

**AGENCY OF NATURAL RESOURCES
Department of Environmental Conservation
1 National Life Drive, Main 2
Montpelier, VT 05620-3521**

**INDIRECT DISCHARGE PERMIT
AMENDMENT**

Permit No.: ID-9-0317-2
PIN: RU96-0266

SECTION A – “ADMINISTRATION”

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

Vermont Hard Cider Company, LLC dba Green Mountain Beverage
1321 Exchange Street
Middlebury, VT 05753

is authorized to discharge non-sewage wastewater from the Green Mountain Beverage production facility in Middlebury, Vermont to an anaerobic digester located on a farm in Weybridge, Vermont. The farm is identified in Attachment A. The post-digester wastewater/manure mixture is expected to be managed in accordance with Required Agricultural Practices. **This amendment authorizes an increase in the maximum disposal limit from 200,000 gallons per year to 250,000 gallons per year and adds fruit juice residual to the list of wastes.**

A1. Permit Summary:

Expiration Date	June 30, 2019
Type of Waste	Tank Residual (Lees), Waste Cider and Beer, Fruit Juice Residual
Disposal System	Discharge of wastewater into an anaerobic digester followed by land application of resulting wastewater/manure mixture in accordance with Required Agricultural Practices
Location of Disposal	Weybridge, Vermont
Maximum Disposal Volume	250,000 gallons per year

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, 2019
D1. Wastewater disposal monitoring and reporting	As Specified
D2. Submit report to the Secretary	Monthly
D4. Other monitoring/testing required	As Specified

A3. Expiration Date:

This permit, unless revoked or amended shall be valid until June 30, 2019 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 should apply for an Indirect Discharge Permit renewal by March 31, 2019 for continued authorization to discharge wastewater to the farm digester. 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 amendment 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 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 14-1902(c) of the Indirect Discharge Rules.

A9. Right of the Agency to Inspect:

The permittee shall make arrangements to insure that the Secretary or the Secretary's authorized representative upon the presentation of their credentials and at reasonable times:

- a. To enter upon any fields being used as effluent disposal sites;
- b. To enter upon the 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;
- c. To have access to and copy any records required to be kept under conditions of this permit;
- d. To inspect any monitoring equipment or method required in this permit;
- e. To sample any discharge of waste, groundwater or surface water; and
- f. To inspect any collection, treatment, pollution management 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. Addition of Farms to Disposal Program:

The permittee may add additional farms to the disposal program in accordance with following:

- a. The permittee shall apply for a permit amendment to add additional farms to the disposal program. The application must include a disposal agreement between the permittee and the farmer(s). The agreement shall include estimated volumes to be delivered to the farm on an annual basis, the frequency of the deliveries, 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.
- b. Farm digesters may be added to the disposal program if the farm has adequate storage capacity and sufficient land associated with the farm for the uptake of the additional nutrients from the food processing waste. Large and medium farm operations may need to update their nutrient management plans and receive approval from the Vermont Agency of Agriculture to be approved as a disposal location.

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 food processing wastewater authorized for disposal by this permit consists of high strength tank bottom residual (lees), waste cider and fruit juice residual generated from the manufacturing of hard cider and non-alcoholic soft drinks at the Green Mountain Beverage production facility located on Exchange Street in Middlebury, Vermont. The food process wastewater may also contain waste cider and beer from kegs supplied to the permittee. The permittee will generate approximately 4,800 gallons per week of food processing wastewater. There will not be any chemicals in the food processing wastewater.

The tank bottom residual, waste cider and beer, and fruit juice residual will be combined with manure from the farm identified in Attachment A to boost methane production in the farm's anaerobic digester. The resulting digestate is expected to be managed in accordance with the Vermont Department of Agriculture Required Agricultural Practices.

Based on analytical data from samples collected in April, May and June 2014 from the wastewater holding tank at the Vermont Hard Cider Company, the wastewater is expected to have the following approximate concentrations:

<u>Parameter</u>	<u>Units</u>	<u>Range of Concentration</u>
Chemical Oxygen Demand	mg/l	210,000 – 260,000
Total Kjeldahl Nitrogen	mg/l	2,600 – 5,100
Total Phosphorus	mg/l	350 - 570
Potassium	mg/l	1,000 – 1,300
Chloride	mg/l	<50 - 96
Sodium	mg/l	17 - 30
pH	S.U.	3.64 – 3.88

These are not permit limits and exceedences of these values may occur.

