

June 30, 2013

EPA-Region 1
Hydroelectric GP Processing
Municipal Assistance Unit (OEP06-3)
5 Post Office Square - Suite 100
Boston, MA 02109-3912

NH Department of Environmental Services
Water Division, Wastewater Engineering
29 Hazen Drive, P.O. Box 95
Concord, NH 03302-0095

Dear Hydroelectric GP Processing:

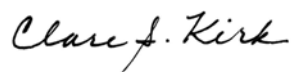
Subject: Revised Errol Hydroelectric Notice of Intent (NHG0016)

Brookfield Renewable Energy Partners, (Brookfield), on behalf of its wholly-owned subsidiary Errol Hydroelectric Company (EHC), hereby submits a revised notice of intent (NOI) for the Errol hydroelectric station located on the Androscoggin River in Errol, NH. GLHA is hereby notifying EPA that:

- 1) EHC discovered in 2013 Q2 that the non-contact cooling water (NCCW) discharge from the hydro station's heat exchangers goes directly to the Androscoggin River, not through the sump pit discharge. (Please see details in the enclosed flow diagrams.) The NOI EHC submitted to EPA on March 25, 2010 did not identify this as a separate discharge.
- 2) EHC began sampling the discharge from the heat exchangers for oil and grease, pH and temperature immediately upon discovery. The sample results, to-date, have been below the permit maximum limits.
- 3) As discussed with Ms. Amy Clark of the NH Department of Environmental Services, the sampling results for the heat exchangers will be reported on the NHG0016 quarterly discharge monitoring reports (DMR) using the "comments" box until otherwise instructed by the EPA.

We appreciate EPA's review of this information and look forward to your recommendations on how to update EHC permit number NHG0016. If you have any questions please do not hesitate to contact me at 508-251-7654 or clare.kirk@brookfieldrenewable.com.

Sincerely,



Clare S. Kirk, P.E.
Licensing and Compliance Specialist

Enclosures

cc: Hydro.GeneralPermit@epa.gov
Jon Elmer, Todd Wynn, Kevin Bernier, Dennis Turcotte, GLHA
George Papadopoulos, EPA
Amy Clark, NHDES

7. Attach a topographic map indicating the location of the facility and the outfall(s) to the receiving water. Map attached? Yes See Attachment A (Revised)

8. Provide the number of turbines and the combined turbine discharge (installed capacity) at maximum and minimum output, in cubic feet per second (cfs). Number of turbines 1 Combined turbine discharge (installed capacity): maximum output, cfs 2,600 and minimum output, cfs 800 (est.)

9. Is the hydroelectric generating facility operated as a pump storage project? NO

B. Discharge Information (attach additional sheets as needed).

1. Name of receiving water into which discharge will occur: Androscoggin River
Freshwater: X Marine Water: _____

2. Attach a line drawing or flow schematic showing water flow through the facility including sources of intake water, operations contributing flow, treatment units, outfalls, and receiving waters(s). Line drawing or flow schematic attached? Yes See Figures 1 & 2 (Revised)

3. List each outfall under the following categories and number sequentially: equipment-related cooling water; equipment and floor drain water; maintenance-related water; facility maintenance-related water during flood/high water events, and equipment-related backwash strainer water (see Parts I.A.1, 2, 3, and 4; or Parts I.B.1, 2, 3, and 4). Attach additional sheets to identify outfalls as needed.

Equipment-related cooling water

New - Non-contact cooling
water from heat exchangers;
low flow (varies)

Equipment and floor drain water

(Already permitted by NHG0016)
#17A- Combination; sump pit
discharge; oil detector alarm;
12,236 GPD (avg.)

Maintenance-related water

#17 - Station dewatering
discharge - used only for
dewatered inspections (3-5 yrs)

Facility maintenance-related water during
flood/high water events

Equipment-related backwash strainer water

4. List each outfall discharging any combination of the following to identify the combined discharges: equipment-related cooling water, equipment and floor drain water, maintenance-related water, equipment-related backwash strainer water, and facility maintenance-related water during flood/high water events (see Parts I.A.5 and B.5) and continue the sequential numbering. Attach additional sheets to identify outfalls as needed.

