

AGENCY OF NATURAL RESOURCES
DEPARTMENT OF ENVIRONMENTAL CONSERVATION
WATERSHED MANAGEMENT DIVISION
ONE NATIONAL LIFE DRIVE, DAVIS BUILDING, 3RD FLOOR
MONTPELIER, VT 05620-3522

Permit No.: 3-1574
PIN: NS06-0192
NPDES No.: VT0120099

DISCHARGE PERMIT

In compliance with the provisions of the Vermont Water Pollution Control Act as amended (10 V.S.A. chapter 47), the Vermont Water Pollution Control Permit Regulations as amended (Environmental Protection Rules, Chapter 13), the federal Clean Water Act as amended (33 U.S.C. §1251 *et seq.*), and implementing federal regulations,

DesRosiers Family Revocable Living Trust
10 Harlow Street
Essex, MA 01929

(hereinafter referred to as the “Permittee”) is authorized by the Secretary of the Agency of Natural Resources (hereinafter referred to as the “Secretary”) to discharge from a facility located at:

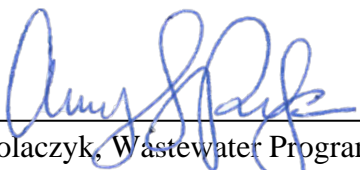
Lower Bartonsville Road
Rockingham, VT
(SPAN 52816612775)

to the Petty Brook and Unnamed Tributary of Williams River in accordance with the following conditions.

This permit shall become effective on December 1, 2022

This permit and the authorization to discharge shall expire on September 30, 2027

Julia S. Moore, Secretary
Agency of Natural Resources

By:  _____ Date: 11/9/2022
Amy Polaczyk, Wastewater Program Manager
Watershed Management Division

I. SPECIAL CONDITIONS

A. EFFLUENT LIMITS

- 1. Discharge Points S/N 001 Lat. 43.22572, Long. - 72.53427 (Petty Brook) and S/N 002 Lat. 43.22678, Long. -72.53434 (Unnamed Tributary of Williams River) :** the Permittee is authorized to discharge pond water treated with Alum, an effluent for which the characteristics shall not exceed the values listed below:

EFFLUENT CHARACTERISTICS	DISCHARGE LIMITATIONS		MONITORING REQUIREMENTS	
	Instantaneous Maximum	Maximum Day	Measurement Frequency	Sample Type

Flow		As needed	Daily ⁴	Estimated Total ¹
Turbidity ²	25 NTU			Grab
pH ²		6.5 to 8.2 S.U.		Grab
Aluminum ^{2,3}		0.087 mg/L	Weekly ⁴	Grab
Dissolved Organic Carbon (DOC) ³		Monitor Only mg/L		Grab
Hardness ³		Monitor Only mg/L		Grab

The Permittee shall collect samples at a representative location prior to the discharge location. If both outlets are discharging simultaneously, only one sample is required for permit compliance. The location of sample collection shall be specified on the applicable WR-43 form.

- (1) Total Daily Flow shall be estimated by measuring the water depth in the pipe at the invert of the outlet pipe and applying a Manning’s equation calculation.
- (2) The discharge shall meet effluent limits prior to discharge. If a pH, turbidity, or aluminum sample exceed permit limits, the Permittee shall immediately discontinue discharge until sampling indicates the discharge meets the permit limits.
- (3) Aluminum, DOC, and Hardness analysis shall be performed on the same sample.
- (4) sampling is required when discharge is occurring.

B. SPECIAL CONDITIONS

- a.** The permittee is approved to make one application of alum resulting in a maximum concentration of 20 ppm for treatment of turbidity in calendar year 2022. Should additional alum use be necessary, the applicant shall apply to amend this permit.
- b.** Down-gradient areas shall be inspected regularly (at least quarterly) for erosion and note the observations of form WR-43. The Permittee shall take immediate action to correct any erosion resulting from this discharge. This applies to discharges from both S/N 001 and S/N 002.
- c.** The discharge shall be free from substances in kind or quantity that settle to form harmful benthic deposits; float as foam, debris, scum, or other visible substances; produce odor, color, taste, or turbidity that is not naturally occurring and would render the surface water unsuitable for its designated uses; result in the dominance of nuisance species; or interfere with recreational activities; or which would cause a violation of the Vermont Water Quality Standards.
- d.** Any action on the part of the Secretary in reviewing, commenting upon or approving plans and specifications for the construction of WWTFs shall not relieve the Permittee from the responsibility to achieve effluent limitations set forth in this permit and shall not constitute a waiver of, or act of estoppel against any remedy available to the Secretary, the State of Vermont, or the federal government for failure to meet any requirement set forth in this permit or imposed by state or federal law.

C. REAPPLICATION

If the Permittee desires to continue to discharge after the expiration of this permit, the Permittee shall reapply on the application forms then in use at least 180 days before this permit expires.

Reapply for a Discharge Permit by: **June 30, 2027**

D. OPERATING FEES

This discharge is subject to operating fees as required by 3 V.S.A. § 2822.

E. MONITORING AND REPORTING

1. Sampling and Analysis

The sampling, preservation, handling, and analytical methods used shall conform to the test procedures published in Title 40 of the Code of Federal Regulations (C.F.R.) Part 136. The Permittee shall use sufficiently sensitive test procedures (i.e., methods) approved under 40 C.F.R. Part 136 for the analysis of the pollutants or pollutant parameters required under this Section.

Samples shall be representative of the quality of effluent discharged over the sampling and reporting period. The Permittee shall identify the effluent sampling location used for each discharge.

2. Reporting

The Permittee is required to submit monthly reports of monitoring results as required in Condition I.A. and operational parameters on Discharge Monitoring Report (DMR) form WR-43 or through an electronic reporting system made available by the Secretary. Reports are due on the 15th day of each month, beginning with the month following the effective date of this permit.

Unless waived by the Secretary, the Permittee shall electronically submit its DMRs via Vermont's online electronic reporting system. The Permittee shall electronically submit additional compliance monitoring data and reports specified by the Secretary. When the Permittee submits DMRs using an electronic system designated by the Secretary, which requires attachment of scanned DMRs in PDF format, it is not required to submit hard copies of DMRs. The link below shall be used for electronic submittals:

<https://anronline.vermont.gov/>

If, in any reporting period there has been no discharge, the Permittee must submit that information by the report due date. All reports shall be signed:

- a. In the case of corporations, by a principal executive officer of at least the level of vice president, or his/her duly authorized representative, if such representative is responsible for the overall operation of the facility from which the discharge described in the permit form originates and the authorization is made in writing and submitted to the Secretary;
- b. In the case of a partnership, by a general partner;
- c. In the case of a sole proprietorship, by the proprietor; or
- d. In the case of a municipal, State, or other public facility, by either a principal executive officer, ranking elected official, or other duly authorized employee.

