VERMONT

State of Vermont
Department of Environmental Conservation
Wastewater Management Division
103 South Main St – The Sewing Bldg
Waterbury VT05671-0405
www.anr.state.vt.us/dec/ww/wwmd.cfm

[phone] 802-241-3822
[fax] 802-241-2596

Agency of Natural Resources

April 6, 2011

Mr. David Murray
TransCanada Hydro Northeast, Inc.
2 Killeen Street
North Walpole, NH 03609

RE: NPDES Discharge Permits: Corrected Pages

3-1393 – Wilder
3-1394 – Bellows Falls
3-1395 – Harriman
3-1396 – Searsburg
3-1449 – Vernon

Dear Mr. Murray:

Enclosed are corrected signature pages for the above referenced discharge permits. The permittee name has been corrected from: TransCanada Northeast, Inc. to TransCanada Hydro Northeast, Inc. The street address has also been corrected from Killen to Killeen. Each permit authorizes the discharge of cooling waters and other wastewaters from the mentioned facilities to the Deerfield and Connecticut Rivers.

Please replaced the enclosed corrected pages with the pages previously provided. Thank you. If you have any questions regarding these corrections, please contact Randy Bean at 802-241-3825.

Respectfully,

Carole Fowler

Carole Fowler
Administration & Compliance Section

Enclosures: as noted above

Cc: Nicole Bohlman, TransCanada Hydro Northeast, Inc.
NEIWPCC
Corps of Engineers (via e-mail to Martha Abair)
Brian Pitt, US EPA
Sandy Mojica, US EPA (via e-mail)

AGENCY OF NATURAL RESOURCES
DEPARTMENT OF ENVIRONMENTAL CONSERVATION
WASTEWATER MANAGEMENT DIVISION
103 SOUTH MAIN STREET, - THE SEWING BUILDING
WATERBURY, VERMONT 05671-0405

Permit No.: 3-1449
File No.: 02-11
PIN: NS96-0014
NPDES No.: VT0000868

DISCHARGE PERMIT

In compliance with the provisions of the Vermont Water Pollution Control Act, as amended, (10 V.S.A. Chapter 47 §1251 et. seq), and the Federal Clean Water Act, as amended (33 U.S.C. § 1251 et. seq),

TransCanada Hydro Northeast, Inc.
2 Killeen Street
North Walpole, NH 03609

(hereinafter referred to as the "permittee") is authorized, by the Secretary, Agency of Natural Resources, to discharge from a facility located at:

152 Governor Hunt Road
Vernon, Vermont

to the Connecticut River, Class B at the point of discharge in accordance with effluent limitations, monitoring requirements, and other conditions set forth in Parts I, II, III hereof.

This permit shall become effective on July 1, 2011.

This permit and the authorization to discharge shall expire on June 30, 2016.

Signed this 4th day of April, 2011.

David K. Mears, Commissioner
Department of Environmental Conservation

By Christine Thompson
Christine Thompson, Director
Wastewater Management Division

VERMONT

State of Vermont
Department of Environmental Conservation
Wastewater Management Division
103 South Main St – The Sewing Bldg
Waterbury VT05671-0405
www.anr.state.vt.us/dec/ww/wwmd.cfm

[phone] 802-241-3822
[fax] 802-241-2596

Agency of Natural Resources

April 5, 2011

David Murray
TransCanada Hydro Northeast, Inc.
2 Killen Street
North Walpole, NH 02609

RE: Discharge Permits: No. 3-1393 – Wilder; No. 3-1394 – Bellows Falls; No. 3-1395 – Harriman; No. 3-1396 – Searsburg; and No. 3-1449 – Vernon.

Dear Mr. Murray,

Enclosed is your copy of the above referenced discharge permits which have been signed on behalf of the Commissioner of the Department of Environmental Conservation. These permits authorize the discharge of cooling waters and other wastewaters from your facilities to the Deerfield and Connecticut Rivers.

Please review the permits carefully and make note of the effluent limitations, monitoring requirements, and other special conditions.

With respect to your comments, we have corrected the discrepancies that were noted in your letter in the Searsburg and Vernon permits. The other final permits are unchanged from the drafts that were placed on public notice for comment.

If there are any questions regarding this permit please contact Randy Bean at our office.

