



STATE OF MAINE
Department of Environmental Protection

Paul R. LePage
GOVERNOR

Patricia Aho
ACTING COMMISSIONER

June 22, 2011

Mr. Keith Taylor
Senior Hydrogeologist
St. Germain Collins
846 Main Street, Suite 3
Westbrook, ME. 04092

RE: Maine Pollutant Discharge Elimination System (MEPDES) Permit #ME0037290
Maine Waste Discharge License (WDL) Application #W008067-5R-A-N
ReEnergy Rumford LLC
Final MEPDES Permit/WDL

Dear Mr. Taylor:

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 order 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,

A handwritten signature in cursive script, appearing to read "G. Wood".

Gregg Wood
Division of Water Quality Management
Bureau of Land and Water Quality

Enc.

cc: Beth DeHaas, DEP/CMRO
Scott Reed, Rumford Paper Company

Sandy Mojica, USEPA



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

DEPARTMENT ORDER

IN THE MATTER OF

REENERGY RUMFORD LLC)	MAINE POLLUTANT DISCHARGE
RUMFORD, OXFORD COUNTY, MAINE)	ELIMINATION SYSTEM
ME0037290)	WASTE DISCHARGE LICENSE
W009067-5R-A-N)	NEW
		APPROVAL

Pursuant to the provisions of the Federal Water Pollution Control Act, Title 33 USC, Section 1251, et. seq. and Maine Law 38 M.R.S.A., Section 414-A et seq., and applicable regulations, the Department of Environmental Protection has considered the application of REENERGY RUMFORD LLC (ReEnergy/permittee hereinafter), with its supportive data, agency review comments, and other related material on file and finds the following facts:

APPLICATION SUMMARY

ReEnergy has submitted a complete application to the Department for a new combination Maine Pollutant Discharge Elimination System (MEPDES) permit/Maine Waste Discharge License (WDL). ReEnergy is seeking authorization to discharge up to 30 million gallons per day (MGD) of non-contact cooling water and an unspecified quantity of filter backwash from the Kinney Strainers to the Androscoggin River, Class C, in Rumford, Maine. It is noted these discharges are already permitted to discharge via MEPDES ME0002054/WDL W000955-5N-F-R, (permit hereinafter) last issued to the Rumford Paper Company (RPC) on September 21, 2005. Said permit expired on September 21, 2010, but RPC submitted a timely and complete application to the Department to renew the permit on July 1, 2010, and was accepted for processing by the Department on July 8, 2010.

On March 16, 2011, ReEnergy and RPC entered into an Asset Sale Agreement in which ReEnergy agreed to purchase from RPC certain energy producing assets located at the Rumford Mill. ReEnergy anticipates that the closing on this transaction will take place on June 30, 2011.

The asset sale includes #3, #5, #6, and #7 Boilers, two turbine generators, fuel storage and handling systems, land, and other infrastructure associated with this equipment. ReEnergy will use these assets for the generation of electricity and steam. As a result of this asset sale, Outfalls #005 and #006 will now be owned and operated by ReEnergy. Process waste water from these ReEnergy assets will continue to be treated in the RPC waste water treatment plant. These outfalls are currently permitted under RPC's September 21, 2005, permit and associated modifications. ReEnergy does not intend to modify the quantity or quality of the discharges and is prepared to adopt the discharge limitations that currently apply under RPC's permit.

PERMIT SUMMARY

This permitting action is carrying forward all the applicable terms and conditions relating to Outfall #005 and Outfall #006 (including the thermal mixing zone) as established in MEPDES ME0002054/WDL W000955-5N-F-R, last issued to the RPC on September 21, 2005.