3. Recording of Results

The Permittee shall maintain records of all information resulting from any monitoring activities required, including:

- a. The exact place, date, and time of sampling or measurements;
- b. The individual(s) who performed the sampling or measurements;
- c. The dates and times the analyses were performed;

- d. The individual(s) who performed the analyses;
- e. The analytical techniques and methods used, including sample collection handling and preservation techniques;
- f. The results of such analyses;
- g. The records of monitoring activities and results, including all instrumentation and calibration and maintenance records;
- h. The original calculation and data bench sheets of the operator who performed analysis of the influent or effluent pursuant to requirements of this permit; and
- i. For analyses performed by contract laboratories:
 - a. The detection level reported by the laboratory for each sample; and
 - b. The laboratory analytical report including documentation of the QA/QC and analytical procedures.

When “non-detects” are recorded, the method detection limit shall be reported and used in calculating any time-period averaging for reporting on DMRs.

4. Additional Monitoring

If the Permittee monitors any pollutant at the location(s) designated herein more frequently than required by this permit, using approved analytical methods as specified above, the results of such monitoring shall be included in the calculation and reporting of the values required in the DMR form WR-43. Such increased frequency shall also be indicated.

II. GENERAL CONDITIONS

A. MANAGEMENT REQUIREMENTS

1. Facility Modification / Change in Discharge

All discharges authorized herein shall be consistent with the terms and conditions of this permit. The discharge of any pollutant more frequently than, or at a level in excess of, that identified and authorized by this permit shall constitute a violation of the terms and conditions of this permit. Such a violation may result in the imposition of civil and/or criminal penalties pursuant to 10 V.S.A. chapters 47, 201, and/or 211. Any anticipated facility alterations or expansions or process modifications which will result in new, different, or increased discharges of any pollutants must be reported by submission of a new permit application or, if such changes will not violate the effluent limitations specified in this permit, by notice to the Secretary of such changes. Following such notice, the permit may be modified, pursuant to Condition II.B.4. of this permit, to specify and limit any pollutants not previously limited.

2. Noncompliance Notification

- a. The Permittee shall give advance notice to the Secretary of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements.
- b. In the event the Permittee is unable to comply with any of the conditions of this permit due, among other reasons, to:
 - i. Breakdown or maintenance of waste treatment equipment (biological and physical-chemical systems including all pipes, transfer pumps, compressors, collection ponds or tanks for the segregation of treated or untreated wastes, ion exchange columns, or carbon absorption units);
 - ii. Accidents caused by human error or negligence;
 - iii. Any unanticipated bypass or upset which exceeds any effluent limitation in the permit;
 - iv. Violation of a maximum day discharge limitation for any of the pollutants listed by the Secretary in this permit; or
 - v. Other causes such as acts of nature, the Permittee shall provide notice as specified in subdivision (c) of this subsection.
- c. For any noncompliance not covered under Condition II.A.2.b. of this permit, the permittee or permittee's delegate shall notify the Secretary within 24 hours of becoming aware of such condition and shall provide the Secretary with the following information, in writing, within five days:

- i. Cause of noncompliance;
- ii. A description of the non-complying discharge including its impact upon the receiving water;
- iii. Anticipated time the condition of noncompliance is expected to continue or, if such condition has been corrected, the duration of the period of noncompliance;
- iv. Steps taken by the Permittee to reduce and eliminate the non-complying discharge; and
- v. Steps to be taken by the Permittee to prevent recurrence of the condition of noncompliance.

3. Operation and Maintenance

All waste collection, control, treatment, and disposal facilities shall be operated in a manner consistent with the following:

- a. The Permittee shall, at all times, maintain in good working order and operate as efficiently as possible all treatment and control facilities and systems (and related appurtenances) installed or used by the Permittee to achieve compliance with the terms and conditions of this permit. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems which are installed by the Permittee only when the operation is necessary to achieve compliance with the conditions of this permit; and
- b. The Permittee shall provide an adequate operating staff which is duly qualified to carry out the operation, maintenance, and testing functions required to ensure compliance with the conditions of this permit.

4. Quality Control

The Permittee shall calibrate and perform maintenance procedures on all monitoring and analytical instrumentation at regular intervals to ensure accuracy of measurements or shall ensure that both activities will be conducted.

The Permittee shall keep records of these activities and shall provide such records upon request of the Secretary.

5. Bypass

The bypass of facilities (including pump stations) is prohibited, except where authorized under the terms and conditions of an Emergency Pollution Permit issued pursuant to 10 V.S.A. § 1268. It shall not be a defense for the Permittee in an enforcement action that it would have been necessary to halt or reduce the activity in order to maintain compliance with the conditions of this permit.

6. Duty to Mitigate

The Permittee shall take all reasonable steps to minimize or prevent any adverse impact to waters of the State, the environment, or human health resulting from noncompliance with any condition specified in this permit, including accelerated or additional monitoring as necessary to determine the nature and impact of the non-complying discharge.

7. Records Retention

All records and information resulting from the monitoring activities required by this permit including all records of analyses performed, all calibration and maintenance of instrumentation records and all original chart recordings for continuous monitoring instrumentation, copies of all reports required by this permit, and records of all data used to complete the application for this permit shall be retained for a minimum of three years, and shall be submitted to the Secretary upon request. This period shall be extended during the course of unresolved litigation regarding the discharge of pollutants or when requested by the Secretary.

8. Solids Management

Collected screenings, sludges, and other solids removed in the course of treatment and control of wastewaters shall be stored, treated and disposed of in accordance with 10 V.S.A. chapter 159 and with the terms and conditions of any certification, interim or final, transitional operation authorization, or order issued pursuant to 10 V.S.A. chapter 159 that is in effect on the effective date of this permit or is issued during the term of this permit.

9. Emergency Pollution Permits

Maintenance activities, or emergencies resulting from equipment failure or malfunction, including power outages, which result in an effluent which exceeds the effluent limitations specified herein, shall be considered a violation of the conditions of this permit, unless the Permittee's discharge is covered under an emergency pollution permit under the provisions of 10 V.S.A. § 1268. The Permittee shall notify the Secretary of the emergency situation by the next working day, unless notice is required sooner under Condition II.A.2.

10 V.S.A. § 1268 reads as follows:

When a discharge permit holder finds that pollution abatement facilities require repairs, replacement, or other corrective action in order for them to continue to meet standards specified in the permit, the holder may apply in the manner specified by the Secretary for an emergency pollution permit for a term sufficient to effect repairs, replacements, or other corrective action. The Secretary shall proceed in accordance with chapter 170 of this title. No emergency pollution permit shall be issued unless the applicant certifies and the Secretary finds that:

- (1) there is no present, reasonable alternative means of disposing of the waste other than by discharging it into the waters of the State during the limited period of time of the emergency;
- (2) the denial of an emergency pollution permit would work an extreme hardship upon the applicant;
- (3) the granting of an emergency pollution permit will result in some public benefit;
- (4) the discharge will not be unreasonably harmful to the quality of the receiving waters; and
- (5) the cause or reason for the emergency is not due to willful or intended acts or omissions of the applicant.

Application shall be made to the Secretary at the following address: Agency of Natural Resources, Department of Environmental Conservation, One National Life Drive, Davis Building, 3rd Floor, Montpelier, VT 05620-3522.

