

**AGENCY OF NATURAL RESOURCES
DEPARTMENT OF ENVIRONMENTAL CONSERVATION
ONE NATIONAL LIFE DRIVE - MAIN 2
MONTPELIER, VERMONT 05620-3521**

**DRAFT INDIRECT
DISCHARGE PERMIT**

Permit No.: ID-9-0015
PIN: BR97-0498

SECTION A "ADMINISTRATION"

In compliance with provisions of 10 V.S.A. §1263, and in accordance with the following conditions, the permittee:

Notch Brook Condominium Owners Association
1229 Notch Brook Road
Stowe, Vermont 05672

is authorized to indirectly discharge treated domestic sewage from two subsurface disposal systems serving the Notch Brook Resort in Stowe, Vermont to groundwater and indirectly into the West Branch of the Waterbury River. **This is a permit renewal.**

A1. Permit Summary:

Expiration Date	March 31, 2023
Type of Waste	Domestic Sewage
Treatment System	Septic Tanks
Town	Stowe
Disposal System	Leachfields
Drainage Basin	Winooski River
Receiving Stream	West Branch Waterbury River
Drainage Area	7.73 square miles
Stream Flow	
Low Median Monthly (LMMF)	4.56 cfs (2,947,000 gpd) est.
Disposal Capacities:	
Mound System	8,770 gallons per day
In-Ground System	5,000 gallons per day
Ratio of Stream Flow : Effluent	
At LMMF	214 : 1

A2. Compliance Schedule:

The following schedule summarizes the actions and requirements necessary for compliance with the conditions of this permit. The permittee shall complete the requirements in accordance with the dates indicated. See the designated section for specific details.

<u>Condition # & Description</u>	<u>Schedule Date</u>
A3. Apply for renewal of indirect discharge permit	By December 31, 2022
D2(A). Have a Vermont Registered Professional engineer complete inspection of the sewage collection and disposal system	Annually in April
D2(B). Submit Annual Inspection Report	Annually by July 1st
D2(C). Submit schedule for implementing engineer's recommendations	Annually by August 1st
D3. Notify Secretary of pumping of tanks and septage disposal	As required
E2(A). Collect and analyze effluent samples	Twice per year in February and September
E2(B). Record water meter readings	First 11 consecutive days during Feb, May, Aug. and Nov.
E2(B). Submit readings and gallons used	By the 15th of following month
E3(A). Collect and analyze groundwater samples	Twice per year in February and September
E2(A), E3(A). Submit results of monitoring samples and analyses	By the 15th of second month following the date of sampling
E5. Submit water quality evaluation	By December 31, 2022

A3. Expiration Date:

This permit, unless revoked, or amended shall be valid until March 31, 2023 despite any intervening change in Water Quality Standards or the classification of receiving waters. Renewal of this Indirect Discharge Permit will be subject to all rules applicable at the time of renewal, including biological standards to determine significant alteration of aquatic biota.

The permittee should apply for an Indirect Discharge Permit renewal by December 31, 2022 for continued authorization to discharge treated sewage. For the purpose of Title 3, an application for renewal of this indirect discharge permit will be considered timely if a completed application is received by the expiration date.

A4. Effective Date:

This permit becomes effective on April 1, 2018.

A5. Revocation:

The Secretary may revoke this permit in accordance with 10 V.S.A. §1267.

A6. Transfer of Permit:

This permit is not transferable without prior written approval of the Secretary. The permittee shall notify the Secretary immediately, in writing, before any sale, lease or other transfer of ownership of the property from which the permitted discharge originates. The proposed transferee shall make application for a permit to be reissued in their name. Failure to apply shall be considered a violation of this permit. Responsibility for compliance with conditions of this permit shall be the burden of the permittee until such times as transfer of the permit to the transferee is complete. All application and operating fees must be paid in full prior to transfer of this permit. This permit shall be transferred only upon showing by the permittee or proposed transferee compliance with the following conditions:

- a. The transferee shall be a legal entity, financially and technically competent to operate, inspect, maintain and replace the system.
- b. The transferee shall demonstrate that they have the legal authority to raise revenues for the proper operation, inspection, and maintenance of the system.
- c. The transferee shall provide a written agreement containing a specific date for transfer of permit responsibility, coverage, and liability between the current and new permittee(s) to the Secretary.

