are provided with an opportunity to comment on the preliminary draft permit and its conditions. If it contains errors or does not accurately reflect present or proposed conditions, please respond to this Department so that changes can be considered.

All comments on the preliminary draft permit must be received in the Department of Environmental Protection office on or before the close of business on **Monday, February 10, 2014**. Failure to submit comments in a timely fashion will result in the proposed draft permit 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) 287-7688 FAX: (207) 287-7826

BANGOR
106 HOGAN ROAD, SUITE 6
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 04679
(207) 764-0477 FAX: (207) 760-3143

If you have any questions regarding the matter, please feel free to call me at 592-7161.

Sincerely,

A handwritten signature in black ink, appearing to read "C. Dionne".

Cindy L. Dionne
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



DEPARTMENT ORDER

IN THE MATTER OF

BROOKFIELD WHITE PINE HYDRO LLC)	MAINE POLLUTANT DISCHARGE
LINCOLN PLANTATION,)	ELIMINATION SYSTEM PERMIT
OXFORD CO., MAINE		
COOLING WATER DISCHARGE)	AND
AZISCOHOS HYDRO PROJECT)	
#ME0036722)	WASTE DISCHARGE LICENSE
#W007582-5R-F-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 BROOKFIELD WHITE PINE HYDRO LLC (BROOKFIELD) with its supportive data, agency review comments, and other related materials on file and FINDS THE FOLLOWING FACTS:

APPLICATION SUMMARY

On January 13, 2014, the Department accepted as complete for processing, a renewal application for Waste Discharge License (WDL) #W007582-5R-E-R/Maine Pollutant Discharge Elimination System (MEPDES) permit #ME0036722, which was issued on May 1, 2009 for a five year term. The 5/1/2009 permit authorized the daily discharge of 270,000 gallons per day of non-contact cooling water from two outfalls (#001 and #004) and an unspecified quantity of miscellaneous wastewater and storm water runoff from two additional outfalls (#002 and #003) from Brookfield's Aziscohos Hydro Project to the Magalloway River, Class A, in Lincoln Plantation, 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 Fact Sheet dated January 27, 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 BROOKFIELD WHITE PINE HYDRO LLC, to discharge 270,000 gallons per day of non-contact cooling water from two outfalls (#001 and #004) and an unspecified quantity of miscellaneous wastewater and storm water runoff from two additional outfalls (#002 and #003) at a temperature not to exceed 95 degrees Fahrenheit from the Aziscohos Hydro Project to the Magalloway River, Class A, 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: _____
FOR 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 10, 2014 .

Date of application acceptance January 13, 2014 .

This Order prepared by Cindy L. Dionne, Bureau of Land and Water Quality

SPECIAL CONDITIONS

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

1. The discharge is limited to a flow of 270,000 gallons per day and a daily maximum temperature of 95°F.
2. The permittee shall 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 shall 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 shall notify the Department immediately of the discharge of any pollutants other than heat from the facility. The permittee shall 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 shall develop BMPs and shall 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 shall 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 shall 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**

**PRELIMINARY DRAFT
FACT SHEET**

DATE: **JANUARY 27, 2014**

PERMIT NUMBER: **#ME0036722**

LICENSE NUMBER: **#W007582-5R-F-R**

NAME AND ADDRESS OF APPLICANT:

**BROOKFIELD WHITE PINE HYDRO LLC
26 KATHERINE DRIVE
HALLOWELL, MAINE 04347**

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

**AZISCOHOS HYDRO PROJECT
14 DAM ROAD
LINCOLN PLANTATION, MAINE 04964
OXFORD COUNTY**

COGNIZANT OFFICIAL CONTACT INFORMATION:

**JASON SEYFRIED
(207) 629-1883
EMAIL: Jason.seyfried@brookfieldrenewable.com**

1. APPLICATION SUMMARY

Application: On January 13, 2014, the Department accepted as complete for processing, a renewal application for Waste Discharge License (WDL) #W007582-5R-E-R/Maine Pollutant Discharge Elimination System (MEPDES) permit #ME0036722, which was issued on May 1, 2009 for a five year term. The 5/1/2009 permit authorized the daily discharge of 270,000 gallons per day of non-contact cooling water from two outfalls (#001 and #004) and an unspecified quantity of miscellaneous wastewater and storm water runoff from two additional outfalls (#002 and #003) from Brookfield's Aziscohos Hydro Project to the Magalloway River, Class A, in Lincoln Plantation, Maine.

