



Oregon

John A. Kitzhaber, MD, Governor

Department of Environmental Quality
Western Region Eugene Office
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TTY 711

12/19/2014

James Bell
Executive Vice President
Bio-Microbics, Incorporated
8450 Cole Parkway
Shawnee, KS 66227

RE: MicroFAST[®] 0.5 Onsite Wastewater Treatment System w/ UV Disinfection

Dear Mr. Bell,

This letter is in response to your application to list the above-referenced Alternative Treatment Technology (ATT) as an approved ATT. DEQ has reviewed your application, plans, specifications, and other required exhibits for the MicroFAST[®] 0.5 incorporating Ultraviolet light (UV) disinfection. The system design flow rating is 500 gpd, and your application was submitted for use in septic systems in Oregon as an approved Treatment Standard 2 system.

Your company provided third party NSF/ANSI testing data from a certification organization whose accreditation is specific to onsite wastewater treatment products certifying the ATT complies with all applicable DEQ rules and regulations. DEQ staff reviewed these materials for compatibility with the standards and criteria found in Oregon Administrative Rule (OAR) 340-071-0345. I am pleased to advise you that DEQ has found the following ATT system manufactured by Bio-Microbics[®] to meet the approval criteria for **Treatment Standard 2** when used as part of an onsite wastewater treatment system in Oregon:

- MicroFAST[®] 0.5 w/ Salcor 3G UV Disinfection (500 GPD)

Bio-Microbics[®] is authorized to manufacture, market, and distribute these ATT's for use in single family dwellings and commercial facilities in Oregon so long as the following conditions are met:

1. The ATT must be manufactured in compliance with DEQ's rules and the plans and design specifications approved by DEQ. Alteration of the ATT system design that might affect system performance must be approved by an ANSI accredited, third-party testing and certification organization and DEQ.
2. The approved version(s) of the plans are enclosed and labeled Bio-Microbics[®] Incorporated, Oregon FAST System and are dated December 18, 2014.
3. The ATT system must be preceded by a properly sized septic tank and followed by a properly sized dosing tank or pump vault approved for use in Oregon.

4. In the event of air blower failure or UV light failure, the control panel must lockout effluent pump operation to prevent untreated or partially treated effluent from discharging to the absorption area. An audible and visual alarm must activate in the event of a pump, air blower or UV light failure.
5. Your company must train and certify maintenance providers on system maintenance for this ATT. Individuals installing your system, and regulators in the County of installation, must be trained prior to installation of your products in Oregon, in accordance with the approved plan you submitted.
6. All tanks that house the MicroFAST[®] unit must be approved by an ANSI accredited, third-party testing and certification organization and Bio-Microbics must provide a warranty. Bio-Microbics must notify and provide a list to DEQ of each tank manufacturer, and the specific tank approved that is allowed in the manufacture of MicroFAST[®] systems. All MicroFAST[®] system tanks must be installed in accordance with your installation manual requirements and the installation requirements of the tank manufacturer.
7. As the manufacturer of these products, it is your responsibility to ensure that each assembled ATT delivered to the construction site is watertight. Ensuring watertight tanks must be achieved by periodic testing of the ATT products at the manufacturing facility.
8. Service contracts and inspection and service visits must meet or exceed the requirements of OAR 340-071-0345(14).
9. Unless otherwise authorized by DEQ, Bio-Microbics must submit an annual manufacturer report. The report must include, but is not limited to:
 - a. A current list of each ATT sold in the State of Oregon for the reporting period including the model number, serial number, and the property address where the ATT is located;
 - b. A current list of all maintenance providers certified by Bio-Microbics and;
 - c. The annual compliance determination fee in OAR 340-071-0140(5).
10. All other applicable rules and requirements within OAR 340-071 and 073 must be followed.

Pursuant to OAR 340-071-0345(2)(e), DEQ has the authority to remove ATT's from the approved list if DEQ determines that the requirements for approval are no longer satisfied, or if any of the following conditions have occurred:

- a. Ten percent or more of systems under 10 years of age fail;
- b. The ATT does not produce effluent quality equal to or better than Treatment Standard 2 requirements under normal operating conditions;
- c. The manufacturer fails to submit the annual report and annual compliance determination fee by the date specified by DEQ; or
- d. The manufacturer goes out of business.

Each ATT is only approved for use at locations where the top loading will not exceed the manufacturer's engineering design parameters. ATT's proposed for use at other locations requires an engineering analysis of the potential top loading, and may require the preparation of site-specific plans and specifications.

DEQ's decision to list this ATT as approved for use does not constitute an endorsement of the product. Moreover, DEQ is not responsible for any situation which may result from improper use or misapplication of your product.

If you have any questions regarding this letter, please contact Dan Wiltse at (541) 687-7436 or by email at Wiltse.daniel@deq.state.or.us.

Sincerely,



David Belyea, Manager
Regional Environmental Solutions

EC: All Contract County Offices
All DEQ Direct Service Offices



Oregon

Kate Brown, Governor

Department of Environmental Quality

Western Region Eugene Office

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November 2, 2015

Amanda Renner
Bio-microbics, Inc
8450 Cole Parkway
Shawnee, KS 66227

RE: Amendment to MicroFAST 0.5 TS-2 product approval

Dear Amanda,

DEQ staff approved 0.5-MicroFAST for treatment standard 2 on December 19, 2014. You subsequently submitted a 'material plan review' application to include a 24" pump vault option, in addition to the 36" vault option that was approved originally. This letter amends the approval letter listed above with the following change: condition 2 in the letter has plan approval dated December 18, 2014 will also include plan approval dated October 27, 2015 and is included with this letter.

A clarification; the plans indicate that the vault is a 'state approved prefabricated basin'. That is incorrect. The vault is a part of your product approval. Also, not all plans state 'fail safe pump arrangement', but Oregon requires a method to prevent wastewater from entering the drainfield if there is a system malfunction and Bio-microbics meets this rule with a 'fail safe pump arrangement' for all products in Oregon.

Questions? Please contact Randy Trox, trox.randall@deq.state.or.us, or by phone, 541-687-7338.

Sincerely,

David Belyea, Manager
Regional Environmental Solutions