10. Power Failure

In order to maintain compliance with the effluent limitations and prohibitions of this permit, the Permittee shall either:

- a. Provide an alternative power source sufficient to operate the wastewater control facilities, or if such alternative power source is not in existence,
- b. Halt, reduce or otherwise control production and/or all discharges upon the reduction, loss, or failure of the primary source of power to the wastewater control facilities.

B. RESPONSIBILITIES

1. Right of Entry

The Permittee shall allow the Secretary or authorized representative, upon the presentation of proper credentials:

- a. To enter upon the Permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this permit;
- b. To have access to and copy, at reasonable times, any records required to be kept under the terms and conditions of this permit;
- c. To inspect, at reasonable times, any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit; and

- d. To sample or monitor, at reasonable times, for the purposes of assuring permit compliance or as otherwise authorized by the Clean Water Act, any substances or parameters at any location.

2. Transfer of Ownership or Control

This permit is not transferable without prior written approval of the Secretary. All application and operating fees must be paid in full prior to transfer of this permit. In the event of any change in control or ownership of facilities from which the authorized discharges emanate, the Permittee shall provide a copy of this permit to the succeeding owner or controller and shall send written notification of the change in ownership or control to the Secretary **at least 30 days in advance of the proposed transfer date**. The notice to the Secretary shall include a written agreement between the existing and new Permittees containing a specific date for transfer of permit responsibility, coverage, and liability between them. The Permittee shall also inform the prospective owner or operator of their responsibility to make an application for transfer of this permit.

This request for transfer application must include as a minimum:

- a. A properly completed application form provided by the Secretary and the applicable processing fee.
- b. A written statement from the prospective owner or operator certifying:
 - i. The conditions of the operation that contribute to, or affect, the discharge will not be materially different under the new ownership;
 - ii. The prospective owner or operator has read and is familiar with the terms of the permit and agrees to comply with all terms and conditions of the permit; and
 - iii. The prospective owner or operator has adequate funding to operate and maintain the treatment system and remain in compliance with the terms and conditions of the permit.
- c. The date of the sale or transfer.

The Secretary may require additional information dependent upon the current status of the facility operation, maintenance, and permit compliance.

3. Confidentiality

Pursuant to 10 V.S.A. § 1259(b):

Any records or information obtained under this permit program that constituents trade secrets under 1 V.S.A. § 317 (c)(9) shall be kept confidential, except that such records or information may be disclosed to authorized representatives of the State and the United States when relevant to any proceedings under this chapter.

Claims for confidentiality for the following information will be denied:

- a. The name and address of any permit applicant or Permittee.
- b. Permit applications, permits, and effluent data.
- c. Information required by application forms, including information submitted on the forms themselves and any attachments used to supply information required by the forms.

4. Permit Modification and Revocation

Pursuant to 40 C.F.R. § 124.5, the Secretary may modify, revoke and reissue, or terminate for cause, in whole or in part, the authorization to discharge under this permit. These actions may be taken for the reasons specified in 40 C.F.R. § 122.62 (modification or revocation and reissuance) and § 122.64 (termination), including:

- a. There are material and substantial alterations or additions to the permitted facility or activity;
- b. New information is received that was not available at the time of permit issuance (other than revised regulations, guidance, or test methods) and would have justified the application of different permit conditions at the time of issuance;
- c. To correct technical mistakes, such as errors in calculation, or mistaken interpretations of law made in determining permit conditions;
- d. Obtaining this permit by misrepresentation or failure to disclose fully all relevant facts;
- e. Reallocation of WLA under the LC TMDL;
- f. Development of an integrated WWTF and stormwater runoff NPDES permit; or
- g. A change in any condition that requires either a temporary or permanent reduction or elimination of the permitted discharge.

The filing of a request by the Permittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance shall not stay any permit condition.

5. Toxic Effluent Standards

If a toxic effluent standard or prohibition (including any schedule of compliance specified in such effluent standard or prohibition) is established under section 307(a) of the Clean Water Act for a toxic pollutant which is present in the Permittee's discharge and such standard or prohibition is more stringent than any limitation upon such pollutant in this permit, then this permit shall be modified or revoked and reissued, pursuant to Condition

II.B.4. of this permit, in accordance with the toxic effluent standard or prohibition and the Permittee so notified.

6. Oil and Hazardous Substance Liability

Nothing in this permit shall be construed to preclude the institution of legal action or relieve the Permittee from any responsibilities, liabilities, or penalties to which the Permittee is or may be subject under 10 V.S.A. §1281.

7. Civil and Criminal Liability

The Permittee shall comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the Clean Water Act and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or denial of a permit renewal application. Except as provided in “Bypass” (Condition II.A.5.) and “Emergency Pollution Permits” (Condition II.A.9.), nothing in this permit shall be construed to relieve the Permittee from civil or criminal penalties for noncompliance. Civil and criminal penalties for noncompliance are provided for in 10 V.S.A. Chapters 47, 201, and 211.

8. State Laws

Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the Permittee from any responsibilities, liabilities, or penalties established pursuant to any applicable state law or regulation under authority preserved by Section 510 of the Clean Water Act.

9. Property Rights

Issuance of this permit does not convey any property rights in either real or personal property, or any exclusive privileges, nor does it authorize any injury to private property or any invasion of personal rights, nor any infringement of federal, state, or local laws or regulations.

10. Other Information

If the Permittee becomes aware that it failed to submit any relevant facts in a permit application or submitted incorrect information in a permit application or in any report to the Secretary, it shall promptly submit such facts or information.

11. Severability

The provisions of this permit are severable, and if any provision of this permit, or the application of any provision of this permit to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected thereby.

12. Appeals

Renewable Energy Plants or Telecommunications Facility – Right to Appeal to Public Utility Commission. If this decision relates to a renewable energy plant for which a certificate of public good is required under 30 V.S.A. § 248 or a telecommunications facility for which the applicant has applied or has served notice under 30 V.S.A. § 248a(e) that it will apply for approval under 30 V.S.A. § 248a, any appeal of this decision must be filed with the Public Utility Commission pursuant to 10 V.S.A. § 8506. This section does not apply to a facility that is subject to 10 V.S.A. § 1004 (dams before the Federal Energy Regulatory Commission), 10 V.S.A. § 1006 (certification of hydroelectric projects) or 10 V.S.A. Chapter 43 (dams). Any appeal of this permit must be filed with the Clerk of the Public Utility Commission within 30 days of the date of this decision; the appellant must file with the Clerk an original and six copies of its appeal. The appellant shall provide notice of the filing of an appeal in accordance with 10 V.S.A. § 8504(c)(2) and the Rules and General Orders of the Public Utility Commission. For further information, see the Rules and General Orders of the Public Utility Commission available at puc.vermont.gov. The address for the Public Utility Commission is: 112 State Street, Montpelier, VT 05620-2701 Telephone #: 802-828-2358.

