

**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-9-0005
PIN: NS96-0313

SECTION A - "ADMINISTRATION"

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

Magic Wastewater Association, Inc.
289 Magic Mountain Access Road
Londonderry, Vermont 05148

is authorized to indirectly discharge treated domestic sewage from an existing and a future sprayfield system serving the Magic Mountain Ski Area and neighboring hotels and condominiums to groundwater and indirectly into Thompsonburg Brook and an unnamed tributary of Thompsonburg Brook in the Town of Londonderry, Vermont. This is a permit renewal.

A1. Permit Summary:

Expiration Date	June 30, 2022	
Type of Waste	Treated Domestic Sewage	
Treatment System	Aerated Lagoon	
Treatment Capacity	34,055 gallons per day (gpd)	
Disposal System	Spray Disposal	
Town	Londonderry	
	<u>Upper Spray Area</u>	<u>Lower Spray Area</u>
Drainage Basin	West River	West River
Receiving Streams	Unnamed Tributary of Thompsonburg Brook	Thompsonburg Brook
Drainage Areas	0.69 sq. miles	4.25 sq. miles
Disposal Capacity	77,658 gals/7 days (1.5")	194,250 gals/7 days (2") 291,375 gals/7 days (3")

A1. Permit Summary (continued):

	<u>Upper Spray Area</u>	<u>Lower Spray Area</u>
Low Median Monthly Stream Flow (LMMF)	110,880 gpd	685,440 gpd
Dilution Ratio at LMMF	10 : 1	16.7 : 1

A2. Compliance Schedule Summary:

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 Discharge Permit	March 31, 2022
C2 Construct upper sprayfield and/or second effluent storage lagoon	As specified
D4(A) Have a Vermont registered professional engineer complete an inspection of the sewage collection, treatment and disposal system	Annually in April
D4(B) Submit Annual Inspection Report	Annually, by July 1st
D4(C) Submit Implementation Schedule	Annually, by August 1 st
D9 Submit monthly report	Monthly
E2(A) Collect and analyze influent and effluent samples	As specified
E2(A) Record volume of effluent sprayed	Continuously
E3(A) Collect and analyze groundwater monitoring samples	Quarterly
E3(B) Measure and record the depths to groundwater in the monitoring wells	As specified

A2. Compliance Schedule Summary (continued):

<u>Condition # & Description</u>	<u>Schedule Date</u>
E4(A) Collect and analyze receiving stream samples	Quarterly
E4(B) Conduct biological sampling of receiving streams	Upon written request from the Secretary
E2(A), E3(A), E3(B), E4(A), E6 Submit results of monitoring	By the 15th of the second month following sampling
E5. Submit evaluation of effluent, groundwater and surface water quality data	By March 31, 2022
E6. Collect and analyze underdrain samples	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 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, 2022 for continued authorization to discharge treated sewage. 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. 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 systems.
- b. If the transferee is a corporation or an association of unit owners or other legal entity, it shall be demonstrated that such legal entity has 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 to increase the monitoring frequency in accordance with Condition E(9) of this permit.

A8. Indirect Discharge Rules:

This indirect discharge was reviewed and qualified for an Indirect Discharge Permit in accordance with Section 14-603(d) of the Indirect Discharge Rules for new indirect discharges of sewage. The operational data collected during the period 2012 - 2016 indicates that the discharge from the system is in compliance with the Aquatic Permitting Criteria of the Indirect Discharge Rules, effective April 30, 2003.

A9. Water Supply and Wastewater Disposal Permits:

Water Supply and Wastewater Disposal Permits are required before construction and/or connection of buildings to the system.

A10. Right of Department to Inspect:

The permittee shall permit the Secretary or the Secretary's authorized representative upon the presentation of their credentials:

- a. To enter upon permittee's premises in which any effluent collection, 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 at reasonable times, any collection, treatment, pollution management and disposal facilities required by this permit.

A11. 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.

A12. 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.

A13. Reserve Connection Capacity:

The reserve capacity for additional construction shall be determined by subtracting the highest monthly average flow during the previous four years from the 365-day connected capacity (34,055 gpd).

New connections will be authorized using the design flows in the Wastewater System and Potable Water Supply Rules, as amended.

A14. 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:

The spray disposal system consists of two separate and independent spray areas identified as the "Lower Spray Area" and the "Upper Spray Area".

