

February 15, 2010

DIAMOND WATER CONDITIONING
TOM GREISBACH
N1022 QUALITY DR
PO BOX 170
GREENVILLE WI 54942

Re: Description: WATER TREATMENT DEVICE – ACTIVATED CARBON
Manufacturer: DIAMOND WATER CONDITIONING
Product Name: DIAMOND WATER CONDITIONING (POE)
Model Number(s): CD-100A, CD-150A AND CD-200A (POE)
Product File No: 20090306

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 February 2015.

This approval supersedes the approval issued on September 24, 2004 under product file number 20040467.

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 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) 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 20090306
TABLE 1 OF 1**

Flow Rates and Corresponding Pressure Losses:

CD-100A = 18.9 liters per minute (lpm) @ 23.4 kilopascals (kPa) [5.0 gallons per minute (gpm) @ 3.4 pounds per square inch gauge (psig)]
CD-150A = 18.9 lpm @ 24.1 kPa (5.0 gpm @ 3.5 psig)
CD-200A = 22.7 lpm @ 26.9 kPa (6.0 gpm @ 3.9 psig)

Capacities:

CD-100A = 344,128 liters (l) [90,909 gallons (gals.)]
CD-150A = 516,194 l (136,364 gals.)
CD-200A = 688,256 l (181,818 gals.)

Tested Contaminant	Average Influent Challenge (mg/l)¹
Chlorine (free)	11.0

Other Conditions: the contaminant reduction performance capabilities displayed for Table 1 of 1 were verified by testing conducted by Baumbach Labs, Appleton WI in accordance with WQA Standard S-200-73. To qualify for free chlorine reduction, the device must reduce the influent challenge concentrations such that all effluent concentrations are ≤ 0.1 mg/l. Note, the influent challenge concentration required under S-200-73 is 3.0 mg/l, Baumbach Labs elected to run the test at a higher influent challenge concentration. The reduction of free chlorine is a surrogate, and thus qualifies this device, for the reduction of organic, aesthetic taste and odor causing compounds (e.g. geosmin, 2-methylisoborneol). Free chlorine reduction testing does not cover inorganic taste and odor causing compounds, other than free chlorine itself (e.g. hydrogen sulfide).

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

\pm = plus or minus

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**
glen.schlueter@wi.gov **Email**
8:00AM – 4:30PM CDT **Work Hours**
GWS:gws