A7. Minor Modifications of Permit:

The Secretary may modify this permit without requiring a permit application, a public notice, or a public hearing to correct typographical errors or to and increase the monitoring frequency in accordance with Condition E(8) of this permit.

A8. Indirect Discharge Rules:

The community sewage collection, treatment and disposal system design was originally approved under the Environmental Protection Rules with the following variance:

The disposal system is not equipped with dual alternating mounds. The system is equipped with dual alternating beds within the mound.

This indirect discharge was originally reviewed and qualified for an Indirect Discharge Permit in accordance with Section 14-406 (b) of the Indirect Discharge Rules for new indirect discharges of sewage. No increase in sewage volume is allowed without the written approval of the Secretary.

A9. Right of the Agency to Inspect:

The permittee shall allow the Secretary or the Secretary's authorized representative upon the presentation of their credentials and at reasonable times:

- a. To enter upon permittee's premises in which any effluent source, treatment or disposal system is located or in which any records are required to be kept under the conditions of the permit;
- b. To have access to and copy any records required to be kept under conditions of this permit;
- c. To inspect any monitoring equipment or method required in this permit;
- d. To sample any discharge of waste, or groundwater or surface water; and
- e. To inspect any collection, treatment, pollution management, and disposal facilities or monitoring equipment required by this permit.

A10. Permit Availability:

A copy of this permit shall remain at the office of the permittee and, upon request, shall be made available for inspection by Secretary.

A11. Minor Modifications to System:

Minor modifications of the engineering design which do not reduce the treatment effectiveness or increase the capacity of the system may be approved in writing by the Secretary without permit amendment.

Before making modifications to the treatment and/or disposal system the permittee shall submit plans to the Secretary for review and approval. These plans must be approved before any of the modifications or additions are made.

A12. Correction of Failed Systems:

The Secretary may, upon discretion, require the permittee to submit an application for an Indirect Discharge Permit Amendment for a replacement wastewater disposal system to replace a failed system if a replacement system was not previously approved in accordance with the design standards of the current Indirect Discharge Rules.

Before reconstruction of the failed system the permittee shall submit plans to the Secretary for review and approval. These plans must be approved before any reconstruction occurs. Due to the urgency of the need to correct failed disposal systems, the Secretary will process these Amendments as soon as possible.

A13. Operating Fees:

This indirect discharge is subject to operating fees. The permittee shall submit the operating fees in accordance with procedures provided by the Secretary.

SECTION B "INDIRECT DISCHARGE"

B1. Location of Indirect Discharge:

The indirect discharge is located on the West Branch of the Waterbury River in the Town of Stowe, Vermont with a drainage area of 7.73 square miles at the point of compliance. The indirect discharge can be located on the USGS Mt. Mansfield, Vermont 7.5' quadrangle map at Latitude N 44° 30' 53" and Longitude W 72° 45' 30".

B2. Nature of Indirect Discharge:

The treated domestic sewage is discharged from a subsurface wastewater disposal system consisting of a mound system and an in-ground leachfield system with a total approved disposal capacity of 13,770 gallons per day. The mound system has a design loading rate of 1.0 gallon/ft²/day and the in-ground leachfield has a design loading rate of 0.79 gallons/ft²/day.

SECTION C "SYSTEM CONSTRUCTION"

C1. Approved Plans:

The approved plans for this sewage collection, treatment and disposal system are listed in the February 2003 Fact Sheet.

SECTION D "SYSTEM OPERATION"

D1. General Operating Requirements:

The sewage treatment and disposal system shall be operated at all times in a manner that will (1) not permit the discharge of sewage onto the surface of the ground; (2) not result in the surfacing of sewage; and (3) not result in the direct discharge of sewage into the waters of the State; (4) not result in a violation of the Vermont Water Quality Standards; and (5) not cause a significant alteration of the aquatic biota in the receiving stream.