The location of the indirect discharge for the "Lower Spray Area" is on Thompsonburg Brook, approximately 2.5 miles upstream of the confluence of Thompsonburg Brook and the West River, in the Town of Londonderry, Vermont. The drainage area at the point of compliance is 4.26 square miles.

The location of the indirect discharge for the "Upper Spray Area" is on an unnamed tributary of Thompsonburg Brook, approximately 3,000 feet upstream of the confluence of the unnamed tributary and Thompsonburg Brook, in the Town of Londonderry, Vermont. The drainage area at the point of compliance is 0.69 square miles. The "Upper Spray Area" is not utilized and its spray disposal system has not been constructed as of the effective date of this permit.

The indirect discharges can be located on the U.S.G.S. Londonderry, Vermont 15' quadrangle map at Latitude N 43° 13' and Longitude W 72° 47'.

B2. Nature of Indirect Discharge:

The wastewater is treated in a 40,000 gpd aerated lagoon, and stored in a 1.2 million gallon storage lagoon, prior to chlorination and spray disposal. The spray disposal systems have a combined sprayfield capacity of 38,844 gpd and connected capacity of 34,055 gpd.

The "Lower Spray Area" has a maximum loading rate of 2 inches (194,250 gallons) per any 7-day period. The loading rate may be increased to 3 inches (291,375 gallons) per any 7-day period if biochemical oxygen demand (5-day) and total suspended solids limits of 15 mg/L are met.

The "Upper Spray Area" has a design maximum loading rate of 1.5 inches (77,658 gallons) per any 7-day period. As of the effective date of this permit, the Upper Spray Area has not been constructed.

SECTION C "SYSTEM CONSTRUCTION"

C1. Previous Approvals:

The upper sprayfield and/or second effluent storage lagoon, if required by Condition C2, shall be completed in accordance with the following plans and specifications prepared by Robert Harrington, P.E.:

<u>Sheet</u>	<u>Description</u>	<u>Date</u>	<u>Last Revised</u>
IVC1	General Site Layout	3/25/87	7/22/87
IVC2	Site Layout Section 1	3/16/87	7/21/87
IVC3	Site Layout Section 2	3/6/87	7/9/87
IVC4	Force Main Layout & Profile Section 1	3/27/87	7/9/87
IVC5	Force Main Layout & Profile Section 2	3/27/87	7/9/87
IVC6	Spray Area Layout Plan	3/6/87	7/22/87
IVC7	Spray Area Details	3/24/87	7/21/87
IVC8	Miscellaneous Details	3/24/87	7/9/87;
IVC9	Effluent Pump Station	3/25/87	7/21/87

and the Construction Specifications for Magic Mountain Upper Mountain Spray Irrigation Project, dated June 1987, and which have been stamped "APPROVED" by the Secretary. No changes shall be made to the plans without prior written approval from the Agency of Natural Resources.

C2. Phased Construction - Upper Sprayfield and Second Effluent Storage Lagoon:

A. Upper Sprayfield:

The permittee shall construct the upper sprayfield if both of the following conditions are met:

- (1) The 30-day peak flow average during the period December 1st - March 31st exceeds 27,750 gpd; and
- (2) During the 30-day peak flow period, the volume of total effluent stored at any time exceeds 90% of the total storage capacity.

C2. Phased Construction - Upper Sprayfield and Second Effluent Storage Lagoon (continued):

B. Second Effluent Storage Lagoon:

The permittee shall construct the second effluent storage lagoon if both of the following conditions are met:

- (1) The peak 30-day flow volume for the period April 1st - May 15th exceeds 80% of the total storage volume available (not including required pond freeboard); and
- (2) During the period March 15th - May 15th the volume of total effluent stored at any time exceeds 90% of the total storage capacity available.

C. Construction Inspection:

The permittee shall submit a copy of a signed contract with a Vermont registered professional engineer to provide inspection of construction of the upper sprayfield and/or second effluent storage lagoon, if either are required to be constructed. The contract, at a minimum, shall provide for the following:

1. The names and qualifications of personnel providing inspection.
2. The location of the pump station, forcemain, and sprayfield be staked out by a Vermont registered professional engineer or surveyor in accordance with the approved plans.
3. The engineer shall be present for installation of all major system components.
4. The engineer shall be present for all leakage testing of the force main, spray system, and/or lagoon liner.
5. The engineer shall be present for the installation of the lagoon liner for the second storage lagoon. The engineer shall inspect the preparation of the lagoon bottom and sidewalls before the liner is installed.
6. The engineer shall provide general inspection of the work at reasonable intervals to assure that construction is in accordance with the contract documents and approved plans.