CONCLUSIONS

BASED on the findings in the attached Fact Sheet dated May 19, 2011, and subject to the Conditions listed below, the Department makes the following conclusions:

1. The discharges, either individually or in combination with other discharges, will not lower the quality of any classified body of water below such classification.
2. The discharges, either individually 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, *Classification of Maine waters*, 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 water 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 discharges 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 above noted application of REENERGY RUMFORD LLC to discharge up to a daily maximum flow of 30 MGD of non-contact cooling water and an unspecified quantity of filter back wash from the Kinney Strainers to the Androscoggin River, Class C, in Rumford, Maine, SUBJECT TO THE ATTACHED 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 closing of the Asset Sale Agreement and expires on June 20, 2016. Within 30 days after closing, ReEnergy shall certify in writing to the Department the date of the closing. 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) (effective April 1, 2003)*].

PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES

Date of initial receipt of application: May 9, 2011

Date of application acceptance: May 11, 2011

This Order prepared by Gregg Wood, BUREAU OF LAND & WATER QUALITY

SPECIAL CONDITION

A. EFFLUENT LIMITATION & MONITORING REQUIREMENTS

- Beginning the effective date of this permit, the permittee is authorized to discharge cooling water and cooling tower blowdown from **Outfall #005** and filter backwash from **Outfall #006** to the Androscoggin River. Such discharges shall be limited and monitored by the permittee as specified below. The italicized numeric values in brackets in the table below and the tables that follow are not limitations but are code numbers used by Department personnel to code Discharge Monitoring Reports (DMR's).

OUTFALL #005 – Co-generation (Non-contact cooling waters and cooling tower blowdown)

Operation of the cooling tower is required between May 15 and September 30 each year.

Effluent Characteristic	Discharge Limitations				Minimum Monitoring Requirements	
	Monthly Average as specified	Daily Maximum as specified	Monthly Average as specified	Daily Maximum As specified	Measurement Frequency as specified	Sample Type as specified
Flow [50050]	---	---	Report MGD [03]	30 MGD [03]	Continuous [99/99]	Record [RC]
Temperature [00011]	---	---	---	105°F [15]	Continuous [99/99]	Record [RC]
Total residual chlorine [50060]				0.2 mg/L ⁽¹⁾ [15]	1/Day [01/01]	Grab [GR]
pH (Effluent) [00400]	---	---	---	5.0 – 9.0 SU ⁽²⁾ [12]	1/Month [01/30]	Grab [GR]
pH (Ambient) [00400]	---	---	---	Report SU ⁽²⁾ [12]	When applicable [02/99]	Grab [GR]

Down-time of the cooling tower for the purposes of maintenance shall be kept to a minimum and scheduled during times when the thermal discharge will have minimal impact on the receiving waters. **The permittee is required to verbally contact the Department within 24 hours and in writing within 5 days should the cooling tower be off-line for more than a 12-hour period of time.**

OUTFALL #006 – Kinney Strainer – (Filter backwash)

No limitations or monitoring requirements are being established for this outfall due to the nature of the discharge. The discharge shall be uncontaminated except for backwashed solids and debris removed from the river.

Footnotes : See page 5 of this permit.

SPECIAL CONDITIONS

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (cont'd)

Footnotes:

Sampling – Sampling and analysis must be conducted in accordance with; a) methods approved in 40 Code of Federal Regulations (CFR) Part 136, b) alternative methods approved by the Department in accordance with the procedures in 40 CFR Part 136, or c) as otherwise specified by the Department. Samples that are sent out for analysis shall be analyzed by a laboratory certified by the State of Maine’s Department of Human Services. Samples that are sent to another POTW licensed pursuant to *Waste discharge licenses*, 38 M.R.S.A. § 413 or laboratory facilities that analyze compliance samples in-house are subject to the provisions and restrictions of *Maine Comprehensive and Limited Environmental Laboratory Certification Rules*, 10-144 CMR 263 (last amended February 13, 2000).

All analytical test results shall be reported to the Department including results which are detected below the respective reporting limits (RLs) specified by the Department or as specified by other approved test methods. If a non-detect analytical test result is below the respective RL, the concentration result shall be reported as <Y where Y is the RL achieved by the laboratory for each respective parameter. Reporting a value of <Y that is greater than an established RL or reporting an estimated value (“J” flagged) is not acceptable and will be rejected by the Department. Reporting analytical data and its use in calculations must follow established Department guidelines specified in this permit or in available Department guidance documents.

