

**AGENCY OF NATURAL RESOURCES
DEPARTMENT OF ENVIRONMENTAL CONSERVATION
ONE NATIONAL LIFE DRIVE - MAIN 2
MONTPELIER, VERMONT 05620-3521**

**DRAFT INDIRECT DISCHARGE
PERMIT AMENDMENT**

Permit No.: ID-9-0052-2
PIN: WY98-0006

SECTION A - "ADMINISTRATION"

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

Ben & Jerry's Homemade, Inc.
900 Industrial Park Road
St. Albans VT 05478

is authorized to discharge non-sewage dairy processing waste from their dairy manufacturing facilities located in Waterbury and St. Albans, Vermont. Dairy processing waste from these facilities may be managed as pig feed, composted at the Intervale Compost site in Burlington, Vermont and at the Vermont Compost site in Montpelier, Vermont, discharged to manure pits, or as a substrate for digesters. **This is a permit amendment which increases the disposal limit from 7,000 gallons to 14,000 gallons per week to the Riverview Farm digester in Franklin, Vermont, and authorizes the conditional disposal of up to 16,365 gallons per week to the Vermont Technical College digester in Randolph, Vermont. This amendment also removes all the requirements for land application of dairy processing wastes, as the permittee does not want to use this disposal option. No other significant changes have been made to the permit.**

A1. Permit Summary:

| | |
|---------------------|--|
| Expiration Date | March 31, 2019 |
| Type of Waste | Non-sewage dairy processing wastewater, washwater and high strength dairy wastes |
| Disposal Methods | Digesters, Manure Pits |
| Permitted Discharge | 4,256,630 gallons (total annual discharge) (= 11,662 gallons per day) |

A1. Permit Summary (continued):

Disposal Locations: Enosburg, Berkshire, Fairfield, Franklin, Johnson, Moretown, Morristown, Randolph, Richford, Richmond, St. Albans, Sheldon, Stowe and Swanton

Digester Disposal Capacity 5,220,000 gallons per year
Manure Pit Disposal Capacity 2,462,369 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 | December 31, 2018 |
| D5. Submit disposal report | By the 15 th of each month |
| E2. Collect and analyze effluent | February and October |
| E2. Submit results of monitoring | By the 15 th of the second month following the date of sampling. |

A3. Expiration Date:

This permit, unless revoked or amended shall be valid until March 31, 2019 despite any intervening change in Water Quality Standards or the Vermont Guidelines for Land Application of Dairy Processing Wastes. 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 should apply for renewal of this Indirect Discharge Permit by December 31, 2018 for continued authorization to discharge dairy 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 the by the expiration date.

A4. Effective Date:

This permit amendment becomes effective on the date of signing.

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 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 monitoring frequency in accordance with Condition E(5) of this permit.

A8. Indirect Discharge Rules:

This indirect discharge was originally reviewed and qualified for an Indirect Discharge Permit in accordance with Section 14-1902(c) of the Indirect Discharge Rules, the Vermont Guidelines for Land Application of Dairy Processing Wastes dated August 14, 1990, and the Ground Water Protection Rule & Strategy, effective February 14, 2005, Appendix II, Section (3)(b)(iv).

The discharge of dairy processing wastewater, washwater and high strength wastes from Ben and Jerry's Homemade, Inc. facilities to manure pits has satisfied the criteria requiring that no more than 10% of the manure pit volume consist of dairy processing wastes on an annual basis. This is in accordance with the Vermont Guidelines for Land Application of Dairy Processing Wastes.

The manure/waste mixture from manure pits and digesters is expected to be land-applied in accordance with Required Agricultural Practices of the Vermont Department of Agriculture.

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, may enter upon any fields or inspect any manure pits being used as disposal sites.

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 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, or groundwater monitoring well; and
- e. To inspect any collection, treatment, pollution management, and 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. Additions or Modifications to Attachment A and/or Attachment B:

The permittee may add farm digesters to those listed in Attachment A or manure pits to those listed in Attachment B, or add agricultural fields for the land application of dairy processing waste using the following procedures:

- a. Farm digesters to be added to the disposal program must have adequate storage and nutrient capacity on the farm(s) for the additional dairy processing waste, as determined by the Agency of Agriculture Food & Markets.
- b. Fields or manure pits to be added to the disposal program must be evaluated in accordance with the Vermont Guidelines for Land Application of Dairy Processing Wastes.
- c. The permittee shall submit an application for permit amendment to add digesters or manure pits to those listed in Attachment A or Attachment B, or to increase disposal volumes to approved locations.

