



December 18, 2013

DIAMOND WATER CONDITIONING
JOHN GRIESBACH / DAN SCHLENZ
N1022 QUALITY DRIVE
PO BOX 170
GREENVILLE WI 54942

Re: Description: WATER TREATMENT DEVICE - POE OXIDIZING
Manufacturer: DIAMOND WATER CONDITIONING
Product Name: LIBERATOR
Model Number(s): LIR-10, LIR-15, LIR-20 AND LIR-25
Product File No: 20130366

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 2018.

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) 267-9787.
- 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.
- Operation of these devices at flow rates above the rated service flow rates specified within this approval letter are not supported or acknowledged by this approval. The rated service flow rates are the flow rates at which these devices were tested.

Because the level of treatment obtained is, in part, a function of how long the water is in contact with the treatment media within these devices, arbitrary increases in the flow rates above the rated service flow rates may compromise the quality of the treated water.

- These devices are not approved for the reduction of bacterial, colloidal or organically bound forms of iron.

The water must be tested to speciate the iron present to determine if these devices can provide adequate treatment.

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.

**TABLE 1 OF 1
 AESTHETIC WATER TREATMENT CAPABILITIES
 PRODUCT FILE NUMBER 20130366**

Model Number	Capacity per Cycle * (mg)	Flow Rate (gpm) @ Pressure Loss (psig)
LIR-10	45,000	2.6 @ 6.0
LIR-15	68,000	3.7 @ 6.0
LIR-20	90,000	5.1 @ 6.0
LIR-25	112,000	6.6 @ 6.0

The testing was performed by TG Analytical Laboratories, Greenville WI. Field testing was performed in addition to laboratory testing. Testing was performed based on NSF Standard 42.

* = the estimated onsite capacity may be calculated by dividing the capacity per cycle by the average onsite dissolved iron concentration. For example, for the LIR-10 model, if the onsite dissolved iron concentration is 5 mg/l, then the estimated capacity would be 45,000 mg/5mg/l = 9,000l. 9,000l x (1 gal./3.785 l) = 2,378 gals. The maximum raw water influent dissolved iron concentration for these devices is 10 mg/l.

mg = milligrams

gpm = gallons per minute

psig = pounds per square inch - gauge

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
 Environmental Engineer - Plumbing Product Reviewer
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 Division of Industry Services
 Bureau of Technical Services
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