- (1) **Total Residual Chlorine (TRC)** – The permittee shall utilize approved test methods that are capable of bracketing the limitation in this permit.
- (2) **pH** - The pH of the discharge shall be in the range of 5.0 – 9.0 standard units unless exceedences of this pH range are due to ambient pH levels in the Androscoggin River outside of this range. In such an event, the pH of the discharge may not be more than 0.5 standard units higher or lower than the ambient pH of the river as measured upstream of all the outfalls, including all outfalls associated with the RPC mill. In such an event, the permittee shall report the pH of both the discharge and the river.

SPECIAL CONDITIONS

B. NARRATIVE EFFLUENT LIMITATIONS

1. The effluent shall not contain a visible oil sheen, foam or floating solids at any time which would impair the usages designated by the classification of the receiving waters.
2. The effluent shall not contain materials in concentrations or combinations which are hazardous or toxic to aquatic life, or which would impair the usages designated by the classification of the receiving waters.
3. The discharge shall not cause visible discoloration or turbidity in the receiving waters, which would impair the usages designated by the classification of the receiving waters.
4. Notwithstanding specific conditions of this permit the effluent must not lower the quality of any classified body of water below such classification, or lower the existing quality of any body of water if the existing quality is higher than the classification.

C. AUTHORIZED DISCHARGES

The permittee is authorized to discharge only in accordance with; 1) the permittee's General Application for Waste Discharge Permit, accepted for processing by the Department on May 11, 2011; 2) the terms and conditions of this permit, and 3) only from Outfalls #005 and #006. Discharges of wastewater from any other point source are not authorized under this permit, and shall be reported in accordance with Standard Condition B(5), *Bypasses*, of this permit.

D. NOTIFICATION REQUIREMENTS

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.

E. ZONE OF INITIAL DILUTION & MIXING ZONE

The zone of initial dilution for the thermal discharge from the ReEnergy Rumford LLC facility is described as beginning at Outfall #005 and extending downstream a distance of approximately 2.2 miles to the west end (upstream end) of Burke Island. See **Attachment A** of this permit for a map illustrating the extent of the zone of initial dilution.

The mixing zone established by the Department for the thermal discharge from the ReEnergy Rumford LLC facility is described as beginning at Outfall #005 and extending downstream approximately 12 miles to a point where the Dixfield, Canton and Peru Town lines intersect at a point in the thread of the Androscoggin River. See **Attachment A** of this permit for a map illustrating the extent of the mixing zone.

The receiving waters shall not be tested for temperature violations within the designated zone of initial dilution or the established mixing zone.

SPECIAL CONDITIONS

F. MONITORING AND REPORTING

Monitoring results obtained during the previous month shall be summarized for each month and reported on separate Discharge Monitoring Report (DMR) forms provided by the Department and shall be postmarked by the thirteenth (13th) day of the month or hand-delivered to a Department Regional Office such that the DMRs are received by the Department by the fifteenth (15th) day of the month following the completed reporting period. A signed copy of the DMR and all other reports required herein shall be submitted, unless otherwise specified, to the Department's facility inspector at:

Department of Environmental Protection
Central Maine Regional Office
Bureau of Land & Water Quality
Division of Water Quality Management
17 State House Station
Augusta, Maine 04333-0017

Alternatively, if you are submitting an electronic Discharge Monitoring Report (eDMR), the completed eDMR must be electronically submitted to the Department by a facility authorized DMR Signatory not later than close of business on the 15th day of the month following the completed reporting period. Hard Copy documentation submitted in support of the eDMR must be postmarked on or before the thirteenth (13th) day of the month or hand-delivered to the Department's Regional Office such that it is received by the Department on or before the fifteenth (15th) day of the month following the completed reporting period. Electronic documentation in support of the eDMR must be submitted not later than close of business on the 15th day of the month following the completed reporting period.

