



Oregon

John A. Kitzhaber, MD, Governor

Department of Environmental Quality

Western Region Eugene Office

165 East 7th Avenue, Suite 100

Eugene, OR 97401

(541) 686-7838

FAX (541) 686-7551

TTY 711

August 23, 2013

Allison Blodig, REHS
Manager, Regulatory Affairs & Special Projects
Bio-Microbics, Inc.
8450 Cole Parkway
Shawnee, Kansas 66227

**RE: MicroFAST® 0.5 & 0.75 wastewater treatment systems
Material Plan review application
Willamette Graystone 1,000 gallon clamshell septic tank.**

Dear Ms. Blodig:

The Oregon Department of Environmental Quality (Department) has received and reviewed your request to include the 1,000 gallon concrete clamshell septic tank manufactured by Willamette Graystone Inc. for use with the MicroFAST® 0.5 and MicroFAST® 0.75 Alternative Treatment Technology systems. The request was submitted with the following supporting documentation:

- A letter from NSF, dated February 16, 2010, certifying septic tanks that meet minimum dimensions; and
- Installation diagrams incorporating the 1,000 gallon clam shell tank.

Condition 1 of your original approval letter dated July 10, 2008, requires the MicroFAST Alternative Treatment Technology System (ATT) to be manufactured in compliance with the Department's rules and the plans and specifications provided. Any deviation from the approved plans and specifications are not permitted unless authorized by NSF® International and in writing by the Department. Product modification approvals must be copied to the Department.

I am pleased to advise you that the revised installation diagrams (attached), incorporating an electronic Department approval date of August 23, 2013 are hereby approved. Please also be aware that all of the conditions listed in the original approval letter remain in effect.

This determination should not be construed in any way as the Department's endorsement of this product or any advertising. Moreover, the Department is not responsible for any situation which may result from 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,

A handwritten signature in black ink, appearing to read "Michael E. Kucinski". The signature is fluid and cursive, with the first name "Michael" being the most prominent.

Michael E. Kucinski, Manager
Water Quality/ Onsite

ec: All Contract County Offices
All DEQ Direct Service Offices



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John A. Kitzhaber, MD, Governor

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Western Region

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www.oregon.gov/DEQ

June 12, 2012

Allison Blodig, REHS
Regulatory Affairs & Special Projects Manager
Bio-Microbics, Inc.
8450 Cole Parkway
Shawnee, KS 66227

**RE: MicroFAST® 0.5 & 0.75 Alternative Treatment Technology Systems
Material Plan Review: Infiltrator IM-1060 tank**

Dear Mrs. Blodig:

The Oregon Department of Environmental Quality (Department) has received and reviewed your request to include the IM-1060 tank manufactured by Infiltrator Systems, Inc. for use with the MicroFAST® 0.5 and MicroFAST® 0.75 Alternative Treatment Technology (ATT) systems. The request was submitted with the following documentation:

- A letter from NSF International, dated April 17, 2012 authorizing the use of the IM-1060 tank;
- Installation diagrams of the MicroFAST® systems using the IM-1060 gallon tank.

Condition 1 of the original approval letter for the MicroFAST® systems dated July 10, 2008 requires the systems to be manufactured in compliance with the Department's rules and the approved plans and specifications. Any deviation from the approved plans and specifications is not permitted unless authorized by NSF International and in writing by the Department. Product modification approvals from NSF International must be copied to the Department.

I am pleased to inform you that the revised installation diagrams (attached), incorporating an electronic Department approval date of June 12, 2012 are hereby approved. Please know that all of the conditions listed in the original approval letter remain in effect.