Sincerely,

Brian D. Kooiker, Chief
Direct Discharge and O&M Section

attachments

PART I

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

1. From July 1, 2011 through June 30, 2016, the permittee is authorized to discharge from outfall serial number **S/N 001**: **bearing cooling water, sump waters, and other internal drainage water**. Such discharges shall be limited and monitored by the permittee as specified below:

	Discharge Limitations		Monitoring Requirements	
Effluent Characteristic	**Monthly Average**	**Daily Maximum**	**Measurement Frequency**	**Sample Type**
Flow		0.3168 mgd	1 x quarterly (1)	Estimate
Temperature		90°F (2)	1 x quarterly (1)	Grab
Oil & Grease		20 mg/l	1 x quarterly (1)	Grab
pH		6.5 to 8.5 SU(3)	1 x quarterly (1)	Grab

Samples taken in compliance with the monitoring requirements specified above shall be taken from the outfall line.

(1) Flow, temperature, oil & grease, and pH monitoring shall be done on the same day.

(2) The temperature of the discharge shall not exceed 90°F at any time.

(3) The pH of the discharge shall be between 6.5 and 8.5 S.U. or fall within the background range of the river if it exceeds these limitations. Due to the natural pH variation of the river, an effluent sample within ±0.5 of background shall be deemed acceptable. All pH monitoring results shall be included on the quarterly Discharge Monitoring Report, including any upstream river analyses.

2. From July 1, 2011 through June 30, 2016, the permittee is authorized to discharge from outfall serial number **S/N 002**: **uncontaminated water during draft tube dewatering of Unit 5 through Unit 8**. Such discharges shall be limited and monitored by the permittee as specified below:

	Discharge Limitations		Monitoring Requirements	
Effluent Characteristic	**Monthly Average**	**Daily Maximum**	**Measurement Frequency**	**Sample Type**
Flow		As necessary	per discharge	Estimate

3. From July 1, 2011 through June 30, 2016, the permittee is authorized to discharge from outfall serial number **S/N 003**: **unon-contact bearing cooling water and auto-strainer backwash from Unit 5 through Unit 10**. Such discharges shall be limited and monitored by the permittee as specified below:

	Discharge Limitations		Monitoring Requirements	
Effluent Characteristic	**Monthly Average**	**Daily Maximum**	**Measurement Frequency**	**Sample Type**
Flow		0.3356 mgd	1 x quarterly (1)	Total Flow
Temperature		90°F (2)	1 x quarterly (1)	Grab
Oil & Grease		20 mg/l	1 x quarterly (1)	Grab
pH		6.5 to 8.5 SU(3)	1 x quarterly (1)	Grab

Samples taken in compliance with the monitoring requirements specified above shall be taken from the outfall line.

(1) Flow, temperature, oil and grease and pH monitoring shall be done on the same day.

(2) The temperature of the discharge shall not exceed 90°F at any time.

(3) The pH of the discharge shall be between 6.5 and 8.5 S.U. or fall within the background range of the river if it exceeds these limitations. Due to the natural pH variation of the river, an effluent sample within ±0.5 of background shall be deemed acceptable. All pH monitoring results shall be included on the quarterly Discharge Monitoring Report, including any upstream river analyses.

4. **Special Conditions**

a. The station sump shall be inspected weekly and cleaned as necessary. Any oil or absorbent materials shall be disposed in accordance with station and federal regulations and in such a manner discharges of these materials to waters of the State occur.

b. The discharge of cleaning or caustic chemicals to the tailrace is prohibited.

c. The permittee shall continue to implement the Spill Prevention Control and Countermeasure Plan received by the Agency on February 11, 2011. ny significant changes to this plan shall be submitted to the Agency for review prior to implementation.

d. This discharge shall not cause a violation of Water Quality Standards in the receiving water.

B. REAPPLICATION

If the permittee desires to continue to discharge after the expiration date of this permit, he shall apply on the application forms then in use at least 180 days before the permit expires.

Reapply for a Discharge permit by December 31, 2015.

C. OPERATING FEES

This discharge is subject to operating fees. The permittees shall submit the operating fees in accord with the procedures provided by the Secretary.