5. Provide for each outfall the following:

- a. Latitude and longitude to the nearest second (see EPA's siting tool at: http://www.epa.gov/tri/report/siting_tool/) and the name(s) of the receiving water(s) into which the discharge will occur.
44.7863431, 71.124330- Androscoggin River
- b. The operations contributing flow and the treatment received by the discharge. Indicate the average flow from each operation. See answers provided (above).
- c. Indicate if the discharge can be sampled at least once per year or can be sampled using the representative outfall sampling provisions (see Parts I.A.6 or B.6 and III.E). Yes, discharge can be sampled.
- d. Note if the outfall discharges intermittently or seasonally.

C. Chemical Additives

Are any non-toxic neutralization chemicals used in the discharge(s)? Yes _____ No X If so, include the chemical name and manufacturer; maximum and average daily quantity used on a monthly basis as well as the maximum and average daily expected concentrations (mg/l) in the discharge, and the vendor's reported aquatic toxicity (NOAEL and/or LC₅₀ in percent for typically acceptable aquatic organism).

D. Endangered Species Act Eligibility Information

A facility, with a previous ESA Section 7 consultation with the National Marine Fisheries Service (NMFS), seeking coverage under the Massachusetts general permit and discharging to the Connecticut River or Merrimack River should provide one of the following, if available. N/A

1. A formal certification indicating consultation with the National Marine Fisheries Service (NMFS) resulted in either a no jeopardy opinion or a written concurrence on a finding that the discharges are not likely to adversely affect the shortnose sturgeon or critical habitat. Information should also be provided indicating the hydroelectric facility's previous ESA Section 7 consultation with NMFS covered the discharges to be authorized under this general permit and demonstrating no significant changes in the discharges have occurred since the previous consultation.
2. Another operator's certificate of the ESA eligibility for those discharges to be authorized under this general permit.

E. Supplemental Information

Please provide any supplemental information, including antidegradation review information applicable to new or increased discharges. Attach any certification(s) required by the general permit.

F. Signature Requirements

The Notice of Intent must be signed by the operator in accordance with the signatory requirements of 40 CFR Section 122.22 (see below) including the following certification:

I certify under penalty of law that no chemical additives are used in the discharges to be authorized under this general permit except for those used for pH adjustment and (2) this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted.

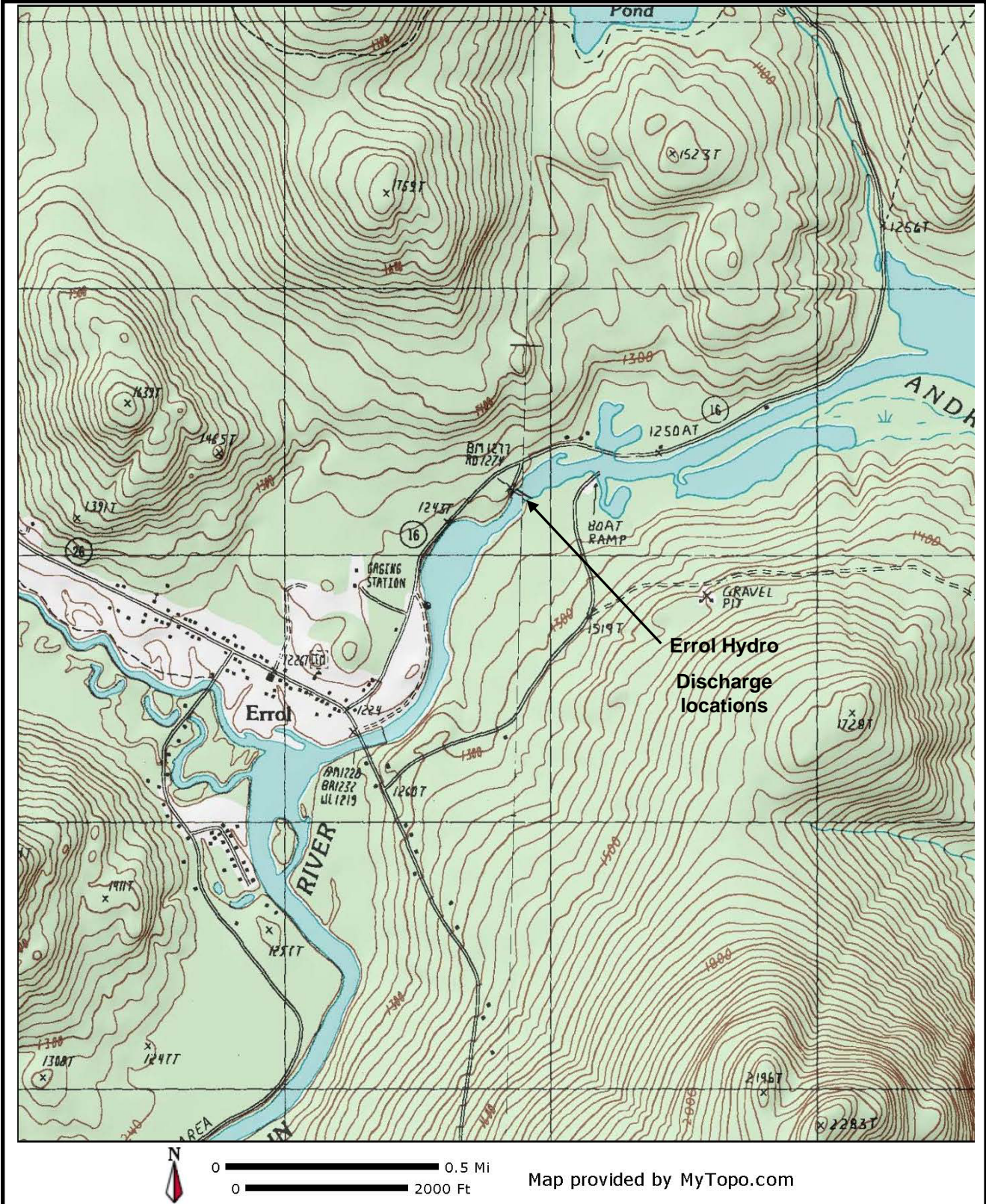
Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, I certify that the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I certify that I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature Jon Elmer Date 6/21/2013

