



July 22, 2010

REVISED COPY

HELLENBRAND INCORPORATED  
JILL MCDONALD  
404 MORAVIAN VALLEY ROAD  
WAUNAKEE WI 53597

Re: Description: WATER TREATMENT DEVICE- ANION EXCHANGE  
Manufacturer: HELLENBRAND INCORPORATED  
Product Name: HELLENBRAND NITRATE/NITRITE REDUCTION SYSTEMS (POE/COMMERCIAL)  
Model Number(s): H125-NRS-10, H125-NRS-15, H125-NRS-20, H125-NRS-30, H125-NRS-40,  
H125-NRS-50 AND H125-NRS-60 (POE/COMMERCIAL)  
Product File No: 20100292

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 July 2015.

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.
- The raw water must be tested for the following anions:
  1. carbonate ( $\text{CO}_3^{2-}$ )
  2. hydrogen carbonate ( $\text{HCO}_3^-$ )
  3. chloride ( $\text{Cl}^-$ )
  4. fluoride ( $\text{F}^-$ )
  5. nitrate ( $\text{NO}_3^-$ )
  6. phosphate ( $\text{PO}_4^{3-}$ )
  7. sulfate ( $\text{SO}_4^{2-}$ )

This data will be used to establish the required frequency of regeneration and reserve capacity.

- The minimum reserve capacity is 20%.

- If one or more devices are installed on a non-transient non-community water supply (NTNC) or a transient non-community water supply (TNC), then a site specific installation approval and final inspection are required.

A NTNC system is a system that regularly serves at least 25 of the same people for six months of the year. Examples of NTNC systems include, but are not limited to, schools, daycares and factories.

A TNC system is a system that serves at least 25 people at least 60 days of the year but does not serve the same 25 people over six months of the year. Examples of TNC systems include, but are not limited to, restaurants, motels, taverns, parks and campgrounds.

The site specific installation approval and final inspection are both performed by this department.

The site specific installation approval will occur prior to the device(s) being put in service, is the responsibility of the installer and is initiated using the following forms:

<http://commerce.wi.gov/SB/docs/SB-FormPlumbing6154App.pdf>

<http://commerce.wi.gov/SB/docs/SB-PlumbingProdRevCommInfo0310.pdf>

The final inspection will occur prior to the device(s) being put in service and be performed by the Plumbing Consultant having jurisdiction in a given locale:

<http://commerce.wi.gov/SB/SB-PlumbingConsultantsMap.html>

When the final inspection has been completed, this department will notify the Wisconsin Department of Natural Resources (WDNR). The WDNR will then monitor the performance of the device(s) to its satisfaction. A suggested frequency and overall duration of monitoring is provided elsewhere in this letter.

If these devices are installed and put in service prior to obtaining a site specific installation approval and final inspection, then any pertinent approval for such devices is immediately rendered null and void and the devices may be ordered removed.

- This department suggests the performance of these devices be monitored on a quarterly basis. Further, if eight consecutive quarterly samples indicate satisfactory performance, then it is suggested that the monitoring of that specific installation end.

The department suggests that performance samples be collected during peak use periods and at a time most remote from the last regeneration cycle as possible.

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 3 of this letter.

**TABLE 1 OF 1  
 PRODUCT FILE NUMBER 20100292  
 NITRATE/NITRITE REDUCTION CAPABILITIES**

<b>Model Number</b>	<b>Salt 1 (lbs.)</b>	<b>Capacity 1* (grains)</b>	<b>Salt 2 (lbs.)</b>	<b>Capacity 2* (grains)</b>	<b>Salt 3 (lbs.)</b>	<b>Capacity 3* (grains)</b>	<b>Max. Flow (gpm)</b>
H125-NRS-10	5.0	8,400	10.0	10,200	15.0	11,000	4
H125-NRS-15	7.5	12,600	15.0	15,300	22.5	16,500	6
H125-NRS-20	10.0	16,800	20.0	20,400	30.0	22,000	8
H125-NRS-30	15.0	25,200	30.0	30,600	45.0	33,000	12
H125-NRS-40	20.0	33,600	40.0	40,800	60.0	44,000	16
H125-NRS-50	25.0	42,000	50.0	51,000	75.0	55,000	20
H125-NRS-60	30.0	50,400	60.0	61,200	90.0	66,000	24

\* = A flow restrictor must be installed to prevent exceeding the flow rates displayed

◆ = capacities listed at 25% SO<sub>4</sub><sup>2-</sup>

1 grain = 64.79891 mg

1 grain/gal. = 17.1 mg/l

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  
 Bureau of Integrated Services  
 Safety and Buildings Division  
 Department of Commerce  
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