

January 31, 2023

Jim King
 Eljen Corporation
 125 McKee Street
 East Hartford, CT 06108

RE: Product Renewal – Notice of Proprietary Distribution Product Listing

Description: Proprietary Distribution Product - Gravelless Distribution Media
 Manufacturer: Eljen Corporation
 Product Name: GSF (Geotextile Sand Filter)
 Model Numbers: A42 & B43

Dear Jim King:

Thank you for your application for renewal dated December 07, 2022, for the Eljen GSF, which includes the following models: A42 & B43.

In accordance with Minn. R. chs. 7080 through 7083, the Minnesota Pollution Control Agency (MPCA) has reviewed Eljen Corporation’s submitted materials for proprietary distribution product registration. Based on the submitted documentation, the MPCA finds the Eljen GSF model series is eligible for registration under the following conditions in order to meet the requirements for proprietary distribution product registration.

The Eljen GSF model series is registered for mound applications in accordance with Minn. R. ch. 7080.2220 and the manufacturer’s installation requirements. Pressure distribution requirements, as described in Minn. R. ch. 7080.2050, shall be met. Table 1 lists registered GSF models and dimensions as presented in the initial application submittal, dated April 11, 2017, and related documents submitted prior to this registration.

Table 1. Eljen GSF Models and Dimensions

Model	Product Dimensions (Length x Width x Height) (inches)	Open Bottom Area (feet)	Maximum Bed Width (feet)
A42	48 x 24 x 7	8	2
B43	48 x 36 x 7	12	3

Subject to this determination, the Eljen GSF model series will be designed per the sizing and conditions specified by the MPCA, and reflected in this letter of registration. The product information listed in this Notice of Proprietary Product Listing will be maintained on the MPCA website and may not be altered by the manufacturer without permission from the MPCA.

The Eljen GSF model series registration as a distribution medium is authorized for applications in **mound systems only**. Absorption area loading rates and the mound absorption ratios are based on requirements Minn. R. 7080.2220, subp. 3(A) and local ordinance.

Mound Applications

Eljen GSF module runs are considered to be, and designed/constructed, as an individual mound beds. Mound distribution media bed widths are restricted to two feet for A42 installations and three feet for B43 installations. Multiple mound beds may be utilized on site provided the absorption area of each mound is outside of the area of influence of all other mound beds. Illustrations of potential layouts for multiple mound beds are provided in Figures 1-4.

Mound designs shall be sized based on bottom area only with no additional reduction given for sidewall absorption. Mound distribution media beds shall be sized in accordance with Minn. R. 7080.2220, subp. 3(A) and (B) except the maximum allowable width for each mound distribution media bed is two (2) feet for Eljen GSF A42, and three (3) feet for Eljen GSF B43. These widths must be used in conjunction with Table IX or IXa in Minn. R. 7080.2150, subp. 3(E) for determining the original soil mound absorption area.

Figures 1-4 provide examples for Eljen GSF configurations when utilized in mound applications using the bottom area sizing as specified above. The area around each Eljen GSF mound distribution media bed shall be filled with clean sand according to manufacturer specifications. The cover placed on top of single mounds, and in between multiple mound beds if such a configuration is used, must meet the requirements specified in Minn. R. 7080.2220, subp. 3 Item S. The top six (6) inches of cover must be established as required in Minn. R. 7080.2220, subp. 3(U).

Figure 1. Top view illustrating multiple mound bed concept for mounds with slopes from 0 to 1%