Printed Name and Title Jon Elmer, Interim GM New England

Federal regulations require this application to be signed as follows:

1. For a corporation, by a principal executive officer of at least the level of vice president;
2. For partnership or sole proprietorship, by a general partner or the proprietor, respectively, or,
3. For a municipality, State, Federal or other public facility, by either a principal executive officer or ranking elected official.



<p>ERROL HYDROELECTRIC COMPANY ERROL HYDRO STATION ANDROSCOGGIN RIVER, NH</p>	<p>NPDES NOI TOPOGRAPHIC MAP JUNE 2013</p>	<p>PAGE 1 OF 1</p>
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Brookfield

Errol Hydro (NHG0016)

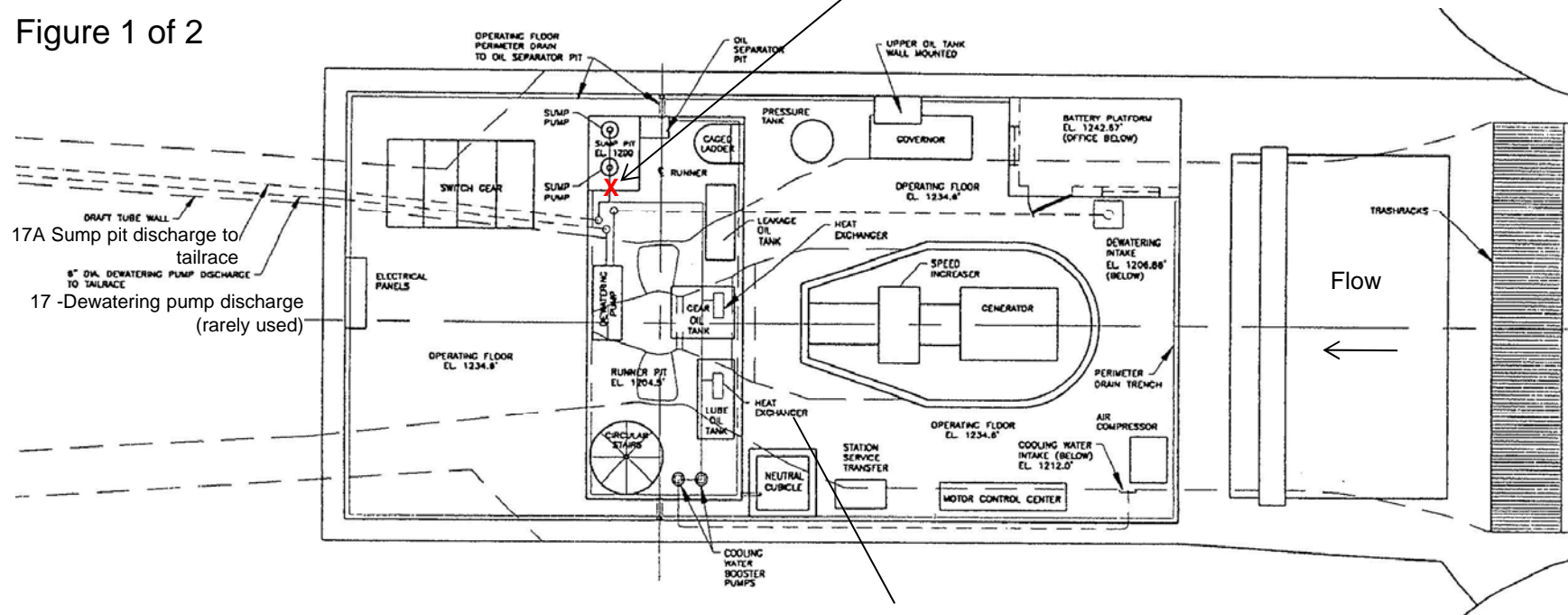
NPDES BMP

Line Drawing - Not to Scale

Revised: June 14, 2013

Sample tap for 17A

Figure 1 of 2



Notes:

1. All water supplied from River
2. Oil separator pit has oil sensor
3. Sensor shuts down sump discharge pumps if oil is detected

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Errol Hydro (NHG0016)

NPDES BMP

Line Drawing - Not to Scale

Revised: June 14, 2013

Figure 2 of 2

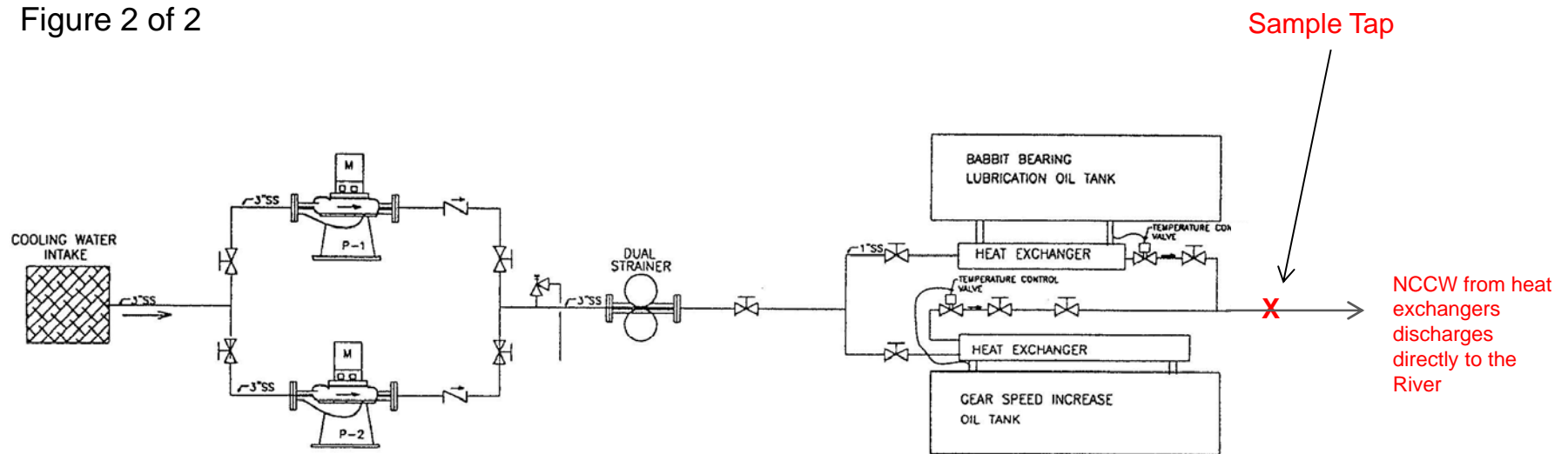


DIAGRAM--EXISTING COOLING WATER PIPING TO THE LUBE OIL AND GEAR OIL HEAT EXCHANGERS