

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

**DRAFT**  
INDIRECT DISCHARGE PERMIT

File Code: ULC-9-0057

Permit No.: ID-9-0057  
PIN: EJ95-0114

**SECTION A "ADMINISTRATION"**

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

The Tyler Place, Inc.  
PO Box 254  
Highgate Springs, VT 05460

is authorized to discharge treated domestic sewage from an existing subsurface disposal system serving The Tyler Place, Inc., a seasonal resort, to the groundwater and indirectly into Lake Champlain. **This is a permit renewal.**

A1. Permit Summary:

Expiration Date	<b>June 30, 2021</b>
Type of Waste	Domestic Sewage
Treatment System	Septic Tank and Recirculating Textile Filter
Disposal System	Leachfield
Town	Highgate
Drainage Basin	Upper Lake Champlain
Receiving Water	Lake Champlain
Design Capacity	7,046 gpd

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 # &amp; Description</u>	<u>Schedule Date</u>
A3. Apply for renewal of Indirect Discharge Permit	<b>March 31, 2021</b>
D2(A). Have a Vermont Registered Professional engineer complete an inspection of sewage collection, treatment and disposal system.	Annually during the period May 15 <sup>th</sup> through June 15 <sup>th</sup>
D2(B). Submit Annual Inspection Report	Annually prior to July 1 <sup>st</sup>
D2(C). Submit Schedule for Implementing engineer's recommendations	Annually prior to July 1 <sup>st</sup>
D3. Notify Secretary of pumping of tanks and septage disposal	As specified
E1. Collect and analyze effluent samples	June, July, August and September
E2. Record water meter readings	Daily during period of operation of the resort
E3. Measure and record the depths to groundwater in the monitor wells	Weekly, May through October
E1., E2., E3. Submit results of monitoring	As Specified

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 July 1, 2016.**

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.

A6. Transfer of Permit (continued):

- 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(6) 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 14-603(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.

The sewage treatment and disposal system was originally permitted under Certificate of Compliance number PB-6-0025 (revised), dated May 27, 1975.

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. Modifications and Additions 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 Upper Lake Champlain drainage basin in the town of Highgate, Franklin County, Vermont. The indirect discharge can be located on the USGS Highgate Center, Vermont 7.5' quadrangle map at Latitude N 44° 58' 46.2" and Longitude W 73° 06' 13".

B2. Nature of Indirect Discharge:

The wastewater is treated by passage through grease traps (for kitchen wastewater), a 10,000 gallon septic tank prior to passage through a 5,000 gallon septic tank converted to an aeration tank in 2014. The aeration tank discharges to a 10,000 gallon MicroFast® 9.0 treatment unit which, in turn, discharges to an Advantex® recirculating textile filter with the final effluent pumped to the disposal field by a 1,000 gallon pump station. The disposal field is an absorption bed with an approved disposal capacity of 7,046 gallons per day.

**SECTION C "SYSTEM SPECIFICATIONS"**

C1. Previous Approvals:

A revised Certificate of Compliance, No. PB-6-0025 was issued to The Tyler Place, Inc. on May 27, 1975. This certificate superseded certificate No. PB-6-0025 issued March 10, 1975. The certified plans were prepared by Collins and Rimer, Architects, Inc., and Willis Engineering on May 9, 1975.

The buried sand filter was reconstructed in the fall of 1990, according to sheets 1 and 2 prepared by Cross Consulting Engineers, dated August 1, 1990, and revised December 7, 1990, to reflect the as built sand filter.

C2. Treatment System Modifications: **Advantex Filter:**

The sewage treatment system modifications were completed in accordance with the following plans and specifications stamped by David Cotton, P.E:

<u>Drawing Number</u>	<u>Title</u>	<u>Date</u>	<u>Last Revised</u>
1231-1-1	Tyler Place - Site Plan - Septic	7/15/02	5/22/03
1231-1-2	Tyler Place – Recirculation Tank	4/3/03	
1231-1-3	Tyler Place – AX Textile Filter System Configuration	12/8/02	5/30/03
1231-1-4	Tyler Place – AX Filter Details	12/8/02	4/21/03

The Certification of Construction was received on May 4, 2005.

