



November 21, 2012

TLC LEARNING CENTER
NICHOLE KOEPP
N1544 SUNSET DRIVE
LODI WI 53555

HELLENBRAND INCORPORATED
JILL MCDONALD
404 MORAVIAN VALLEY ROAD
WAUNAKEE WI 53597

Re: Description: WATER TREATMENT DEVICE - SITE SPECIFIC/COMMERCIAL
Manufacturer: HELLENBRAND INCORPORATED
Product Name: TLC LEARNING CENTER (TRANS. I.D. # 2175645)
Model Number(s): H125-NRS15 TRIPLEX DEMAND RECALL NITRATE REDUCTION SYSTEM
(POE NITRATE REDUCTION)
Product File No: 20120384

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 November 2017.

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 device ordered removed. The Plumbing Consultant shall provide a written indication of the results of the final inspection to the system owner.

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 Sandy Heimke. Ms. Heimke can be contacted via the following:

Phone: 920-387-7866
 E-mail: sandy.heimke@wi.gov

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

- nitrate
- nitrite
- alkalinity

The samples should be collected at a time of day when the device is under stress and at a time most remote from the last regeneration cycle as possible. Because this device is reportedly being installed on a copper water supply system, concerns relating to decreased alkalinity and subsequent corrosion are applicable. Because of this, a means to add alkalinity/buffering capacity to the treated water is installed downstream of the anion exchange units; the chemical injection of sodium carbonate (Na₂CO₃), referred to informally as soda ash.

- The anion exchange, nitrate reduction device being installed is approved under DSPS product file number 20100292. The 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.

NITRATE 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

♦ = capacities listed at 25% SO₄²⁻
 1 grain/gal. = 17.1 mg/l

1 grain = 64.79891 mg

* = Flow restrictors must be installed to prevent exceeding the flow rate displayed

‡ = Triplex Demand Recall consists of three H125-NRS-15 units in parallel. Units go online/offline in direct response to water demand up to a maximum total flow rate of 18 gpm.

- A flow control shall be installed to preclude the nitrate reduction device from exceeding its maximum rated service flow rate (i.e. 20 gpm).
- No bypass piping shall be installed on this nitrate reduction device.
- Any wall hydrant that is not served by the nitrate treatment device must have one, or more, of the following:
 - The handles of the hydrant shall be removed;
 - The hydrant shall be capped and sealed using solder; or
 - 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 82.40-1a.

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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 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