

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

**DRAFT INDIRECT
DISCHARGE PERMIT**

Permit No.: ID-9-0170
PIN: NS97-0054

SECTION A - "ADMINISTRATION"

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

Piper Ridge Home Owners Association, Inc.
P.O. Box 90
Bondville, Vermont 05340

is authorized to discharge treated domestic sewage from an existing subsurface disposal system (referred herein as the West Disposal Fields) serving the Piper Ridge Condominiums in Winhall, Vermont, to groundwater and indirectly into the North Branch of Ball Mountain Brook. **This is a permit renewal.**

A1. Permit Summary:

Expiration Date	September 30, 2022
Type of Waste	Domestic Sewage
Treatment System	Septic Tanks
Disposal System	Leachfield Mounds
Town	Winhall
Drainage Basin	West River
Receiving Water	North Branch of Ball Mountain Brook
Design Capacity	20,736 gallons per day
Drainage Area	Approx. 2.5 sq. mi.
Stream Flow:	
Low Median Monthly (LMMF)	401,900 gallons per day (est.)
Dilution Ratio (at LMMF)	
Stream Flow : Effluent	19.4 : 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	June 30, 2022
D2. Alternate the disposal fields	Annually, during the annual inspection in April
D3(A). Have a Vermont Registered Professional Engineer complete an inspection of the sewage collection, treatment and disposal system.	Annually in April
D3(B). Submit Annual Inspection Report	Annually by July 1st
D3(C). Submit schedule for implementing engineer's recommendations	Annually by August 1st
D4. Notify Secretary of pumping of tanks and septage disposal	As specified
E1. Check for evidence of ponding in shallow observation wells	Annually, during the annual inspection in April
E2. Record depth to groundwater below ground surface in monitoring wells	Annually, during the annual inspection in April

A3. Expiration Date:

This permit, unless revoked, or amended shall be valid until September 30, 2022 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.

A3. Expiration Date (continued):

The permittee should apply for an Indirect Discharge Permit renewal by June 30, 2022 for continued authorization to discharge treated sewage. For the purposes of Title 3, an application for renewal of this indirect discharge permit will be considered timely if a complete application is received by the expiration date.

A4. Effective Date:

This permit becomes effective on the date of signature.

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 the conditions of this permit shall be the burden of the permittee until such time 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 of 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 increase the monitoring frequency in accordance with Condition E(3) of this permit.

A8. Indirect Discharge Rules:

This permit authorizes an existing indirect discharge.

This indirect discharge was reviewed and qualified for an Indirect Discharge Permit in accordance with Section 14-403 (a) of the Indirect Discharge Rules for existing 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, groundwater or surface water; and
- e. To inspect any collection, treatment, pollution management and disposal facilities 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 the 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, issue an Amendment to the Indirect Discharge Permit for the design and reconstruction of a failed wastewater disposal system where the replacement system design was not previously approved.

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:

This existing indirect discharge is located in the West River drainage basin in the Town of Winhall, Vermont. The indirect discharge can be located on the USGS Londonderry, VT 15' quadrangle map at Latitude N 43° 07' 14" and Longitude W 72° 53' 15".

The disposal system is located within the Wellhead Protection Area of Water Supply ID# 5592 which serves the Piper Ridge Condominiums.

B2. Nature of Indirect Discharge:

The wastewater is treated in septic tanks then flows to an effluent pump station which discharges to the disposal fields (mounds with beds). The disposal system has an approved disposal capacity of 20,736 gallons per day and is dual alternating. There are six primary beds and six alternate beds.

The design flow for this discharge was calculated as follows (originally from Permit #2W0112-3a):

<u>Source</u>	<u>Design Sewage Flow</u>
126 bedrooms @ 135 gpd/bdrm	17,010 gpd
Athletic Facility/Pool Backwash	2,500 gpd
Infiltration	1,070 gpd
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Total:	20,580 gpd

B2. Nature of Indirect Discharge (continued):

There are two other sewage treatment and disposal systems at the project site; the East Disposal Fields system is authorized under General Permit 9-0009 identified as NOI-9-0171; and the Southeast Disposal Fields system (design capacity 6,300 gpd) is authorized under #2W0112-3a.