C2. Phased Construction - Upper Sprayfield and Second Effluent Storage Lagoon:

C. Construction Inspection (continued):

7. The engineer shall maintain written reports of all inspections performed including dates, items inspected, and comments and provide that copies of all inspection reports be submitted to the Secretary at a minimum of once every two weeks.
8. The engineer shall notify the Secretary when the construction is completed for a joint inspection with Secretary personnel.
9. The engineer shall certify in writing to the Secretary that the construction was completed in accordance with the approved plans and specifications and shall submit as-built plans for the system within 30 days of the completion of construction.

C3. General Construction Requirements:

Before the liner is installed in the second effluent storage lagoon, the permittee shall have a Vermont registered professional engineer submit specifications for leakage testing of the installed lagoon liner. The specifications shall be subject to the review and approval of the Secretary.

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; (4) not result in a violation of the Vermont Water Quality Standards; and (5) not cause a significant alteration of the aquatic biota in the receiving stream(s).

The wastewater collection, treatment, and disposal system shall be operated and maintained at all times in a manner satisfactory to the Secretary so as not to cause a health hazard or contamination of drinking water supplies, groundwater or surface water.

D2. Influent and Effluent Limitations:

The facility shall be operated at all times in accordance with the following influent and effluent limits:

INFLUENT LIMITATIONS

PARAMETER	30-DAY AVERAGE	MAXIMUM IN 10-DAY PERIOD	MAXIMUM DAY
Influent Flow	34,055 gallons per day	N/A	N/A

EFFLUENT LIMITATIONS

PARAMETER	30-DAY AVERAGE	MAXIMUM IN 7-DAY PERIOD	MAXIMUM DAY (except as noted)
Upper Sprayfield Flow	N/A	77,658 gal.	N/A
Lower Sprayfield Flow	N/A	194,250 gal.	N/A
		291,375 gal. ⁽¹⁾	
Biochemical Oxygen Demand (5-day)	N/A	N/A	30 mg/L ⁽¹⁾
Total Suspended Solids	N/A	N/A	30 mg/L ⁽¹⁾
Escherichia coli	N/A	N/A	77 col/100 mL
Total Chlorine Residual	N/A	N/A	4.0 mg/L minimum – total) or 1.0 mg/L (minimum free) ⁽²⁾

Notes:

(1) 15 mg/L required for BOD and TSS if spray more than 2" per any 7 consecutive days as per §14-1701(a) of the Indirect Discharge Rules, effective April 30, 2003.

(2) Unless the permittee chooses to utilize disinfection prior to effluent storage as allowed under §14-1705(a)(2) of the Indirect Discharge Rules, effective April 30, 2003.

D2. Influent and Effluent Limitations (continued):

- A. The groundwater table shall not rise closer than one foot to ground surface in the disposal area as a result of spraying as evidenced by groundwater levels in the field monitoring wells. Groundwater levels shall be measured within 24 hours after spraying when more than 2.0 inches are sprayed in any one day.
- B. No spraying shall be conducted when air temperature is below 10°F, groundwater is within one foot of ground surface, or when surface runoff is occurring in the sprayfield.
- C. The total wastewater applied to the Lower Sprayfield shall not exceed 8,880,000 gallons per year. The permittee may spray up to 3.0 inches (291,375 gallons) on the wetted area in the Lower Sprayfield in any consecutive seven (7) day period, providing that groundwater levels are not within one foot of ground surface and BOD and TSS concentrations are less than 15 mg/L. The total wastewater applied to the Upper Sprayfield shall not exceed 1.5 inches (77,658 gallons) on the wetted area in any consecutive seven (7) day period.
- D. The maximum hourly rate of wastewater application shall not exceed 0.25 inches per hour.
- E. There shall be a minimum of a 12-hour rest period between spray applications for any spray line.
- F. The effluent shall have a minimum of 4.0 mg/L total chlorine residual or 1.0 mg/L free chlorine residual at the spray nozzle at all times unless the permittee chooses to utilize disinfection prior to effluent storage as allowed under §14-1705(a)(2) of the Indirect Discharge Rules, effective April 30, 2003.

D3. Lagoon Freeboard Requirements:

A minimum three feet of freeboard shall be maintained in the treatment and effluent storage lagoons at all times.

