



January 23, 2007

CULLIGAN INTERNATIONAL
ANNA LEVOY
2375 SANDERS RD.
NORTHBROOK IL 60062

Re: Description: WATER TREATMENT DEVICE-REVERSE OSMOSIS
Manufacturer: CULLIGAN INTERNATIONAL
Product Name: CULLIGAN WATER TOWER
Model Number(s): CWT35ST3.0.
Product File No: 20050163

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 January 2012.

This approval supersedes the approval issued on December 19, 2002 under product file number 20020432.

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.
- The system shall be provided with an in-line total dissolved solids (TDS) monitor, or other acceptable means, to warn the user when the system is not performing it's functions. Acceptable alternatives to an in-line TDS monitor include:
 1. terminating the discharge of treated water;
 2. sounding an alarm which is connected to acceptable power source;
 3. flashing a light connected to an acceptable power source;
 4. providing the user with an obvious, readily interpretable, indication of the system's ability to perform (e.g. decreasing the flow rate of treated water by 50% or more for systems making mechanical filtration claims;

(continued from previous page)

5. providing a sampling service by the manufacturer, either directly or through an authorized dealer, a minimum of once every six months;
6. providing a sampling kit for analysis of TDS or other appropriate contaminants; or
7. providing a TDS monitor to measure the product water quality.

Whichever means of performance verification is selected, it shall be clearly described in the owner's manual for this device, and approved for use along with the device.

Based on testing data submitted to and reviewed by the department, this approval recognizes that this plumbing product will reduce the concentration of contaminants as specified on pages 1 through 3 of this letter.

INORGANIC CONTAMINANT REDUCTION CAPABILITIES
PRODUCT FILE NUMBER 20050163
TABLE 1 OF 2

Flow Rate: 41.6 liters per day (lpd) [11.0 gallons per day (gpd)]

Maintenance Cycle: when the concentration of any of the regulated contaminants in table 1 of 2 exceeds their respective maximum contaminant levels, or, when the total dissolved solids (TDS) concentration in the treated water exceeds 25% of the TDS concentration in the untreated water.

Tested Contaminant	Influent Challenge Concentration (mg/l) ¹	Max. Permissible Effluent Concentration (mg/l) ¹
Barium (Ba ⁺²)	10.0 ± 10%	2.0
Cadmium (Cd ⁺²)	0.03 ± 10%	0.005
Hexavalent Chromium (Cr ⁺⁶)	0.3 ± 10%	0.1
Trivalent Chromium (Cr ⁺³)	0.3 ± 10%	0.1
Copper (Cu ⁺²)	3.0 ± 10%	1.3
Fluoride (F ⁻¹)	8.0 ± 10%	1.5
Lead (Pb ⁺²)	0.15 ± 10%	0.010
Radium 226/228 (Barium surrogate) ³	25 pCi/L	5 pCi/L
Selenium (Se ⁺⁴ and Se ⁺⁶)	0.10 ± 10%	0.05
Total Dissolved Solids (NaCl)	750 ± 40	187

Other Conditions: the contaminant reduction performance capabilities displayed for Table 1 of 2 were verified by testing conducted in accordance with NSF *International* Standard 58. To qualify for a specific contaminant reduction claim, the system shall reduce the influent challenge concentration so that the arithmetic mean of all effluent sample results, and 90% of the individual effluent samples, are ≤ the maximum permissible effluent concentration.

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

³ = barium is used as a surrogate based on its relationship with radium on the periodic table and the difficulty in using radium for routine testing.

pCi/l = picocuries per liter

* = unless otherwise specified

≤ = less than or equal to

± = plus or minus

**EFFECTING BIOLOGICAL CONTAMINANT REDUCTION CAPABILITIES
PRODUCT FILE NUMBER 20050163
TABLE 2 OF 2**

Flow Rate: 41.6 liters per day (lpd) [11.0 gallons per day (gpd)]
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	$\geq 5.0 \times 10^4$

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 $\geq 99.95\%$ 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

\geq = greater 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 that 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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GWS:gws