2. PERMIT SUMMARY

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

February 18, 1999 - The Department issued WDL renewal #W007582-5R-C-R for a five-year term.

January 12, 2001 – The Department received authorization from the USEPA to administer the NPDES permitting program in Maine, excluding areas of special interest to Maine Indian Tribes. From this point forward, the program has been referred to as the Maine Pollutant Discharge Elimination System (MEPDES) program, and MEPDES permit #ME0101443 has been utilized for this facility. On March 26, 2011, the USEPA authorized the Department to administer the MEPDES program in Indian territories of the Penobscot Nation and Passamaquoddy Tribe.

October 26, 2004 – The Department issued WDL renewal #W007582-5R-D-R for a five year term.

May 1, 2009 – The Department issued WDL renewal #W007582-5R-E-R for a five year term.

January 10, 2014 – Brookfield submitted a timely and complete General Application to the Department for renewal of the May 1, 2009 MEPDES permit. The application was accepted for processing on January 13, 2014, and was assigned WDL #W007582-5R-F-R / MEPDES #ME0036722.

- 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 270,000 gallons per day (maximum cooling system capacity, based on information from applicant). The discharge occurs from four separate outfalls. A map showing the location of the treatment facility is included as Fact Sheet **Attachment A**.

Other miscellaneous discharges from the facility consist of shaft lubrication waters, foundation leakage waters, and/or leakage from wicket gates and other equipment. In the event of unplanned leaks, spills or equipment failure, these discharges 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 shall develop written BMPs and shall 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

2. PERMIT SUMMARY

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. A process flow diagram submitted by the permittee is included as Fact Sheet **Attachment B**.

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, 38 M.R.S.A. § 420 and 06-096 CMR 530 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(1)(C) classifies the Androscoggin River "Upper Drainage; that portion within the State lying above the river's most upstream crossing of the Maine-New Hampshire boundary," which includes the reach of river subject to Brookfield'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 January 23, 2014 from Jason Seyfried to Cindy L. Dionne). 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 section of the Magalloway River where the discharge occurs

5. RECEIVING WATER CONDITIONS (cont'd)

as “Category 2: Rivers and Streams Attaining Some Designated Uses-Insufficient Information for Other Uses” under Assessment Unit ID ME0104000104_401R.

6. REGULATIONS RELATING TO TEMPERATURE

Regulations Relating to Temperature 06-096 CMR 582 (last amended February 18, 1989), states that no discharge shall cause the ambient temperature of any freshwater body to be raised more than 5 degrees Fahrenheit, nor shall 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

USEPA has not promulgated National Effluent Guidelines for non-contact cooling water. The DEP has made a Best Professional Judgment (BPJ) determination that BPT for hydro project cooling water is no treatment.

The Department has calculated that, under worst case conditions of maximum cooling water flow (270,000 GPD), maximum cooling water temperature (assumed 95 degrees Fahrenheit, based on staff analysis of industry data), and 7Q10 receiving water flow (400 cfs), and without any treatment to reduce thermal loading, the discharge will raise the ambient temperature of the receiving water by only 3/100th 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.

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 shall develop BMPs and shall 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 17, 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 shall have at least 30 days in which to submit comments on the draft or to request a public

8. PUBLIC COMMENTS (cont'd)

hearing, pursuant to *Application Processing Procedures for Waste Discharge Licenses*, 06-096 CMR 522 (effective January 12, 2001).

