

# RHODE ISLAND

# **DEPARTMENT OF ENVIRONMENTAL MANAGEMENT**

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

## Alternative/Experimental OWTS Technology Program

## Vendor Information:

Geomatrix Systems, LLC 114 Mill Rock Road East Old Saybrook, CT 06475 Phone: 860-510-0730 Toll Free: 888-SoilAir Fax: 860-510-0735 Web: www.geomatrixsystems.com

#### Technology Name & Model Numbers:

GeoMat 1200 (12-inch wide mat) GeoMat 3900 (39-inch wide mat)

#### Technology Type:

Alternative Leachfield Component Class II

Certification Dates: Renewed: October 8, 2020 Expires: October 8, 2025

# Contact:

David Potts Email: <u>info@geomatrixsystems.com</u>

# CERTIFICATION

The Rhode Island Department of Environmental Management (RIDEM) has reviewed the Class Two Alternative Component Technology renewal application submitted by Geomatrix Systems, LLC, hereafter referred to as the "Vendor", for the GeoMat<sup>™</sup> 1200 and 3900 Leaching Systems hereafter referred to as the "Component". Based upon information contained in the application the RIDEM hereby renews the approval of the Component for listing on the RIDEM Alternative and Experimental (A/E) Technology List as a Class Two Component.

The Component is a leaching system comprised of a one-inch thick core of fused, entangled plastic filaments; it is installed on natural soil or a sand interlayer where specified in applicable design guidance. GeoMat 1200 is sleeved in geotextile fabric. A low-pressure distribution line (1-inch Schedule 40 PVC), with down-facing orifices set in clear plastic orifice shields, is inserted into the fabric sleeve, on top of the Component and then covered by soil to a depth between 6 and 12 inches. GeoMat 3900 is dosed by two low-pressure distribution lines (1-inch Schedule 40 PVC), with down-facing orifices set in clear plastic orifice shields. The GeoMat 3900 and its two dosing pipes are covered by geotextile fabric prior to backfilling. Cleanout/distal pressure monitoring ports are installed on the terminal end of the distribution lines in both GeoMat 1200 and GeoMat 3900. The Component is used in conjunction with a time-dosed pump apparatus and must be preceded by a RIDEM-approved treatment technology producing an effluent quality of at least 30 mg/L TSS and 30 mg/L BOD.

Design, installation, and operation of the Component shall be in accordance with the following terms and conditions:

# I. Design Requirements

- 1. The Component shall be preceded by a RIDEM-approved A/E treatment technology that must achieve a minimum treated effluent quality of 30 mg/L TSS and 30 mg/L BOD.
- 2. Effluent delivered to the Component must not exceed a Fat, Oil, & Grease (FOG) concentration of 5 mg/L.
- 3. The Component shall be installed in trench configuration.

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- 4. Design and installation shall be in strict conformance with the RIDEM-approved **Component Design Manual dated 2016** and shall only be performed by a Rhode Island licensed designer/installer who has received training and is authorized in writing by the Vendor to design/install the Component.
- 5. Each Component design shall meet all other applicable OWTS standards and receive prior approval by the RIDEM pursuant to the regulations in effect at the time of application.

#### 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' system training available on the RIDEM website in the A/E technology section.
- 3. The Vendor shall make available to the public, a means of verifying individuals, by name and category, who have received training and are authorized in writing by the Vendor to design, install, and maintain the Component.

#### III. General Certification Requirements

- 1. This Class Two certification shall be effective until its expiration and may be renewed according to the provisions of the OWTS Rules, as amended.
- The Vendor is responsible for providing any revisions to the design and installation 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 reapplication to the alternative/experimental program.
- 4. The Vendor shall notify the RIDEM at least 30 days prior to any proposed transfer of ownership of the Component. 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 approval shall be applicable to any new owners.
- 5. The Vendor shall provide any purchaser of the Component with a copy of this approval prior to the sale of the Component.

#### **IV.** Operation and Maintenance Requirements

- 1. Operation and maintenance of the Component shall be performed in strict conformance with the RIDEM-approved **Design Manual dated 2016**.
- 2. The RIDEM approved Design Manual shall be provided to the Owner/Operator.
- 3. Installations of the Component shall be in accordance with the Installation Manual Dated 2011.
- 4. The Vendor must offer for sale a minimum two-year service contract, which must include as an option, service to all components of the treatment train in addition to the Component.
- 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 Component, 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.
- 6. a) The owner shall retain a public or private maintenance entity (service provider) for the life of the Component and all other A/E components of the treatment train; a Vendor-authorized

homeowner functioning as service provider is exempt from this for the Component 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. A service contract must remain active during the life of the Component.
- c) Service providers must be trained and authorized in writing by the appropriate Vendor to perform O&M on the Component and all other A/E components of the treatment train for which they will be performing O&M.
- d) System owners who are authorized by the appropriate Vendor(s) to perform O&M on their own system's components must file a Vendor-authorization for each component for which they are performing O&M service.
- e) The service provider or homeowner providing O&M on his or her own Component 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 for residential systems with a design flow below 2,000 GPD. Inspection of the treatment System shall be performed quarterly for all commercial systems and residential systems with a design flow of 2,000 GPD or greater.
- 7. The Vendor shall have an inventory of Component replacement parts available locally.

#### V. **Rights of the RIDEM**

- 1. The RIDEM may suspend, modify or revoke this approval for cause, including but not limited to: non-compliance with any of the provisions or conditions of this Certification, misrepresentation or failure to disclose fully all relevant data, or receipt of new information indicating that 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 or one hundred and eighty (180) days prior to the expiration date of this Certification. All revisions must be reviewed and approved by the RIDEM.

This approval does not represent an endorsement of the Component by the RIDEM. This letter of approval may be reproduced only in its entirety.

Mohamed J. Freij PE PLS Supervising Sanitary Engineer, OWTS Program

<u>10 - 8.2020</u> Issuance Date