

**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-9-0329
PIN: BR92-0011

SECTION A – “ADMINISTRATION”

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

Lawson’s Finest Liquids, LLC
292 Stony Hill Road
Warren, VT 05674

is authorized to discharge non-sewage, low strength process wastewater from a proposed brewery in Waitsfield, Vermont to the Winter Park Community Septic treatment and disposal system. This is a new indirect discharge permit.

A1. Permit Summary:

Expiration Date:	June 30, 2022
Type of Waste:	Low Strength Process Wastewater from Brewery
Waste Generated:	Initially: 4,340 gallons per day, 5 days/week Capacity: 6,200 gallons per day, 5 days/week
Treatment System:	Settling Tank, Equalization Tank, Moving Bed Biofilm Reactor, Trickling Filters
Disposal System:	Leachfield
Disposal Capacity:	4,429 gallons per day, 7 days/week

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
A11. Apply for Permit Amendment	At least 90 days prior to Brewery start-up
C2. Submit Construction Certification	Within 30 day of completion
D4. Submit Operation and Maintenance Plan	At least 30 days prior to Brewery start-up
D5. Employ Certified Operator	At all times
D9. Submit disposal report	Monthly
E1. Perform effluent sampling and analyses	As specified

A3. Expiration Date:

This permit, unless revoked or amended shall be valid until June 30, 2022, despite any intervening change in Water Quality Standards. Renewal of this Indirect Discharge Permit will be subject to all rules applicable at the time of application for 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 process wastewater. 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 indirect discharge 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 permittees 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 permittees 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 increase the frequency of monitoring or reporting in accordance with Condition D(4) of this permit.

A8. Indirect Discharge Rules:

This indirect discharge was reviewed and qualified for an Indirect Discharge Permit in accordance with Section 14-607 of the Indirect Discharge Rules.

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 wastewater 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 treatment or disposal facility 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. Disposal of High Strength Waste:

This permit does not authorize the disposal of high strength waste from the brewery to manure pits or anaerobic digesters, or for the land application of the waste. The permittee or contracted wastewater management company shall apply for a permit amendment at least 90 days prior to brewery start-up if the high strength waste from the permittee's brewery is to be disposed of in one of these manners. The application shall include supplemental information in accordance with one or more of the following:

- a. For disposal to an anaerobic digester, submittal of a written agreement between the permittee or wastewater management company and the farmer/owner. The agreement shall include estimated volumes to be delivered to the farm on a weekly or annual basis, the frequency of the deliveries, state that the farmer/owner agrees to manage the resulting digestate in accordance with Required Agricultural Practices, and be signed and dated by both parties. The farm may need to update their nutrient management plan and may need to obtain approval from the Vermont Agency of Agriculture Food & Markets as a disposal location.

A11. Disposal of High Strength Waste (continued):

- b. For disposal to a manure pit, submittal of a written agreement between the permittee or wastewater management company and the farmer. The agreement must state the location and volume of the farmer's manure pit, the estimated volume of waste to be delivered, state that the farmer agrees to manage the wastewater/ manure mixture in accordance with Required Agricultural Practices, and be signed and dated by both parties. Documentation verifying the construction and volume of the manure pit must also be submitted. In accordance with the Vermont Guidelines for Land Application of Dairy Processing Wastes, up to 10% of the manure pit volume may be used for disposal of non-manure wastes.
- c. For land application of the waste, submittal of a site evaluation in accordance with the Vermont Guidelines for Land Application of Dairy Processing Wastes.

A12. 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. Nature of Indirect Discharge:

The wastewater authorized for disposal by this permit is only for the lower strength waste generated from the manufacturing of beer by the permittee. It does not include any domestic wastewater from the Tap Room. Lower strength waste will be generated by the general cleaning and sanitizing operations within the brewery. All lower strength waste will be collected in a floor drain and piped to treatment system located on another lot in the Winter Park commercial development. The treatment system consists of a settling tank, equalization tank, an Aquapoint Moving Bed Biological Reactor and two Bioclere clarifiers. After treatment, the process wastewater will be of domestic wastewater strength, and will then be discharged to the Winter Park Community Septic system. The design flow to the Winter Park system is 4,429 gallons per day based on maximum production of 20,000 barrels of beer per year.