D2. Annual Inspection, Report and Implementation Schedule:

(A) Annual Inspection:

Annually during the month of April, the permittee shall engage a professional engineer registered in the State of Vermont to make a through inspection, evaluation, and report of the complete sewage collection, treatment and disposal system. The engineer's inspection shall include, but not be limited to the following:

1. verifying the use of alternate disposal fields for both the mound and the conventional leachfield;
2. verifying the proper operation of all lift station pumps and alarms, and dosing siphons;
3. inspecting the entire collection system, removing manhole covers to observe the condition of the sewers and manholes, and noting any signs of inflow or excess infiltration;
4. evaluating the accumulation of solids and scum in the septic tanks and verifying the pumping of the tanks if necessary;
5. verifying that flow is correctly proportioned through the distribution weir; and
6. noting any necessary repairs, or maintenance that needs to be performed on the sewage collection, treatment and disposal system.

D2. Annual Inspection, Report and Implementation Schedule (continued):

(B) Annual Inspection Report:

By July 1st each year, the permittee shall have a professional engineer submit an annual report including the following items:

1. a complete list of the items inspected and the results of the inspection;
2. a discussion of the recommended repairs and maintenance required;
3. an evaluation of metered water use and groundwater levels in the vicinity of the disposal fields, and;
4. the measured depths of sludge and scum in each septic tank.

(C) Implementation Schedule:

By August 1st each year, the permittee shall notify the Secretary in writing stating how the engineer's recommendations were or are to be implemented, including a schedule for the required repair and maintenance items which have not yet been completed.

D3. Septage Disposal:

During the system's annual inspection, the depth of sludge and scum shall be measured in all septic tanks. The septic tanks shall be pumped if: 1) the sludge is closer than twelve (12) inches to the outlet baffle; 2) the scum layer is closer than three (3) inches to the septic tank outlet baffle, or; 3) otherwise recommended by the inspecting engineer. The permittee shall notify the Secretary in writing of the name and address of the pumper and the municipal sewage treatment facility or other facility approved by the Secretary where the septage was or is to be disposed.

D4. System Operation and Maintenance:

The sewage collection, treatment and disposal system shall be operated and maintained at all times in a manner satisfactory to the Secretary and in a manner that will not pose a risk to the public health and safety, or cause contamination of drinking water supplies, groundwater and/or surface water.

D5. Reporting of Failures:

The permittee shall immediately report any failure of the sewage collection, treatment or disposal system to the Secretary, first by telephone within 24 hours of the failure and then in writing within 5 days of the failure. The written notice shall include a discussion of the actions taken or to be taken to correct the failure.

D6. Discharge Restrictions:

The permittee shall not allow any person to discharge or cause to be discharged anything other than sanitary sewage to this collection, treatment and disposal system.

SECTION E "MONITORING"

E1. Quality Control/Quality Assurance Plan:

The permittee shall perform compliance monitoring in accordance with an approved Quality Assurance/Quality Control Plan and the conditions of this indirect discharge permit.

E2. Sewage Effluent Monitoring:

A. Chemical

The effluent discharged to the disposal fields shall be sampled and analyzed as follows:

Parameter	Units	Sample Type	Sample Frequency
Biochemical Oxygen Demand (5-day)	mg/L	Grab	February and September
Total Suspended Solids	mg/L	Grab	February and September
Chloride	mg/L	Grab	February and September
Total Phosphorus	mg/L	Grab	February and September
pH	S.U.	Grab	February and September
Total Kjeldahl Nitrogen (TKN)	mg/L	Grab	February and September
Ammonia Nitrogen	mg/L	Grab	February and September
Nitrate Nitrogen	mg/L	Grab	February and September
Samples shall be taken at the distribution weir.			
The results of the effluent analysis shall be submitted to the Secretary by the 15th day of the second month following the date of sampling.			

E2. Sewage Effluent Monitoring (continued):

B. Sewage Volume:

For the first 11 consecutive days during the months of February, May, August and November of each year, the permittee shall record the daily water meter readings for all units connected to the sewage collection, treatment and disposal system to determine the total volume of water used each day. The volume of water used and individual meter readings shall be submitted to the Secretary by the 15th of the month following the recording period.