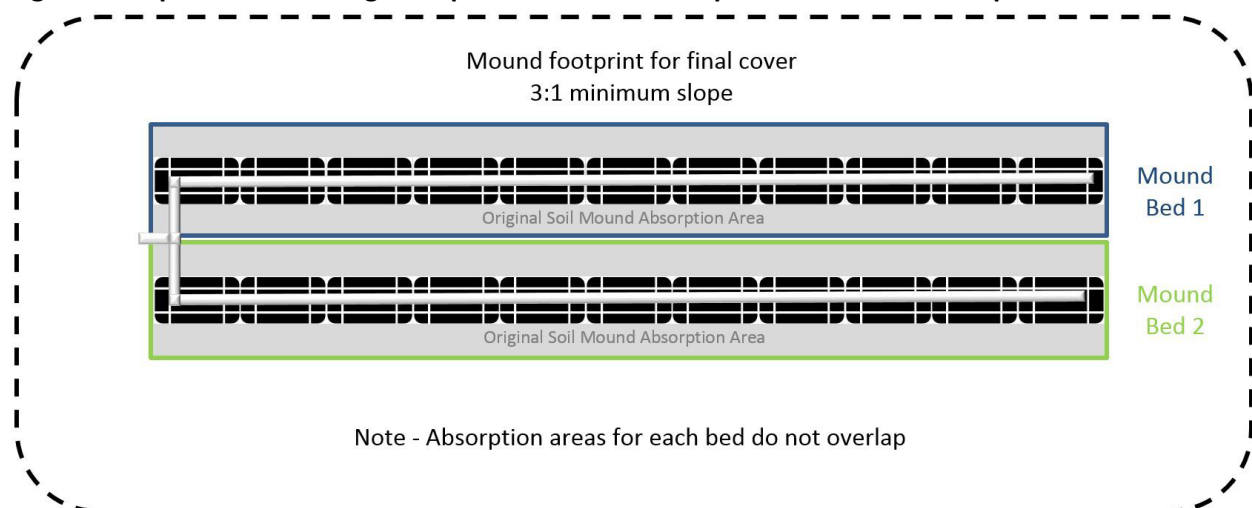


Figure 2. Top view illustrating multiple mound bed concept for mounds with slopes > 1%

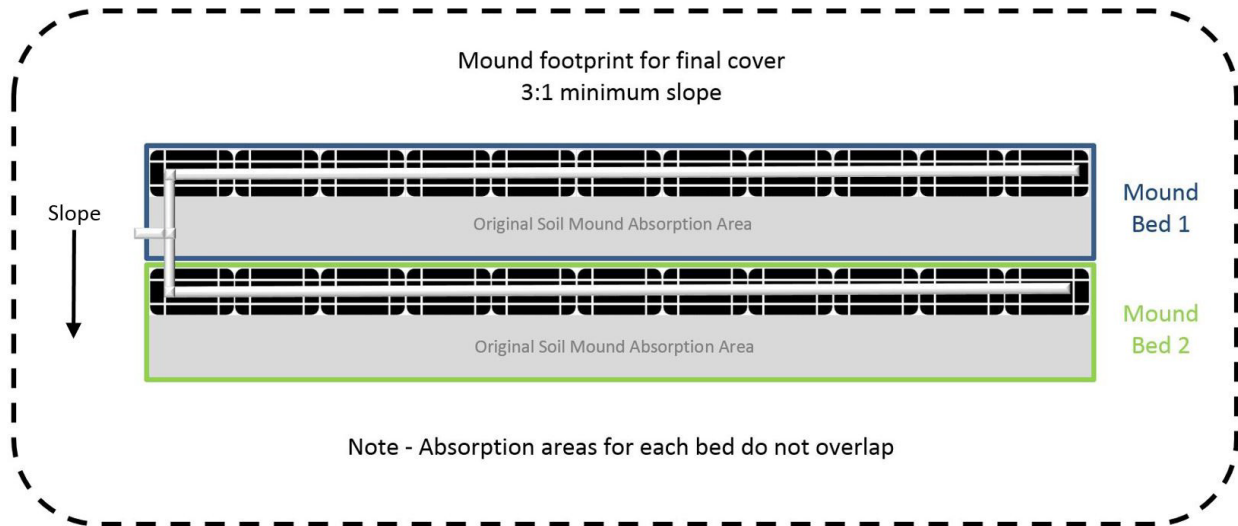


Figure 3. Side view illustrating multiple mound bed concept for mounds with slopes from 0 to 1%

