

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

FACT SHEET

March 2011

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)
PERMIT TO DISCHARGE TO WATERS OF THE UNITED STATES

FILE NO.: 13-14

PROJECT ID NO.: NS95-0208

NPDES NO: VT0000795

PERMIT NO.: 3-1394

NAME AND ADDRESS OF APPLICANT:

TransCanada Hydro Northeast, Inc
2 Killen Street
North Walpole, NH 03609

NAME AND ADDRESS OF FACILITY WHERE DISCHARGE OCCURS:

12 Mill Street
Bellows Falls, Vermont

RECEIVING WATERS AND CLASSIFICATION: Connecticut River: Class B. Class B waters are suitable for bathing and recreation; irrigation and agricultural uses; good fish habitat; good aesthetic value; acceptable of public water supply with filtration and disinfection.

I. Proposed Action, Type of Facility, and Discharge Location

The above named applicant has applied to the Vermont Department of Environmental Conservation for renewal of its permit to discharge into the designated receiving water. The facility generates non-contact cooling water and other miscellaneous wastewaters.

The complete application, draft permit, and other information are on file and may be inspected at the VTDEC, Wastewater Management Division, Waterbury Office. Copies will be made at a cost based on the previous Secretary of State Official Fee Schedule for Copying Public Records from 8:00 am to 4:30 pm, Monday through Friday

II. Description of Discharge

This permit authorizes the discharge of 0.3168 MGD, daily maximum, of bearing cooling water, sump water and other internal drainage water from Discharge Point S/N 001. The permit also authorizes the uncontaminated water generate during draft tube cleaning via Discharge Point S/N 002 and 0.3356 MGD, daily maximum of non-contact bearing cooling water and backwash via Discharge Point S/N 003.. A quantitative description of the discharge in terms of significant effluent parameters is presented in section IV. below.

III. Limitations and Conditions

The effluent limitations of the permit, the monitoring requirements, and any implementation schedule (if required), may be found on the following pages of the permit:

Effluent Limitations: Page 2 and 3

Monitoring Requirements: Page 2 and 3

IV. Permit Basis and Explanation of Effluent Limitation Derivation

History & Summary

TransCanada Hydro Northeast, Inc. owns and operates a hydroelectric power generating facility at 12 Mill Street, Bellows Falls, VT. The facility uses water for cooling in the electrical generation process. Water is extracted from the Connecticut River and is directed through the facility to provide cooling for various industrial processes and is discharged to the Connecticut River. The summer 7Q10 flow of the Connecticut River at the point of discharge is approximately 967 cfs.

Effluent Limitations

Discharge Point S/N 001: Non Contact Cooling Water from the transformer cooling system

Flow

The permit contains a flow limitation of 0.576 MGD, daily maximum. This limitation is based on the capacity of this cooling system and the other water sources and is unchanged from the current permit. Quarterly flow monitoring is required.

Temperature

Due to the cooling process, temperature has been identified as a pollutant of concern in the discharge. Therefore permit contains an effluent temperature limitation of 90°F, daily maximum, and is unchanged from the current permit. This limitation ensures compliance with the requirements of Section 3-01B.1 of the Vermont Water Quality Standards (VWQS). Specifically given the very small instream waste concentration of this discharge during 7Q10 flow conditions (967 cfs) this discharge will not cause a measurable change in the river temperature downstream of the outfall. Temperature monitoring is required once per quarter and is unchanged from the current permit.

pH

The permit contains a pH limitation of 6.5 to 8.5 SU. This limitation is unchanged from the current permit and is based on Section 3-01.B.9 of the Vermont Water Quality Standards. Sampling of pH is required once per quarter. This sampling requirement is unchanged from the current permit.

Discharge Point S/N 002, S/N 009, and S/N 010: Bearing Unit Cooling Water

Flow

The permit contains a flow limitation of 0.023 MGD, daily maximum for each discharge point. This limitation is based on the capacity of this cooling system and the other water sources and is unchanged from the current permit. Quarterly flow monitoring is required.

