

AGENCY OF NATURAL RESOURCES
Department of Environmental Conservation
1 National Life Drive, Main 2
Montpelier, VT 05620-3521

INDIRECT DISCHARGE PERMIT
FACT SHEET

September 2017

PERMIT NO.: ID-9-0003
 PERMITTEE: Holbrook Bay Homeowners Association
 NATURE OF WASTE: Treated Domestic Sewage
 DISPOSAL METHOD: Leachfields
 DISPOSAL LOCATION: Latitude N 44° 57' 35.8" and Longitude W 72° 14' 34.1"
 RECEIVING WATERS: Unnamed Tributaries of Lake Memphremagog
 DRAINAGE BASIN: Lake Memphremagog

Aquatic Permitting Criteria

Based on water quality monitoring data for the period February 2012 – February 2017, the following table demonstrates that the indirect discharge of treated domestic sewage from the Holbrook Bay Condominiums meets the aquatic permitting criteria of the Indirect Discharge Rules in the unnamed tributary to Lake Memphremagog south of the leachfields:

Parameter	Discharge Conc. (a)	Upstream Conc. (b)	Calculated Downstream Conc. (c)	Downstream Conc. (d)	IDR Limits
TDP	0.557 mg/L	0.017 mg/L	0.072 mg/L	0.013 mg/L	0.018 mg/L (e)
NO3	12.9 mg/L	0.17 mg/L	1.49 mg/L	0.17 mg/L	2.0 mg/L
pH	6.55 S.U.	7.1 S.U.	-	7.1 S.U.	7.0 – 7.3 (f)

Notes:

All total dissolved phosphorus (TDP) and Nitrate (NO3) values based on normal distribution of raw or transformed data.

- (a) 5% Exceedance Value based on 26 groundwater sampling results (23 for TDP) from monitoring wells downgradient of leachfields. Mean value used for pH.
- (b) 95% Confidence Value based on 11 upstream sampling results from an unnamed tributary to Lake Memphremagog. Mean value used for pH.
- (c) Based on assumed maximum discharge of 7,960 gpd and estimated low median monthly flow of 68,950 gpd in unnamed tributary to Lake Memphremagog.
- (d) 95% Confidence Value based on 11 downstream sampling results from an unnamed tributary to Lake Memphremagog. Mean value used for pH.
- (e) Reflects 0.001 mg/L allowed increase above background concentration.
- (f) Based on background pH range.

Proposed Action

The Department of Environmental Conservation intends to issue an indirect discharge permit renewal to the permittee. The following changes have been made to the draft permit:

- Condition D8 (Water Meter Readings): This condition has been renamed and moved to the System Operation section of the permit. The requirements have not changed.
- Condition E2 (Effluent Monitoring): Total dissolved phosphorus has been removed from the analytical list, and nitrate nitrogen replaces nitrite nitrogen.
- Condition E3 (Groundwater Monitoring): Groundwater samples are no longer required to be collected and analyzed from monitoring well #101.
- Condition E4 (Receiving Stream Monitoring): Turbidity has been removed from the analytical list.

No other significant changes to permit conditions have been made.

Tentative determinations regarding conditions to be included in the pending Vermont Indirect Discharge Permit have been made by the Vermont Agency of Natural Resources, Department of Environmental Conservation. The conditions imposed will assure that the Vermont Water Quality Standards and applicable provisions of 10 V.S.A. Chapter 47 will be met.