All Other Facilities or Projects – Right to Appeal to Environmental Division. Any appeal of this permit must be filed with the clerk of the Environmental Division of the Superior Court within 30 days of the date of the decision. The notice of appeal must specify the parties taking the appeal and the statutory provision under which each party claims party status; must designate the act or decision appealed from; must name the Environmental Division; and must be signed by the appellant or the appellant's attorney. In addition, the appeal must give the address or location and description of the property, project, or facility with which the appeal is concerned and the name of the applicant or any permit involved in the appeal. The appellant must also serve a copy of the notice of appeal in accordance with Rule 5(b)(4)(B) of the Vermont Rules for Environmental Court Proceedings. For further information, see the Vermont Rules for Environmental Court Proceedings available at www.vermontjudiciary.org. The address for the Environmental Division is: 32 Cherry Street; 2nd Floor, Suite 303; Burlington, VT 05401 Telephone #: 802-951-1740.

13. Authority

This permit is issued under authority of 10 V.S.A. §§1258 and 1259 of the Vermont Water Pollution Control Act, the Vermont Water Pollution Control Permit Regulation, and Section 402 of the Clean Water Act, as amended.

III.

A. OTHER REQUIREMENTS

This permit shall be modified, suspended, or revoked to comply with any applicable effluent standard or limitation issued or approved under Sections 301(b)(2)(C) and (D), 304(b)(2), and 307(a)(2) of the Clean Water Act, if the effluent standard or limitation so issued or approved:

1. Contains different conditions or is otherwise more stringent than any effluent limitation in the permit, or
2. Controls any pollutant not limited in the permit.

The permit as modified under this paragraph shall also contain any other requirements of the Vermont Water Pollution Control Act then applicable.

B. DEFINITIONS

For purposes of this permit, the following definitions shall apply.

Agency – means the Vermont Agency of Natural Resources.

Annual Average – means the highest allowable average of daily discharges calculated as the sum of all daily discharges (mg/L, lbs or gallons) measured during a calendar year divided by the number of daily discharges measured during that year.

Average – means the arithmetic means of values taken at the frequency required for each parameter over the specified period.

Bypass – means the intentional diversion of waste streams from any portion of the treatment facility.

The Clean Water Act – means the federal Clean Water Act, as amended (33 U.S.C. § 1251, *et seq.*).

Composite Sample – means a sample consisting of a minimum of one grab sample per hour collected during a 24-hour period (or lesser period as specified in the section on Monitoring and Reporting) and combined proportionally to flow over that same time period.

Daily Discharge – means the discharge of a pollutant measured during a calendar day or any 24-hour period that reasonably represents the calendar day for purposes of sampling.

For pollutants with limitations expressed in pounds the daily discharge is calculated as the total pounds of pollutants discharged over the day.

For pollutants with limitations expressed in mg/L the daily discharge is calculated as the average measurement of the pollutant over the day.

Discharge – means the placing, depositing, or emission of any wastes, directly or indirectly, into an injection well or into the waters of the State.

Grab Sample – means an individual sample collected in a period of less than 15 minutes.

Incompatible Substance – means any waste being discharged into the treatment works which interferes with, passes through without treatment, or is otherwise incompatible with said works or would have a substantial adverse effect on the works or on water quality. This includes all pollutants required to be regulated under the Clean Water Act.

Instantaneous Maximum – means a value not to be exceeded in any grab sample.

Major Contributing Industry – means one that: (1) has a flow of 50,000 gallons or more per average work day; (2) has a flow greater than five percent of the flow carried by the municipal system receiving the waste; (3) has in its wastes a toxic pollutant in toxic amounts as defined in standards issued under Section 307(a) of the Clean Water Act; or (4) has a significant impact, either singly or in combination with other contributing industries, on a treatment works or on the quality of effluent from that treatment works.

Maximum Day or Maximum Daily Discharge Limitation – means the highest allowable “daily discharge” (mg/L, lbs or gallons).

Mean – means the arithmetic mean.

Monthly Average or Average Monthly Discharge Limitation – means the highest allowable average of daily discharges (mg/L, lbs or gallons) over a calendar month, calculated as the sum of all daily discharges (mg/L, lbs or gallons) measured during a calendar month divided by the number of daily discharges measured during that month.

NPDES – means the National Pollutant Discharge Elimination System.

Secretary – means the Secretary of the Agency of Natural Resources or the Secretary’s duly authorized representative.

Septage – means the liquid and solid material pumped from a septic tank, cesspool, or similar domestic sewage treatment system, or a holding tank when the system is cleaned or maintained.

Untreated Discharge – means (1) combined sewer overflows from a WWTF; (2) overflows from sanitary sewers and combined sewer systems that are part of a WWTF during dry weather flows, which result in a discharge to waters of the State; (3) upsets or bypasses around or within a WWTF during dry or wet weather conditions that are due to factors unrelated to a wet weather storm event and that result in a discharge of sewage that has not been fully treated to waters of the State; and (4) discharges from a WWTF to separate storm sewer systems.

Waste – means effluent, sewage or any substance or material, liquid, gaseous, solid, or radioactive, including heated liquids, whether or not harmful or deleterious to waters.

Waste Management Zone – means a specific reach of Class B waters designated by a permit to accept the discharge of properly treated wastes that prior to treatment contained organisms pathogenic to human beings. Throughout the receiving waters, water quality

criteria must be achieved but increased health risks exist in a waste management zone due to the authorized discharge.

Waters – means all rivers, streams, creeks, brooks, reservoirs, ponds, lakes, springs, and all bodies of surface waters, artificial or natural, which are contained within, flow through, or border upon the State or any portion of it.

Weekly average or Average Weekly Discharge Limitation – means the highest allowable average of daily discharges (mg/L, lbs or gallons) over a calendar week, calculated as the sum of all daily discharges (mg/L, lbs or gallons) measured during a calendar week divided by the number of daily discharges measured during that week.

Whole Effluent Toxicity (WET) – means the aggregate toxic effect of an effluent measured directly by a toxicity test.

Wastewater Treatment Facility (WWTF) – means a treatment plant, collection system, pump station, and attendant facilities permitted by the Secretary for the purpose of treating domestic, commercial, or industrial wastewater.

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MONTPELIER, VT 05620-3522

FACT SHEET FOR DRAFT PERMIT
October 2022

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT TO DISCHARGE TO WATERS OF THE STATE

PERMIT NO: 3-1574
PIN: NS06-0192
NPDES NO: VT0120099

NAME AND ADDRESS OF APPLICANT:

DesRosiers Family Revocable Living Trust
10 Harlow Street
Essex, MA 01929

NAME AND ADDRESS OF FACILITY WHERE DISCHARGE OCCURS:

Lower Bartonsville Road
Rockingham, VT
(SPAN 52816612775)

FACILITY COORDINATES: Lat. 43.22572, Long. - 72.53427.

RECEIVING WATERS: Petty Brook, Unnamed Tributary of Williams River

CLASSIFICATION: All uses Class B(2). Class B waters are suitable for swimming and other primary contact recreation; irrigation and agricultural uses; aquatic biota and aquatic habitat; good aesthetic value; boating, fishing, and other recreational uses; and suitable for public water source with filtration and disinfection or other required treatment.