D4. 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 thorough 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. inspecting the entire collection system, removing manhole covers to observe the condition of the sewers and manholes, and noting any signs of inflow or excess infiltration;
2. checking the calibration of the influent and effluent flow meters;
3. verifying the proper operation of the aeration system in the treatment lagoon and chlorination system prior to disposal;
4. verification of the proper operation of the lift station pumps, alarms, and controls in each pump station;
5. walking each spray lateral in the spray fields and checking for the proper operation of the spray system, noting any repairs needed and any areas of erosion or concentrated surface runoff; and
6. noting any necessary repairs, or maintenance that needs to be performed.

B. Annual Inspection Report:

By July 1st each year the permittee shall have the inspecting engineer submit an annual report to the Secretary including the following items:

1. a complete list of the items inspected and the results of the inspection;
2. a discussion of the recommended repairs and maintenance required for the next construction season;
3. an evaluation of the past year's influent flow records, effluent spray records, and groundwater table levels in sprayfields to verify compliance with permit requirements; and

D4. Annual Inspection, Report and Implementation Schedule:

B. Annual Inspection Report (continued):

4. an evaluation of influent flow records and volume of effluent stored in the effluent storage lagoon to determine if either the upper sprayfield or second effluent storage lagoon must be constructed as per the requirements of Condition C2.

C. Implementation Schedule:

By August 1st each year, the permittee shall notify the Secretary in writing stating how the engineer's recommendations were implemented, including submittal of a schedule for the required repair and maintenance items that have not yet been completed.

D5. Wastewater Treatment Plant Operator Qualifications:

The permittee is required at all times to employ a wastewater treatment facility operator with a minimum Grade II operator certificate in accordance with the September 25, 2014 Wastewater Treatment Facility Operator Certification Rule. The permittee shall notify the Secretary in writing of any change in operators.

D6. Sludge Disposal:

All sludge removed from the sewage treatment facility 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.

D7. 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.

For untreated discharges of sewage that reach Vermont's surface waters, the system operator or their delegate shall follow the notification and signage requirements in 10 V.S.A. 1295 (Act 86) and Agency "Procedure for Public Notice of Untreated Discharges and Unpermitted Discharges to Vermont's Surface Waters." These procedures require:

D7. Reporting of Failures (continued):

- A. Posting an electronic Public Alert as soon as possible but no longer than within 1 hour from discovery of an untreated discharge;
- B. Posting a follow-up Overflow and Incident Report within 12 hours of discovery of an untreated discharge and notify the town health officer; and
- C. Posting temporary signs at any public access area(s) downstream of the unpermitted discharges.

D8. 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.

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 the operator and 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. Quality Control/Quality Assurance Plan:

The laboratory identified in the Quality Control/Quality Assurance 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. Influent and Effluent Monitoring:

A. Chemical:

The permittee shall sample, analyze, and report on the performance and operation of the sewage treatment and disposal system in accordance with the following schedule:

Parameter	Measurement Location	Sample or Measurement Type	Sample Frequency
Flow	Influent and Spray Effluent	Continuous ¹	Daily Total, Maximum, Minimum
Treatment Lagoon and Effluent Storage Lagoon Levels	Transfer Pit Gages	Instantaneous	Daily
Biochemical Oxygen Demand (5-Day)	Influent and Effluent	Composite ²	Once per month
Total Suspended Solids	Influent and Effluent	Composite ²	Once per month
Escherichia coli	Effluent (at spray nozzle) ³	Grab	Once per month
pH	Influent and Effluent	Grab	Once per month
Total Chlorine Residual	Effluent (at spray nozzle) ³	Grab	2x daily (at beginning and end of spray period)
Total Kjeldahl Nitrogen	Effluent	Grab	Quarterly ⁴
Ammonia (as N)	Effluent	Grab	Quarterly ⁴
Nitrate (as N)	Effluent	Grab	Quarterly ⁴
Total Phosphorus	Effluent	Grab	Quarterly ⁴
Chloride	Effluent	Grab	Quarterly ⁴
Air Temperature	In Sprayfield	Instantaneous	2x daily (at beginning and end of spray period)

Notes:

1. Continuous influent metering and effluent metering when spraying.
2. Composite samples shall be taken during the hours 6:00 am and 6:00 pm, unless otherwise specified.
3. On the day that the E. coli grab sample is collected, the daily total residual chlorine sample for that day shall be collected at the same time and location as the E. coli sample. Both shall be collected after spray system has been operating that day for a minimum of 30 minutes. Sampling frequency may be modified if the permittee chooses to utilize disinfection prior to effluent storage as allowed under §14- 1705(a)(2) of the Indirect Discharge Rules, effective April 30, 2003.
4. Quarterly means February, June, September and December.
5. The results of the effluent analysis shall be submitted to the Secretary prior to the 15th day of the second month following the date of sampling.