G. REOPENING OF PERMIT FOR MODIFICATION

Upon evaluation of the test results in the Special Conditions of this permitting action, new site-specific information, or any other pertinent test results or information obtained during the term of this permit, the Department may, at any time and with notice to the permittee, modify this permit to: (1) include effluent limits necessary to control specific pollutants or whole effluent toxicity where there is a reasonable potential that the effluent may cause water quality criteria to be exceeded; (2) require additional monitoring if results on file are inconclusive; or (3) change monitoring requirements or limitations based on new information.

H. 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.

ATTACHMENT A

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

FACT SHEET

DATE: May 19, 2011

MEPDES PERMIT NUMBER: **ME0037290**
WASTE DISCHARGE LICENSE: **W009067-5R-A-N**

NAME AND ADDRESS OF APPLICANT:

**REENERGY RUMFORD LLC
20 Century Hill Drive
Latham, NY 12110**

COUNTY: **Oxford**

NAME AND ADDRESS WHERE DISCHARGE OCCURS:

**River Street
Rumford, Maine**

RECEIVING WATER / CLASSIFICATION: **Androscoggin River, Class C**

COGNIZANT OFFICIAL AND TELEPHONE NUMBER: **Mr. Keith Taylor
St. Germain Collins
(207) 591-7000 ext. 22
e-mail: keitht@stgermaincollins.com**

1. APPLICATION SUMMARY

- a. Application - ReEnergy Rumford LLC (ReEnergy/permittee hereinafter) has submitted a complete application to the Department for a new combination Maine Pollutant Discharge Elimination System (MEPDES) permit/Maine Waste Discharge License (WDL). ReEnergy is seeking authorization to discharge up to 30 million gallons per day (MGD) of non-contact cooling water and an unspecified quantity of filter backwash from the Kinney Strainers to the Androscoggin River, Class C, in Rumford, Maine. See **Attachment A** of this Fact Sheet for a location map. It is noted these dischargers are already permitted to discharge via MEPDES ME0002054/WDL W000955-5N-F-R, (permit hereinafter) last issued to the Rumford Paper Company (RPC) on September 21, 2005. Said permit expired on September 21, 2010, but RPC submitted a timely and complete application to the Department to renew the permit on July 1, 2010, and was accepted for processing by the Department on July 8, 2010.

1. APPLICATION SUMMARY (cont'd)

On March 16, 2011, ReEnergy and RPC entered into an Asset Sale Agreement in which ReEnergy agreed to purchase from RPC certain energy producing assets located at the Rumford Mill. ReEnergy anticipates that the closing on this transaction will take place on June 30, 2011.

The asset sale includes #3, #5, #6, and #7 Boilers, two turbine generators, fuel handling systems, land, and other infrastructure associated with this equipment. ReEnergy will use these assets for the generation of electricity and steam. As a result of this asset sale, Outfalls #005 and #006 will now be owned and operated by ReEnergy. Process waste water from these ReEnergy assets will continue to be treated in the RPC waste water treatment plant. See **Attachment B** of this Fact Sheet for a map of the mill complex and outfall locations. These outfalls are currently permitted under RPC's September 21, 2005, permit and associated modifications. ReEnergy does not intend to modify the quantity or quality of the discharges and is prepared to adopt the discharge limitations that currently apply under RPC's permit.

- b. Source Description – Description for each outfall are as follows:

Outfall #005

Outfall #005 is used intermittently for the discharge of untreated non-contact cooling water from the #4 Turbine Generator condenser. Number 4 Turbine Generator utilizes steam from the #6, #7, and C-Recovery Boilers to produce electricity (#6 and #7 Boilers will be owned by RER). After the steam passes through the turbine, it is condensed through non-contact exchange of heat to the cooling water. The clean steam condensate is returned to the boiler for steam production. The cooling water can be managed by two methods. Typically, the cooling water operates as a closed loop. The cooling water (hot from the condenser) is sent through cooling towers to remove the heat before it is re-circulated back to the turbine condenser. During periods when the cooling towers are completely or partially shut-down, the turbine condenser can operate in "once-through-mode". In this mode, river water is pumped through the condenser and returned to the Androscoggin River by way of outfall #005 without being re-circulated. In once-through mode, Outfall #005 is currently licensed to discharge up to an average of 30 million gallons per day with a daily maximum temperature of 105°F and a chlorine residual limitation (essentially obsolete since chlorine compounds are no longer used for disinfection). RER is prepared to operate under the same discharge limitations.

