STATE OF MAINE



Department of Environmental Protection

JOHN ELIAS BALDACCI GOVERNOR David P. Littell COMMISSIONER

Mr. Bearl Keith Miller Hydro Group 148 Middle Street, Suite 506 Portland, Maine 04101 April 10, 2009

RE: Maine Pollutant Discharge Elimination System (MEPDES) Permit #ME0023469

Maine Waste Discharge License (WDL) Application #W007590-5R-D-R

Final Permit/License Worumbo Hydro Project

Dear Mr. Keith:

Enclosed please find a copy of your **final** MEPDES permit and Maine WDL which was approved by the Department of Environmental Protection. Please read the permit/license and its attached conditions carefully. You must follow the conditions in the permit/license to satisfy the requirements of law. Any discharge not receiving adequate treatment is in violation of State Law and is subject to enforcement action.

Any interested person aggrieved by a Department determination made pursuant to applicable regulations, may appeal the decision following the procedures described in the attached DEP FACT SHEET entitled "Appealing a Commissioner's Licensing Decision."

If you have any questions regarding the matter, please feel free to call me at 287-7693.

Sincerely,

Gregg Wood

Division of Water Quality Management Bureau of Land and Water Quality

Enc.

cc: Denise Behr, DEP/CMRO

Sandy Mojica, USEPA



STATE OF MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION 17 STATE HOUSE STATION AUGUSTA, ME 04333

DEPARTMENT ORDER

IN THE MATTER OF

| MILLER HYDRO GROUP | |) | MAINE POLLUTANT DISCHARGE |
|----------------------------------|----------|---|----------------------------------|
| LISBON, ANDROSCOGGIN COUNTY, ME. | |) | ELIMINATION SYSTEM PERMIT |
| COOLING WATER DISCHARGE | |) | AND |
| WORUMBO HYDRO PROJECT | |) | |
| ME0023469 | |) | WASTE DISCHARGE LICENSE |
| W007590-5R-D-R | APPROVAL |) | RENEWAL |

Pursuant to the provisions of the Federal Water Pollution Control Act, Title 33 USC, Section 1251, et. seq. and 38 MRSA Sections 413 and 414-A et. seq., and 06-096 CMR Chapter 582 (Regulations Relating to Temperature, effective date February 18, 1989, as amended), the Department of Environmental Protection (Department hereinafter) has considered the application of the MILLER HYDRO GROUP (permittee hereinafter) with its supportive data, agency review comments, and other related materials on file and FINDS THE FOLLOWING FACTS:

APPLICATION SUMMARY

The permittee has filed a timely and complete application with the Department for the renewal of combination Maine Pollutant Discharge Elimination System (MEPDES) permit #ME0023469/Maine Waste Discharge License (WDL) #W007590-5R-C-R (permit hereinafter) which was issued by the Department on April 1, 2004 and is due to expire on April 1, 2009. The permit authorized the discharge of up to 1.015 million gallons per day of non-contact cooling water from the Worumbo Hydro Project to the Androscoggin River, Class C, in Lisbon, Maine.

PERMIT SUMMARY

This permitting action is carrying forward all the terms and conditions of the previous permitting action.

CONCLUSIONS

BASED on the findings in the attached Fact Sheet dated March 4, 2009 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 MRSA Section 464(4)(F), will be met, in that:
 - (1) Existing in-stream water uses and the level of water quality necessary to protect and maintain those existing uses will be maintained and protected;
 - (2) Where high quality waters of the State constitute an outstanding national resource, that water quality will be maintained and protected;
 - (3) 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;
 - (4) 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
 - (5) 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.

ACTION

THEREFORE, the Department APPROVES the application of the MILLER HYDRO GROUP, to discharge up to 1.015 million gallons per day of non-contact cooling water at a temperature not to exceed 95 degrees Fahrenheit from the Worumbo Hydro Project to the Androscoggin River, Class C, in Lisbon, Maine, as described above, SUBJECT TO ALL APPLICABLE STANDARDS AND REGULATIONS AND THE FOLLOWING CONDITIONS:

- 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 expires five (5) years from the date of signature below.

PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES

| Date of initial receipt of application | on: <u>February 24, 2009</u> | |
|--|------------------------------|--|
| | • | |
| Date of application acceptance: | February 26, 2009 | |

This Order prepared by Irene Saumur, Bureau of Land and Water Quality

SPECIAL CONDITIONS

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

- 1. The discharge shall not contain 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.
- 2. The discharge shall not impart 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.
- 3. The permittee shall notify Department immediately of the discharge of any pollutants other than heat from the facility. The permittee shall also notify Department of any changes in facility design, operation or generating capacity that may affect the flow or temperature of the cooling water discharge.
- 4. All miscellaneous facility leakage and lubrication waters that may become contaminated with oil or grease shall be 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, BMPs shall be developed by the permittee and shall be available in writing for Department review and approval upon request. BMPs may 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 shall include the maintenance of a written log or record of bearing oil levels and maintenance activities. Where floor drains and sumps are used, BMPs shall include (1) written procedures for the cleaning and maintenance of any oilgrease 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. UNAUTHORIZED DISCHARGES

The permittee is authorized to discharge only in accordance with: 1) the permittee's General Application for Waste Discharge Permit, accepted for processing on February 26, 2009; 2) the terms and conditions of this permit; and 3) only from Outfall #001 and #002. Discharges of waste water from any other point source are not authorized under this permit, and shall be reported 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