E3. Groundwater Monitoring:

A. Chemical & Bacteriological Monitoring:

The permittee shall sample and analyze groundwater in the monitoring wells located above and below the sprayfield(s) in accordance with the following:

Parameter	Measurement Units	Sample or Measurement Type	Sample Frequency
pH	S.U.	Grab	Quarterly ¹
Nitrate (as N)	mg/L	Grab	Quarterly ¹
Total Dissolved Phosphorus	mg/L	Grab	Quarterly ¹
Chlorides	mg/L	Grab	Quarterly ¹
Depth to Groundwater (below ground surface)	Feet and tenths of feet		At time of sampling

Notes:

1. Quarterly means February, June, September and December.
2. Because of changing water table conditions, the samples from the groundwater monitoring wells may not be collected on the same day or in the same week. If a monitoring well has water at any time during the month, then a sample is required to be collected and analyzed.
3. The results of these analyses shall be submitted to the Secretary by the 15th day of the second month following the date of sampling.

B. Groundwater Levels:

The depth to groundwater below ground surface shall be measured and recorded weekly, or, if applicable, more frequently in accordance with the requirements of Condition D2 if more than 2.0 inches are sprayed in any one day. Dry wells may be recorded as "no water to depth of well".

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

E4. Receiving Stream Monitoring:

A. Chemical:

The permittee shall sample the receiving stream(s) at locations upstream and downstream of the indirect discharge(s) and have the samples analyzed in accordance with the following schedule:

Parameter	Measurement Units	Sample or Measurement Type	Sample Frequency
pH	S.U.	Grab	Quarterly ¹
Nitrate (as N)	mg/L	Grab	Quarterly ¹
Total Phosphorus	mg/L	Grab	Quarterly ¹ (see Note #2)
Total Dissolved Phosphorus	mg/L	Grab	Quarterly ¹ (see Note #2)
Chloride	mg/L	Grab	Quarterly ¹
Turbidity	NTU	Grab	Quarterly ¹
Temperature	°C	Grab	Quarterly ¹

Notes:

1. Quarterly means February, June, September and December.
2. Two independent samples shall be taken and analyzed on each sampling date.
3. The permittee shall not sample the receiving stream(s) within 24 hours of any storm event affecting the stream watershed.
4. The results of these analyses shall be submitted to the Secretary prior to the 15th day of the second month following the date of sampling.

B. Biological Monitoring:

Upon written request from the Secretary, the permittee shall conduct biological sampling during the months of August - September in the receiving stream(s) in accordance with approved biological sampling practices.

E5. Water Quality Evaluation:

By March 31, 2022, the permittee shall have a qualified water quality specialist submit an evaluation to the Secretary of all effluent, groundwater and surface water quality data and determine what, if any, short or long term impacts there have been on groundwater and surface water quality. The evaluation shall include all data from the January 2017 - December 2021 permit period, including any biomonitoring results.

E6. Underdrain Monitoring:

In June, September and December of every year, the discharge from the underdrains beneath the treatment lagoon and effluent storage lagoons shall be sampled and analyzed for the following:

- a. Chlorides
- b. Total Dissolved Phosphorus
- c. Nitrate Nitrogen

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

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 monitor 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.

E8. Miscellaneous (continued):

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 monitoring of the system in accordance with Condition A(7) should operation of the system fail to meet the requirements of Condition D(1).

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, or a significant alteration of the aquatic biota in the receiving waters 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-9-0005, to the Magic Wastewater Association, Inc. by the Secretary relies upon the data, designs, judgement and other information supplied by the applicants, 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 applicants and no warranties or guarantees are given or implied.

SECTION G "EFFECTIVE DATE"

This Indirect Discharge Permit, ID-9-0005, issued to the Magic Wastewater Association, Inc. for the discharge of treated domestic sewage from an existing sprayfield and a future sprayfield both located in Londonderry, Vermont is effective on this ____ day of July, 2017.

Emily Boedecker, Commissioner
Department of Environmental Conservation

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