

**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-9-0187
PIN: EJ95-0357

SECTION A - "ADMINISTRATION"

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

Grand Isle School District
"Grand Isle School"
U.S. Route 2
Grand Isle, Vermont 05458

is authorized to discharge treated domestic sewage from a disposal system serving Grand Isle School in Grand Isle, Vermont, to groundwater and indirectly to Lake Champlain.

A1. Permit Summary:

Expiration Date	June 30, 2021
Type of Waste	Domestic Sewage
Treatment System	Septic Tanks followed by a Recirculating Sand Filter
Disposal System	Pressurized Mound System
Town	Grand Isle
Drainage Basin	Upper Lake Champlain
Receiving Water	Unnamed stream that discharges to Pearl Bay in Lake Champlain
Drainage Area	0.65 mi ² (at point of compliance)
Stream Flow:	
Low Median Monthly (LMMF)	101,000 gpd (est.)
Design Flow	7,500 gpd
Design Capacity (Phase I)	4,500 gpd
Dilution Ratio	
(stream flow to wastewater)	13.5 to 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.

<u>Condition # & Description</u>	<u>Schedule Date</u>
A3. Apply for renewal of Indirect Discharge Permit	March 31, 2021
D2(A). Have a Vermont Registered Professional Engineer complete an inspection of sewage treatment and disposal system	Annually during April
D2(B). Submit annual inspection report	Annually by July 1st
D2(C). Submit implementation schedule	Annually by July 1st
D3. Notify Secretary of pumping of tanks and septage disposal	As specified
E2. Collect and analyze septic tank and recirculating filter effluent	Twice per year; February and October
E3. Inspect surface of recirculating sand filter	Weekly
E4. Record meter readings	As specified
E5. Check observation wells	Weekly
E6. Check groundwater wells	Weekly
E2. Submit results of monitoring	By the 15th day of the second month following date of sampling
E3 - E6. Submit results of inspection, readings and measurements	By the 15th day of the following month

A3. Expiration Date:

This permit, unless revoked or amended, shall be valid until June 30, 2021 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, 2021. 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. 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 Permits:

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(9) 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 this 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.

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 Grand Isle, Vermont. The indirect discharge can be located on the USGS South Hero, Vermont - New York 7.5' quadrangle map at Latitude N 44°43'31" and Longitude W 73°17'28".

B2. Nature of Indirect Discharge:

The wastewater is treated in two septic tanks (in series) followed by a recirculating sand filter, then pumped to two pressurized mound systems.

The system is approved for a Phase I design capacity of 4,500 gallons per day based on metered flow readings taken during the 1990-91 school year. A replacement area has been designated for wastewater disposal, and extra cells may be added to the recirculating sand filter to accommodate additional flow if it is necessary to expand the design flow to 7,500 gallons per day.

SECTION C "SYSTEM CONSTRUCTION"

C1. Previous Approvals:

The sewage treatment and disposal system was certified on January 16, 1992 by Dennis LaBombard, P.E. of LaBombard Engineering as being built in substantial compliance with the following design plans. The plans had been stamped "APPROVED" by the Secretary. No changes shall be made to the approved plans without prior written approval from the Secretary.

<u>SHEET #</u>	<u>TITLE</u>	<u>DATE PREPARED</u>	<u>REVISION DATE</u>
1 of 5	Site Plan	5/27/91	7/8/91
2 of 5	Typical Profile, Section and Details	5/27/91	7/8/91
3 of 5	Pumps, Pump Chambers & Details	5/27/91	6/28/91
4 of 5	Recirculating Sand Filter - General	5/27/91	7/8/91
5 of 5	Recirculating Sand Filter - Concrete	5/27/91	6/28/91

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.

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 treatment and disposal system. The engineer's inspection shall include, but not be limited to the following:

1. verification of the proper operation of all lift station pumps, alarms, and controls;
2. inspecting the entire system, noting any signs of inflow or excess infiltration;
3. evaluation of the accumulation of solids and scum in the septic tanks and determining if the tanks should be pumped that year;
4. checking the proper operation and distribution of flow onto and from the recirculating sand filter;
5. walking the disposal field checking for evidence of surfacing sewage;
6. checking the calibration of the pump hour and water meters; and
7. noting any necessary 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 inspection 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. an evaluation of the quality of the influent to and the effluent from the recirculating sand filter;
4. an evaluation of metered water used and groundwater levels in the vicinity of the disposal fields; and
5. a discussion of the recommended repairs and maintenance required.