I. Proposed Action, Type of Facility, and Discharge Location

The Secretary of the Vermont Agency of Natural Resources (hereinafter referred to as “the Secretary”) received an application for the permit to discharge into the designated receiving water from Desrosiers Family Revocable Living Trust on January 31, 2022. At this time, the Secretary has made a tentative decision to issue the discharge permit.

A Reasonable Potential Determination Memo for the discharge is provided in Attachment A.

II. Description of Discharge

The discharge consists of surface water that has accumulated in the constructed pond that will be treated with alum to control nuisance turbidity from affecting other waters of the state downstream.

III. Limitations and Conditions

The draft permit contains effluent limitations for pH, Total Recoverable Aluminum and turbidity. It also contains monitoring requirements for Hardness, Dissolved Organic Carbon, and flow. The effluent limitations of the draft permit and the monitoring requirements may be found on the page 2 of the draft permit:

IV. Statutory and Regulatory Authority

A. Clean Water Act and NPDES Background

Congress enacted the Clean Water Act (CWA or Act), “to restore and maintain the chemical, physical, and biological integrity of the Nation's waters.” CWA § 101(a). To achieve this objective, the CWA makes it unlawful for any person to discharge any pollutant into the waters of the United States from any point source, except as authorized by specified permitting sections of the Act, one of which is § 402. CWA §§ 301(a), 402(a). Section 402 establishes one of the CWA's principal permitting programs, the National Pollutant Discharge Elimination System (NPDES). Under this section of the Act, the U.S. Environmental Protection Agency (EPA) may “issue a permit for the discharge of any pollutant, or combination of pollutants” in accordance with certain conditions. CWA § 402(a). The State of Vermont has been approved by the EPA to administer the NPDES Program in Vermont. NPDES permits generally contain discharge limitations and establish related monitoring and reporting requirements. CWA § 402(a)(1) - (2).

Section 301 of the CWA provides for two types of effluent limitations to be included in NPDES permits: “technology-based” limitations and “water quality-based” limitations. CWA §§ 301, 303, 304(b); 40 C.F.R. Parts 122, 125, 131. Technology-based limitations, generally developed on an industry-by-industry basis, reflect a specified level of pollutant-reducing technology available and economically achievable for the type of facility being permitted. CWA § 301(b). As a class, WWTFs must meet performance-based requirements based on available wastewater treatment technology. CWA § 301(b)(1)(B). The performance level for WWTFs is referred to as “secondary treatment.” Secondary treatment is comprised of technology-based requirements expressed in terms of BOD₅, TSS, and pH; 40 C.F.R. Part 133.

Water quality-based effluent limits, on the other hand, are designed to ensure that state water quality standards are achieved, irrespective of the technological or economic considerations that inform technology-based limits. Under the CWA, states must develop water quality standards for all water bodies within the state. CWA § 303. These standards have three parts: (1) one or more “designated uses” for each water body or water body segment in the state; (2) water quality “criteria,” consisting of numerical concentration levels and/or narrative statements specifying the amounts of various pollutants that may be present in each water body without impairing the designated uses of that water body; and (3) an antidegradation provision, focused on protecting

high quality waters and protecting and maintaining water quality necessary to protect existing uses. CWA § 303(c)(2)(A); 40 C.F.R. § 131.12. The applicable water quality standards for this permit are the 2017 Vermont Water Quality Standards (Environmental Protection Rule, Chapter 29a).

A permit must include limits for any pollutant or pollutant parameter (conventional, non-conventional, toxic, and whole effluent toxicity) that is or may be discharged at a level that causes or has "reasonable potential" to cause or contribute to an excursion above any water quality standard, including narrative water quality criteria. See 40 C.F.R. § 122.44(d)(1). An excursion occurs if the projected or actual in-stream concentration exceeds the applicable criterion. A NPDES permit must contain effluent limitations and conditions in order to ensure that the discharge does not cause or contribute to water quality standard violations.

Receiving stream requirements are established according to numerical and narrative standards adopted under state law for each stream classification. When using chemical-specific numeric criteria from the State's water quality standards to develop permit limits, both the acute and chronic aquatic life criteria are used and expressed in terms of maximum allowable instream pollutant concentrations. Acute aquatic life criteria are generally implemented through maximum daily limits and chronic aquatic life criteria are generally implemented through average monthly limits.

Where a state has not established a numeric water quality criterion for a specific chemical pollutant that is present in the effluent in a concentration that causes or has a reasonable potential to cause a violation of narrative water quality standards, the permitting authority must establish effluent limits in one of three ways: based on a "calculated numeric criterion for the pollutant which the permitting authority demonstrates will attain and maintain applicable narrative water quality criteria and fully protect the designated use"; on a "case-by-case basis" using CWA § 304(a) recommended water quality criteria, supplemented as necessary by other relevant information; or, in certain circumstances, based on an "indicator parameter." 40 C.F.R. § 122.44(d)(1)(vi)(A-C).

The state rules governing Vermont's NPDES permit program are found in the Vermont Water Pollution Control Permit Regulations (Environmental Protection Rule, Chapter 13).

1. Reasonable Potential Determination

In determining whether this permit has the reasonable potential to cause or contribute to an impairment, Vermont has considered:

- 1) Existing controls on point and non-point sources of pollution as evidenced by the Vermont surface water assessment database;
- 2) Pollutant concentration and variability in the effluent as determined from the permit application materials, monthly discharge monitoring reports (DMRs), or other facility reports;

- 3) Receiving water quality based on targeted water quality and biological assessments of receiving waters, as applicable, or other State or Federal water quality reports;
- 4) Toxicity testing results based on the Vermont Toxic Discharge Control Strategy, and compelled as a condition of prior permits;
- 5) Available dilution of the effluent in the receiving water, expressed as the instream waste concentration. In accordance with the applicable Vermont Water Quality Standards, available dilution for rivers and streams is based on a known or estimated value of the lowest average flow which occurs for seven (7) consecutive days with a recurrence interval of once in ten (10) years (7Q10) for aquatic life and human health criteria for non-carcinogens, or at all flows for human health (carcinogens only) in the receiving water. For nutrients, available dilution for stream and river discharges is assessed using the low median monthly flow computed as the median flow of the month containing the lowest annual flow. Available dilution for lakes is based on mixing zones of no more than 200 feet in diameter, in any direction, from the effluent discharge point, including as applicable the length of a diffuser apparatus; and
- 6) All effluent limitations, monitoring requirements, and other conditions of the draft permit.

A Reasonable Potential Determination Memo for the facility is provided in Attachment A.

B. Anti-Backsliding

Section 402(o) of the CWA provides that certain effluent limitations of a renewed, reissued, or modified permit must be at least as stringent as the comparable effluent limitations in the current permit. EPA has also promulgated anti-backsliding regulations which are found at 40 C.F.R. § 122.44(l). Unless applicable anti-backsliding exemptions are met, the limits and conditions in the reissued permit must be at least as stringent as those in the current permit.

