



RHODE ISLAND
DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

OFFICE OF WATER RESOURCES
235 Promenade Street, Providence, Rhode Island 02908

Alternative and Experimental OWTS Technology Program

Vendor Information:

Eljen Corporation
125 McKee Street
East Hartford, CT 06108
www.eljen.com

Contacts:

Jim King, President
Eljen Corporation
125 McKee Street
East Hartford, CT 06108
Phone: 1-800-444-1359

Technology Name:

Geotextile Sand Filter (GSF)

Technology Type:

Alternative Leachfield Component - Class One

Certification Date:

Issued: April 29, 1997

Renewed: December 31, 1998

Revised: November 14, 2018

Expires: No Expiration

CERTIFICATION

The Rhode Island Department of Environmental Management (RIDEM) has reviewed the Alternative Technology Component application submitted by Eljen Corporation, hereafter referred to as the "Vendor", for the Geotextile Sand Filter (GSF) leaching system, which hereafter may be referred to as the "Component". GSF was formerly named Eljen In-Drain; this certification replaces the previous certification issued for Eljen In-Drain, Type B. Each GSF module is 3 feet wide, 4 feet long, 7 inches high, and is constructed of a cusped plastic core that is completely enveloped by a geotextile fabric that is folded accordion style over and under the plastic core. It is approved for installation end-to-end in trench configuration with a minimum of 6 inches of specified sand bedding beneath and along the sidewalls of the units. Effluent from a septic tank or RIDEM approved treatment system is dispersed over the Component by a perforated pipe centered lengthwise, on top of the Component; anti-siltation geotextile fabric is placed over the top and sides of the GSF module after placement of the pipe.

Based upon information contained in the Vendor's application, supplemental material submitted to the RIDEM, and information provided during presentations to the Technical Review Committee, the RIDEM hereby renews the Component's approval for listing on the RIDEM Alternative/Experimental Technology list. Design and installation of the Component shall be in accordance with the following terms and conditions:

I. General Design Requirements

1. An effluent filter shall be required on any septic tank or replacement tank that discharges to the Component.
2. The Component shall be sized based upon the following criteria: one linear foot of GSF is equivalent to 7 square feet of required leachfield area, in accordance with RIDEM OWTS Rule 6.33.
3. The minimum separation distance between the walls of adjacent trenches shall be 11 feet. The distribution lines shall be spaced 15 feet on center.
4. The requirements of RIDEM OWTS Rule 6.33 and 6.34 shall apply unless otherwise addressed in this certification or in the approved design, installation and operation and maintenance manual.
5. The specified sand media used in construction shall meet ASTM C-33 specifications and other requirements stated in the design and installation manual.
6. The separation distance to the design water table depth shall be measured from the bottom of the GSF module at the interface with the sand media.

7. Each Component installation shall meet all other applicable OWTS standards and be approved by the RIDEM pursuant to the OWTS Rules in effect at the time of application.
8. Design and installation shall be in strict conformance with the RIDEM approved design and installation manual dated **November 2018**.
9. Design and installation of the Component receiving effluent via Low Pressure Pipe (LPP) shall only be performed by RIDEM licensed Designers and Installers who have received training and are authorized in writing by the Vendor to design/install (as applicable), this configuration.

II. Training

1. The Vendor shall make training available for Designers, Installers and Service Providers.
2. The Vendor shall notify the RIDEM of the date and time of each training seminar and submit to the RIDEM a detailed agenda, material to be distributed to attendees and a list of presenters specifying their credentials at least six weeks in advance of the date of the scheduled seminar. Please consult the RIDEM-issued requirements for Vendors' technology training available on the RIDEM website in the A/E technology section.