Outfall #005 originates from a 36-inch diameter underground steel pipe that runs from the #4 Turbine Generator building to an above-ground 12-foot diameter, steel hydropower penstock near the surge tanks. The penstocks convey river water from the upper canal to the lower hydroelectric station before it re-enters the Androscoggin River. The canal, penstocks, and lower hydroelectric station are owned and operated by Rumford Falls Hydro, LLC (aka Brookfield). The top-of-pipe elevation for the outfall is approximately 416 feet mean seal level (MSL) while the summer river levels at this point are approximately 420 feet MSL. There is no diffuser associated with this outfall. See **Attachment C** of this Fact Sheet for a schematic.

1. APPLICATION SUMMARY (cont'd)

Outfall #006

Outfall #006 discharges screening backwash from the Kinney Strainers and backwash water from the L'eau Claire Upflow Sand Filters associated with the Cogeneration Boilers #6 and #7. The outfall has continuous flow near 4.5 MGD, although the rate may change according to the backwashing activity. These strainers/filters remove debris from incoming river water to prepare it for use as make-up water to the boiler feedwater treatment system and the turbine condenser cooling systems. The water discharged from Outfall #006 is uncontaminated, but may contain backwashed solids and debris removed from the river water during filtration. This water is discharged by gravity into the Androscoggin River via an underground 18-inch reinforced concrete pipe. The top-of-pipe elevation is approximately 413 feet MSL and the summertime river elevation is approximately 414 feet MSL. See **Attachment C** of this Fact Sheet for a schematic.

- c. Waste Water Treatment: The non-contact cooling water does not receive any form of treatment prior to discharge as the water is uncontaminated except for heat. The filter backwash from the Kinney strainer does not receive any form of treatment as it only consists of solids extracted from the river.

2. PERMIT SUMMARY

- a. Terms and conditions: This permitting action is carrying forward all the applicable terms and conditions relating to Outfall #005 and Outfall #006 (including the thermal mixing zone) as established in MEPDES ME0002054/WDL W000955-5N-F-R, last issued to the RPC on September 21, 2005.

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 (effective October 9, 2005), 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)(A)(2) classifies the Androscoggin River at the point of discharge as a Class C waterway. *Standards for classification of fresh surface waters*, 38 M.R.S.A. § 465(4)(C) describes the standards for Class C waters.

5. EFFLUENT LIMITATIONS & MONITORING REQUIREMENTS

- a. Flow: This permitting action is carrying forward the daily maximum flow limitation of 30 MGD from RPC's September 21, 2005, permit as RPC indicated it was representative of the design discharge flow from the facility. A review of the monthly DMR data for the period January 2006 – February 2011 indicates the facility has only reported one flow value of 29.4 MGD (November 2010).
- b. Temperature – This permitting action is carrying forward the daily maximum temperature limit of 105°F from RPC's September 21, 2005, permit as RPC indicated it was representative of the maximum expected temperature of the discharge from the facility. A review of the monthly DMR data for the period January 2006 – February 2011 indicates the facility has only reported one temperature value of 69°F (November 2010) during said period.
- c. Total residual chlorine (TRC) – This permitting action is carrying forward the daily maximum TRC limit of 0.20 mg/L from RPC's September 21, 2005, permit. The limitation was established in RPC's permit based on a best available technology economically achievable (BAT) limitation established in federal regulation found at 40 CFR, Part 423, *Steam Electric Power Generating Point Source Category*, §423((b)(1). A review of the monthly DMR data for the period January 2006 – February 2011 indicates the facility has only reported one TRC value of 0.0 mg/L (November 2010) during said period.
- d. Thermal mixing zone – RPC's September 21, 2005, permit established a formal zone of initial dilution (ZID) and mixing zone. The ZID was described as beginning at Outfall #001 and extending downstream a distance of approximately 2.2 miles to the west end (upstream end) of Burke Island. The mixing zone was described as beginning at Outfall #001 and extending downstream approximately 12 miles to a point where the Dixfield, Canton and Peru Town lines intersect at a point in the thread of the Androscoggin River. The physical characteristics of the ZID and mixing zone were determined by extensive ambient water quality monitoring conducted in the early 1990s. The establishment of a formal ZID and mixing zone were necessary as at full permitted flow and critical low (7Q10) flow conditions for the Androscoggin River, the discharge from the mill complex could not comply with the temperature increase criteria established in 06-096 CMR, Department rule Chapter 582, *Regulations Relating To Temperature*.

