



December 22, 2011

WATER QUALITY ASSOCIATION
STUART MANN
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LISLE IL 60532-3696

HAGUE QUALITY WATER, INTERNATIONAL
CHRIS HUGHES
4343 S HAMILTON RD
GROVEPORT OH 43125

Re: Description: WATER TREATMENT DEVICE - POU REVERSE OSMOSIS
Manufacturer: HAGUE QUALITY WATER, INTERNATIONAL
Product Name: WATERMAX
Model Number(s): H3500
Product File No: 20110375

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 approval based on the Wisconsin Statutes and the Wisconsin Administrative Code. This approval is valid until the end of December 2016.

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

- The integral air gap within the faucet being served by this device shall conform to American Society of Mechanical Engineer (ASME) Standard A112.1.2-2004
- 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 manufacturer's 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) 267-9787.
- 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 its 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;

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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.

**AESTHETIC CONTAMINANT REDUCTION CAPABILITIES
 PRODUCT FILE NUMBER 20110375
 TABLE 1 OF 2**

Product Water Production Rate: 76.0 liters per day (lpd) [20.0 gallons per day (gpd)]

Tested Contaminant	Influent Challenge (mg/l) ¹
Total Dissolved Solids (NaCl)	750 ± 40

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 total dissolved solids reduction, the device must reduce the influent challenge concentrations by ≥ 75%.

mg/l = milligrams per liter are equivalent to parts per million (ppm)
 ≥ = greater than or equal to

± = plus or minus

**HEALTH EFFECTING INORGANIC CONTAMINANT REDUCTION CAPABILITIES
 PRODUCT FILE NUMBER 20110375
 TABLE 2 OF 2**

Product Water Production Rate: 76.0 liters per day (lpd) [20.0 gallons per day (gpd)]

Tested Contaminant	Tested Influent Concentration (mg/l) ¹
Arsenic (As ⁺⁵)	0.050 ± 10%
Barium (Ba ⁺²)	10.0 ± 10%
Cadmium (Cd ⁺²)	0.03 ± 10%
Copper (Cu ⁺²)	3.0 ± 10%
Fluoride (F ⁻¹)	8.0 ± 10%
Hexavalent Chromium (Cr ⁺⁶)	0.15 ± 10%
Lead (Pb ⁺²)	0.15 ± 10%
Radium 226/228 (<i>barium surrogate</i>)	25 pCi/L
Selenium (Se ⁺⁴ and Se ⁺⁶)	0.10 ± 10%
Trivalent chromium (Cr ⁺³)	0.15 ± 10%

Other conditions: the contaminant reduction capabilities displayed for table 2 of 2 were generated by testing conducted in accordance with NSF/ANSI Standard 58. To qualify for arsenic reduction, the device must reduce the influent challenge concentrations such that all effluent concentrations are ≤ 0.010 mg/l. To qualify for barium reduction, the device must reduce the influent challenge water concentrations such that all effluent concentrations are ≤ 2.0 mg/l. To qualify for cadmium reduction, the device must reduce the influent challenge concentrations such that all effluent concentrations are ≤ 0.005 mg/l. To qualify for copper reduction, the device must reduce the influent challenge water concentrations such that all effluent concentrations are ≤ 1.3 mg/l. To qualify for fluoride reduction, the device must reduce the influent challenge concentrations such that all effluent concentrations are ≤ 1.5 mg/l.

To qualify for chromium reduction (i.e. trivalent or hexavalent), the device must reduce the influent challenge concentrations such that all effluent concentrations are ≤ 0.1 mg/l. To qualify for lead reduction, the device must reduce the influent challenge concentrations such that all effluent concentrations are ≤ 0.010 mg/l. To qualify for radium reduction, the device must reduce the influent barium challenge concentrations such that all effluent concentrations are ≤ 2.0 mg/l (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). To qualify for selenium reduction, the device must reduce the influent challenge concentrations such that all effluent concentrations are ≤ 0.05 mg/l.

1 = milligrams per liter (mg/l) are equivalent to parts per million (ppm)
 \leq = less than or equal to
pCi/l = picocuries per liter

\pm = plus or minus
* = unless otherwise indicated

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 Safety and Professional Services
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