

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

**DRAFT
INDIRECT DISCHARGE PERMIT**

Permit No.: ID-9-0328
PIN: EJ06-0194

SECTION A - "ADMINISTRATION"

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

Camp Dudley at Kiniya, LLC
126 Dudley Road
Westport, NY 12993

is authorized to discharge treated domestic sewage from two subsurface disposal systems serving Camp Kiniya in Colchester, Vermont, to groundwater and indirectly to the Lamoille River and Lake Champlain. **This is a new indirect discharge permit.**

A1. Permit Summary:

Expiration Date	June 30, 2022
Type of Waste	Treated Domestic Sewage
Treatment System	Septic Tanks
Disposal System	Leachfields
Town	Colchester
Drainage Basin	Upper Lake Champlain
Receiving Waters	Lamoille River and Lake Champlain
Design Capacity	6,974 gallons per day

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	March 31, 2022
C2. Submit a copy of a contract with a Vermont Registered Professional Engineer to provide construction inspection	Before start of any construction on the new septic tanks, septic tank effluent sewers, pump stations and force mains
C2. Submit inspecting Engineer's Certification of Construction	Within 30 days of completion of construction
D2(A). Have a Vermont Registered Professional Engineer complete an inspection of sewage collection, treatment, and disposal system.	Annually during June
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 specified
D7. Record wastewater readings	Monthly during operational season
D7. Submit wastewater readings	By the 15th of the following month
E1. Collect and analyze effluent samples	Annually, in June
E2. Collect and analyze groundwater monitoring samples	Annually, in June
E1, E2. Submit results of monitoring	By the 15th of the second month following the date of sampling

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 permittee shall apply for an Indirect Discharge Permit renewal by March 31, 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(5) of this permit.

A8. Indirect Discharge Rules:

This indirect discharge was reviewed and qualifies for an Indirect Discharge Permit in accordance with Section 14-603(d) of the Indirect Discharge Rules as a New Indirect Discharge of Sewage. No increase in sewage volume is allowed without the written approval of the Secretary.

A Wastewater System and Potable Water Supply Permit is required for all new buildings to be connected to the system.

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 permittees 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 Upper Lake Champlain drainage basin in the Town of Colchester, Vermont. The indirect discharge can be located on the USGS Colchester, Vermont 7.5' quadrangle map at Latitude N 44°36' 25" and Longitude W 73°13' 34".

B2. Nature of Indirect Discharge:

This indirect discharge consists of the discharge of treated domestic sewage from two leachfields at Camp Kiniya. One leachfield serves the Dining Hall and Treiber Center with a disposal capacity of 6,471 gallons per day. The other leachfield serves the new Activities Barn with a disposal capacity of 502.5 gallons per day. The combined flow from both leachfields is 6,974 gallons per day. An indirect discharge permit is required due to the close proximity of the leachfields to one another.

B2. Nature of Indirect Discharge (continued):

Wastewater from the Dining Hall is treated in an existing 6,000-gallon septic tank before being pumped to the leachfield disposal area. Wastewater from the Treiber Center is treated in an existing 4,500-gallon grease interceptor before being discharged to the Dining Hall septic tank. The existing disposal area consists of eight leachfield trenches. This system currently has an approved design flow of 5,996 gallons per day as per Wastewater System and Potable Water Supply Permit #WW-C-0009-7 Corrected #2. The permittee will apply for a WW-C-0009-7 permit amendment for approval to discharge up to 6,471 gallons per day.

Wastewater from the Activities Barn will be treated in a 1,000-gallon septic tank before being pumped to the leachfield disposal area. The proposed disposal area consists of two leachfield trenches with an approved design flow of 502.5 gallons per day as per Wastewater System and Potable Water Supply Permit #WW-C-0009-8.

Treated effluent from the leachfields discharges to groundwater, which flows radially from the disposal site east/northeast toward the Lamoille River and west/northwest toward Lake Champlain.

SECTION C "SYSTEM APPROVALS"

C1. Previous Approvals:

A. Dining Hall and Treiber Center:

The sewage treatment and disposal system serving the Dining Hall and Treiber Center was approved by Wastewater System and Potable Water Supply Permit #WW-C-0009-7 Corrected #2. The system was reported constructed in accordance with the following approved plans dated October 9, 2015, prepared by Otter Creek Engineering:

<u>Sheet</u>	<u>Title</u>	<u>Last Revision</u>
C-1.1	Proposed Site Plan	6/30/2016
C-1.2	Proposed Site Plan	8/24/2016
C-2.1	Sanitary Sewer Profile	6/30/2016
C-3.1	Notes and Details	6/30/2016
C-3.2	Notes and Details	6/30/2016
C-3.3	Notes and Details	8/24/2016
C-3.4	Notes and Details	6/30/2016

C1. Previous Approvals (continued):

B. Activities Barn:

The sewage treatment and disposal system serving the Activities Barn was approved by Wastewater System and Potable Water Supply Permit #WW-C-0009-8. The system shall be constructed in accordance with the following approved plans dated October 9, 2015, prepared by Otter Creek Engineering:

<u>Sheet</u>	<u>Title</u>	<u>Last Revision</u>
C-1.1	Proposed Site Plan	8/24/2016
C-2.1	Sanitary Sewer Profile	6/30/2016
C-3.1	Notes and Details	6/30/2016
C-3.2	Notes and Details	6/30/2016

No changes shall be made to the approved plans without the approval of the Secretary.