Chapter 582, limits thermal discharges to an in-stream temperature increase (ΔT) of 0.5° F above the ambient receiving water temperature when the weekly average temperature of the receiving water is greater than or equal to 66° F or when the daily maximum temperature is greater than or equal to 73° F. The temperature thresholds are based on EPA water quality criterion for the protection of brook trout and Atlantic salmon (both species indigenous to the Androscoggin River). The weekly average temperature of 66° F was derived to protect for normal growth of the brook trout and the daily maximum threshold temperature of 73° F protects for the survival of juveniles and adult Atlantic salmon during the summer months. As a point of clarification, the Department interprets the term, "weekly average

5. EFFLUENT LIMITATIONS & MONITORING REQUIREMENTS (cont'd)

temperature" to mean a seven (7) day rolling average. To promote consistency, the Department also interprets the ΔT of 0.5° F as a weekly rolling average criterion when the receiving water temperature is $\geq 66^\circ$ F and $< 73^\circ$ F. When the receiving water temperature is $\geq 73^\circ$ F, compliance with the ΔT of 0.5° F is evaluated on a daily basis.

With the removal of Outfall #005 from RPC's permit, the Department must evaluate the thermal impact as a single source. The calculated impact to the receiving water under critical conditions (full permitted flow and temperature and 7Q10), is as follows;

Permitted flow – 30 MGD

Permitted temperature - 105°F

Critical receiving water flow 7Q10 – 1,663 cfs or 1,075 MGD

Critical receiving water temperature - 66°F

Receiving water assimilative capacity = $(1,075 \text{ MGD})(0.5^\circ\text{F})(8.34 \text{ lbs/gal}) = 4.48 \times 10^9 \text{ BTU's}$

Discharge BTU load = $(30 \text{ MGD})(105^\circ\text{F} - 66^\circ\text{F})(8.34 \text{ lbs/gal}) = 9.76 \times 10^9 \text{ BTU's}$

Potential receiving water temperature increase = $\frac{9.76 \times 10^9 \text{ BTU}}{(1,075 \text{ MGD})(8.34 \text{ lbs/gal})} = 1.1^\circ\text{F}$

Therefore, under critical summertime conditions, the ReEnergy discharge by itself would not be in compliance with Chapter 582 criteria. Therefore, the same ZID and mixing zone established in RPC's September 21, 2005, permit is being established in this permitting action. See **Attachment A** of the permit for a map depicting the ZID and mixing zone.

6. DISCHARGE IMPACT ON RECEIVING WATER QUALITY

As permitted, the Department has made a determination based on a best professional judgment that the existing water uses will be maintained and protected and the discharge will not cause or contribute to the failure of the waterbody to meet standards for Class C classification.

7. PUBLIC COMMENTS

Public notice of this application was made in the *Sun Journal* on or about April 23, 2011. The Department receives public comments on an application until the date a final agency action is taken on the 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 *Application Processing Procedures for Waste Discharge Licenses*, 06-096 CMR 522 (effective January 12, 2001).