9. DEPARTMENT CONTACTS

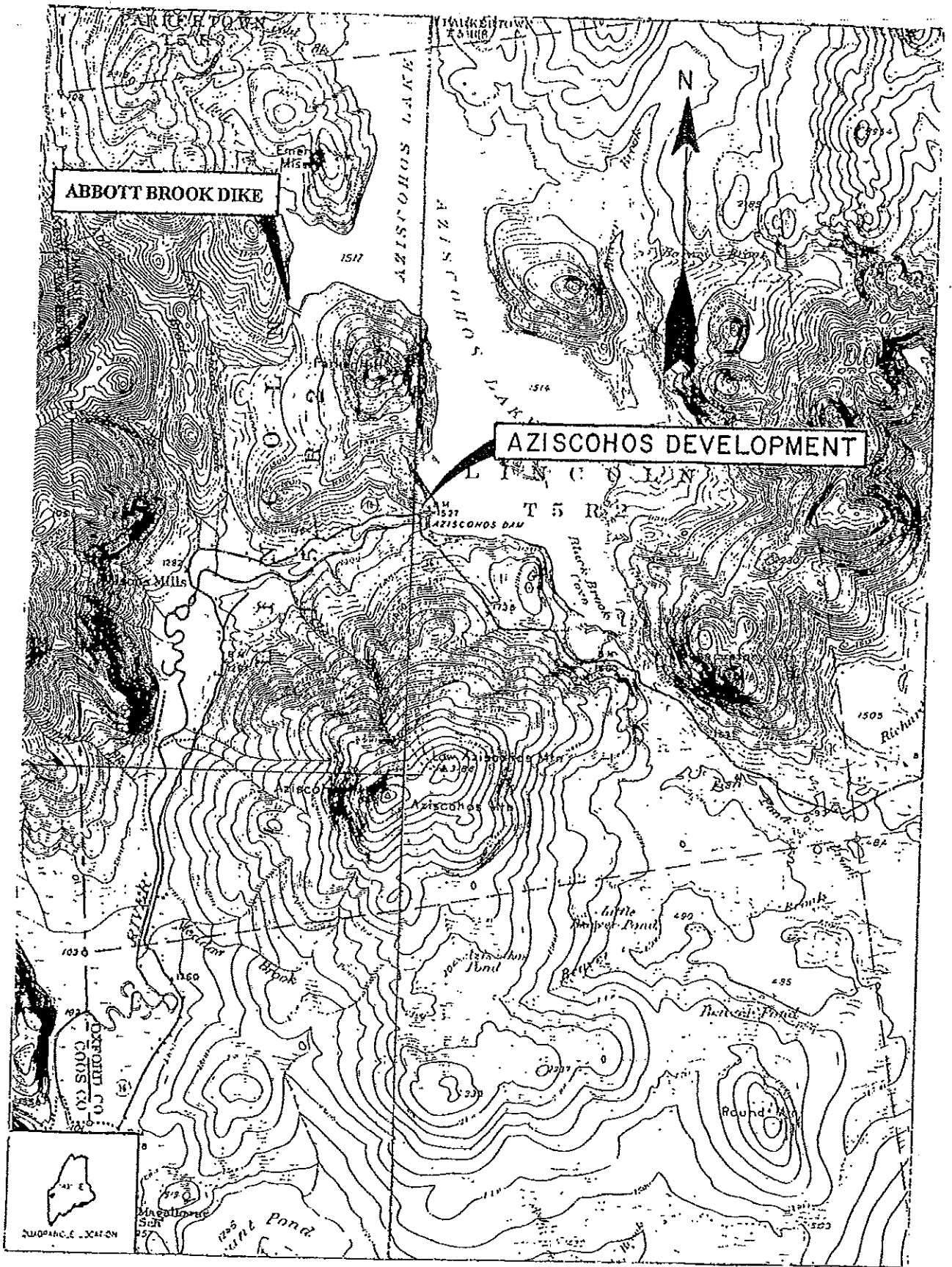
Additional information concerning this permitting action may be obtained from and written comments should be sent to:

