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-9-0088
PIN: NS95-0011

SECTION A - "ADMINISTRATION"

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

Lodge at Pinnacle View, LLC
P.O. Box 98
Peru, Vermont 05152

is authorized to discharge treated domestic sewage from a spray disposal system serving the Lodge at Pinnacle View to groundwater and indirectly into an unnamed tributary of Bromley Brook in the Town of Winhall, Vermont. This is a permit renewal.

A1. Permit Summary:

Expiration Date	June 30, 2022
Type of Waste	Treated Domestic Sewage
Treatment System	Aerated Lagoon
Disposal System	Sprayfield
Town	Winhall
Treatment Capacity	5,000 gpd Summer, Fall, and Winter 2,500 gpd Spring
Disposal Capacity	29,066 gallons/7 days 34,972 gallons/7 days after expansion
Receiving Stream	Unnamed tributary to Bromley Brook
Drainage Basin	Batten Kill River
Drainage Area	300 acres (at compliance point A1)
Stream Flow:	
Low Median Monthly (LMMF)	75,300 gpd (est.)
Dilution Ratio	
Stream Flow : Effluent	15.1 : 1 at LMMF

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.

Condition # & Description		Schedule Date
A3.	Apply for renewal of indirect discharge permit	March 31, 2022
D4(A).	Have a Vermont Registered Professional Engineer complete an inspection of sewage collection, treatment and disposal system	Annually in April
D4(B).	Submit Annual Inspection Report	Annually by July 1st
D4(C).	Submit Schedule for Implementing engineer's recommendation	Annually by August 1st
D11.	Submit monthly operations report	Monthly
E1.	Collect and analyze spray effluent samples	February and October
	Submit results of spray monitoring and analyses	By the 15th of the second month following the date of sampling
E2.	Measure and record the depths to groundwater in monitoring wells	Weekly
E3.	Record water meter readings	Daily

A3. Expiration Date:

This permit, unless revoked, or amended shall be valid until June 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.

The permittees shall apply for an Indirect Discharge Permit renewal by March 31, 2022. 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 July 1, 2017.

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 systems.

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 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(6) of this permit.

A8. Indirect Discharge Rules:

This permit authorizes an existing indirect discharge.

This indirect discharge was originally reviewed and qualified for an Indirect Discharge Permit in accordance with Section 14-603 (b) 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 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. Additional Connections to System:

A Wastewater System and Potable Water Supply Permit is required for all connections to this sewage treatment and disposal system.

A13. Correction of Failed System:

The Secretary may, upon discretion, issue an amendment to this Indirect Discharge Permit for the design and reconstruction of a failed wastewater disposal system where a 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 the amendment as soon as possible.

A14. 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 indirect discharge is located on an unnamed tributary of Bromley Brook in the Town of Winhall, Vermont. The indirect discharge can be located on the USGS Londonderry 15' quadrangle map at Latitude N 43° 12' 25" and Longitude W 72° 57' 31". The spray disposal laterals are located between elevations 1930' and 1990'.

B2. Nature of Indirect Discharge:

The wastewater is treated in a 400,000 gallon aerated lagoon and chlorinated, prior to sprayfield disposal. The sprayfield consists of two spray lines: Line 1 consists of 11 nozzles with a disposal capacity of 11,025 gallons per 7 days, and Line 2 consists of 18 nozzles with a disposal capacity of 18,041 gallons per 7 days, for a total capacity of 29,066 gallons per any 7-day period. The disposal capacity is based on a maximum application rate of 2" during any seven-consecutive day period.

The disposal capacity of the spray field increases to a maximum of 34,972 gallons per any 7-day period with modifications to the so-called "L2" or summer spray line in accordance with Condition C(3).

SECTION C "SYSTEM CONSTRUCTION"

C1. Previous Approvals:

The aerated lagoon treatment and spray disposal system was originally approved in Certification of Compliance #2W0053-1, issued April 30, 1979 to eliminate a failed subsurface disposal system. Certification of Compliance #2W0053-1R1, issued on October 16, 1985, added operations and monitoring requirements and indicated that the basis of design for the system was metered water usage of 2,500 gpd during the Spring and 5,000 gpd during the remaining months.

The design connected capacity for this sewage treatment system totals 6,150 gpd based on previously approved lodging and restaurant seating capacity.

C2. Approved Plans:

The project was approved to be constructed in accordance with plans and specifications prepared by Timothy Buzzell, P.E., last revised 3/22/79.