This determination should not be construed in any way as the Department's endorsement of this product or any advertising. Moreover, the Department is not responsible for any situation which may result from use or misuse 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,

Michael E. Kucinski, Manager
Water Quality/ Onsite Program

ec: All Contract County Offices
All DEQ Direct Service Offices





Oregon

John A. Kitzhaber, MD, Governor

Department of Environmental Quality
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July 15, 2011

Allison Blodig, REHS
Manager,
Regulatory Affairs & Special Projects
Bio-Microbics, Incorporated
8450 Cole Parkway
Shawnee, KS 66227

RE: MicroFAST® 1.5 (X2) Parallel Configuration
NSF Standard 40 Certified Onsite Wastewater Treatment Systems

Dear Mrs. Blodig,

We received your Alternative Treatment Technology (ATT) application and the plans, specifications, and other required exhibits for the MicroFAST® 1.5 (X2), incorporating two MicroFAST® 1.5 systems rated at 1500 gpd for Treatment Standard 1 approval.

NSF International (NSF), through a letter dated December 10, 2010 has stated that if the rated capacity of the certified system is not exceeded, the strength of the wastewater is residential and the loading of the system is maintained consistent with your design, then NSF certification of the systems remain valid.

Your company and NSF have certified that the ATT's comply with all applicable rules and regulations. We have 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 the following ATT systems manufactured by Bio-Microbics®, Incorporated have been found to meet the approval criteria for **Treatment Standard 1** when used as part of an onsite wastewater treatment system in Oregon:

- MicroFAST® 1.5 (X2) Parallel Configuration (2500 GPD)

Bio-Microbics®, Incorporated is authorized to manufacture, market, and distribute these ATT's for use in Oregon provided the following conditions are met:

1. The ATT must be manufactured in compliance with the Department's rules and the plans and design specifications approved by the Department. Alteration of the ATT system design that might affect system performance must be authorized by NSF International and the Department. Product modification approval from NSF International must be copied to the Department.
2. The approved version(s) of the plans are labeled Bio-Microbics® Incorporated, Oregon Fast System and are dated July 12, 2011.
3. The ATT system must be preceded by properly sized septic tanks and dosing tank approved for use in Oregon. Duplex pumps are required in the dosing tank in accordance with OAR 340-073-0055(4)(i).

4. When dosing to a drain field the use of duplex pumps is required. When using a 1,000 gallon dosing tank, duplex pumps and telemetry are required. Telemetry is not required when using a 1,500 gallon or larger dosing tank.
5. In the event of air blower 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 either a pump or air blower failure.
6. Your company must provide training for, and maintain a list of certified installers and maintenance providers authorized to work on these ATT's and provide certificates to those individuals. Individuals installing your systems, and regulators in the County of installation, must be trained prior to installation of your products in Oregon. Please provide the Department with a plan for training installers, maintenance providers, and regulators within 90 days of the date of this letter.
7. The ATT system must be preceded by a properly sized septic tanks and dosing septic tank approved for use in Oregon.
8. All tanks that house the MicroFAST® unit must be approved by NSF international and Bio-Microbics must provide a warranty. Bio-Microbics must notify and provide a list to the Department of each tank manufacturer, and the specific tank approved by NSF international, 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.
9. As the Manufacturer of these products, it is your responsibility to assure that each assembled ATT delivered to the construction site is water-tight. Assurance must be achieved by periodic testing of the ATT products for water-tightness at the manufacturing facility.
10. Service contract, and inspection and service visits must meet or exceed the requirements of OAR 340-071-0345(14). The current rules states that a two-year service contract, including a minimum of four (4) service visits scheduled every six months, to inspect, adjust and service the ATT is required until the system is decommissioned. The initial service contract must be included in the purchase price of the ATT.
11. Each ATT system must maintain NSF Standard 40 Class I Certification.
12. Systems less than 10 years old may not exceed a failure rate of 10 percent.
13. The ATT must be installed in accordance with the manufacturer's installation manual.
14. Each ATT is only acceptable for use at locations where the top loading will not exceed the 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.
15. All other applicable rules and requirements within OAR 340-071 and 73 must be followed.

