



January 24, 2013

DEPARTMENT OF SAFETY AND PROFESSIONAL SERVICES  
DIVISION OF INDUSTRY SERVICES  
BUREAU OF TECHNICAL SERVICES  
1400 E. WASHINGTON AVE.  
MADISON WI 53703

Re: Description: ALTERNATE SYSTEM  
Manufacturer: DEPARTMENT OF SAFETY AND PROFESSIONAL SERVICES  
Product Name: ALTERNATE APPROVAL IN LIEU OF PLAN REVIEW FOR REUSE  
Model Number(s): GRAYWATER REUSE AT POINT OF USE  
Product File No: 20130019

The specifications and/or plans for this plumbing product have been reviewed and determined to be in compliance with chapters SPS 382 through 384, Wisconsin Administrative Code, and Chapters 145 and 160, Wisconsin Statutes.

The Department hereby issues an alternate approval to s. SPS 382.20 (1) based on the Wisconsin Statutes and the Wisconsin Administrative Code. This approval is valid until the end of January 2018.

This approval permits the installation of a water reuse system within a single-family dwelling unit that treats graywater influent to a water treatment device from a maximum of two lavatories, or one combination lavatory, at the point-of-use. The effluent is non-potable water that is used to supply water to an individual water closet. This approval permits the installation of a water reuse system without departmental plan review provided the following stipulations are complied with.

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

- All water lines and outlets shall be labeled as required by s. SPS 382.40 (3) (d) per the specific end use.
- The reuse system shall be installed by a properly licensed Wisconsin plumber under the supervision of a Master Plumber, or by the owner occupant of a single family dwelling that is their primary place of residence unless a plumbing license is required by the municipality.
- All pertinent aspects of chapters SPS 382-387 of the Wis. Adm. Code (i.e. Plumbing Code) shall be adhered to.
- Monitoring and maintenance of this system may be performed by a properly trained system owner.
- A permanent tag and/or label must be affixed to all treatment components of the water reuse system in a conspicuous location, visible after installation is complete. The tag/label must contain the following minimum information:
  1. model number;
  2. manufacturer's name;
  3. manufacturer's address;
  4. manufacturer's phone number
- The device must have plumbing product approval in accordance with ch. SPS 384 Wis. Adm. Code and conform to all stipulations of the product approval.
- The device shall serve gravity type flush tank toilets only.

- The quality of the reuse water shall be maintained within the following ranges and should be tested every six months:
  1. pH = 6 - 9;
  2. TSS = < 5.0 mg/l;
  3. BOD<sub>5</sub> = < 200
  4. Free chlorine residual = ≥ 0.1 mg/l and ≤ 4.0 mg/l
  5. Odor = none
  6. Color = none
- Gravity flush tank toilets served by the device must use ballcocks and fill valves that conform to American Society of Sanitary Engineers (ASSE) Standard 1002.
- The dynamic water pressure downstream of a flow restrictor in the potable fixture supply line must be ≥ 8 psig.
- The device shall serve a maximum of two lavatories or one combination lavatory.
- If a device requires an electrical connection, then the connection shall be via a ground fault circuit interrupter (GFCI) protected receptacle.
- The discharge tubing from the device must be protected from crushing, kinking and splicing hazards (e.g. sleeved).
- The installation of the device may require a local plumbing permit. If so, it is the responsibility of the installer to obtain the proper permit.
- The owner of the facility or residence is responsible for maintaining the device in accordance with the manufacturer's published instructions.

Consumers should be mindful of the materials permitted to go down the lavatory drain. For example, excessive use of soaps may cause bubbles to form in the water closet. Dumping coffee down the lavatory drain will discolor the water in the water closet.

- The device shall be thoroughly cleaned, disinfected, inspected and tested for cross-connections on an annual basis.
- This Alternate Approval letter and the pertinent Plumbing Product Approval letter shall be obtained and retained by the device owner.

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,

Thomas Braun  
Plumbing Consultant  
Department of Safety and Professional Services  
Division of Industry Services  
Bureau of Technical Services  
715-340-5387 **Phone**  
608-283-0000 **Fax**  
[thomas.braun@wisconsin.gov](mailto:thomas.braun@wisconsin.gov) **Email**