A12. Operating Fees:

This indirect discharge is subject to operating fees. The permittee shall submit the operating fees in accordance with the procedures provided by the Secretary.

SECTION B - "INDIRECT DISCHARGE"

B1. Nature of Indirect Discharge:

The indirect discharge authorized by this permit is classified as a non-sewage, non-pathogenic waste. The wastewater is a result of start up of equipment, purging the ice cream from the lines prior to either changing flavors or at the end of the day, and concentrated by-products and waste. This will include:

- a. Product spills, spoiled batches, abnormal losses of product due to human error, machine malfunction or process control malfunction;
- b. Concentrated residuals of products or its component materials removed prior to cleaning equipment and piping;
- c. Unused by-products such as cherry, strawberry and peach juice;
- d. Wastewater from a central wet vac;
- e. Dissolved Air Flootation (DAF) "float"; and
- f. Wastewater grease trap waste.

B1. Nature of Indirect Discharge (continued):

Some of this product may be utilized by pig farmers, and some may be suitable for composting by the Intervale Compost Project in Burlington, Vermont and the Vermont Compost Company in Montpelier, Vermont.

SECTION C - "PREVIOUS APPROVALS"

C1. Previous Approvals:

Ben & Jerry's Homemade, Inc. contracts all transportation and disposal of the dairy processing wastes to private haulers. As such, there are no approved plans or specifications for the disposal of high strength wastewater.

This permit is for discharges from existing facilities at Waterbury and St. Albans, Vermont. No additional construction or modifications are necessary for the operation of the disposal methods authorized by this permit.

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 surface runoff of wastewater to waters of the State, and (2) not result in a violation of the Vermont Water Quality Standards.

D2. Limits on Disposal:

This permit authorizes only the discharge of dairy process wastewater from the manufacturing of ice cream at the Ben & Jerry's facilities in Waterbury and St. Albans, Vermont to the digesters listed in Attachment A and to the manure pits listed in Attachment B. The permittee shall not exceed the maximum disposal limits indicated in Attachment A or Attachment B. The resulting manure/wastewater mixture is expected to be managed in accordance with the Vermont Agency of Agriculture's Required Agricultural Practices.

D3. Other Restrictions:

The permittee shall not allow any person to discharge or cause to be discharged from the manufacturing facilities anything other than the dairy processing wastewater and washwater described herein.

D4. Daily Journal:

The permittee shall maintain a bound, daily journal at each facility for documenting the disposal of high strength wastewater to the digesters or manure pits. The journal shall have printed pre-numbered pages. For each load transported to the digester or manure pits, facility personnel shall enter in ink 1) their name (with signature), 2) the date, 3) the digester or manure pit utilized for disposal, 4) the hauler's name, and 5) the volume disposed of.

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

D5. Monthly Disposal Report:

On a monthly basis, the permittee shall submit a written report to the Secretary listing 1) the dates in which disposal occurred, 2) the digester or manure pit where disposal occurred, 3) the daily volume in gallons discharged to each digester or manure pit, and 4) the total gallons discharged to each digester and manure pit for the month. 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 reports shall be submitted by the 15th day of the month following the dates of disposal.

SECTION E - "MONITORING"

E1. Quality Assurance/Quality Control Plan:

The laboratory identified in the Quality Assurance/Quality Control plan 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.

E2. Wastewater and Washwater Monitoring:

The wastewater, washwater and high strength wastes from both facilities which is disposed of in digesters or manure pits shall be sampled and analyzed as follows:

| <u>Parameter</u> | <u>Units</u> | <u>Sample Type</u> | <u>Sample Frequency</u> |
|-----------------------------------|--------------|--------------------|-------------------------|
| Biochemical Oxygen Demand (5-day) | mg/L | grab | February and October |
| Total Suspended Solids | mg/L | grab | February and October |
| Chlorides | mg/L | grab | February and October |
| Total Phosphorus | mg/L | grab | February and October |
| Total Dissolved Phosphorus | mg/L | grab | February and October |
| pH | S.U. | grab | February and October |
| Total Kjeldahl Nitrogen (TKN) | mg/L | grab | February and October |
| Ammonia Nitrogen | mg/L | grab | February and October |
| Nitrate-Nitrite Nitrogen | mg/L | grab | February and October |
| Total Dissolved Solids | mg/L | grab | February and October |

Samples shall be representative of the wastewater which is disposed of in digesters or manure pits.

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

E3. Sampling and Testing Procedures:

All wastewater and groundwater 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 more frequently or at additional locations other than required by this permit, the results of such monitoring shall be submitted by the 15th day of the second month following the date of sampling.