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

By July 1st each year, the permittee shall notify the Secretary in writing stating how the engineer's recommendations are to be implemented and include a schedule for the required repair and maintenance items which have not 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 municipal sewage treatment facility or other facility approved by the Secretary where the septage is to be or was 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. Operator Certification:

The permittee is required at all times to employ a wastewater treatment facility operator with a minimum Grade I operator certificate from the Secretary. The permittee shall notify the Secretary in writing of any change in operators.

SECTION E "MONITORING"

E1. Quality Control/Quality Assurance Plan:

The permittee shall perform all sampling and monitoring in accordance with the Quality Control/Quality Assurance plan approved by the Secretary on September 30, 1991, and the schedules specified below.

The laboratory identified in the Quality Control/Quality Assurance Plan shall demonstrate successful performance for U.S. EPA check samples for all parameters and shall analyze any check samples provided by the Secretary. Failure to obtain an acceptable result for either the Secretary or EPA check samples may be a basis for requiring an alternate analytical laboratory.

E2. Effluent Monitoring:

The effluent from the septic tank shall be sampled at the inflow pipe to the recirculating sand filter pump chamber, and the effluent from the collector cell shall be sampled after passing through the recirculating sand filter. The samples shall be collected and analyzed as follows:

<u>Parameter</u>	<u>Units</u>	<u>Sample Types</u>	<u>Sample Frequency</u>
Biochemical Oxygen Demand (5-day)	mg/l	grab	Twice per year in February & October
Total Suspended Solids (TSS)	mg/l	grab	Twice per year in February & October

Sampling shall be conducted while school is in session.

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.

E3. Recirculating Sand Filter Inspection:

The surface of the recirculating sand filter shall be inspected weekly during the school session for ponding. The monthly monitoring report shall include a description of the media surface, and the depth of ponding in each cell shall be measured and recorded. If ponding exceeds six (6) inches the media surface shall be rehabilitated by raking and removing surface sand if necessary. Complete removal of the surface sand may be necessary if the effluent quality has deteriorated.

The results of the recirculating sand filter visual inspection shall be submitted to the Secretary by the 15th day of the month following the date of inspection.

E4. Wastewater Volume:

The permittee shall record the daily water meter readings and the date and time the readings are taken each day that school is in session. The daily volume of water used, individual meter readings, and the date and times readings are taken shall be submitted to the Secretary by the 15th of the month following the recording period.

Weekly when school is in session, the permittee shall also record the total weekly meter readings at the mound leach field pump station, and the pump run hours for the mound leach field pumps and the recirculating sand filter pumps. Weekly wastewater volume pumped to the disposal fields, the pump run times and the times the readings were taken shall be submitted to the Secretary by the 15th of the month following the recording period.

E5. Observation Wells:

Weekly when school is in session, the eight (8) observation wells (MW-2, MW-3, MW-5, MW-6 in the north field; and MW-8, MW-9, MW-11, MW-12 in the south field) in the mound system shall be inspected.

The depth of effluent ponding in inches in each well shall be measured and recorded and the results submitted to the Secretary by the 15th of the month following the date of measurement.

E6. Groundwater Monitoring Wells:

Weekly when school is in session, the four (4) groundwater monitoring wells (MW-1 and MW-4 in the north relief trench, and MW-7 and MW-10 in the south relief trench) in the mound system shall be inspected.

The depth to groundwater below ground surface in inches in each well shall be measured and recorded and the results submitted to the Secretary by the 15th of the month following the date of measurement.

E7. 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.

E8. Miscellaneous:

If the permittee monitors any parameter 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 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.

E9. Additional Monitoring Requirements:

No additional water quality 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 permit, ID-9-0187, to the Grand Isle School District 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-9-0187, issued to the Grand Isle School District located in Grand Isle, Vermont for the discharge of treated domestic sewage from the Grand Isle School, is effective on this _____ day of September, 2016.

Alyssa B. Schuren, Commissioner
Department of Environmental Conservation

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