Temperature

Due to the cooling process, temperature has been identified as a pollutant of concern in the discharge. Therefore permit contains an effluent temperature limitation of 90°F, daily maximum, for each discharge point and is unchanged from the current permit. This limitation ensures compliance with the requirements of Section 3-01B.1 of the Vermont Water Quality Standards (VWQS). Specifically given the very small instream waste concentration of this discharge during 7Q10 flow conditions (967 cfs) this discharge will not cause a measurable change in the river temperature downstream of the outfall. Temperature monitoring is required once per quarter and is unchanged from the current permit.

pH

The permit contains a pH limitation of 6.5 to 8.5 SU. This limitation is unchanged from the current permit and is based on Section 3-01.B.9 of the Vermont Water Quality Standards. Sampling of pH is required once per quarter. This sampling requirement is unchanged from the current permit.

Discharge Point S/N 003: Air Compressor Cooling Water, Sump Water, and Other Internal Drainage Water after treatment via an oil water separator**Flow**

The permit contains a flow limitation of 0.260 MGD, daily maximum. This limitation is based on the capacity of this cooling and auto backwash systems and is unchanged from the current permit. Quarterly flow monitoring is required.

Temperature

Due to the cooling process, temperature has been identified as a pollutant of concern in the discharge. Therefore permit contains an effluent temperature limitation of 90°F, daily maximum, and is unchanged from the current permit. This limitation ensures compliance with the requirements of Section 3-01B.1 of the Vermont Water Quality Standards (VWQS). Specifically given the very small instream waste concentration of this discharge during 7Q10 flow conditions (967 cfs) this discharge will not cause a measurable change in the river temperature downstream of the outfall. Temperature monitoring is required once per quarter and is unchanged from the current permit.

Oil and Grease

Oil and grease has been identified as a pollutant of concern. Therefore, the permit contains an Oil and Grease limitation of 20 mg/l, daily maximum and is established in support of the narrative standard in Section 3-01.B.5 of the Vermont Water Quality Standards. Sampling is required once per quarter. This limitation and sampling frequency is unchanged from the current permit.

pH

The permit contains a pH limitation of 6.5 to 8.5 SU. This limitation is unchanged from the current permit and is based on Section 3-01.B.9 of the Vermont Water Quality Standards. Sampling of pH is required once per quarter. This sampling requirement is unchanged from the current permit.

Discharge Point S/N 004: Wheel Pit and Other Internal Drainage Water

Flow

The permit contains a flow limitation of 1.296 MGD, daily maximum. This limitation is based on the capacity of this cooling and auto backwash systems and is unchanged from the current permit. Quarterly flow monitoring is required.

Temperature

Due to the cooling process, temperature has been identified as a pollutant of concern in the discharge. Therefore permit contains an effluent temperature limitation of 90°F, daily maximum, and is unchanged from the current permit. This limitation ensures compliance with the requirements of Section 3-01B.1 of the Vermont Water Quality Standards (VWQS). Specifically given the very small instream waste concentration of this discharge during 7Q10 flow conditions (967 cfs) this discharge will not cause a measurable change in the river temperature downstream of the outfall. Temperature monitoring is required once per quarter and is unchanged from the current permit.

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pH

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V. Procedures for Formulation of Final Determinations

The public comment period for receiving comments on this draft permit is from February 22, 2011 through March 24, 2011. During this time interested persons may submit their written views on the draft permit. All written comments will be retained by the Department and considered in the formulation of the final determination to issue, deny or modify the draft permit. The period of comment may be extended at the discretion of the Department.

Written comments should be sent to:

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

Comments may also be faxed to: 802-241-2596 or submitted by e-mail using the e-mail comment provisions included at <http://www.anr.state.vt.us/dec/ww/Drafts.htm>

Any interested person or groups of persons may request or petition for a public hearing with respect to this draft permit. Any such request or petition for a public hearing shall be filed within the public comment period described above and shall indicate the interest of the party filing such request and the reasons why a hearing is warranted.

The Department will hold a hearing if there is significant public interest in holding such a hearing. Any public hearing brought in response to such a request or petition will be held in the geographical area of the draft discharge or other appropriate area, at the discretion of the Department and may, as appropriate, consider related groups of draft permits. Any person may submit oral or written statements and data concerning the draft permit at the public hearing. The Department may establish reasonable limits on the time allowed for oral statements and may require the submission of statements in writing. All statements, comments, and data presented at the public hearing will be retained by the Department and considered in the formulation of the final determination to issue, deny, or modify the draft permit.