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 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 system fail to meet the requirements of Conditions D(1) and D(2).

SECTION F - "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/or 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 permit amendment, ID-9-0052-2, to Ben & Jerry's Homemade, Inc., by the Secretary relies upon the data, designs, judgement and other information supplied by the applicant, their 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 Amendment ID-9-0052-2, issued to Ben & Jerry's Homemade, Inc., for the discharge of non-sewage dairy processing wastewater to the digesters listed in Appendix A and to the manure pits listed in Appendix B is effective on this _____ day of March 2018.

Emily Boedecker, Commissioner
Department of Environmental Conservation

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

APPENDIX A

BEN & JERRY'S HOMEMADE, INC. Approved Farm Digester Disposal

(Based on ID-9-0052-2 Permit Amendment)
February 2018

| Farm/Owner | Town | Weekly Disposal Limit (gallons) | Annual Disposal Limit (gallons) |
|---|-----------|---------------------------------|---------------------------------|
| St. Pierre Farm | Berkshire | 50,000 | 2,600,000 |
| Gervais Family Farm | Enosburgh | 14,000 | 728,000 |
| Green Mountain Dairy | Sheldon | 6,000 ¹ | 313,000 ² |
| Riverview Farm (Benjamin's) | Franklin | 14,000 | 728,000 |
| Vermont Technical College | Randolph | 16,365 ^{1,3} | 851,000 ³ |
| Ben & Jerry's Annual Digester Capacity | | 100,365 | 5,220,000⁴ |

Note #1: Monthly average.

Note #2: Annual disposal limit to be reduced from 500,000 to 313,000 gallons per year, or less. Historical disposal limit of 500,000 gallons per year was based on 10% of manure pit capacity. Weekly and annual disposal limits to digester will be subject to Agency of Agriculture Food & Markets approval of Green Mountain Dairy's Large Farm Operation (LFO) permit amendment request.

Note #3: Conditional approval until May 31, 2018. Approval beyond May 31, 2018 is subject to Agency of Agriculture Food & Markets approval of Vermont Technical College's revised nutrient management plan.

Note #4: Total annual volume authorized by Indirect Discharge Permit ID-9-0052-2. Ben & Jerry's Homemade, Inc. may also dispose of dairy process wastewater to digesters connected to or part of a municipal wastewater treatment facility regulated under a National Pollutant Discharge Elimination System (NPDES) permit.

APPENDIX B

BEN & JERRY'S HOMEMADE, INC. Approved Manure Pit Disposal

(Based on ID-9-0052-1A Permit August 2014)

| Farm/Owner | Town | Manure Pit Total Volume (gallons) | Annual Disposal Limit (gallons) |
|---|------------|---|---------------------------------------|
| Todd Larose | Enosburgh | 1,172,550 | 117,255 |
| Green Dream Farm | Enosburgh | 2,500,000 | 250,000 |
| Richard Bourbeau | Fairfield | 1,880,920 | 188,920 |
| Thomas Branon | Fairfield | 1,000,000 | 100,000 |
| Lyndon Corey | Fairfield | 1,705,051 | 170,505 |
| Stephen White | Fairfield | 714,963 | 71,496 |
| Philip Bouchard | Franklin | 1,000,000 | 100,000 |
| Jim Hubbard | St. Albans | 1,500,000 | 150,000 |
| Robert Manning | St. Albans | 1,000,000 | 100,000 |
| Leon Benoit (Home Farm) | Sheldon | 1,025,985 | 102,598 |
| Leon Benoit (#2) | Sheldon | 890,240 | 89,024 |
| Robert Parent (Home Farm) | Sheldon | 1,403,652 | 140,365 |
| Robert Parent (#2) | Sheldon | 456,699 | 45,670 |
| Terry Rice | Swanton | 2,250,000 | 225,000 |
| St. Albans Facility | | Subtotal | 1,850,833 |
| Paul McLure | Johnson | 1,009,800 | 100,980 |
| Elwin Neill | Moretown | 299,200 | 29,920 |
| Waja Farms | Morristown | 1,500,000 | 150,000 |
| Clarence Towne | Morristown | 239,360 | 23,936 |
| Joseph Lanphere | Morristown | 400,000 | 40,000 |
| David Conant | Richmond | 1,250,000 | 225,000 |
| Lesley Pike | Stowe | 417,000 | 41,700 |
| Waterbury Facility | | Subtotal | 611,536 |
| Ben & Jerry's Annual Manure Pit Capacity | | | 2,462,369 |