8. DEPARTMENT CONTACTS

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

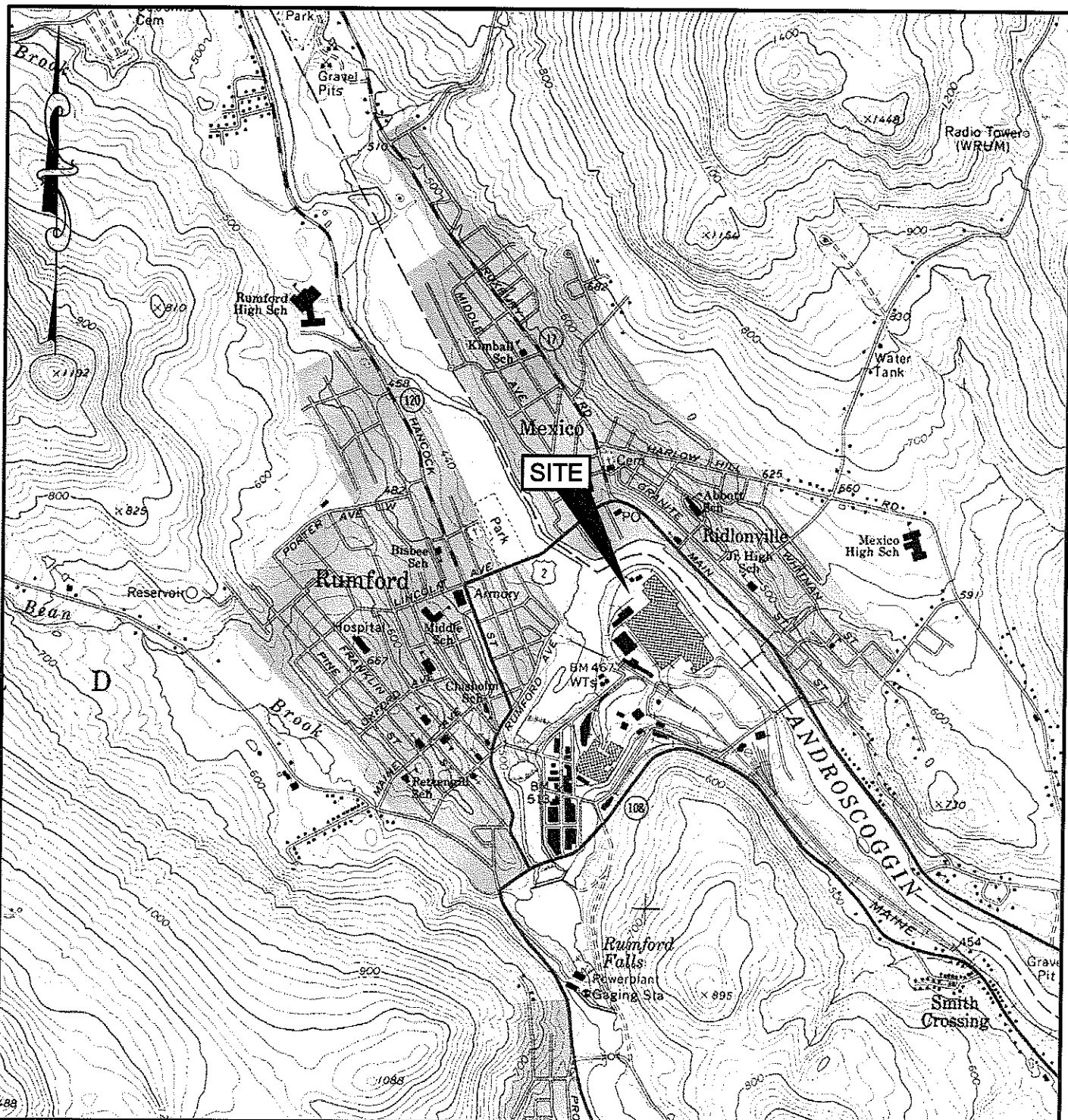
Gregg Wood
Division of Water Quality Management
Bureau of Land & Water Quality
Department of Environmental Protection
17 State House Station
Augusta, Maine 04333-0017 Telephone: (207) 287-7693 Fax: (207) 287-3435
e-mail: gregg.wood@maine.gov

9. RESPONSE TO COMMENTS

During the period of May 19, 2011, through the issuance date of this 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.