V. Description of Receiving Water

The receiving waters for this discharge are the Petty Brook, and another (unnamed) tributary of the Williams River. The Williams River downstream of the discharge points is a Class B (2) water and is designated as Cold-Water Fish Habitat.

VI. Mixing Zones

Mixing Zone. A Mixing Zone is a length or area within Class B waters required for the dispersion and dilution of waste discharges adequately treated to meet federal and state treatment requirements and within which it is recognized that specific water uses or water quality criteria associated with the assigned classification for such waters may not be realized. A mixing zone shall not extend more than 200 feet from the point of discharge and must meet the terms of 10 V.S.A. § 29A-204. For a mixing zone to be applicable to a discharge it must be authorized within the discharge permit. There is no mixing zone authorized in this permit.

VII. Facility History and Background

This is a new permit for discharge of alum to a surface water and subsequent discharge of this surface water treated with alum to reduce the transport of nuisance turbidity into downstream ponds.

On property owned by Brian and Amanda Desrosiers (SPAN 52816612775), located on Petty Rd. in Rockingham VT, construction of a pond and other earthwork created disturbed earth and/or impervious surface in excess of one acre. The work commenced without the required Agency of Natural Resources permits. The pond has a discharge to Petty Brook which feeds several ponds prior to meeting the Williams River.

According to a Notice of Alleged Violation (NOAV) sent to the Desrosiers and Peloquin Construction LLC on October 18, 2021, on 10/04/21 silt from the site migrated downhill, entering two streams, two ponds, and the Williams River. A similar discharge event occurred on 10/16/21, impacting the same State waters. The NOAV includes the requirement to “submit a corrective action plan to the Agency detailing short and long-term measures that will be taken to stabilize the site, abate discharges, and comply with all applicable environmental laws and regulations. The plan shall also address off-site impacts and shall include timeframes acceptable to the Agency.”

The Desrosiers were instructed to apply for a direct discharge permit following the submission of information by the permittee’s engineering consultant, Technicon P.C., that indicated the most viable solution to controlling the nuisance turbidity was identified as a one-time treatment with alum.

Because this is a new discharge, compliance with the Vermont Discharge Policy and Antidegradation Procedure are documented below:

Discharge Policy

(1) The proposed discharge is in conformance with all applicable provisions of The Vermont Water Quality Standards including the classification of the receiving waters adopted by the Secretary as set forth in Appendix F of these rules.

Review of the permit application indicates this criterion has been met.

(2) There is neither an alternative method of waste disposal, nor an alternative location for waste disposal, that would have a lesser impact on water quality including the quality of groundwater, or if there is such an alternative method or location, it would be clearly unreasonable to require its use.

The pond is on a side hill which is steep and directly uphill of the Williams River and a tributary feeding ponds of others. The use of alum to achieve clarification of the water in the discharge is the alternative proposed by the consultant given the constraints of the site and the size of the particulate matter contributing to the high turbidity. Alum use is limited in the draft permit to support clarification of the water column while minimizing the unbound aluminum discharged downstream. The alternative to the discharge of surface water with a minimum amount of alum is to require the alum-treated discharge to be pumped out and treated elsewhere. Given the volume of water that would need to be removed (a minimum of 2 million gallons) that requirement would be unreasonable.

(3) The design and operation of any waste treatment or disposal facility is adequate and sufficiently reliable to ensure the full support of uses and to ensure compliance with these rules and with all applicable state and federal treatment requirements and effluent limitations.

Not Applicable, as there are no physical treatment systems. The permit authorizes only one application of alum for treatment to achieve a maximum concentration of 40 ppm (mg/L) in the pond. The Vermont Water Quality Standards do not currently contain criteria for Aluminum, therefore we are limiting the downstream discharge to the US EPA Gold Book chronic limit of 0.087 mg/L.

(4) Except as provided for in 10 V.S.A. § 1259(d) and (f), the discharge of wastes other than nonpolluting wastes and stormwater runoff is prohibited in Class A(1) and A(2) waters regardless of the degree of treatment provided.

Not Applicable – discharge is to a class B water.

(5) Except as provided for in 10 V.S.A. § 1259, the discharge of wastes that, prior to treatment, contained organisms pathogenic to human beings into waters is prohibited.

Not Applicable

(6) The receiving waters will have sufficient assimilative capacity to accommodate the proposed discharge.

Treatment is intended to reduce the amount of turbidity loading that passes downstream from the pond, and this permit limits the impacts of alum used for treatment to downstream waters and negative effects on assimilative capacity are not anticipated due to the limited duration of this treatment. The water from the pond will be tested and treated if needed to raise the pH level prior to discharge, reducing the likelihood of toxic effects due to ionized aluminum.

(7) Assimilative capacity has been allocated to the proposed discharge consistent with the classification set forth in Appendix F of these rules.

Not Applicable

(8) The discharge of wastes to the thermocline or hypolimnion of any lake in manner that may prevent the full support of uses is prohibited.

Not Applicable

(9) The discharge of sewage into Class B(1) or B(2) waters shall not pose more than a negligible risk to public health. Compliance with this criterion shall include an assessment of both the level and reliability of treatment achieved and the impact of the discharge on the water quality of the receiving waters.

Not Applicable

Antidegradation Procedure

Section 29A-105 of the Vermont Water Quality Standards (VWQS) describes the Antidegradation Policy. The Secretary implements this policy in accordance with the Agency's "Interim Anti-Degradation Implementation Procedure," dated October 12, 2010 (Procedure).

Among other circumstances, the Secretary applies the Antidegradation Policy and Procedure during the review of applications for a new discharge under an individual NPDES direct discharge permit issued pursuant to 10 V.S.A. §1263 and the Vermont Water Pollution Control Permit Regulations, as in this case.

Under the Antidegradation Policy and Procedure, the Secretary must first determine the applicable water quality review Tier:

- Tier 3 - Protection of water quality in outstanding resource waters
- Tier 2 - Protection and maintenance of water quality in high quality waters
- Tier 1 - Determination and protection of existing uses

Neither Petty Brook nor the specified unnamed tributary to the Williams River are classified as an Outstanding Resource Waters in the 2017 VWQS (Tier 3). The Procedure requires the Secretary to presume that all waters are high-quality waters for at least one criterion for some portion of the year (Tier 2). Procedure at VII.E.1.c. Because the Secretary has not received credible and relevant information to the contrary, the Tier 2 approach of protecting designated and existing uses is the focus of this antidegradation review.

Tier 2 review requires the Secretary to determine:

- (1) whether the proposed discharge will result in a limited reduction in water quality; and
- (2) after an analysis of alternatives, any limited reduction in water quality satisfies the socioeconomic justification test set forth in the Procedure.

Antidegradation Policy, VWQS § 29A-105(c); Procedure at VII.E.2; VII.E.3.

1. Limited Reduction in Water Quality.

The analysis of alternatives considered the approaches described below to abate the uncontrolled discharge of turbid waters. Many were deemed too challenging to implement since the discharge is highly affected by precipitation patterns.