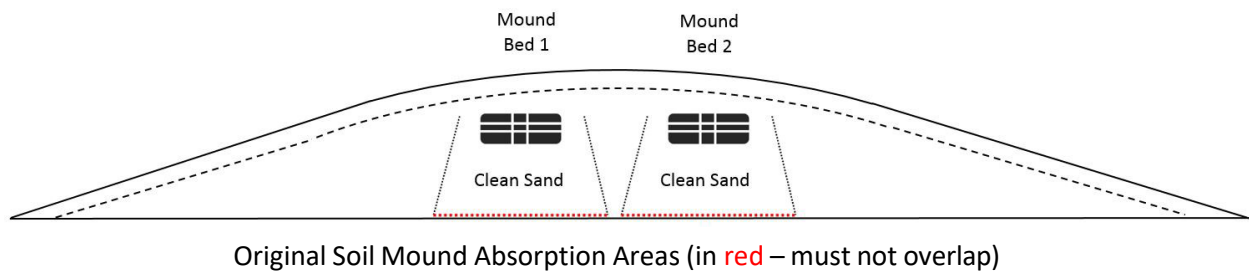
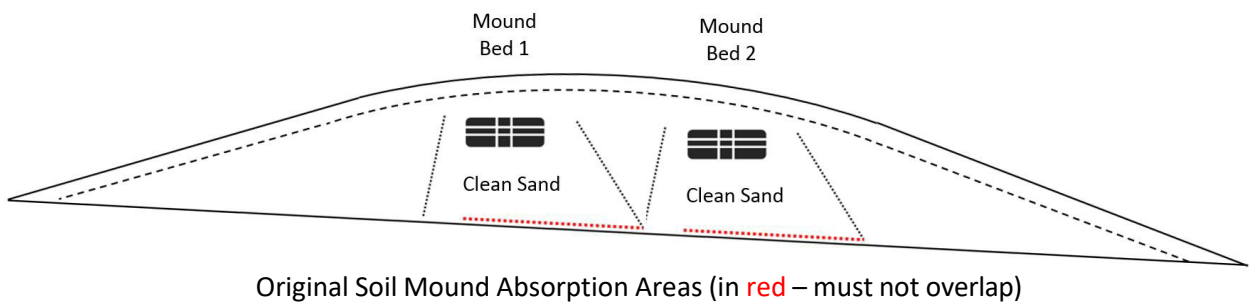


Figure 4. Side view illustrating multiple mound bed concept for mounds with slopes > 1%



General Requirements

The registration of products in Minnesota is contingent upon compliance with the following conditions:

1. The manufacturer shall have readily accessible information, specific to a product's registered use in Minnesota, for designers, installers, regulators, system owners, and service providers for the following items: a) product manual; b) design instructions; c) installation instructions; d) information regarding operation and maintenance; e) homeowner instructions and f) list of manufacturer-certified service providers, if any, as required by Minn. R. ch. 7083.4040 (H).
2. Distribution of sewage must be pressurized in accordance with Minn. R. ch. 7080.2050 and the manufacturer's installation requirements. The distribution of effluent shall be done in a manner that does not scour or excessively pit the soil's infiltrative surface or cause sealing from fines at the soil's infiltrative surface.
3. Original soil mound absorption ratios shall be as specified in Minn. R. ch. 7080.2150, subp.3. Tables IX and IXa and in Minn. R. ch. 7080.2350. Loading rates to the clean sand shall be at 1.2 gal/ft²/day.
4. The minimum depth of soil cover, including six inches of topsoil borrow over the center of the mound or mound beds, is 12 inches. The material placed on top of single mounds, and in between multiple mounds if such a configuration is used, must meet the requirements specified in Minn. R. 7080.2220, subp. 3 Item S at a minimum. The material for the top 6 inch of cover must be as specified in Minn. R. 7080.2220, subp. 3(U).
5. Any excavation into the absorption area must be in a manner that maintains soil structure in an un-smearred and un-compacted condition. Excavation and placement of Eljen GSF modules are allowed when: 1) the soil moisture is less than the plastic limit and 2) the soil is not frozen or freezing per Minn. R. 7080.2150, subp. 3(G).
6. Placement of Eljen GSF modules shall be performed in a manner that minimizes soil compaction due to foot traffic related to the installation of module products.
7. Supply pipes must remain below finished grade in all configurations and meet all requirements outlined in Minn. R. 7080.2050, subp. 2(B).
8. One vertical inspection pipe must be properly installed within each mound, terminating at the clean sand and Eljen GSF module interface, per Minn. R. 7080.2220, subp. 3(O). The manufacturer's installation instructions for mounds shall illustrate this requirement.
9. Training shall be provided to practitioners in the proper application and use of the Eljen GSF model series as registered for use in Minnesota.
10. During the period of product registration and as part of the renewal process, systems using registered distribution products are subject to an audit established by the MPCA.

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Please be advised that this registration expires on December 31, 2025. Manufacturers desiring to continue product registration beyond this date must obtain MPCA renewal according to the requirements in Minn. R. 7083.4080, subp. 5. If the MPCA finds the product has changed in any way that may affect performance, it may not be renewed and must meet the requirements for initial registration.

The MPCA is in no way endorsing these products or any advertising, and is not responsible for any situation which may result from its use or misuse. The MPCA is not liable for any product failure and these statements are not intended and cannot be relied upon to establish any substantive or procedural rights with the state of Minnesota or the MPCA, either express or implied, that can be enforced in litigation or any administrative proceeding.

If you have any questions, please contact Freya Linnett at 651-757-2724 or by email at freya.linnett@state.mn.us.

Sincerely,



This document has been electronically signed.

Freya Linnett
Environmental Specialist
Municipal Division

FL:map

cc: File