ATTACHMENT A

M:\Dwgs\3241 ReEnergy New Page Rumford\3241.3\Draws\3241.3 Fig. 1 Site Loc. Map.dwg 5/5/2011 11:29:40 AM



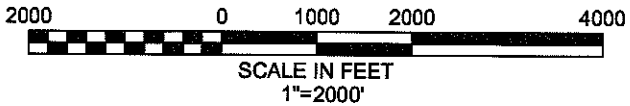
REFERENCE:
 USGS SERIES 7.5 TOPOGRAPHIC MAP, RUMFORD QUADRANGLE,
 OBTAINED FROM TERRAIN NAVIGATOR.

SITE LOCATION MAP
 REENERGY RUMFORD FACILITY
 RUMFORD, ME

REENERGY RUMFORD LLC
 20 CENTURY HILL DR., STE. 203
 LATHAM, NY 12110

ENVIRONMENTAL CONSULTING GROUP
St. Germain • Collins

FIGURE 1



ATTACHMENT B

M:\Dwg\3241_ReEnergy New Page_Rumford\3241.3\Drawings\3241.3 SITE-OUTFALL PLAN.dwg 4/26/2011 12:34:41 PM



APPROXIMATE
PROPERTY LINE

OUTFALL #006

OUTFALL #005

LEGEND:

APPROXIMATE PROPERTY LINE OF
PLANNED REENERGY ACQUISITION

OUTFALL

REFERENCE:
AERIAL PHOTOGRAPH OBTAINED FROM MAINE GIS.

OUTFALL LOCATIONS
REENERGY RUMFORD FACILITY
RUMFORD, MAINE

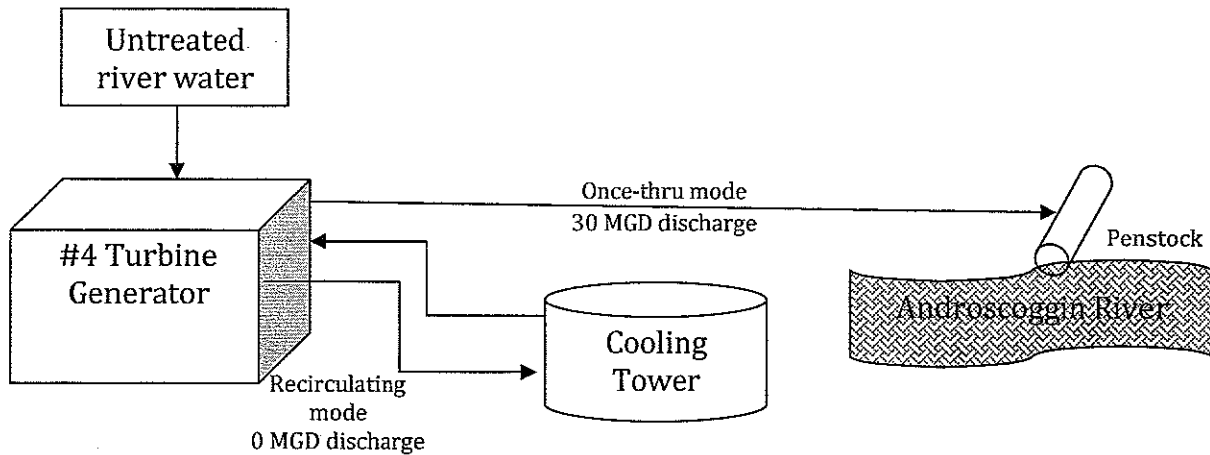
REENERGY RUMFORD LLC
20 CENTURY HILL DR., STE. 203
LATHAM, NY 12110

ENVIRONMENTAL CONSULTING GROUP
St. Germain • Collins

FIGURE 2

ATTACHMENT C

Schematic Diagram of Outfall #005



Schematic Diagram of Outfall #006