- a. Traditional “dirt bag” for management of turbid stormwater. This technique was determined to not appropriate for the small size of the particles that are causing the turbidity.
- b. Overland discharge – This technique was attempted but could not be left unmonitored successfully and may cause erosion should a large storm affect the region.
- c. Fractionation tank for sediment settling – This approach was deemed too expensive due to the cost of hauling large amounts of liquid, as well as the carbon footprint of transporting large volumes of water.
- d. Flow metering to slow discharge to rely on dilution to comply with turbidity – dilution of the discharge is a reasonable option but was not selected due to close monitoring required to assure the flow metering remains at an appropriate rate for the discharge to maintain compliance with the Vermont Water Quality Standards.

e. One-time alum treatment – this approach was selected as it would address the suspended solids quickly and it has previously been used successfully for similar applications by the engineer of the project. Alum is widely used in water treatment and the main pollutant of concern from alum treatment is aluminum, which can be measured by Clean Water Act-approved standard laboratory methods. pH is also a pollutant of concern and can be measured quickly on-site to determine if the discharge meets WQS.

This treatment approach would minimize the lowering of water quality that is currently occurring due to the discharge of highly turbid waters. The permit limits the application of alum to once in the permit term and requires the minimum amount of chemical that will be effective to treat the turbidity issue be employed. Aluminum toxicity is the main concern with this approach and the US EPA Gold Book Standard of 0.087 mg/L is set as a discharge limit. This criterion was promulgated in 1988 which indicates that “freshwater aquatic organisms and their uses should not be affected unacceptably... if the four-day average concentration of aluminum does not exceed 87 ug/L more than once every three years on the average...”(<https://www.epa.gov/sites/default/files/2019-02/documents/ambient-wqc-aluminum-1988.pdf>). The permit requires the discharge to meet the aluminum limit prior to release. If sampling indicates the aluminum concentration exceeds permit limits, the discharge must be discontinued until aluminum samples indicate the discharge will meet the permit limit, which creates a reasonable assurance that the four-day average concentration of aluminum does not exceed 0.087 mg/L more than once every three years on the average

2. Socioeconomic Justification Test

The socioeconomic justification test allows authorization of a discharge resulting in a limited reduction in the existing higher quality of high-quality waters only when it is shown that:

- i. the adverse economic or social impacts on the people of the state specifically resulting from the maintenance of the higher quality waters would be substantial and widespread;
- ii. these adverse impacts would exceed the environmental, economic, social and other benefits of maintaining the higher water quality; and
- iii. there shall be achieved the highest statutory and regulatory requirements for all new or existing point sources, and all cost effective and reasonable accepted agricultural practices and best management practices, as appropriate for nonpoint source control, consistent with state law.

Procedure at VII.E.3.a.

The Procedure also sets forth many example factors the Secretary may consider in completing the socioeconomic justification test, including impacts on aquatic biota from lowering water quality and correction of an environmental, public health, or public safety problem. Procedure at VII.E.3.c.

The Secretary proposes this discharge meets the three socioeconomic justification criteria as follows: Authorization of this one-time alum application discharge is intended to mitigate downstream discharge of high-turbidity water from the pond which is adversely impacting downstream waters. By limiting the discharge of alum to the US EPA Gold Book Standard of 0.087 mg/L a current adverse social impact (turbidity) at the pond and downstream of the pond is addressed, while avoiding collateral impacts of treatment (criterion i). The adverse impact of high turbidity water outweighs the limited impact of a one-time alum with a permit limit of less than 0.087 mg/L based on the most restrictive EPA value that is

protective of aquatic life downstream water (criterion ii). Finally, by issuance of the draft permit the currently unpermitted discharge is required to comply with the highest statutory and regulatory requirements for the discharge (criterion iii).

The one-time application of alum is proposed to correct an environmental problem, turbidity discharge, for which the applicant was issued a Notice of Alleged Violation by the Agency of Natural Resources Department of Environmental Conservation Enforcement Section on October 18, 2021 (21C001296). The permit limits the amount of alum that can be added to achieve a concentration that supports successful treatment of turbidity while avoiding contributing extraneous aluminum to downstream receiving waters.

While alum treatment has the potential to affect aquatic plants and biota, due to the recent construction of the pond, these uses are not yet established. Alum treatment followed by quiescent settling is intended to protect downstream receiving waters from an influx of turbidity that affects the aquatic biota and contact recreation. The draft permit requires the discharge cease if monitoring indicates water quality limits for pH, aluminum, or turbidity are exceeded.

In summary, the Secretary concludes that a one-time application of alum is justified and a draft discharge may be issued. Procedure at VII.E.3.e.

VIII. Permit Basis and Explanation of Effluent Limitation Derivation (S/N 001)

A. **Flow** – The draft permit requires the total flow be estimated using Manning’s equation. Total Daily Flow estimation is required daily when discharge is occurring.

B. Conventional Pollutants

1. **pH** – The pH limitation is 6.5 - 8.2 Standard Units. The range of 6.5 to 8.5 is specified in Section 29A-303(6) in the Vermont Water Quality Standards; however, due to the potential dissociation of alum and associated toxicity of aluminum at pH of 8.2 and higher, the permit limits the discharge to a maximum pH of 8.2. Monitoring is required daily when discharge is occurring from S/N 001 or S/N 002. The permit requires the discharge to meet pH limits prior to release. If sampling indicates pH exceeds permit limits, the discharge must be discontinued until pH samples indicate the discharge will meet the permit limits.

2. **Hardness** - Hardness is included to obtain a measurement of alkalinity and is a necessary parameter in determining the as the water quality standard for Aluminum, which is intended to be promulgated in the next version of the VT Water Quality Standards. Monitoring is required weekly when there is a discharge.

C. Non-Conventional and Toxics

1. **Turbidity** The turbidity limitation is 25 NTU, maximum day. This limit is implemented to be protective of the Vermont Water Quality Standard that specifies turbidity shall not exceed 25 NTU annual average under dry weather base-flow conditions. Monitoring is required daily when there is a discharge. The permit requires the discharge to meet the turbidity limit prior to

release. If sampling indicates the discharge will exceed the permitted limit, the discharge must be discontinued until turbidity samples indicate the discharge will meet the permit limits.

- 3. Aluminum** – Aluminum is considered a non-essential metal because fish and other aquatic life don't need it to function. Elevated levels of aluminum can affect some species ability to regulate ions, like salts, and inhibit respiratory functions. The US EPA promulgated Aluminum Criteria in 2018 and these criteria are currently being incorporated into Vermont's Water Quality Standards. Because updated limits are not yet effective, the permit limit is based on the EPA Gold Book Standard promulgated in 1988 which indicates that "freshwater aquatic organisms and their uses should not be affected unacceptably... if the four-day average concentration of aluminum does not exceed 87 ug/L more than once every three years on the average..."(<https://www.epa.gov/sites/default/files/2019-02/documents/ambient-wqc-aluminum-1988.pdf>). To reflect this given the use of Alum for turbidity reduction, the permit contains a limit for aluminum of 0.087 mg/L. Monitoring is required weekly when discharge is occurring. The permit requires the discharge to meet the aluminum limit prior to release. If sampling indicates the aluminum concentration exceeds permit limits, the discharge must be discontinued until aluminum samples indicate the discharge will meet the permit limits.