D. MONITORING AND REPORTING

1. Sampling and Analysis

The sampling, preservation, handling, and analytical methods used shall conform to regulations published pursuant to Section 304(g) of the Clean Water Act, under which such procedures may be required. Guidelines establishing these test procedures have been published in the Code of Federal Regulations, Title 40, Part 136 (Federal Register, Vol. 56, No. 195, July 1, 1999 or as amended).

If applicable, *Escherichia coli* shall be tested using one of the following methods:

a. "Most Probable Number" (MPN) method 9223B found in Standard Methods for the Examination of Water and Wastewater, 18th or subsequent approved edition(s). Premade formulations are available as Colilert and Colilert 18 from IDEXX Labs Inc., Westbrook, ME;

b. EPA "membrane filtration" (MF) method 1603 using modified mTEC; or

c. A single step membrane filtration (MF) method using mColiBlue 24 available from Hach Company, Loveland, CO.

Samples shall be representative of the volume and quality of effluent discharged over the sampling and reporting period. All samples are to be taken during normal operating hours. The permittee shall identify the effluent sampling location used for each discharge.

2. Reporting

The Permittee is required to submit monitoring results as specified on a Discharge Monitoring Report (Form WR-43). Reports are due on the 15th day of each month, beginning with the month following the effective date of this permit.

If, in any reporting period, there has been no discharge, the permittee must submit that information by the report due date.

Signed copies of these, and all other reports required herein, shall be submitted to the Secretary at the following address:

Agency of Natural Resources
Department of Environmental Conservation
Wastewater Management Division

103 South Main Street, The Sewing Building
Waterbury, Vermont 05671-0405

All reports shall be signed:

a. In the case of corporations, by a principal executive officer of at least the level of vice president, or his/her duly authorized representative, if such representative is responsible for the overall operation of the facility from which the discharge described in the permit form originates;

b. In the case of a partnership, by a general partner;

c. In the case of a sole proprietorship, by the proprietor;

d. In the case of a municipal, State, or other public facility, by either a principal executive officer, ranking elected official, or other duly authorized employee.

3. Recording of Results

The permittee shall maintain records of all information resulting from any monitoring activities required including:

a. The exact place, date, and time of sampling;
b. The dates and times the analyses were performed;
c. The person(s) who performed the analyses;
d. The analytical techniques and methods used including sample collection handling and preservation techniques;
e. The results of all required analyses.
f. The records of monitoring activities and results, including all instrumentation and calibration and maintenance records;
g. The original calculation and data bench sheets of the operator who performed analysis of the influent or effluent pursuant to requirements of Section I.(A) of this permit.

The results of monitoring requirements shall be reported (in the units specified) on the Vermont reporting form WR-43 or other forms approved by the Secretary.

4. Additional Monitoring

If the permittee monitors any pollutant at the location(s) designated herein more frequently than required by this permit, using approved analytical methods as specified above, the results of such monitoring shall be included in the calculation and reporting of the values required in the Discharge Monitoring Report Form WR-43. Such increased frequency shall also be indicated.

PART II

A. MANAGEMENT REQUIREMENTS

1. Facility Modification / Change in Discharge:

All discharges authorized herein shall be consistent with the terms and conditions of this permit. The discharge of any pollutant more frequently than, or at a level in excess of, that identified and authorized by this permit shall constitute a violation of the terms and conditions of this permit. Such a violation may result in the imposition of civil and/or criminal penalties as provided for in Section 1274 and 1275 of the Vermont Water Pollution Control Act. Any anticipated facility expansions, production increases, or process modifications which will result in new, different, or increased discharges of pollutants must be reported by submission of a new permit application or, if such changes will not violate the effluent limitations specified in this permit, by notice to the permit issuing authority of such changes. Following such notice, the permit may be modified to specify and limit any pollutants not previously limited.

2. Noncompliance Notification

In the event the permittee is unable to comply with any of the conditions of this permit due, among other reasons, to:

a. breakdown or maintenance of waste treatment equipment (biological and physical-chemical systems including, but not limited to, all pipes, transfer pumps, compressors, collection ponds or tanks for the segregation of treated or untreated wastes, ion exchange columns, or carbon absorption units),

b. accidents caused by human error or negligence, or

c. other causes such as acts of nature,

the permittee shall notify the Secretary within 24 hours of becoming aware of such condition or by the next business day and shall provide the Secretary with the following information, in writing, within five (5) days:

i. cause of non-compliance

ii. a description of the non-complying discharge including its impact upon the receiving water;

iii. anticipated time the condition of non-compliance is expected to continue or, if such condition has been corrected, the duration of the period of non-compliance;

iv. steps taken by the permittee to reduce and eliminate the non-complying discharge; and

v. steps to be taken by the permittee to prevent recurrence of the condition of non-compliance.