C3. Future Modifications:

The sprayfield disposal capacity available for this system was estimated at 29,066 gallons per consecutive 7-day period, or approximately 83% of the theoretical capacity required, based on design water usage. As part of the engineer's annual inspection, a calculation of the previous year's total water usage shall be made and compared to the design usage (2,500 gpd for Spring months; 5,000 gpd for remainder of the year, for a yearly total of 1,600,000 gallons). If the actual water usage exceeds 83% of that total, or 1,328,000 gallons, the permittee shall be required to:

A. Submit plans and specifications to the Secretary for review and approval for modifications to the so-called "L2" or summer spray line to increase its disposal capacity to 23,947 gallons per any consecutive 7-day period. The plans and specifications must be submitted by August 1st of the same year; and

B. Complete modifications to sprayfield by November 1st of the same year.

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.

The spray disposal field shall be operated at all times in accordance with the following:

a. The groundwater table shall not rise closer than one foot to the ground surface in the disposal area as a result of spraying.

b. No spraying shall be conducted when air temperature is below 10°F or when groundwater is within one foot of ground surface, or when surface runoff is occurring.

c. The total wastewater applied to the sprayfields shall not exceed 2.0 inches in any consecutive seven (7) day period. In any consecutive seven (7) day period, the permittee shall not dispose of more than 29,066 gallons in the sprayfield, or more than 34,972 gallons following modifications to the spray field as per Condition C(3).

d. The actual maximum hourly rate of wastewater application shall not exceed 0.25 inches per hour.

e. There shall be a minimum of a 12-hour rest period between spray applications for any spray line.

f. Spraying in winter shall be conducted during daylight hours only.

g. The effluent shall have a minimum of 4.0 mg/L total chlorine residual (or 1.0 mg/L free chlorine residual) at the spray nozzle at all times.

D2. Spray Effluent Limits:

The treated effluent to be sprayed on the disposal field shall comply with the following limits at all times:

Parameter	Maximum in any 7-Day Period	Daily Maximum
Flow	29,066 gallons(1)	N/A
Biochemical Oxygen Demand (5-day)	N/A	30 mg/L
Total Suspended Solids	N/A	30 mg/L
Escherichia coli	N/A	77 colonies/100 mL
Chlorine Residual (2)		
Total, or	N/A	4 mg/L (minimum)
Free	N/A	1 mg/L (minimum)

Notes:

(1) Following approved modifications, this increases to 34,972 gallons in accordance with Condition C3.

(2) The permittee may maintain a minimum of 1.0 mg/L free chlorine residual instead of 4 mg/L total chlorine residual. In either case, measurement must be made at the spray nozzle. The permittee may choose to utilize disinfection prior to effluent storage as allowed under §14-1705(a)(2) of the Indirect Discharge Rules.

D3. Lagoon Freeboard Requirements:

A minimum three feet of freeboard shall be maintained in the aerated lagoon at all times.

D4. Annual Inspection, Report and Implementation Schedule:

(A) Annual Inspection:

Annually during the month of April, the permittee shall have a Vermont Registered Professional Engineer make a thorough inspection, evaluation and report of the complete collection, treatment and spray 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;

2. Evaluation of the accumulation of solids and scum in the septic tanks and determining if the septic tanks should be pumped out that year;

D4. Annual Inspection, Report and Implementation Schedule:

(A) Annual Inspection (continued):

3. Verification of the proper operation of the blowers and evaluation of the aeration pattern in the aerated lagoon;

4. Verifying the proper operation of the chlorinator;

5. Evaluation of the accumulation of sludge in the aerated lagoon and the need to pump the sludge;

6. Evaluation of the condition of the lagoon liner;

7. Walking each spray lateral in the spray fields and checking for the proper operation of the spray system, noting any repairs needed and any areas of erosion or concentrated surface runoff; and

8. Noting any additional repairs, or maintenance that needs to be performed.

(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. the measured depths of sludge and scum in each septic tank;

3. a discussion of the recommended repairs and maintenance required; and

4. an evaluation of the past year's water meter readings including the requirements of Condition C(3), effluent quality, spray disposal records and the groundwater levels in the spray fields to verify compliance with the permit requirements.

(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 submittal of a schedule for the completion of any required repair and maintenance items which have not yet been completed.

D5. Wastewater Treatment Plant Operator:

The permittee is required to employ a wastewater treatment plant operator with a minimum Grade I operator in accordance with the Department of Environmental Conservation's Wastewater Treatment Facility Operator Certification Rule dated September 25, 2014. The permittee shall notify the Secretary in writing immediately of any change in the operator employed to operate the wastewater treatment and disposal facility.