SECTION C "SYSTEM APPROVALS"

C1. Previous Approvals:

The project was approved to be constructed in accordance with the following plans and specifications prepared by Dubois and King, Inc:

Sheet #	Description	Date	Last Revised
3 of 17	Utility Plan	April, 1983	August 23, 1983
4 of 17	Sewer Profiles	April, 1983	August 23, 1983
5 of 17	Sewer Profile	April, 1983	-----
9 of 17	West Disposal Fields - Site Plan	April, 1983	August 23, 1983
10 of 17	West Disposal Fields - Site Plan	April, 1983	August 23, 1983
11 of 17	West Disposal Fields - Sections & Details	April, 1983	August 23, 1983
12 of 17	East & West Disposal Fields - Supply Piping Profiles	April, 1983	August 23, 1983
15 of 17	Miscellaneous Wastewater Details	April, 1983	August 23, 1983
16 of 17	Sewer System Details	April, 1983	August 23, 1983

The project specifications entitled "Piper Ridge Condominiums - Phase II, Technical Specifications" dated April, 1983.

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; (3) not result in the direct discharge of sewage into the waters of the State; and (4) not result in a violation of the Vermont Water Quality Standards.

D1. General Operating Requirements (continued):

In accordance with accepted design practices, the effluent disposal rate to the disposal fields shall not exceed 20,736 gallons per day except as may occur on an occasional basis during normal operation.

D2. Alternation of Fields:

The subsurface sewage disposal fields shall be alternated annually, with the alternation occurring during the engineer's annual inspection in April.

D3. Annual Inspection, Report and Implementation Schedule:

(A) Annual Inspection:

Annually during the month of April, the permittee shall retain a Vermont Registered Professional engineer to make a thorough 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. 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;
2. evaluating of the accumulation of solids and scum in the septic tanks and determining whether the septic tanks should be pumped that year;
3. verifying the proper operation of the lift station pumps, alarms, and controls;
4. checking the levelness of all distribution boxes;
5. verifying alternation of the disposal fields;
6. checking the twelve shallow in-field monitoring wells for ponding (see Condition E1);
7. checking the ten groundwater monitoring wells to determine the depth to groundwater (see Condition E2); and
8. noting any necessary repairs or maintenance that needs to be performed on the sewage collection, treatment, and disposal system.

D3. 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; the measured depths of sludge and scum in each septic tank;
2. a tabulation of the ponding and groundwater level measurements data collected during the inspection; and
3. a discussion of the recommended repairs and maintenance required.

(C) Implementation Schedule:

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

D4. 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 or; 2) the scum layer is closer than three (3) inches to the septic tank outlet baffle or; 3) if 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 septic was or is to be disposed.

D5. 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.

D6. 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.

D7. 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. Shallow In-Field Monitoring Wells:

As part of the annual inspection, the engineer shall measure the depth of ponding in each of the twelve in-field monitoring wells and report the results of those measurements in the annual inspection report.

E2. Groundwater Level Monitoring:

As part of the annual inspection, the engineer shall measure the depth to groundwater (below ground surface) in the ten groundwater monitoring wells. The tabulated results of this monitoring shall be submitted along with the inspecting engineer's annual inspection report.

E3. Other Monitoring Requirements:

No 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"

This indirect discharge is located within the current Well Head Protection Area for the following water supply source, as designated by the Commissioner of Health in accordance with EPR Chapter 12 Groundwater Protection Rule and Strategy:

1. Bedrock Wells (4) serving Piper Ridge Condominiums WSID #5592

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-9-0170, to Piper Ridge Home Owners Association, Inc., 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-9-0170, issued to Piper Ridge Home Owners Association, Inc. for the discharge of treated domestic sewage from the Piper Ridge Condominiums to the West Disposal Fields in Winhall, Vermont is effective on this _____ day of October, 2017.

Emily Boedecker, Commissioner
Department of Environmental Conservation

By _____ **DRAFT** _____
Bryan Redmond, Director
Drinking Water and Groundwater Protection Division