C2. Construction Inspection and Certification:

Before the start of any construction on the treatment and disposal system, the permittee shall submit to the Secretary a copy of a signed contract with a Vermont Registered Professional Engineer to provide inspection of the approved construction. The contract, at a minimum shall provide the following items:

- a. The names and qualifications of personnel providing inspection.
- b. The location of septic tanks and pump stations shall be staked out by a Vermont Registered Professional Engineer or surveyor in accordance with the approved plans.
- c. The engineer or designated representative shall be present for the installation of all new septic tanks, septic tank effluent sewers, pump stations and force mains.
- d. The engineer or designated representative shall be present for the pressure and leakage testing of the new force mains.
- e. The engineer or designated representative shall be present for the leakage testing of the new septic tanks, septic tank effluent sewers and pump stations.
- f. The engineer or designated representative shall provide general inspection of the work at reasonable intervals to assure that construction is in accord with the contract documents.

C2. Construction Inspection and Certification (continued):

- g. The engineer or designated representative shall maintain written reports of all inspections performed including dates, items inspected and comments. Copies of all inspection reports shall be submitted to the Secretary a minimum of once every two weeks.
- h. When the system construction is completed and before the inspecting engineer has issued a certification of construction, the permittee shall arrange an inspection of the system with the inspecting engineer and the Secretary's representative.
- i. Within 30 days following completion of construction, the inspecting Professional Engineer shall certify in writing to the Secretary that the construction was completed in accordance with approved plans and specifications and submit As-Built plans for the system.

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.

In accordance with accepted design practices, the effluent disposal rate to the disposal fields shall not exceed 6,974 gallons per day except as may occur on an occasional basis during normal operation.

D2. Annual Inspection, Report and Implementation Schedule:

A. Annual Inspection:

Annually during the month of June, the permittee shall engage 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. verification of the proper operation of all system components, including pump stations, alarms and controls, valves, and proper distribution of flow in the distributing valve manhole;

A. Annual Inspection (continued):

3. evaluation of the accumulation of solids and scum in the septic tanks and grease interceptor and determine if the septic tanks or grease interceptor should be pumped out that year;
4. checking all septic tank effluent filters and evaluating if they need cleaning or replacement;
5. checking the calibration of the pump hour meters;
6. walking the disposal area and checking for evidence of surfacing sewage; and
7. noting any necessary repairs or maintenance that needs to be performed on the sewage collection, treatment, and disposal system.

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 and the grease interceptor;
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.

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 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 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.

D7. Wastewater Volume:

The permittee shall record the pump run times monthly during the Camp's operational season on each of the pumps for each wastewater disposal system. Readings shall be taken and recorded at the end of each month. The average daily volume of effluent discharged to the leachfields shall be calculated and submitted to the Secretary by the 15th of the month following the recording period.

SECTION E "MONITORING"

E1. Effluent Monitoring:

Annually during the month of June, the septic tank effluent from the Dining Hall and Treiber Center wastewater system shall be collected and analyzed for the following parameters:

<u>Parameter</u>	<u>Sample Units</u>	<u>Sample Types</u>	<u>Frequency</u>
Biochemical Oxygen Demand (5-day)	mg/L	composite	Annually in June
Total Suspended Solids	mg/L	composite	Annually in June
Total Kjeldahl Nitrogen (TKN)	mg/L	grab	Annually in June
Ammonia Nitrogen	mg/L	grab	Annually in June
Nitrate Nitrogen	mg/L	grab	Annually in June
Total Phosphorus	mg/L	grab	Annually in June
Chloride	mg/L	grab	Annually in June
pH	S.U.	grab	Annually in June

E1. Effluent Monitoring (continued):

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

E2. Groundwater Monitoring:

The permittee shall install a minimum of three groundwater monitoring wells at approved locations around the leachfields. Groundwater in the monitoring wells shall be sampled and analyzed for the following parameters:

<u>Parameter</u>	<u>Sample Units</u>	<u>Sample Types</u>	<u>Frequency</u>
Nitrate Nitrogen	mg/L	grab	Annually in June
Total Phosphorus	mg/L	grab	Annually in June
Total Dissolved Phosphorus	mg/L	grab	Annually in June
Chloride	mg/L	grab	Annually in June
pH	S.U.	grab	Annually in June
Depth to groundwater (below ground surface)	inches	-----	At time of sampling

Because of the changing water table conditions, the samples from the monitoring wells may not be collected on the same day or in the same week if water is not available. If a monitoring well has water at any time during the month, then a sample is required to be collected and analyzed. The monitoring wells shall be checked weekly during the month a sample is required to determine if water is available for sampling.

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

E3. Sampling and Testing Procedures:

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.

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.

E4. 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 than required by this permit, the results of such monitoring shall be submitted to the Secretary.

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.

E5. Additional Monitoring Requirements:

No additional monitoring of the system is required under this permit. However, the Secretary reserves the right to require additional 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 "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 indirect discharge permit, ID-9-0328, to Camp Dudley at Kiniya, LLC, by the Secretary relies upon the data, designs, judgment, 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 G "EFFECTIVE DATE"

This Indirect Discharge Permit, ID-9-0328, issued to Camp Dudley at Kiniya, LLC for the discharge of treated domestic sewage from Camp Kiniya located in Colchester, Vermont, is effective on this _____ day of August, 2017.

Emily Boedecker, Commissioner
Department of Environmental Conservation

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