

State of New Hampshire DEPARTMENT OF ENVIRONMENTAL SERVICES

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September 4, 2002

Ms. Allison Blodig, REHS BioMicrobics, Inc. 8450 Cole Parkway Shawnee, KS 66227

Re:

BioMicrobics FAST® Wastewater Treatment System, Draft Provisional Approval for additional leach field reductions.

Dear Ms. Blodig:

The NH Department of Environmental Services (DES) has reviewed the material you sent us dated August 15, 2002. In this, you requested a modification to the October 29, 2001 general approval of the FAST® unit as an "Innovative/Alternative" method of residential wastewater disposal in New Hampshire. Specifically, you requested that the allowable leach field reduction be changed from 50% to 75%.

Based on material submitted, DES finds that a Provisional Approval, as defined in NH Code of Administrative Rules, Part Env-Ws 1024.24(d)(6)(1) 1, is appropriate. As required in that Part, this letter is to convey DES's proposed conditions to a provisional approval for the FAST® unit. These proposed conditions are:

- 1. The October 29, 2001 general approval ("50% reduction approval") remains. This proposed Provisional Approval is for a limited number of installation with up to 75% reduction, with some conditions.
- 2. This approval is for up to fifty (50) installations between the date of approval and December 31, 2007. As noted in Env-Ws 1024.06(d)(1) you may re-apply for Provisional or General approval. Data submitted as called for below can be used to support an application for general approval.
- 3. This approval is specific to the MicroFAST 0.5 through MicroFAST 9.0 models for use with ordinary domestic wastewater. You had also requested approval for NitriFAST units for denitrification, HighStrengthFAST for high-strength wastewater, and RetroFAST for rehabilitation of failed systems. Denitrification is not an issue for ground discharge in New Hampshire. DES is not willing to grant this amount of leach field reduction for high strength wastewater. For failed system applications, DES works with the property owner and system designer to reach the best solution to the problem, and under those conditions RetroFast may be approvable on a site-by-site basis.
- 4. Units must be installed in accordance with manufacturer's recommendations.
- 5. A leach field used for disposal of treated effluent from a FAST® unit may be reduced up to 75% of the size listed in Env-Ws 1014.07, subject to all conditions in this Provisional approval. However, please understand that double reductions will **not** be allowed. For example, you may not claim the allowable reduction for chambered leach fields in a residential use, and then claim a 75% reduction of that reduced size. DES will not allow leach fields any smaller than 1/4 of the size listed in Env-Ws 1014.07.

TDD Access: Relay NH 1-800-735-2964

¹ The administrative rules for septic systems in NH, Chapter Env-Ws 1000 can be found at http://www.des.state.nh.us/rules/envws1000.pdf, or by calling DES's Public Information office at 603-271-2975

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- 6. If an applicant proposes to place a FAST® unit employing a reduced leach field size per No. 5, above, on a lot which was created prior to adoption of DES subdivision rules, the design submitted shall demonstrate sufficient capacity to construct a full sized leaching facility on the lot.
- 7. All other details of the overall wastewater disposal system using FAST® units must comply with the provisions of Chapter Env-Ws 1000, with the exception that a septic tank is not required when a FAST® unit is used.
- 8. Per Env-Ws 1024.06(c), a copy of this letter shall accompany any specific design involving the use of the FAST® unit under this approval which may be submitted to DES.
- 9. Maintenance must be performed by a licensed wastewater treatment plant operator. A fact sheet on DES's licensure available at http://www.des.state.nh.us/factsheets/wwt/web-2.htm. DES expects that a Grade 1 license will be sufficient.
- 10. Performance monitoring is required as a condition of this Provisional Approval. Each site where FAST® units are installed with leach field size reduced more than 50% shall be carefully inspected quarterly (January, April, July, and October of each year) for signs of hydraulic failure at the leach field, issues with poor drainage in the building served, and any other problems noted by the users. If the leach field inspection is not possible due to winter conditions, that fact shall be noted and included in the report required in #11, below.
- 11. Results of inspections for all units installed under this approval, or previous to this approval, shall be reported to the Administrator of DES's Subsurface Systems Bureau, in February and August of each calendar year. For each installation, this report shall include an estimated building population and a description of the uses of the building.

I hope this letter meets your needs. I look forward to your response on these proposed conditions. I can be reached at the Water Division at 603-271-2941, or E-mail at rminicucci@des.state.nh.us.

Sincerely,

ATPMIT

Robert P. Minicucci II, PE

Innovative Technology Coordinator

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cc: William Evans, PE, SSB/DES James Falicon, SSB/DES

Robert S. Myers, J&R Engineered Products, Inc.