



Jim Doyle, Governor
Cory L. Nettles, Secretary

November 19, 2003

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

GENERAL ELECTRIC CO.
MARGARET BICKING
PO BOX 64420
ST. PAUL MN 55164

Re: Description: WATER TREATMENT DEVICE-ACTIVATED CARBON
Manufacturer: GENERAL ELECTRIC CO.
Product Name: SMARTWATER
Model Number(s): GNUT05Z, GXUT03A AND GNUT03A ALL USING THE FXUS AND FXUT
CARTRIDGES
Product File No: 20030404

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 November 2008.

This approval supercedes the approval issued on August 17, 1998 under product file number 19980326.

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 these approved devices are 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.

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.

**AESTHETIC CONTAMINANT REDUCTION CAPABILITIES
PRODUCT FILE NUMBER 20030404
TABLE 1 OF 1**

Flow Rate: 2.3 liters per minute (lpm) [0.6 gallons per minute (gpm)]
Capacity[‡]: 79,494 liters (l) [21,000 gallons (gals.)], for particulate reduction, the capacity is dependent on the type and quantity of particulate matter present in the untreated water; the need for maintenance may be indicated by a significant decrease in flow rate.

Tested Contaminant	Influent Challenge (mg/l)*, ¹
Chlorine (free)	2.0 ± 10%
Particulates (0.5 to < 1.0 µm)	≥ 1.0 x 10 ⁴ #/ml

Other Conditions: the contaminant reduction performance capabilities displayed for Table 1 of 1 were verified by testing conducted in accordance with NSF *International* Standard 42. To qualify for free chlorine reduction, the device must reduce the influent challenge concentrations by ≥ 75%; meeting the free chlorine reduction requirements also qualifies the device for the reduction of aesthetic, organic, taste and odor reduction (e.g. geosmin, methylisoborneol); this does not include hydrogen sulfide. To qualify for particulate reduction (Class I) the device must reduce the influent challenge concentrations by ≥ 85%.

¹ = milligrams per liter (mg/l) are equivalent to parts per million (ppm)

≥ = greater than or equal to

± = plus or minus

#/ml = particles per milliliter

< = less than

µm = micrometers

* = unless otherwise specified

≤ = less than or equal to

[‡] = The total capacity of these devices, 21,000 gallons, is the sum of the tested capacities of the FXUS cartridge (14,000 gallons) and the tested capacity of the FXUT cartridge (7,000 gallons).

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**
8:00A - 4:30P CT **Work Hours**

GWS:gws