

State of Vermont Department of Environmental Conservation

WASTEWATER SYSTEM AND POTABLE WATER SUPPLY INNOVATIVE AND ALTERNATIVE (I/A) COMPONENT PILOT USE APPROVAL PERMIT

LAWS/REGULATIONS INVOLVED

10 V.S.A. Chapter 64, Potable Water Supply and Wastewater System Permit Wastewater System and Potable Water Supply Rules, Effective November 06, 2023

Permittee: Chittenden Solid Waste District 19 Gregory Drive, Suite 204 South Burlington, VT 05405 (802) 872-8100 www.cswd.net

Permit Number:	P-2024-02-R0
Date Issued:	06/12/2024
Date Expires:	05/01/2026

This permit is for the following processed glass aggregate (PGA) I/A component models:

Product Name	Model Number(s)	Design Flow (gpd)
Processed Glass Aggregate	Processed to meet Mound Fill Material #2 per Table 9-7 of the WW Rules	1 gpd per sqft

The components listed in this permit are used as part of a system to treat and disperse low strength wastewater effluent as a component of the discharge to a soil-based wastewater disposal system. The components, consisting of processed glass aggregate, are hereby approved under the requirements of the regulations named above subject to the following conditions.

1. GENERAL

- 1.1 The components listed in this permit may be used as part of a soil-based wastewater system permitted under the Rules provided the conditions of this permit are met.
- 1.2 Failure by the Permittee to comply with these conditions is grounds for the Secretary to revoke or not renew the Approval Permit.
- 1.3 The approval shall expire on **May 1, 2026.** Applications for renewal of this Approval Permit shall be submitted to the Division by March 1, 2026, to avoid a lapse in approval. The renewal request shall be submitted on a form prepared by the Secretary and shall include: a description of any changes to the equipment, technical specifications and drawings, installation requirements, and operation and maintenance manuals.
- 1.4 No changes shall be made to the approved component without prior review and approval by the Secretary.
- 1.5 This Approval Permit is based on the supporting materials submitted by the Permittee to the Secretary. Misrepresentation in the application material is grounds for the Secretary to revoke this permit.
- 1.6 If the Rules are revised during the term of this Approval Permit, this permit shall be revised as needed to conform to the revisions.
- 1.7 Site-specific permission for the use of this component is required in the form of a Wastewater System and Potable Water Supply Permit (WW Permit).
- 1.8 This permit is not a representation or guarantee of the effectiveness, efficiency, or operation of the approved component.



- 1.9 This Pilot Use Approval Permit is limited to treating low strength wastewater effluent that is characterized as low strength according to §1-805(b) of the Rules.
- 1.10 This Pilot Use Approval Permit is limited to 25 installations of the component in the State of Vermont as per §1-403(c) of the Rules.
- 1.11 This approval is based on information submitted by the Permittee indicating that the component will treat and disperse the effluent as part of the discharge to a soil-based dispersal system.
- 1.12 Each Vermont landowner in interest shall be shown a copy of the Wastewater System and Potable Water Supply Innovative and Alternative System Pilot Use Approval Permit, the Operation and Maintenance manuals, and projected maintenance costs prior to the installation of any permitted site.
- 1.13 The use of the component shall be warranted for the first 2 years following commencement of use of component. If a system should fail within the warrantee period and it is determined to be caused by the IA component material, the permittee shall replace the material with traditionally sourced material within 30 days.
- 1.14 All conditions set forth in WW Permits that include the use of the approved component shall remain in effect and may surpass the conditions set herein.
- 1.15 A WW Permit that approves the use of a component approved by this permit remains valid for the use of the component identified in the WW Permit even if this permit expires, so long as there is a State-approved production entity. The entity must be approved by the Solid Waste Program of VT Department of Environmental Conservation for the production and storage of the material, and the distribution of the material for the purpose of use in wastewater systems. At the time that there is no longer a State-approved entity, the WW Permit that approved the use of the component must be amended through the normal application for permit amendment process to be valid for construction. Any site that is constructed as per their WW Permit, with a valid installation certification on file with the State and Town, remains valid for the continued use of the component until such time as the system fails.

2. DOCUMENTS

2.1 The approval of the I/A component is based on the following documents submitted by the permittee:

Title	Submission Date	Revision
VT-ANR Innovative and Alternative	03/211/2024	None
Component Approval Application		

2.2 Use of the I/A component in ways not depicted or described in the documents, and or identified in this permit, is not allowed without prior approval by the Drinking Water and Groundwater Protection Division.