III. General Certification Requirements

1. The Vendor shall submit a manual detailing design, installation, operation and maintenance requirements for the Component.
2. The Vendor is responsible for providing any revisions to the design, installation, operation and maintenance manual(s) for all models applicable to this certification to RIDEM for review and approval within thirty (30) days of RIDEM request. All manuals must be provided to the RIDEM in electronic portable document format (pdf).
3. The Vendor shall notify the RIDEM in writing of any changes to the Component, including its discontinuation. Modifications deemed by the RIDEM to be substantial, may require re-application to the A/E program.
4. The Vendor shall notify the RIDEM at least thirty (30) days prior to any proposed transfer of ownership of the Component technology. Notification shall include the name and address of the new owner and a written agreement between the existing and new owner specifying a date for transfer of ownership, responsibility, and liability for the Component. All provisions of this Certification shall be applicable to any new owners.
5. The Vendor shall provide any purchaser of the Component with a copy of this Certification prior to the sale of the Component.

IV. Operation and Maintenance (O&M) Requirements for LPP Systems

1. The RIDEM approved GSF manual shall be provided to the owner of the installation.
2. Where the Component is installed in a LPP configuration receiving either septic tank effluent or following a RIDEM-approved alternative technology treatment system, the designer must provide the applicant the New England Onsite Wastewater Training Program's list of Registered Operation & Maintenance Service Providers for Innovative & Alternative Septic Systems. RIDEM will not issue a conformance for an LPP system without documentation of recording in the Land Evidence Records a minimum two-year service contract for service for all A/E components in the treatment train in addition to the LPP equipment associated with the Component.
3. Vendor trained homeowners may perform O&M on their LPP systems; training must have been received for all components of the treatment train on which a homeowner wishes to perform O&M.
4. a.) The owner shall retain a public or private maintenance entity (Service Provider) for the life of the LPP System and all other A/E components of the treatment train; a Vendor-authorized homeowner functioning as Service Provider is exempt from this for the System and any components of the treatment train for which the homeowner is providing service.
b.) No agreement with a maintenance entity shall be for less than two years.

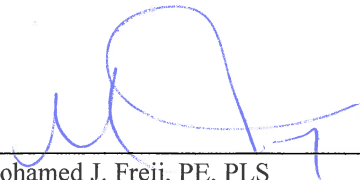
- c.) Service Providers must be trained and authorized in writing by the appropriate Vendor to perform O&M on the System and all other A/E components of the treatment train for which they will be performing O&M.
- d.) The Service Provider or homeowner providing O&M on his or her own System shall:
 - 1) Receive training as approved by the Vendor
 - 2) Be available to perform required preventative maintenance, perform repairs, respond to System emergency situations, and conduct performance monitoring when required by this Certification or by permit.
 - 3) Perform an inspection of the treatment System at least twice annually.
 - 4) Report to the Vendor, all inspections and maintenance calls conducted, and all problems or failures observed with a summary of the cause and remedial measures taken.
5. The Applicant/Owner shall record copies of the OWTS construction permit issued by RIDEM and the initially executed O&M contract(s) for the LPP components, and all other A/E components in the treatment train, in the land evidence records of the applicable city or town prior to the RIDEM issuing the Certificate of Conformance for each installation.

V. Reporting

1. The Vendor shall submit an annual report to the RIDEM by February 1st of each year containing the following information for the previous 12-month period ending December 31st: the number of inspections/maintenance calls conducted, and all known problems or failures reported and/or observed with a summary of the cause and remedial measures taken.

VI. Rights of the RIDEM

1. The RIDEM may suspend, modify or revoke this Certification for cause, including but not limited to: Non-compliance with any of the provisions or conditions of this Certification, misrepresentation or failure to fully disclose all relevant data, or receipt of new information indicating the use of the Component is contrary to the public interest, public health or the environment.
2. The design and installation manuals referenced herein are approved upon the date of approval of this Certification.
3. The RIDEM reserves the right to suspend or revoke this Certification if updated design and installation manuals are not provided to the RIDEM within thirty (30) days of RIDEM request. All revisions must be reviewed and approved by the RIDEM prior to any changes applying to system designs in Rhode Island.
4. This Certification does not represent an endorsement of the Component by the RIDEM. This Certification may be reproduced only in its entirety.



Mohamed J. Freij, PE, PLS
Supervising Sanitary Engineer
RIDEM – Office of Water Resources
Onsite Wastewater Treatment Systems

11-14-18

Issuance Date