D. Nutrient Monitoring

- 1. Dissolved Organic Carbon (DOC)** – is organic matter contained in a water sample that is soluble and/or colloidal and which can pass through a 0.45-µm filter. The 2018 USEPA Aluminum Criteria calculation methodology requires inputs of total hardness, pH, and DOC to determine the applicable water quality criteria in a receiving water. Therefore the draft permit requires monitoring of DOC to provide data for calculating aluminum criteria should the permit be renewed when the 2018 Aluminum Criteria are applicable. Monitoring is required once per week when discharge is occurring.

E. Special Conditions

1. Condition I.B.a allows one application of aluminum to the pond during calendar year 2022 with a maximum allowed concentration of aluminum in the pond of 40 ppm. The application for alum treatment in the pond indicated the volume of water to be treated is 4.5 million gallons. At this volume it is calculated that a total of 279 gallons of 48.5% alum may be applied.
2. Condition I.B.b. requires the area downgradient of discharge points S/N 001 and S/N 002 to be inspected at a frequency of at least quarterly for signs of erosion.
3. Footnotes to the effluent limit table include a condition that require the effluent to meet effluent limits prior to discharge. If a turbidity, pH, or aluminum sample exceeds their limit, the Permittee shall immediately discontinue discharge until samples indicate the discharge meets the permit limits.
4. **Electronic Reporting** - The EPA recently promulgated a final rule to modernize the Clean Water Act reporting for municipalities, industries, and other facilities by converting to an electronic data reporting system. The final rule requires the inclusion of electronic reporting requirements in NPDES permits that become effective after December 21, 2015. The rule

requires that NPDES regulated entities that are required to submit discharge monitoring reports (DMRs), including majors and non-majors, individually permitted or covered by a general permit, must do so electronically after December 2016. The Secretary has created an electronic reporting system for DMRs and has recently trained facilities in its use. As of December 2020, these NPDES facilities will also be expected to submit additional information electronically as specified in Appendix A in 40 C.F.R. part 127.

Reporting Guidance: The permit requires monitoring when a discharge is occurring. If a discharge only occurs one day in a week, sampling must occur on that day. If discharge starts and stops in a week, only one sample is required during that week. When there is no discharge, the permittee shall note “No discharge” on the appropriate form WR-43.

5. **Noncompliance Notification** - Condition II.A.2. has been included in the draft permit. The permit prohibits discharge if sampling indicates the discharge does not meet Vermont Water Quality Standards (VWQS). However, if discharge does occur when the VWQS are not met, the Permittee shall notify the Secretary within 24 hours of becoming aware of noncompliance and shall provide the following to the Secretary within 5 days: the cause of noncompliance, a description of the non-complying discharge including its impact upon the receiving water, anticipated time the condition of noncompliance is expected to continue or the total duration of noncompliance, steps taken to reduce and eliminate the non-complying discharge, and steps taken to prevent recurrence of the condition of noncompliance.
6. **Reopener** - This draft permit includes a reopener whereby the Secretary reserves the right to reopen and amend the permit to implement an integrated plan to address multiple Clean Water Act obligations.

E. Reasonable Potential Analysis

The Agency has conducted a streamlined reasonable potential analysis for the facility. The decision conduct a simplified analysis was based on the effluent discharge from the pond and the size of the receiving water. The decision is attached to this Fact Sheet as Attachment A.

IX. Procedures for Formulation of Final Decision

*The public comment period for this draft permit extended from **October 7, 2022 through November 7, 2022** during which time no comments were received.*

Per Vermont Act 150, public comments concerning draft permits must be submitted via the Environmental Notice Bulletin (ENB) for all applications deemed administratively complete after January 1, 2018. In addition to providing a portal for submitting public comments, the ENB website presents details on the processing history, draft permit documents for review, and can be used to request public meetings. The ENB public site is <http://enb.vermont.gov> and the DEC ENB information page is <http://dec.vermont.gov/permits/enb>.

NPDES permits are considered Type 1 permits under Act 150 and are subject to a 30-day public comment period. All comments received within the period described above will be considered by the Department of Environmental Conservation in its final ruling to grant or deny authorization to discharge. Any person who has commented on the draft permit may, within 30 days of the final


ruling by the Department of Environmental Conservation to grant or deny authorization to discharge, appeal the ruling to the Environmental Court pursuant to 10 V.S.A. Chapter 220.

**Agency of Natural Resources Department
of Environmental Conservation**

**Watershed Management Division1
National Life Drive Davis 3
802-828-1535**

MEMORANDUM

To: John Merrifield, Wastewater Management Program

From: Amy Polaczyk, Wastewater Management Program 

Cc: Pete LaFlamme, Director, Watershed Management Division
Bethany Sargent, Monitoring and Assessment Program

Date: February 14, 2022

Subject: DesRosiers Pond Reasonable Potential Determination Decision

Discharge from:

DesRosiers Pond
Permit No. 3-1574
NPDES No. VT0120099

Hydrology for DesRosiers Pond used in this evaluation:

Total pond volume: 4.5 MG = 20,2418 CF

Receiving Water(s):

Petty Brook (43.22572, -72.53427), unnamed tributary to the William River (43.22678, -72.53434)

On January 31, 2022, The Wastewater Management Program (WWP) received an application to apply alum to a private pond that discharges to other private ponds in series in order to control colloidal turbidity that could not be removed by filtration. In order to avoid a discharge in excess of the VWQS to downstream ponds, the applicant has proposed dosing alum at [20 mg/L] to allow settling of the fine particles.

Due to the extremely small size of the DesRosiers Pond discharge, lack of available ambient water quality data at the time of application, and authorization of one-time discharge of Alum for turbidity control, the WWP has determined it is Determination for this discharge.

The permit should contain the following monitoring requirements, to be measured at S/N001 and S/N 002 as applicable: weekly monitoring of turbidity, pH, hardness, DOC, and Aluminum when the pond is discharging. Limits for pH and turbidity should be set to the Vermont Water Quality Standards for Class B waters: pH shall be maintained within the range of 6.5 and 8.5. Turbidity limits shall not exceed 25 NTU as an annual average under dry weather base-flow conditions.

PERMITTEE: _____

PERMIT No.: _____

Address: _____

S/N: _____

MONTH: _____ YEAR: _____

Page _____ of _____

Phone: _____

PERMIT MONITORING INFORMATION

DATE	EFFLUENT																		SIZE AND TYPE OF PRIMARY FLOW DEVICE:				
																			FLOW CHECKS: Influent <input type="checkbox"/> Effluent <input type="checkbox"/>				
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Factory Calibration Date: _____ Calibrated By: _____

COMMENTS AND EXPLANATIONS OF ANY VIOLATIONS:
(Reference all attachments here)

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 fine and imprisonment.

PREPARED BY: _____

APPROVED BY: _____
Authorized Agent for the Permittee