



Jim Doyle, Governor
Mary P. Burke, Secretary

September 20, 2005

REVISED COPY

UV PURE TECHNOLOGIES
RON HALLETT
60 VENTURE DR NO 19
TORONTO, ON, M1B 3S4, CANADA

Re: Description: WATER TREATMENT DEVICE-ULTRAVIOLET
Manufacturer: UV PURE TECHNOLOGIES
Product Name: HALLETT
Model Number(s): 13
Product File No: 20050634

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 September 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.
- The installation and use of these devices shall conform to the most current version of the document entitled "DNR Criteria for Ultraviolet (UV) Water Treatment Systems for Private and Non-Community Public Water Supplies to Control Microbiological Contamination".
- The device(s) covered under this approval are designed to inactivate microorganisms, including bacteria, viruses, Cryptosporidium oocysts and Giardia cysts from contaminated water. The device(s) covered under this approval are not intended for the treatment of water that has obvious and/or intentional contamination source (e.g. raw sewage) nor is the device(s) intended to convert wastewater into drinking water. The device(s) are intended to be installed on visually clear water.

If this device(s) is not installed downstream of a device(s) specifically approved for cyst reduction/inactivation by this department, then protozoan related performance claims are limited to Cryptosporidium oocysts and Giardia cysts only. If this device(s) is installed downstream of a separate device specifically approved for cyst reduction by this department, then a general cyst reduction claim can be made when applied to untreated surface waters and/or ground waters under the direct influence of surface waters.

- At 254 nanometers (nm), this device must deliver a minimum UV dose of 40 millijoules per square centimeter (40 mJ/cm^2) at the alarm set point. 40 mJ/cm^2 is equivalent to 40,000 microwatt-seconds per square centimeter ($4.0 \times 10^4 \mu\text{wsec/cm}^2$).

A normally closed (N.C.) solenoid shall be installed on the inlet piping immediately adjacent to this device. At the alarm set point (i.e. 40 mJ/cm^2) the N.C. solenoid valve shall deenergize halting the flow of water through this device.

- A narrow band monitor shall be included with this device. The narrow band monitor shall specifically measure the 254 nanometer (nm) wavelength. When the UV dosage decrease to the alarm set point (i.e. 40 millijoules (mJ) minimum), the narrow band monitor shall signal the normally closed (N.C.) solenoid on the inlet piping to this device to close.

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 2 of this letter.

MICROBIOLOGICAL INACTIVATION PERFORMANCE
PRODUCT FILE NUMBER 20050634
TABLE 1 OF 1

Flow Rates: 49.2 liters per minute (lpm) [13 gallons per minute (gpm)]

Tested Contaminant	Influent Challenge Concentrations (pfu/ml)
MS2 Bacteriophage (ATCC# 15597-B)	5×10^4 to 5×10^5


Other conditions: the testing performed on these devices was conducted in accordance with NSF/ANSI Standard 55. The devices meet NSF/ANSI Standard 55, Class "A" criteria, this means these devices are approved for the inactivation of bacteria, viruses, Cryptosporidium oocysts and Giardia cysts from microbiologically unsafe water.

pfu/ml = plaque forming units per milliliter

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
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