3. INSPECTION AND DIAGNOSTIC PROFESSIONALS

- 3.1 All Class B. BW, and 1 Vermont Licensed Wastewater and Potable Water Supply Designers shall be considered to be an Inspection and Diagnostic Professional for the State of Vermont (Vermont I&D Professional) to perform the inspections, maintenance, and repairs required by this permit and by conditions of the WW Permit. The Vermont I&D Professional must be based in Vermont and be ready and willing to provide service to the components in Vermont.
- 3.2 The Permittee shall provide training to each individual acting on its behalf as a Vermont I&D Professional on the proper installation of the approved component.
- 3.3 I&D Professionals must follow Permittee and WW Permit conditions for installation, inspection, and reporting requirements.
- 3.4 Installation certifications and inspections of the approved component must be performed by an I&D Professional trained and authorized by the Permittee. Reports shall be provided to the Permittee, landowner, and Division in a timely manner so that they can ensure conditions of the WW Permits are met.

- 3.5 Installation and inspections performed by Service I&D Professionals shall be in accordance with training provided by the Permittee and specified in the WW Permits issued by this Division.
- 3.6 An Installation and inspection manual must be developed and submitted prior to this approval expiring. Installation and inspections performed by I&D Professionals shall be in accordance with the to be submitted manual, as provided in trainings by the Permittee, and specified in the WW Permits issued by this Division. The manual and trainings shall include the following:
 - A. A means and methodology of covering the component with topsoil within 24 hours of installation;
 - B. A means and methodology for managing the component during the transportation and installation process;
 - C. A means and methodology for inspecting the general functionality of the system.

4. **REPORTS**

- 4.1 The Permittee shall submit electronically by April 1st of each year an annual report to the Division containing the following information for the previous 12-month period ending December 31st:
 - A. a listing of each permitted component installed in Vermont during the previous calendar year with the following information:
 - i. assigned WW Permit number;
 - ii. the property's SPAN number;
 - iii. the name of the Vermont-licensed Designer providing the installation certification;
 - iv. the date installed, and;
 - v. the date of initial use of the component (beginning of 2-year warrantee period).
- 4.2 The Permittee shall ensure the Vermont I&D Professionals for each of the permitted systems utilizing this component installed in Vermont are submitting to the Division the following reports;

A. inspection reports of the I/A component conducted annually.

- 4.4 Maintenance and inspections reports shall be submitted on the Secretary-approved inspection report form and be signed and dated by the I&D Professionals.
- 4.5 Inspection reports by the I&D Professionals shall include but not be limited to a summary of lab analyzes of effluent quality taken from the base of the component installation, all known problems, damages, and/or failures of the component to comply with this approval and operating requirements for the component, including:
 - A. a description of any problems, damages, and/or failures;
 - B. potential/known causes of any problems, damages, and/or failures;
 - C. a statement of system operability including whether or not the component is operating in compliance with this approval and operating specifications following repairs or corrections of any problems, damages, and/or failures;
 - D. a listing of the required repair/remediation;
 - E. identification of changes to the component specifications; and
 - F. any observed failure of the wastewater system including wastewater exposed to the open air, wastewater pooling on the surface of the ground, wastewater discharging directly to surface water, or wastewater backing up into the building or structure.
- 4.6 Problems, damages, and/or failures of the component identified during an inspection per condition 4.4 of this permit must be reported by the service provider immediately to the landowner and within 15 days to the Division.

5. DESIGN SPECIFICATIONS

- 5.1 The design of a wastewater system using the approved component shall identify the specific approved -model/configuration and or combination of configurations and shall not be replaced with any other model/configuration and or combination of configurations without an amendment to the WW Permit.
- 5.2 component model choice and sizing shall be in accord with the WW Rules. Sizing of each unit shall be based on the calculated design flow per §1-803 of the Rules.

6. INSTALLATION SPECIFICATIONS

- 6.1 The approved component shall be installed under the guidance of a Vermont I&D Professional.
- 6.2 The installation of each component shall be in accordance with the Permittee's technical requirements approved by the Secretary.

Any person aggrieved by this permit may appeal to the Environmental Court within 30 days of the date of issuance of this permit in accordance with 10 V.S.A. Chapter 220 and the Vermont Rules of Environmental Court Proceedings.

Julia S. Moore, Secretary Agency of Natural Resources

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Dated June 12, 2024

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