



Jim Doyle, Governor
Mary P. Burke, Secretary

December 19, 2005

ECOWATER SYSTEMS
MARGARET L. BICKING
PO BOX 64420
ST. PAUL MN 55164-9888

ECODYNE WATER SYSTEMS
MARGARET L. BICKING
PO BOX 64420
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Re: Description: WATER TREATMENT DEVICE-ACTIVATED CARBON
Manufacturer: ECODYNE WATER SYSTEMS
Product Name: WHIRLPOOL
Model Number(s): WHED 10 USING THE WHCF-GD05 AND WHCF-DB1 CARTRIDGES
Product File No: 20050817

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 December 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.
- 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) 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.
- This device will only reduce the concentration of cysts/oocysts at water outlets that are served by the devices. Therefore, using point-of-use devices such as this will not protect all routes of potential exposure. Potentially hazardous exposures to cysts/oocysts will remain possible at unprotected outlets.

The presence of cysts/oocysts strongly suggests that other pathogens (e.g. bacteria, virus) may also be present.

If, by way of reputable water analyses, a water supply is known to contain cysts/oocysts, then all the water entering the residence must be treated at the point-of-entry, using an approved water treatment device, to address all potential routes of exposure thereby providing a biologically safe water supply.

**AESTHETIC CONTAMINANT REDUCTION CAPABILITIES
 PRODUCT FILE NUMBER 20050817
 TABLE 1 OF 2**

Flow Rate: 2.3 liters per minute (lpm) [0.6 gallon per minute (gpm)]
Capacity: 3,785 liters (l) [1,000 gallons (gals.)] for the reduction of free chlorine. For particulate reduction, dependent on the type and quantity of particulate matter present in the influent 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 2 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 ≥ 50%; 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 = mg/l are equivalent to parts per million (ppm) < = less than
 ≥ = greater than or equal to µm = micrometers
 * = unless otherwise specified #/ml = particles per milliliter
 ± = plus or minus

**HEALTH EFFECTING BIOLOGICAL CONTAMINANT REDUCTION CAPABILITIES
 PRODUCT FILE NUMBER 20050817
 TABLE 2 OF 2**

Flow Rate: 2.3 lpm (0.6 gpm)
Capacity: dependent on the type and quantity of particulate matter present in the influent water; the need for maintenance may be indicated by a significant decrease in flow rate.

Tested Contaminant	Influent Challenge (#/ml)
Cysts/Oocysts ¹	≥ 5.0 x 10 ⁴

Other Conditions: the contaminant reduction performance capabilities displayed for Table 2 of 2 were verified by testing conducted in accordance with NSF *International* Standard 53. To qualify for cyst/oocyst reduction, the device must reduce the influent challenge concentrations by ≥ 99.95% at each sample point.

1 = the specific organisms covered under this testing protocol include cryptosporidium parvum, entamoeba histolytica, giardia lamblia and toxoplasma gondii
 #/ml = particles per milliliter
 ≥ = greater than or equal to

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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
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Safety and Buildings Division
Department of Commerce
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