**C3. Treatment System Modifications: MicroFast 9.0 Treatment Unit:**

**Approval for the installation of the MicroFast 9.0 Treatment Unit was by letter dated March 20, 2014. The following As-Built plans by Roy A. Hango, P.E. depicts the overall system following the construction of the modifications:**

**As-Built Sheet entitled "Wastewater Treatment System 2014 Upgrade Plan – The Tyler Place, Highgate Springs, VT" dated 3-25-14, last revised 6/20/14; and**

**As-Built Sheet entitled "Wastewater Treatment System 2014 Upgrade Plan Details – The Tyler Place, Highgate Springs, VT" dated 3-25-14, last revised 6/20/14.**

**The Certification of Construction was received on September 22, 2014.**

**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 7,046 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 period May 15th to June 15th, within one week of start-up for that season, 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. verification of the proper operation of the lift station pumps, alarms, and controls;

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

2. evaluation of the accumulation of solids and scum in the grease traps and septic tanks and verifying the pumping of the tanks;
3. checking the septic tank effluent filters and determining if they need cleaning or other maintenance;
4. **checking the aeration system in the 5,000 gallon tank to ensure that it is operating properly;**
5. **verification of the proposer operation of the MicroFast 9.0 Treatment Unit and associated tankage, fans and pumps;**
6. verification of the proper operation of the recirculating textile filter system
7. checking the proper distribution of flow through the splitter boxes and the levelness of all distribution boxes in the disposal fields;
8. evaluating the liquid level in the leachfield shallow, in-field monitoring wells **and the new wells around the leachfield;**
9. checking for evidence of surfacing sewage or seepage; and
10. noting any necessary repairs, or maintenance that needs to be performed.

B. Annual Inspection Report:

Before July 1<sup>st</sup> 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;
4. an evaluation of metered water use and liquid levels in **and around** the disposal fields; and
5. an evaluation of the effluent quality discharged by the **MicroFast 9.0 Treatment Unit/Advantex** recirculating textile filter system.



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

C. Implementation Schedule:

Before July 1<sup>st</sup> each year the permittee shall notify the Secretary in writing stating how the engineer's recommendations are to be implemented and including a schedule for the required repairs and maintenance.

D3. Septage Disposal:

During the system's annual inspection the depth of sludge and scum shall be measured **in all tankage**. The septic tank 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 grease traps shall be pumped out if determined necessary by the engineer during the annual inspection based on the accumulation of grease.

Before pumping the tanks, the permittee shall notify the Secretary in writing of the name and address of the pumper and the municipal sewage treatment facility where the septage is to be disposed or other facility approved by the Secretary.

D4. Biosolids Removal:

**All sludge removed from the MicroFast 9.0 Treatment Unit shall be disposed of at locations approved by the Residual Management Section of the Department of Environmental Conservation. The permittee shall comply with the reporting procedures specified in the Certification from the Residuals Management Section or approved Sludge Management Plan.**

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. Effluent Monitoring: Chemical:

The effluent from the **MicroFast 9.0 Treatment Unit/Advantex** recirculating textile filter shall be sampled in the pump station prior to discharge to the disposal fields and analyzed for the following parameters:

<b>Parameter</b>	<b>Measurement Units</b>	<b>Sample Types</b>	<b>Sample Frequency</b>
Biochemical Oxygen Demand (5-day)	mg/L	Grab	June, July, August and September
Total Suspended Solids	mg/L	Grab	June, July, August and September

The results of the effluent analysis shall be submitted to the Secretary prior to the 15<sup>th</sup> day of the second month following the date of sampling.

E2. Sewage Volume:

During the period of operation from May through October of each year, the permittee shall record the daily water meter readings for all buildings 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 15<sup>th</sup> of the month following the recording period.

E3. In-Field Monitor Levels:

The depth to the liquid level (below ground surface) in the five monitors installed in the disposal field **and the four monitors installed around the disposal field** shall be measured and recorded weekly during the months of operation from May through October.

The results of measurements shall be submitted to the Secretary prior to the 15<sup>th</sup> day of the month following the date of sampling.

E4. Sampling and Testing Procedures:

All wastewater 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.

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 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.

E6. Monitoring Requirements:

No other water quality monitoring of the system is required under this permit. However, the Secretary reserves the right to require water quality 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(5)**.

**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-9-0057, to The Tyler Place, 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 G "EFFECTIVE DATE"**

This Indirect Discharge Permit, ID-9-0057, issued to The Tyler Place, Inc. for the discharge of wastewater from The Tyler Place, Inc. located in Highgate Springs, Vermont is effective on July 1, 2016.

Alyssa B. Schuren, Commissioner  
Department of Environmental Conservation  
Agency of Natural Resources

**DRAFT**

By \_\_\_\_\_ Date: \_\_\_\_\_  
George Desch, Acting Director  
Drinking Water and Groundwater Protection Division