3. Operation and Maintenance

All waste collection, control, treatment, and disposal facilities shall be operated in a manner consistent with the following:

a. The permittee shall, at all times, maintain in good working order and operate as efficiently as possible all treatment or control facilities or systems installed or used by the permittee to achieve compliance with the terms and conditions of this permit.

b. The permittee shall provide an adequate operating staff which is duly qualified to carry out the operation, maintenance, and testing functions required to insure compliance with the conditions of this permit.

4. Quality Control

The permittee shall calibrate and perform maintenance procedures on all monitoring and analytical instrumentation at regular intervals to ensure accuracy of measurements, or shall ensure that both activities will be conducted.

The permittee shall keep records of these activities and shall provide such records upon request of the Secretary.

The permittee shall analyze any additional samples as may be required by the Agency of Natural Resources to ensure analytical quality control.

5. Bypass

The diversion or bypass of facilities, necessary to maintain compliance with the terms and conditions of this permit, is prohibited, except where authorized under terms and conditions of an emergency pollution permit issued pursuant to 10 V.S.A. Section 1268.

6. Duty to Mitigate

The permittee shall take all reasonable steps to minimize or prevent any adverse impact to waters of the State resulting from non-compliance with any condition specified in this permit, including accelerated or additional monitoring as necessary to determine the nature and impact of the non-complying discharge.

7. Records Retention

All records and information resulting from the monitoring activities required by this permit including all records of analyses performed, calibration and maintenance of instrumentation, and recordings from continuous monitoring instrumentation shall be retained for a minimum of three (3) years, and shall be submitted to Department representatives upon request. This period shall be extended during the course of

unresolved litigation regarding the discharge of pollutants or when requested by the Secretary.

8. Solids Management

Collected screenings, sludges, and other solids removed in the course of treatment and control of wastewaters shall be stored, treated and disposed of in accord with 10 V.S.A., Chapter 159 and with the terms and conditions of any certification, interim or final, transitional operation authorization or order issued pursuant to 10 V.S.A., Chapter 159 that is in effect on the effective date of this permit or is issued during the term of this permit.

9. Emergency Pollution Permits

Maintenance activities, or emergencies resulting from equipment failure or malfunction, including power outages, which result in an effluent which exceeds the effluent limitations specified herein, shall be considered a violation of the conditions of this permit, unless the permittee immediately applies for, and obtains, an emergency pollution permit under the provisions of 10 V.S.A., Chapter 47, Section 1268. The permittee shall notify the Department of the emergency situation by the next working day.

10 V.S.A., Chapter 47, Section 1268 reads as follows:

"When a discharge permit holder finds that pollution abatement facilities require repairs, replacement or other corrective action in order for them to continue to meet standards specified in the permit, he may apply in the manner specified by the secretary for an emergency pollution permit for a term sufficient to effect repairs, replacements or other corrective action. The permit may be issued without prior public notice if the nature of the emergency will not provide sufficient time to give notice; provided that the secretary shall give public notice as soon as possible but in any event no later than five days after the effective date of the emergency pollution permit. No emergency pollution permit shall be issued unless the applicant certifies and the secretary finds that:

(1) there is no present, reasonable alternative means of disposing of the waste other than by discharging it into the waters of the state during the limited period of time of the emergency;

(2) the denial of an emergency pollution permit would work an extreme hardship upon the applicant;

(3) the granting of an emergency pollution permit will result in some public benefit;

(4) the discharge will not be unreasonably harmful to the quality of the receiving waters;

(5) the cause or reason for the emergency is not due to wilful or intended acts or omissions of the applicant."

Application shall be made to the Secretary of the Agency of Natural Resources, Department of Environmental Conservation, 103 South Main Street, Waterbury, Vermont 05671-0405.