D6. Sludge Disposal:

Prior to any disposal of sludge from the aerated lagoon the permittee shall obtain approval for the disposal from the Secretary. The permittee shall comply with all conditions specified in the approval.

D7. 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.

D8. 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.

For untreated discharges of sewage that reach Vermont’s surface waters, the system operator or their delegate shall follow the notification and signage requirements in 10 V.S.A. 1295 (Act 86) and Agency “Procedure for Public Notice of Untreated Discharges and Unpermitted Discharges to Vermont’s Surface Waters.” These procedures require:

A. Posting an electronic Public Alert as soon as possible but no longer than within 1 hour from discovery of an untreated discharge;

B. Posting a follow-up Overflow and Incident Report within 12 hours of discovery of an untreated discharge and notify the town health officer; and

C. Posting temporary signs at any public access area(s) downstream of the unpermitted discharges.

D9. 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.

D10. Sprayfield Warning Signs:

In lieu of maintaining fencing along the perimeter of the sprayfield area, the permittee shall maintain signs, a maximum of 25' apart, along the perimeter of the sprayfield at a height of approximately seven (7) feet. The signs shall include the language, "Sewage Disposal Area – Keep Out".

D11. Monthly Report:

On a monthly basis, the permittee shall submit a disposal report to the Secretary summarizing all information required for the previous month. The report shall be submitted to the Secretary by the 15th of each month for all disposal activities for the previous month. The report shall be signed by an official of the permittee, under the following statement:

"I certify under penalty of law that I have personally examined, and am familiar with, the information submitted herein. Based on my inquiry of those individuals immediately responsible for obtaining the information, I believe the submitted information is true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fines and imprisonment."

SECTION E "MONITORING"

E1. Effluent Monitoring:

The effluent from the treatment system shall be sampled and analyzed as follows:

PARAMETER	MEASUREMENT LOCATION	SAMPLE FREQUENCY	SAMPLE TYPE
Flow Volume	spray effluent	Continuous	Daily Total
Biochemical Oxygen Demand (BOD_5)	spray effluent	February & October	8 hour composite(1)
Total Suspended Solids (TSS)	spray effluent	February & October	8 hour composite(1)
Escherichia coli	spray effluent	February & October	Grab(2)(3)
Total or Free Chlorine Residual	spray effluent	2 x daily when spraying	Grab(2)
Ammonia (as N)	spray effluent	February & October	8 hour composite(1)
Nitrate (as N)	spray effluent	February & October	8 hour composite(1)
Total Dissolved Phosphorus	spray effluent	February & October	8 hour composite(1)
Chloride (Cl-)	spray effluent	February & October	8 hour composite(1)
Dissolved Oxygen	aerated lagoon	Daily	Grab
Lagoon Level	staff gauge	Daily	
Air Temperature	in spray field	At start and end of spray period	

Notes:

(1) Composite samples shall be taken between the hours of 6:00 A.M. and 6:00 P.M., unless otherwise specified.

(2) On the day that the E. coli grab sample is collected, the daily residual chlorine sample for that day shall be collected at the same time and location as the E. coli sample. Both shall be collected after the spray system has been operating that day for a minimum of 30 minutes.

(3) If the E. coli effluent limit of 77 col/100 mL is exceeded, the permittee shall re-sample the spray effluent during the next spray disposal event and submit the results of that sampling to the Secretary.

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. Groundwater Monitoring:

The depth to ground water (below ground surface) in all monitoring wells shall be measured and recorded weekly. Dry wells shall be recorded as "no water to depth of well".

The results of these measurements shall be submitted to the Secretary by the 15th day of the following month.

E3. Water Meter Readings:

The permittee shall record the daily water meter readings each day at approximately the same time each day. The volume of water used and the meter readings shall be submitted to the Secretary by the 15th day of the following month.

E4. 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.

E5. 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.

E6. 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(7).

SECTION F - "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-9-0088, to the Lodge at Pinnacle View, LLC by the Secretary relies upon the data, designs, judgement and other information supplied by the applicant, 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 G - "EFFECTIVE DATE"

This Indirect Discharge Permit, ID-9-0088, issued to the Lodge at Pinnacle View LLC, for the discharge of treated domestic sewage from the Lodge at Pinnacle View located in the Town of Winhall, Vermont, is effective on July 1, 2017.

Emily Boedecker, Commissioner
Department of Environmental Conservation

By_____DRAFT_____ Date: _____
Bryan Redmond, Director
Drinking Water and Groundwater Protection Division