B1. Nature of Indirect Discharge (continued):

The high strength wastewater generated from the brewing of beer at the permittee's facility is prohibited from being discharged to the pretreatment system and ultimately to the Winter Park Community Septic system. High strength wastewater includes spent grains, hops and yeast, wort run-off, waste beer and the first rinse of fermentation vessels, wort kettle and other brewery equipment. These high strength wastes will be collected and transported from the brewery.

According to the design specifications provided by Aquapoint, the treatment system for the lower strength wastewater is expected to achieve the following concentrations:

<u>Parameter</u>	<u>Settled Influent</u>	<u>Treated Effluent</u>
Design Flow	4,429 gpd	4,429 gpd
Biochemical Oxygen Demand	4,000 mg/L	< 250 mg/L
Total Suspended Solids	1,000 mg/L	< 250 mg/L
Total Kjeldahl Nitrogen (TKN)	20 – 80 mg/L	< 10 mg/L
Total Phosphorus	10 – 50 mg/L	< 10 – 33 mg/L
pH	5.5 – 8.6 S.U.	6.5 – 8.5 S.U.

B2. Chemicals Utilized:

The permittee has submitted Material Safety Data Sheets and other information for the cleaning and sanitizing agents which will be used at the brewery.

Prior to making any changes in the chemicals used, the permittee shall submit a request for evaluation of the new chemicals to the Secretary. If the Secretary determines that the change in chemicals is a significant change, the permittee shall be required to apply for a permit amendment. Minor changes in chemicals used, as determined by the Secretary, will not require permit amendment. For those chemicals which are obtained from a different supplier or source and are identical to the chemicals listed in the application, the permittee shall notify the Secretary of the change and no evaluation will be necessary.

SECTION C "SYSTEM CONSTRUCTION"

C1. Approved Plans:

The following plans for the treatment of the low strength process wastewater from the Lawson's Finest Liquids brewery in Waitsfield, Vermont, titled "Brewery Wastewater Pre-Treatment Facility" prepared and stamped by Michael Smith, P.E. of Weston & Sampson, Inc., are approved by the Secretary:

<u>Sheet</u>	<u>Title</u>	<u>Date</u>
C-1	Site Plan & Layout Pre-Treatment System	June 23, 2017
M-1	Flow Schematic and Process Control Building Plan	June 23, 2017

The following plans and specifications for the treatment of the low strength process wastewater from the Lawson's Finest Liquids brewery in Waitsfield, Vermont, prepared by Aquapoint and submitted with the application for an indirect discharge permit, are approved by the Secretary:

<u>Drawing</u>	<u>Title</u>	<u>Date</u>
FRP-1288-74	Primary, Aerated Equalization & Aerobic MBBR in Horizontal FRP Tank and Two Bioclere Units in Series (Sheet 1 of 2 and Sheet 2 of 2)	April 2016
LB-1000	Lawsons Finest Liquids Process & Instrumentation Diagram	May 3, 2017
---	Wastewater Treatment System Design Specifications	May 5, 2017

No changes shall be made to the Weston & Sampson or Aquapoint approved plans and specifications without the approval of the Secretary.

C2. Construction Inspection Requirements:

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

- a. The names and qualifications of personnel providing inspection services.
- b. The location of major components of the pretreatment system 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 major system components.
- d. The engineer or designated representative shall be present for all required leakage and pressure testing of all tankage and sewer lines, and shall verify the proper operation of all alarms, floats, valves, pumps, controls and any other component of the treatment and disposal system.
- e. The engineer shall provide general inspection of the work at reasonable intervals to assure that construction is in accordance with the approved plans and specifications.
- f. The engineer 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 during construction.
- g. When the construction of the proposed improvements is complete and before the inspecting engineer has issued his certification, the permittee shall arrange an inspection of the treatment and disposal system with the inspecting engineer and the Secretary's representative(s).
- h. Within 30 days following completion of construction and before the pretreatment system is put into service, the inspecting Professional Engineer shall certify in writing to the Secretary that the construction was completed in accordance with approved plans and specifications, and shall submit as-built plans of the construction. The numerical results of any leakage and pressure tests shall be submitted as part of the inspecting engineer's certification of construction.

SECTION D - "SYSTEM OPERATION"

D1. General:

The process wastewater from the brewery shall be handled at all times in a manner that will (1) not permit the surface runoff of wastewater to waters of the State, (2) not result in a violation of the Vermont Water Quality Standards, and (3) not cause a violation of effluent limits for the Winter Park Community Septic wastewater system.

