



March 20, 2013

HELLENBRAND INCORPORATED  
JILL MCDONALD  
404 MORAVIAN VALLEY ROAD  
WAUNAKEE WI 53597

LIONS QUICK MARTS INCORPORATED  
PO BOX 2108  
JANESVILLE WI 53545-2108

Re: Description: WATER TREATMENT DEVICE - SITE SPECIFIC/COMMERCIAL  
Manufacturer: LIONS QUICK MARTS INCORPORATED  
Product Name: POE NITRATE REDUCTION (TRANS. I.D. NO. 2219196)  
Model Number(s): H125-NRS-15 TRIPLEX DEMAND RECALL NITRATE REDUCTION SYSTEM  
WITH PH ADJUSTMENT (NaCO<sub>3</sub>)  
Product File No: 20130085

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 March 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 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.
- This installation must undergo a final inspection prior to the device being put into service. The Plumbing Consultant having jurisdiction in this area is Ryan Boebel. Mr. Boebel can be contacted via the following:

Phone: 608-412-3998  
Fax: 608-283-7449  
E-mail: ryan.boebel@wi.gov

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 the treated water is used for consumptive purposes prior to passing the final inspection, then this approval may be rendered null and void and the devices ordered removed. The Plumbing Consultant shall provide a written indication of the results of the final inspection to the system owner. If these devices are installed and put in service prior to obtaining a final inspection, then

any pertinent approval for the site specific device is immediately rendered null and void and the device may be ordered removed.

- When the final inspection has been passed, the Plumbing Consultant will notify the Wisconsin Department of Natural Resources (WDNR) Field Staff having authority over the well. The WDNR will then monitor the quality of the treated water to its satisfaction. Monitoring advice, which the WDNR is free to accept or reject, is provided elsewhere in this letter. The WDNR Field Staff having authority over this well is Robert Kaczmarek. Mr. Kaczmarek can be contacted via the following:

Phone: 608-275-3202  
 E-mail: Robert.kaczmarek@wisconsin.gov

- The suggested monitoring interval for this installation is quarterly. As a minimum, the following tests should be performed:

1. nitrate
2. nitrite
3. alkalinity
4. copper

With the exception of copper/lead samples, the water quality samples should be collected at a time of day when the devices are as near peak demand as possible. Untreated and treated water samples should be collected together in sets, the untreated samples taken upstream of all water treatment devices and the treated samples for nitrate, nitrite and alkalinity taken downstream of all water treatment devices.

Because these devices are being installed on a copper/solder water supply system, concerns relating to decreased alkalinity, via anion exchange, and subsequent corrosion are applicable. The purpose of the sodium carbonate (NaCO<sub>3</sub>), commonly referred to as “soda ash”, injection is to mitigate this potential effect. If copper is detected, then lead samples must also be collected. Lead and copper corrosion samples should be collected in accordance with the USEPA’s Lead/Copper Rule (i.e. overnight dwell samples most remote from the point of entry as possible).

- The anion exchange, nitrate reduction device being installed is approved under DSPS product file number 20100292. The complete approval letter can be viewed at:

<http://dsps.wi.gov/sb/docs/sb-ppalopp/wtd/20100292.pdf>

All stipulations displayed in the approval letter for product file number 20100292 must be adhered to:

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

Model Number	Salt 1 (lbs.)	Capacity 1* (grains)	Salt 2 (lbs.)	Capacity 2* (grains)	Salt 3 (lbs.)	Capacity 3* (grains)	Max. Flow (gpm)
H125-NRS-15	7.5	12,600	15.0	15,300	22.5	16,500	6

\* = 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

**Note:** the triplex system is comprised of three H125-NRS-15 devices installed in parallel. One tank is always in service, while the remaining two tanks are either regenerating or resting. The units come on/off line directly in response to the demand for treated water.

- Flow controls shall be installed to preclude each nitrate reduction device from exceeding its maximum rated service flow rate (i.e. 18 gpm).
- Any water treatment chemicals injected into the potable water supply shall conform to ANSI/NSF Standard 61.
- Any wall hydrant that is not served by the nitrate treatment device must have one, or more, of the following:
  1. The handles of the hydrant shall be removed;
  2. The hydrant shall be capped and sealed using solder; or
  3. Signage shall be posted immediately above the hydrant indicating the water is unfit for human consumption
- All water distribution piping shall be marked as required by Table SPS 382.40-1a.

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  
Plumbing Product Reviewer  
Department of Safety and Professional Services  
Division of Industry Services  
Bureau of Technical Services  
(608) 267-1401 Phone  
(608) 266-2602 Fax  
glen.schlueter@wi.gov E-mail