Cindy L. Dionne
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) 592-7161 Fax: (207) 287-3435
cindy.l.dionne@maine.gov

10. RESPONSE TO COMMENTS

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

ATTACHMENT A

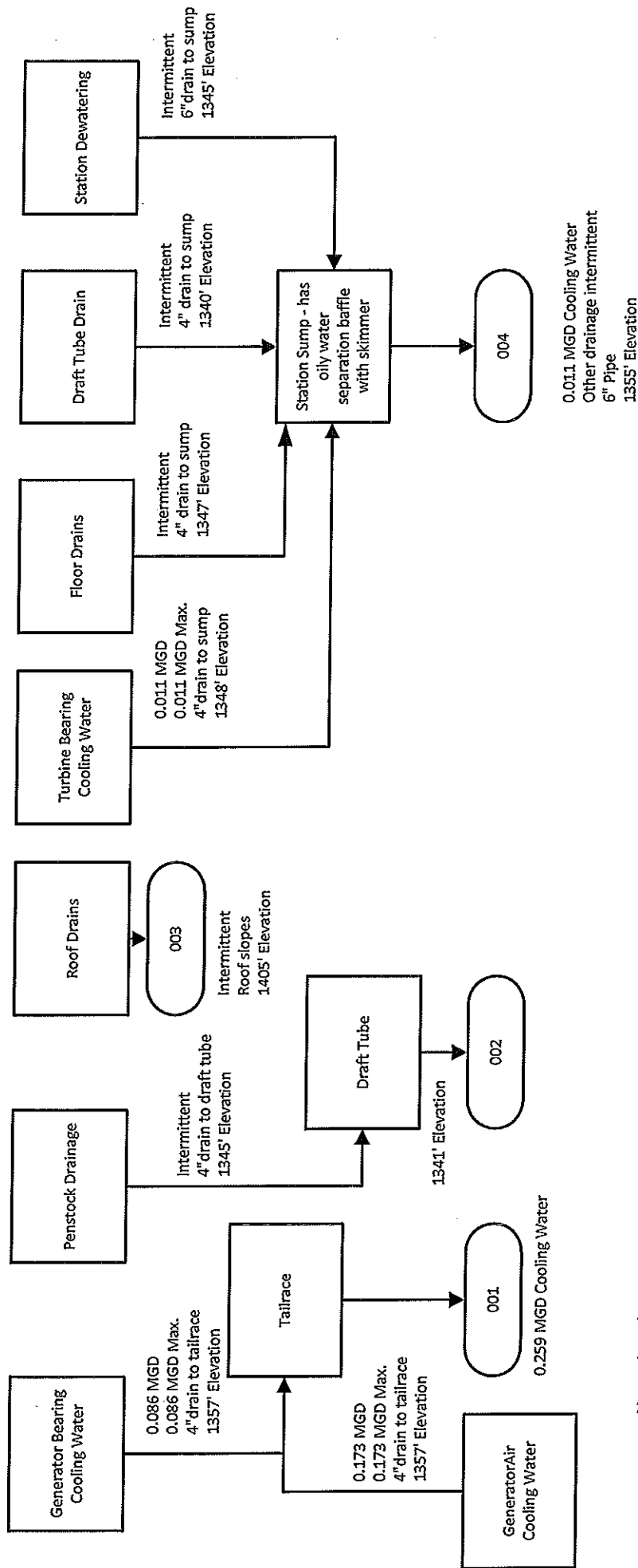


Location of Aziscohos Project

SCALE: 1:62,500

ATTACHMENT B

Aziscohos Hydro Project 2013 Water Flow Diagram



No sanitary facilities.

Maximum cooling is 0.27 MGD.

Small transformer in yard in crushed stone within concrete vault that drains to a manhole. The manhole has an oil trap valve. The outlet of the valve drains onto the surface banking which slopes to the station and the river.