SECTION C - "SYSTEM OPERATION"

C1. General:

The wastewater 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, or (3) not cause the farm identified in Attachment A to be in violation of a General Permit for Medium Farm Operations.

C2. Limits on Disposal:

This permit authorizes only the discharge of tank bottom residual (lees), waste cider and beer, and fruit juice residual generated from the manufacturing of hard cider and non-alcoholic soft drinks at the Green Mountain Beverage production facility in Middlebury, Vermont to the farm identified in Attachment A at a maximum disposal volume of 250,000 gallons in any calendar year.

SECTION D - "MONITORING"

D1. Monitoring Requirements:

Upon the effective date of this permit, the permittee shall sample and analyze the high strength food processing wastewater as follows:

<u>Parameter</u>	<u>Units</u>	<u>Sample Type</u>	<u>Sample Frequency</u>
Total Solids (TS)	%	grab	Semi-annual
Total Volatile Solids (TVS)	% of TS	grab	Semi-annual
Chemical Oxygen Demand (COD)	mg/l	grab	Semi-annual
Sodium (Na+)	mg/L	grab	Semi-annual
Chloride (Cl-)	mg/L	grab	Semi-annual
Total Phosphorus (P ₂ O ₅)	mg/L	grab	Semi-annual
Total Kjeldahl Nitrogen (TKN)	mg/L	grab	Semi-annual
Total Potassium (K ₂ O)	mg/l	grab	Semi-annual
pH	S.U.	grab	Semi-annual

Semi-annual periods are January – June and July – December. If any disposal of wastewater occurs in a semi-annual period, sampling is required to be performed in that period. Samples shall be taken from the 8,000 gallon waste holding tank in the cellar and from the 12,000 gallon waste holding tank on the keg line, after agitation of the contents of the tanks.

D1. Monitoring Requirements (continued):

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

The laboratory performing the analyses 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.

D2. Monthly Disposal Report:

On a monthly basis, the permittee shall submit a written report to the Secretary listing the daily volume in gallons of wastewater discharged to the farm and the dates the disposal occurred. The report shall be signed by the permittee under the following certification language:

"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."

The report shall be submitted by the 15th day of the month following disposal.

D3. Daily Journal:

The permittee shall maintain a bound, daily journal at the Green Mountain Beverage's production facility for documenting the volume of wastewater transported to the farm identified in Attachment A. The journal shall have printed pre-numbered pages. For each load transported to the farm, facility personnel shall enter in ink their name (signature), the date and the volume shipped.

The journal shall be made available for inspection by the Secretary. Upon request, the permittee shall photocopy daily entries for submission to the Secretary.

D4. 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 of the system in accordance with Condition A(8) should operation of the system fail to meet the requirements of Sections C(1) and C(2).

SECTION E - "COMPLIANCE REVIEW"

If the results of any monitoring or reporting indicate that there is a possibility that the Vermont Water Quality Standards may be violated, the Secretary may require monitoring of groundwater and surface water. If continued monitoring and analysis indicates that a violation of the wastewater discharge rate 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 Amendment, ID-9-0317-2, to the Vermont Hard Cider Company, LLC dba Green Mountain Beverage 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 Amendment, ID-9-0317-2, issued to the Vermont Hard Cider Company, LLC dba Green Mountain Beverage for the discharge of tank bottom residual (lees), waste cider and beer, and fruit juice residual from the Green Mountain Beverage production facility in Middlebury, Vermont to the farm listed in Attachment A is effective on this 29th day of January 2018.

Emily Boedecker, Commissioner
Department of Environmental Conservation

By: Mary Clark
Mary Clark, Program Manager
Indirect Discharge Program

ATTACHMENT A

Vermont Farms Approved for Disposal of Tank Bottom Residual (Lees), Waste Cider and Beer, and Fruit Juice Residuals from Green Mountain Beverage

January 2018

Farm Digester	Location	Disposal Limit
Monument Farms Dairy	2107 James Road Weybridge, Vermont	250,000 gallons per year

Note: The Vermont Agency of Agriculture, Farms & Markets has reviewed the farm's nutrient management plan and has approved this disposal.

