



Jim Doyle, Governor
Cory L. Nettles, Secretary

February 21, 2005

ECOWATER SYSTEMS INCORPORATED
SANDRA GAMES
PO BOX 64420
SAINT PAUL MN 55164-0421

GENERAL ELECTRIC COMPANY
DAN CAPELLE
APPLIANCE PARK AP35-1312
LOUISVILLE KY 40225

Re: Description: WATER TREATMENT DEVICE- SOFTENER
Manufacturer: GENERAL ELECTRIC COMPANY
Product Name: SMARTWATER
Model Number(s): GNSF35Z
Product File No: 20040275

The specifications and/or plans for this plumbing product 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 February 2010.

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

- This product has undergone sufficient testing to document the product's 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 manufacturers published instructions.
- For buildings not served by a municipal water supply, Department of Natural Resources (DNR) 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) 266-3415.
- 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.
- These cation exchange water softeners shall be sized, installed, programmed and maintained such that wastewater, total dissolved solids and chloride discharges are minimized.

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

**WATER SOFTENING CAPABILITIES
 PRODUCT FILE NUMBER 20040275
 TABLE 1 OF 1**

Model Number	Capacity*								Flow Rate vs. Pressure Loss gpm @ psig
	Rating 1		Rating 2		Rating 3		Rating 4		
SmartWater Series	Grains	Pounds	Grains	Pounds	Grains	Pounds	Grains	Pounds	
Demand Initiated									
GNSF35Z	14,300	2.8	23,900	5.6	32,100	10.3	35,300	15.0	8.5 @ 14.0

- The softener capacity rating is based on grains of hardness, due to calcium and magnesium cations, removed (as calcium carbonate) while producing soft water between successive regenerations and is related to the pounds of salt required for each regeneration. The tests run to generate the data for table 1 were conducted in accordance with NSF Standard 44.

This softener is also approved for the reduction of dissolved iron (a.k.a. ferrous iron, clear water iron) to a maximum influent concentration of 9.0 mg/l. This device will not reduce bacterial, organically bound or particulate forms of iron; in fact the presence of any of the three aforementioned forms of iron is detrimental to the proper function of this device and should therefore be avoided.

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 that 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
 (608) 267-1401 **Phone**
 (608) 267-9566 **Fax**
 gschlueter@commerce.state.wi.us **Email**
 8:00AM – 4:30PM CT **Work Hours**

GWS:gws