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 anytime 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, or part thereof, of this permit is declared to be unlawful by a reviewing court, the remainder of the permit shall remain in full force and effect, and shall be construed and enforced in all aspects 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

FACT SHEET

Date: March 4, 2009

PERMIT NUMBER: ME0023469

LICENSE NUMBER: W007590-5R-D-R

NAME AND ADDRESS OF APPLICANT:

MILLER HYDRO GROUP P.O. Box 97 Lisbon Falls, Maine 04252

COUNTY: Androscoggin

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

Worumbo Hydro Project 31 Canal Street Lisbon Falls, Maine 04252

COGNIZANT OFFICIAL AND TELEPHONE NUMBER: Mr. Bearl S. Keith (207) 772-6190

bkeith@energymaine.com

1. APPLICATION SUMMARY

- a. <u>Application</u>: The Miller Hydro Group has filed a timely and complete application with the Department for the renewal of combination Maine Pollutant Discharge Elimination System (MEPDES) permit #ME0023469/Maine Waste Discharge License (WDL) #W007590-5R-C-R (permit hereinafter) which was issued on April 1, 2004 and is due to expire on April 1, 2009. The permit authorized the discharge of up to 1.015 million gallons per day of non-contact cooling water from the Worumbo Hydro Project to the Androscoggin River, Class C, in Lisbon, Maine.
- b. <u>History:</u> The most current relevant regulatory actions and or significant events include the following:

June 22, 1988 - The Department issued WDL #W7590-57-A-N for a five-year term.

1. APPLICATION SUMMARY (cont'd)

February 18, 1999 - The Department issued WDL #W007590-5R-B-R for a Five-year term.

April 1, 2004 – The Department issued combination MEPDES permit #ME0023469/WDL #W007590-5R-C-R for a five-year term.

February 24, 2009 – The Miller Hydro Group submitted a timely and complete application to the Department to renew the April 1, 2004 permit.

c. <u>Source Description:</u> 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 1.015 million gallons per day (maximum cooling system capacity, based on information from applicant). The discharge occurs from two separate outfalls.

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.

2. CONDITIONS OF PERMITS

Maine law, 38 M.R.S.A. Section 414-A, requires that the effluent limitations prescribed for discharges require application of best practicable treatment, 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. "Best practicable treatment" (BPT) means the methods of reduction, treatment, control and handling of pollutants for a category or class of discharge sources that are best calculated to protect and improve the quality of the receiving water and that are consistent with the requirements of the Federal Clean Water Act.

Maine law, 38 M.R.S.A., Section 420 and Department rule06-096 CMR Chapter 530, Surface Water Toxics Control Program, require the regulation of toxic substances not to exceed levels set forth in Department rule 06-096 CMR Chapter 584, Surface Water Quality Criteria for Toxic Pollutants, and that ensure safe levels for the discharge of toxic pollutants such that existing and designated uses of surface waters are maintained and protected.

Maine law, 38 MRSA Section 414-A requires that a discharge, either by itself or in combination with other discharges, not lower the quality of any classified body of water below its assigned classification. Therefore, discharges shall be subject to any additional effluent limitations required to meet applicable water quality standards.

3. RECEIVING WATER QUALITY STANDARDS

At the point of discharge, the Androscoggin River is classified as having Class C waters.

Class C waters shall be of such quality that they are suitable for the designated uses of drinking water after treatment; fishing; recreation in and on the water; industrial process and cooling water supply; hydroelectric power generation, except as prohibited under Title 12, section 403; navigation; and as habitat for fish and other aquatic life. The dissolved oxygen content of Class C waters shall be not less than 5 parts per million or 60% of saturation, whichever is higher, except that in identified salmonid spawning areas where whatever quality is sufficient to ensure spawing, egg incubation and survival of early life stages, that water quality sufficient for these purposes must be maintained. Discharges to Class C waters may cause some changes to aquatic life, provided that the receiving waters shall be of sufficient quality to support all species of fish indigenous to the receiving waters and maintain the structure and function of the resident biological community.

4. REGULATIONS RELATING TO TEMPERATURE

The Department's Chapter 582, *Regulations Relating to Temperature* 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 U.S. Environmental Protection Agency's (EPA) 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 EPA 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. EPA 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.

5. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

EPA 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 (1.015 MGPD), maximum cooling water temperature (assumed 95 degrees Fahrenheit, based on staff analysis of industry data), and 7Q10 receiving water flow (1994 cfs), and without any treatment to reduce thermal loading, the discharge will raise the ambient temperature of the receiving water by only 2/100^{ths} 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.

6. PUBLIC COMMENTS

Public notice of this application was made in the Lewiston Sun Journal on or about February 21, 2009. 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 hearing, pursuant to Chapter 522 of the Department's rules.

7. DEPARTMENT CONTACTS

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

Gregg Wood
Department of Environmental Protection
Bureau of Land and Water Quality
Division of Water Quality Management
17 State House Station

Appeared Mains 04222 0017

Augusta, Maine 04333-0017 Telephone (207) 287-7693

Email: gregg.wood@maine.gov

8. RESPONSE TO COMMENTS

During the period of March 4, 2009, through the issuance date of the permit/license, the Department solicited comments on the proposed draft permit/license to be issued for the discharge(s) from the permittee's facility. The Department did not receive comments from the permittee, state or federal agencies or interested parties that resulted in any substantive change(s) in the terms and conditions of the permit. Therefore, the Department has not prepared a Response to Comments.