

May 13<sup>th</sup>, 2011

BUTTERS - FETTING COMPANY, INC.  
RAYMOND LUCZAK  
1669 S. 1ST STREET  
MILWAUKEE WI 53204-2999

Re: Description: WATER TREATMENT DEVICE - SITE SPECIFIC/COMMERCIAL  
Manufacturer: BUTTERS - FETTING COMPANY, INC.  
Product Name: MEQUON MONTESSORI SCHOOL (ARSENIC)  
Model Number(s): MEQUON MONTESSORI SCHOOL (ARSENIC)  
(Transaction I.D. No. 1939288)  
Product File No: 20110171

The specifications and/or plans for this site specific commercial water treatment device installation have been reviewed and determined to be in compliance with chapters Comm 82 through 84, Wisconsin Administrative Code, and Chapters 145 and 160, Wisconsin Statutes.

The Department hereby issues an approval based on the Wisconsin Statutes and the Wisconsin Administrative Code. This approval is valid until the end of May 2016.

This approval is contingent upon compliance with the following stipulation(s):

- The point-of-entry (POE) arsenic reduction devices have undergone sufficient testing to document the ability to reduce only those contaminants and/or substances as specified in this approval letter when the product is installed and maintained in strict accordance with the manufacturer's published instructions.
- Where the Department of Natural Resources (DNR) has jurisdiction, a written approval may be required prior to installation of this product in a water supply system to reduce the concentration of a contaminant that exceeds the primary drinking water standards contained in ch. NR 809, Wis. Admin. Code, the enforcement standards contained in ch. NR 140, Wis. Admin. Code, or for a water supply system that is subject to a written advisory opinion by the DNR. For more information contact the DNR Section of Private Water Systems, P.O. Box 7921, Madison, WI 53707, telephone (608) 267-9787.
- If this approved device is modified or additional assertions of function or performance are made, then this approval shall be considered null and void, unless the change is submitted to the department for review and the approval is reaffirmed.
- This installation must undergo a final inspection prior to the device being put into service. The Plumbing Consultant having jurisdiction in this area is Scott Altenberger. Mr. Altenberger can be contacted via the following:

Phone: 608-235-0557  
E-mail: [scott.altenberger@wi.gov](mailto:scott.altenberger@wi.gov)

When the final inspection has been completed, this department will notify the Wisconsin Department of Natural Resources (WDNR). The WDNR will then monitor the performance of the device(s) to its satisfaction. A suggested frequency and overall duration of monitoring is provided elsewhere in this letter. The WDNR Field Staff person having jurisdiction in this area is Patricia Iwanski. Ms. Iwanski can be contacted via the following:

Phone: 414-263-8683  
E-mail: [Patricia.Iwanski@wi.gov](mailto:Patricia.Iwanski@wi.gov)

- If these devices are installed and put in service prior to obtaining a final inspection by DComm, then any pertinent approval for the site specific device is immediately rendered null and void and the device may be ordered removed.
- The suggested monitoring interval for this installation is quarterly. As a minimum, the following tests should be performed:
  1. total arsenic (i.e. As<sup>+3</sup> + As<sup>+5</sup> + particulate arsenic)
  2. manganese

The samples should be collected at a time of day when the devices are under stress and at a time most remote from the last regeneration/backwash cycle as possible. Raw water samples should be collected from the well pressure tank tap (i.e. prior to any treatment devices). Treated water samples should be collected downstream of all water treatment devices.

- The granular ferric oxide based arsenic reduction devices being installed are approved under DComm product file number 20090103. The approval letter can be viewed at:

<http://commerce.wi.gov/sb/docs/sb-ppalopp/wtd/20090103.pdf>

All stipulations displayed in the approval letter for product file number 20090103 must be adhered to.

Based on testing data submitted to and reviewed by the department, this approval recognizes that the water treatment devices will reduce the concentration of contaminants as specified on pages 1 through 2 of this letter.

### ARSENIC REDUCTION CAPABILITIES

**Service Flow Rate @ Pressure Loss Per Tank :** 36.0 lpm @ 103.4 KPa (9.5 gpm @ 15.0 psig)

**Capacity Per Tank:** 757,082 l (200,000 gals.)

Tested Contaminant	Tested Influent Concentration (mg/l) <sup>1</sup>
Arsenic (As <sup>+5</sup> ) <sup>2</sup>	0.050 ± 10%
Arsenic (As <sup>+3</sup> ) <sup>2</sup>	0.050 ± 10%

**Other conditions:** the contaminant reduction capabilities were verified by testing conducted in accordance with NSF/ANSI Standard 53. To qualify for pentavalent arsenic (As V) reduction, the device must reduce the influent challenge concentrations such that all effluent concentrations are ≤ 0.010 mg/l. To qualify for trivalent arsenic (As III) reduction, the device must reduce the influent challenge concentrations such that all effluent concentrations are ≤ 0.010 mg/l. These devices are approved for total dissolved arsenic reduction (i.e. As III + As V) up to 0.100 mg/l. Two 14-inch models are being used in parallel.

<sup>1</sup> = milligrams per liter (mg/l) are equivalent to parts per million (ppm)  
± = plus or minus

<sup>2</sup> = tested at pH 6.5 and 8.5  
≤ = less than or equal to

This device was tested under controlled laboratory, or field, conditions. The actual performance of this device for a specific end use installation will vary from the tested conditions based on local factors such as water pressure, water temperature and water chemistry. The department is in no way endorsing this product or any advertising, and is not responsible for any situation which may result from its use.

Sincerely,

Glen W. Schlueter  
Engineering Consultant-Plumbing Product Reviewer  
Bureau of Integrated Services  
Safety and Buildings Division  
Department of Commerce  
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8:00AM – 4:30PM CDT **Work Hours**  
GWS:gws