E3. Groundwater Monitoring:

A. Chemical & Bacteriological Monitoring:

The Quality Control/Quality Assurance Plan includes two groundwater monitoring wells upgradient and two monitoring wells downgradient of each wastewater disposal system. The groundwater in the monitoring wells shall be sampled and analyzed for the following parameters:

Parameter	Units	Sample Type	Sample Frequency
Nitrate Nitrogen	mg/L	Grab	February and September
Total Dissolved Phosphorus	mg/L	Grab	February and September
Chloride	mg/L	Grab	February and September
pH	S.U.	Grab	February and September
Escherichia coli	Colonies/100 ml	Grab	February and September
Depth to Groundwater (below ground surface)	Feet and tenths of feet	----	At time of sampling

Because of changing water table conditions, the samples from the groundwater monitoring wells might not be collected on the same day or in the same week. If a monitoring well has water at any time during the month then the single sample from that well is required to be collected and analyzed.

The results of these analyses shall be submitted to the Secretary by the 15th day of the second month following the date of sampling.

E4. Receiving Stream Monitoring:

Upon written request from the Secretary, the permittee shall conduct water quality and/or biological sampling in the receiving stream upstream and downstream of the indirect discharge in accordance with procedures approved by the Secretary.

E5. Summary Water Quality Evaluation:

By December 31, 2022, the permittee shall have a qualified water quality specialist submit an evaluation to the Secretary of all the past groundwater quality data and determine what, if any, short or long-term impacts there have been on groundwater and/or surface water quality. The biological monitoring data, if available, shall also be included.

E6. Sampling and Testing Procedures:

All wastewater, groundwater and surface water sampling, preservation, handling and test procedures used to comply with the monitoring requirements herein shall conform to procedures specified in the most current edition of Standard Methods for the Examination of Water and Wastewater APHA - AWWA - WPCF, and the Vermont Water Quality Standards unless written approval of an alternate method is received from the Agency.

The laboratory utilized for analyzing the samples shall demonstrate successful participation in third party proficiency testing recognized by ISO or NELAP for all parameters and shall analyze any check sample provided by the Secretary. Failure to obtain an acceptable result for either the Secretary's check sample or successful third-party proficiency testing may be a basis for requiring an alternate analytical laboratory.

E7. Miscellaneous:

If the permittee monitors any required parameter set forth in this permit for this treatment and disposal system more frequently or at additional locations outside the treatment facility than required by this permit, the results of such monitoring shall also be provided in the appropriate monthly reports and analyzed in the engineer's annual inspection report.

All records and information resulting from the monitoring activities required by this permit, including all records of analyses performed and calibration and maintenance of instrumentation and recordings from continuous monitoring instrumentation shall be retained for a minimum of three (3) years, or longer if requested by the Secretary. Records shall include laboratory bench sheets showing exact location, time and composites of sample as well as analytical procedures used, interim results obtained and all calculations supporting the reported test results.

E8. Additional Monitoring Requirements:

No other water quality monitoring of the system is required under this permit. However, the Secretary reserves the right to require monitoring of the system in accordance with Condition A(7) should operation of the system fail to meet the requirements of Sections D(1) and D(4).

SECTION F "PUBLIC HEALTH PROTECTION"

For future information it is noted that this indirect discharge is located within the current Well Head Protection Area for the following water supply source per Chapter 12 - Groundwater Protection Rule and Strategy:

1. Bedrock Wells (4) serving Notch Brook Subdivision WSID #5167
(3 wells in use)

This does not imply that this water supply is adversely affected by this indirect discharge. If future replacement of this system is required, the potential impact on the public water supply should be evaluated.

SECTION G "COMPLIANCE REVIEW"

If the results of any inspection or monitoring indicate that a violation of the effluent disposal rate, or a violation of the Vermont Water Quality Standards, is occurring, or is likely to occur, the Secretary may require the permittee to take appropriate corrective actions to eliminate or reduce the possibility of a violation.

The issuance of this permit, ID-9-0015, to Notch Brook Condominium Owners Association by the Secretary relies upon the data, designs, judgement and other information supplied by the applicant, the applicant's consultants and other experts who have participated in the preparation of the application. The Secretary makes no assurance that this system will meet the performance objectives of the applicant and no warranties or guarantees are given or implied.

SECTION H "EFFECTIVE DATE"

This Indirect Discharge Permit, ID-9-0015, issued to Notch Brook Condominium Owners Association for the discharge of wastewater from Notch Brook Resort located in Stowe, Vermont is effective on April 1, 2018.

Emily Boedecker, Commissioner
Department of Environmental Conservation

By: _____**DRAFT**_____
Mary Clark, Program Manager
Indirect Discharge Program

Date: _____