D2. Limits on Disposal:

This permit authorizes only the discharge of low strength process wastewater from the manufacturing of beer at the Lawson's Finest Liquids brewing facility in Waitsfield, Vermont to the Winter Park Community Septic wastewater system. The permittee is authorized to dispose up to 4,429 gallons per day to the Winter Park Community Septic wastewater system.

D3. Effluent Limits:

The effluent discharged to the Winter Park Community Septic wastewater system shall meet the following effluent quality limitations:

<u>Parameter</u>	<u>Daily Limit</u>
Flow	4,429 gpd
Biochemical Oxygen Demand (5-day)	250 mg/L
Total Suspended Solids	250 mg/L
pH	6.5 – 8.5 S.U.

If the system fails to meet these effluent limitations, the Secretary may require the permittee to take additional measures to achieve compliance.

D4. Operation and Maintenance Plan

At least 30 days prior to brewery start-up, the permittee shall submit an operation and maintenance plan to the Secretary for review and approval. The Plan shall incorporate the Aquapoint operation and maintenance manual for the pretreatment system, a revised Waste Management Plan for the management of high strength wastewater, the Clean-in-Place (CIP) System plan, and the First Rinse Management System plan all into one document. The Plan shall include a maintenance schedule by a service contractor for the Moving Bed Biological Reactor and Bioclere clarifiers.

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 pretreatment system.

D6. System Operation and Maintenance:

The wastewater pretreatment system shall be operated and maintained at all times in accordance with an approved Operation and Maintenance Plan, and in a manner satisfactory to the Secretary and not cause contamination of drinking water supplies, groundwater and/or surface water.

D7. Reporting of Failures:

The permittee shall immediately report any failure of the wastewater collection or treatment 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.

D8. Discharge Restrictions:

The permittee shall not discharge any high strength wastewater to the permittee's pretreatment system or to the Winter Park Community Septic wastewater system. High Strength wastewater, including spent grains, hops and yeast, wort run-off, waste beer and the first rinse of brewery equipment, shall be collected and managed in accordance with the high strength management plans in the application for an indirect discharge permit, and transported off-site for disposal at a permitted wastewater facility.

The permittee shall not allow any person to discharge or cause to be discharged anything other than low strength process wastewater from the brewery building to the pretreatment system. Discharge of domestic sewage from the permittee's Tap Room to the Winter Park Community Septic wastewater system shall be authorized by a Wastewater System and Potable Water Supply Permit prior to discharge.

D9. 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. Monitoring Requirements:

Upon the effective date of this permit, the permittee shall sample and analyze the low strength process wastewater from the brewery, as follows:

<u>Parameter</u>	<u>Units</u>	<u>Sample Type</u>	<u>Sample Frequency</u>
Flow	gpd	total	Daily
Biochemical Oxygen Demand	mg/L	composite	Weekly
Total Suspended Solids	mg/L	composite	Weekly
Total Phosphorus	mg/L	grab	Monthly
Total Kjeldahl Nitrogen (TKN)	mg/L	grab	Monthly
Nitrate	mg/L	grab	Monthly
Chloride	mg/L	grab	Monthly
pH	S.U.	grab	Monthly

Notes:

Representative samples shall be taken from either the effluent pump station or the auto-sampler in the control building following pretreatment of the process wastewater.

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

E2. 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.

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.

E3. 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.

E4. Other Water Quality Monitoring:

No other water quality monitoring of the system is required under this permit. However, the Secretary reserves the right to require additional monitoring in accordance with Condition A(7) should the disposal fail to meet the requirements of Conditions C(1) and C(2).

SECTION E - "COMPLIANCE REVIEW"

If the results of any monitoring or reporting indicate exceedances of the permittee's effluent limits or the possibility that the Winter Park Community Septic wastewater system effluent limits or the Vermont Water Quality Standards may be violated, the Secretary may require additional effluent monitoring. If continued monitoring and analysis indicates that a violation of effluent limits, the Winter Park Community Septic wastewater system effluent limits, or a violation of the Vermont Water Quality Standards has occurred, 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-9-0329, to Lawson's Finest Liquids, 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 F - "EFFECTIVE DATE"

This Indirect Discharge Permit, ID-9-0329, issued to Lawson's Finest Liquids, LLC, for the discharge of low strength process wastewater generated from the manufacturing of beer at the permittee's brewery in Waitsfield, Vermont to the Winter Park Community Septic wastewater system, is effective on this _____ day of July, 2016.

Emily Boedecker, Commissioner
Department of Environmental Conservation

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