10. Power Failure

In order to maintain compliance with the effluent limitations and prohibitions of this permit, the permittee shall either:

a. Provide an alternative power source sufficient to operate the wastewater control facilities, or if such alternative power source is not in existence,

b. Halt, reduce, or otherwise control production and/or all discharges upon the reduction, loss, or failure of the primary source of power to the wastewater control facilities.

B. RESPONSIBILITIES

1. Right of Entry

The permittee shall allow the Secretary or authorized representative, upon the presentation of proper credentials:

a. to enter upon the permittee's premises in which an effluent source or any records required to be kept under terms and conditions of the permit are located;

b. to have access to and copy any records required to be kept under the terms and conditions of the permit;

c. to inspect any monitoring equipment or method required in the permit; or

d. to sample any discharge of pollutants.

2. Transfer of Ownership or Control

This permit is not transferable without prior written approval of the Secretary. All application and operating fees must be paid in full prior to transfer of this permit. In the event of any change in control or ownership of facilities from which the authorized discharges emanate, the permittee shall provide a copy of this permit to the succeeding owner or controller and shall send written notification of the change in ownership or control to the Secretary. The permittee shall also inform the prospective owner or operator of their responsibility to make an application for transfer of this permit.

This request for transfer application must include as a minimum:

a. A properly completed application form provided by the Secretary and the applicable processing fee.

b. A written statement from the prospective owner or operator certifying:

i.. The conditions of the operation that contribute to, or affect, the discharge will not be materially different under the new ownership.

ii. The prospective owner or operator has read and is familiar with the terms of the permit and agrees to comply with all terms and conditions of the permit.

iii. The prospective owner or operator has adequate funding to operate and maintain the treatment system and remain in compliance with the terms and conditions of the permit.

c. The date of the sale or transfer.

The Secretary may require additional information dependent upon the current status of the facility operation, maintenance, and permit compliance.

3. Confidentiality

Pursuant to 10 V.S.A. 1259(b):

"Any records, reports or information obtained under this permit program shall be available to the public for inspection and copying. However, upon a showing satisfactory to the secretary that any records, reports or information or part thereof, other than effluent data, would, if made public, divulge methods or processes entitled to protection as trade secrets, the secretary shall treat and protect those records, reports or information as confidential. Any records, reports or information accorded confidential treatment will be disclosed to authorized representatives of the state and the United States when relevant to any proceedings under this chapter."

4. Permit Modification

After notice and opportunity for a hearing, this permit may be modified, suspended, or revoked in whole or in part during its term for cause including, but not limited to, the following:

a. violation of any terms or conditions of this permit;

b. obtaining this permit by misrepresentation or failure to disclose fully all relevant facts; or

c. a change in any condition that requires either a temporary or permanent reduction or elimination of the permitted discharge.

5. Toxic Effluent Standards

That if a toxic effluent standard or prohibition (including any schedule of compliance specified in such effluent standard or prohibition) is established under section 307(a) of the Federal Act for a toxic pollutant which is present in the permittee's discharge and such standard or prohibition is more stringent than any limitation upon such pollutant in the

permit, the secretary shall revise or modify the permit in accordance with the toxic effluent standard or prohibition and so notify the permittee.

6. Oil and Hazardous Substance Liability

Nothing in this permit shall be construed to preclude the institution of legal action or relieve the permittee from any responsibilities, liabilities, or penalties to which the permittee is or may be subject under 10 V.S.A. §1281.

7. Civil and Criminal Liability

Except as provided in, "Bypass" (Part II, paragraph A.5.), "Power Failure" (Part II, paragraph A.10.), and "Emergency Pollution Permits" (Part II, paragraph A.9.), nothing in this permit shall be construed to relieve the permittee from civil or criminal penalties for noncompliance. Civil penalties, as authorized under 10 V.S.A. §1274 and 10 V.S.A. §8010, shall not exceed $10,000 a day for each day of violation. Criminal penalties, as authorized under 10 V.S.A. §1275, shall not exceed $25,000 for each day of violation, imprisonment for up to six months, or both.

8. State Laws

Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties established pursuant to any applicable State law or regulation under authority preserved by Section 510 of the Clean Water Act.

