# AGENCY OF NATURAL RESOURCES Department of Environmental Conservation

1 National Life Drive, Main 2 Montpelier, VT 05620-3521

## INDIRECT DISCHARGE PERMIT FACT SHEET

December 2017

PERMIT NO.: ID-9-0011

PERMITTEES: Stowe Club Owners Association, Paul Percy

NATURE OF WASTE: Treated Domestic Sewage

DISPOSAL METHOD: Leachfields

DISPOSAL LOCATION: Latitude N 44° 29′ 28″ and Longitude W 72° 42′ 00″

RECEIVING WATERS: West Branch Waterbury River

DRAINAGE BASIN: Winooski River

### **Aquatic Permitting Criteria**

Based on water quality monitoring data for the period February 2013 – September 2017, the following table demonstrates that the indirect discharge of treated domestic sewage from the Stowe Club Highlands development in Stowe, Vermont meets the aquatic permitting criteria of the Indirect Discharge Rules in the West Branch of the Waterbury River:

Parameter	Discharge Conc. (a)	Upstream Conc. (b)	Calculated Downstream Conc. (c)	Downstream Conc. (d)	IDR Limits
TDP	0.036 mg/L	0.010 mg/L	0.010 mg/L	0.010 mg/L	0.011 mg/L (e)
NO3	6.8 mg/L	0.43 mg/L	0.45 mg/L	0.44 mg/L	2.0 mg/L
рН	6.6 S.U.	6.7 S.U.	-	6.7 S.U.	6.4 – 7.28 (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 22 groundwater sampling results from monitoring wells downgradient of leachfields. Mean value used for pH.
- (b) 95% Confidence Value based on 9 upstream sampling results from the West Branch of the Waterbury River. Mean value used for pH.
- (c) Based on discharge of 20,000 gpd and estimated low median monthly flow of 5,533,200 gpd in the West Branch of the Waterbury River.
- (d) 95% Confidence Value based on 9 downstream sampling results from the West Branch of the Waterbury River. 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 permittees. The following changes have been made to the draft permit:

- Condition E2(B) (Sewage Volume) has been moved to the System Operation section of the permit and renumbered as Condition D10.
- Condition E3(B) (Groundwater levels) has been removed from the permit because the requirements are essentially the same as those in E3(A).
- Condition E4(A) (Receiving Stream Monitoring) has been revised to remove turbidity from the analytical list and add e-coli to it.

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.