This determination should not be construed in any way as our endorsement of the product or any advertising. Moreover, we are not responsible for any situation which may result from use or mis-application 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,



Michael E. Kucinski, Manager
WQ/Onsite

EC: All Contract County Offices
All DEQ Direct Service Offices



Oregon

Theodore Kulongoski, Governor

Department of Environmental Quality

Western Region Eugene Office

1102 Lincoln Street, Suite 210

Eugene, OR 97401

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TTY (541) 687-5603

July 10, 2008

Bob Rebori, President
Bio-Microbics, Incorporated
8450 Cole Parkway
Shawnee, KS 66227

RE: MicroFAST® 0.5, 0.75, 0.9, 1.5 NSF Standard 40 Certified Onsite Wastewater Treatment Systems

Dear Mr. Rebori,

The Oregon Department of Environmental Quality (Department) has received your Oregon Alternative Treatment Technology (ATT) application(s) and the plans, specifications, and other required application exhibits. Your company has certified that the ATT's comply with all applicable Department rules and regulations. The Department has 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 the following ATT systems manufactured by Bio-Microbics®, Incorporated have been found to meet the approval criteria for **Treatment Standard 1** when used as part of an onsite wastewater treatment system in Oregon:

- MicroFAST® 0.5 (500 GPD)
- MicroFAST® 0.75 (750 GPD)
- MicroFAST® 0.9 (900 GPD)
- MicroFAST® 1.5 (1500 GPD)

Bio-Microbics®, Incorporated is authorized to manufacture, market, and distribute these ATT's for use in Oregon provided the following conditions are met:

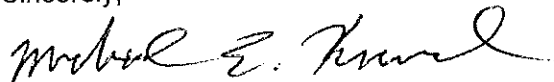
1. The ATT must be manufactured in compliance with the Department's rules and the plans and design specifications approved by the Department. Alteration of the ATT system design that might affect system performance must be authorized by NSF International and the Department. Product modification approval from NSF International must be copied to the Department.
2. The approved version(s) of the plans are labeled Bio-Microbics® Incorporated, Oregon Fast System and are dated April 23, 2008.
3. In the event of air blower 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 either a pump or air blower failure.
4. Your company must provide training for, and maintain a list of certified installers and maintenance providers authorized to work on these ATT's and provide certificates to those individuals. Individuals installing your systems, and regulators in the County of installation, must be trained prior to installation of your products in Oregon. Please provide the Department with a plan for training installers, maintenance providers, and regulators within 90 days of the date of this letter.

5. The ATT system must be preceded by a properly sized septic tank or dosing septic tank approved for use in Oregon.
6. All tanks that house the MicroFAST® unit must be approved by NSF international and Bio-Microbics and must be included in your warranty. Bio-Microbics must notify and provide a list to the Department of each tank manufacturer's specific tank and model number approved by NSF international 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 assure that each assembled ATT delivered to the construction site is water-tight. Assurance must be achieved by periodic testing of the ATT products for water-tightness at the manufacturing facility.
8. A minimum two-year service contract, including a minimum of four service visits (scheduled every six months) must be included in the purchase price of the ATT. A service contract for each system must be maintained until the system is decommissioned.
9. Each ATT system must maintain NSF Standard 40 Class I Certification.
10. Systems less than 10 years old may not exceed a failure rate of 10 percent.
11. The ATT must be installed in accordance with the manufacturer's installation manual.
12. Each ATT is only acceptable for use at locations where the top loading will not exceed the 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.
13. All other applicable rules and requirements within OAR 340-071 and 073 must be followed.

This determination should not construed in any way as the Department's endorsement of the product or any advertising. Moreover, the Department is not responsible for any situation which may result from use or mis-application of your product.

If you have any questions regarding this letter, please contact the Department's Onsite Program Coordinator, Zach Loby at (541) 687-7425 or by email at loboy.zach@deq.state.or.us.

Sincerely,



Michael E. Kucinski, Manager
Water Quality/Onsite

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All DEQ Direct Service Offices