9. Property Rights

Issuance of this permit does not convey any property rights in either real or personal property, or any exclusive privileges, nor does it authorize any injury to private property or any invasion of personal rights, nor any infringement of Federal, State, or local laws or regulations.

10. Severability

The provisions of this permit are severable, and if any provision of this permit, or the application of any provision of this permit to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected thereby.

11. Authority

This permit is issued under authority of 10 V.S.A. §1259 which states that: "No person shall discharge any waste, substance, or material into waters of the State, nor shall any person discharge any waste, substance, or material into an injection well or discharge into a publicly owned treatment works any waste which interferes with, passes through without treatment, or is otherwise incompatible with those works or would have a substantial adverse effect on those works or on water quality, without first obtaining a permit for that

discharge from the Secretary", and under the authority of Section 402 of the Clean Water Act, as amended.

PART III

A. OTHER REQUIREMENTS

This permit shall be modified, suspended or revoked to comply with any applicable effluent standard or limitation issued or approved under Sections 301(b) (2) (C), and (D), 304(b) (2), and 307 (a) (2) of the Clean Water Act, if the effluent standard or limitation so issued or approved:

1. Contains different conditions or is otherwise more stringent than any effluent limitation in the permit; or

2. Controls any pollutant not limited in the permit.

The permit as modified under this paragraph shall also contain any other requirements of the Vermont Water Pollution Control Act then applicable.

B. DEFINITIONS

For purposes of this permit, the following definitions shall apply:

The Act - The Vermont Water Pollution Control Act, 10 V.S.A. Chapter 47

Annual Average - The highest allowable average of daily discharges calculated as the sum of all daily discharges (mg/l, lbs or gallons) measured during a calendar year divided by the number of daily discharges measured during that year.

Average - The arithmetic means of values taken at the frequency required for each parameter over the specified period.

The Clean Water Act - The federal Clean Water Act, as amended.

Composite Sample - A sample consisting of a minimum of one grab sample per hour collected during a 24-hour period (or lesser period as specified in the section on Monitoring and Reporting) and combined proportionally to flow over that same time period.

Daily Discharge - The discharge of a pollutant measured during a calendar day or any 24-hour period that reasonably represents the calendar day for purposes of sampling.

For pollutants with limitation expressed in pounds the daily discharge is calculated as the total pounds of pollutants discharged over the day.

For pollutants with limitations expressed in mg/l the daily discharge is calculated as the average measurement of the pollutant over the day.

Grab Sample - An individual sample collected in a period of less than 15 minutes.

Incompatible Substance (Pollutant) - Any waste being discharged into the treatment works which interferes with, passes through without treatment, or is otherwise incompatible with said works or would have a substantial adverse effect on these works or on water quality. This includes all pollutants required to be regulated under the Federal Clean Water Act.

Instantaneous Maximum - A value not to be exceeded in any grab sample.

Major Contributing Industry - One that: (1) has a flow of 50,000 gallons or more per average work day; (2) has a flow greater than five percent of the flow carried by the municipal system receiving the waste; (3) has in its wastes a toxic pollutant in toxic amounts as defined in standards issued under Section 307(a) of the Act; or (4) has a significant impact, either singly or in combination with other contributing industries, on a publicly owned treatment works or on the quality of effluent from that treatment works.

Maximum Day (maximum daily discharge limitation) - The highest allowable "daily discharge" (mg/l, lbs or gallons).

Mean - The mean value is the arithmetic mean.

Monthly Average - (Average monthly discharge limitation) - The highest allowable average of daily discharges (mg/l, lbs or gallons) over a calendar month, calculated as the sum of all daily discharges (mg/l, lbs or gallons) measured during a calendar month divided by the number of daily discharges measured during that month.

NPDES - The National Pollutant Discharge Elimination System.

Secretary - The Secretary of the Agency of Natural Resources

State Certifying Agency Agency of Natural Resources
Department of Environmental Conservation
Wastewater Management Division
103 South Main Street
Waterbury, Vermont 05671-0405

Weekly Average - (Average weekly discharge limitation) - The highest allowable average of daily discharges (mg/l, lbs or gallons) over a calendar week, calculated as the sum of all daily discharges (mg/l, lbs or gallons) measured during a calendar week divided by the number of daily discharges measured during that week.

07/2000; u.4/2007