

# LYNDON STATION

*P.O. Box 408 Lyndon Station, Wisconsin 53944 (608) 666-2500*

*President: Edward C. Welsh  
Trustee: Rebecca Coley*

*Trustee: Morgan Place  
Clerk: Michelle L. Klein*

July 5, 2024

Attn: [REDACTED]  
State Engineer  
Rural Development  
United States Department of Agriculture  
5417 Clem's Way | Stevens Point, WI 54482

Re: Request for Project Specific AIS Waiver – Availability Waiver  
Sludge Storage Tank replacement glass-coated steel panels and manway  
WWTP Improvements, Lyndon Station, WI

Mr. [REDACTED]

The Village of Lyndon Station, Wisconsin requests a project specific availability waiver from the "American Iron and Steel" requirements for 20 replacement panels and access manway to the existing glass-coated steel sludge storage tank. The project Owner, the Village of Lyndon Station is requesting this waiver after unsuccessful attempts by the Contractor and Consultant to locate material manufactured domestically to meet AIS requirements. Some of the tank panels are damaged and in need of replacement.

Glass-Fused-to-Steel (GFtS), also known as Glass-Lined-Steel (GLS), is the ultimate when it comes to tank and silo containment storage design. The fusing together of these two materials deliver the best characteristics of both materials. The strength and flexibility of the structure is provided from the steel while the structure's surface is protected by the glass. When the glass is fused to steel it results in a very strong durable and resilient product. The materials when combined result in a product that exhibits unparalleled physical property characteristics that provide excellent resistance to both corrosion and wear.

The tank has begun to leak and will no longer be usable without replacing several of the glass coated steel panels. The foundation, concrete slab, and mixing system are still in good working condition and are planned to be reused. The following supporting information is provided for your consideration:

- The only other U.S. based glass-fused, bolted steel tank manufacturer (CST Industries, Inc.) produces a panel with a different panel configuration and bolting alignment. CST Industries panels would NOT be compatible with the existing tank. The attached emails document the correspondence with Cady Aquastore, Inc., who represent CST Industries in Wisconsin.
- We did contact the only U.S. manufacturer of glass coated steel tanks, CST Industries, Inc., represented by Cady Aquastore Inc., in Wisconsin. They confirmed that they would NOT be able to supply replacement panels (See the attached emails from Cady Aquastore.)

- We contacted three (3) manufacturers and suppliers about replacement panels. All three companies responded that they could not offer the requested AIS-compliant replacement panels that meet project specifications. Two did not have glass-coated steel panels and the others could not match the bolt pattern.
- RD AIS Research Request submittal and RUS Bulletin 1780-35 checklist.
- Date Product is needed – August 2024
- Relevant plans, specifications, emails, and vendor quote
  - Section 6.11 – Sludge Storage Tank Repairs
  - Plan Sheet G10
  - Emails from Cady Aquastore, April 26, 2024, and May 7, 2024.
  - Proposal from Northern Steel Tanks

Thank you for reviewing this request and considering this availability waiver request. If you have any questions regarding the information provided or need any additional information, please contact me at 608-393-3310.

Sincerely,

A handwritten signature in black ink that reads "Steve Klicko". The signature is written in a cursive style with a large, prominent "S" and "K".

Steve Klicko, DPW  
Village of Lyndon Station

| RD AIS Research Request Submittal Form              |  |
|---|--|
| <b>Utility Name</b>                                 | Village of Lyndon Station, WI  |
| <b>Project Name</b>                                 | Lyndon Station Wastewater Treatment Facility (WWTF)  |
| <b>Project Location</b>                             | Lyndon Station, WI   |
| <b>Product(s) Needed</b>                            | Replacement panels for a sludge storage tank. The panels are glass lined steel with a specific bolt pattern.   |
| <b>Date/Timeframe in which Product(s) is Needed</b> | ASAP for completion of work in fall 2024. Draining of tank can only occur in spring and fall when it's legally permissible to dispose of tank contents through land application. |

**Description of project:**

The Village of Lyndon Station WI is conducting improvements to their wastewater collection system and wastewater treatment facility. The work requiring AIS research is a component of the wastewater treatment facility improvements and consists of completing repairs to a sludge storage tank. The storage tank is constructed from glass lined steel panels that are bolted together. The tank was manufactured by Fusion f/k/a Permastore from the United Kingdom. The US Supplier for Fusion is Northern Steel Tanks, LLC in Mounds View, MN 55112

Repairs to the tank include replacement of 20 individual panels with bolts, replace an access manway, application of a sealer to interior and exterior of tank, and replacement of three cathodic protection anodes. Total quoted cost of repair is approximately \$94,000.

**Summary of product(s) to be researched:**

| Part Description (including size)  | Quantity | Total Value |
|--|----------|-------------|
| Glass Coated Steel Tank Panels with bolt hole pattern to match Fusion Tanks. | 20       | \$42,000    |
| Glass Coated Steel Manway  | 1        | \$4,500     |
|  |          |             |
|  |          |             |

**Key product information:**

**Panels must be steel with a glass coating. Bolt hole pattern must match pattern for Fusion (f/k/a Permastore) tanks.**

**Companies contacted:**

(In order to reduce duplication of efforts, provide information about any contacts made and the responses received, including information for the non-compliant product(s) identified):

| Company Name                          | Contact Name    | Email/Phone Number  | Response/findings (including lead times)  |
|---------------------------------------|-----------------|---|---|
| CST Industries / Cady Aquastore, Inc. | Randy Cady, CEO | <a href="mailto:randyc@cadyquastore.com">randyc@cadyquastore.com</a><br>815.438.5678 (office)<br>815.499.8501 (mobile)<br><a href="#">Cady Aquastore</a><br><br><a href="#">Aquastore Glass Lined Liquid Storage Tanks   CST Industries</a> | Cady Aquastore is the Wisconsin representative for CST Industries. They are able to supply panels. Documentation provided in waiver request letter. |
|                                       |                 |   |   |
|                                       |                 |   |   |

**Additional notes:**

Use of stainless steel panels are not an option due to concerns with dissimilar materials creating an electrolysis reaction at uncoated locations (including pinhole defects in glass coating) throughout all wetted portions of tank.

RD State Engineer name and contact information:

████████████████████ \_\_\_\_\_  
████████████████████ ██████████ \_\_\_\_\_

## Waiver Checklist from RUS Bulletin 1780-35

Project: Lyndon Station WWTP Improvements, Wisconsin

Project Location: 198 Damon Ln., Lyndon Station, WI 53944

Davy Project No. : 1072-003, Reference Specifications Section 6.11.0 Sludge Storage Tank Repairs.

Material: Glass Coated Steel Tank, Fusion (Permastore), manufactured in England

Unit of Measure/: (20) Twenty replacement panels, access manway, sealer (interior & Exterior)  
Scope of Supply Cathodic protection (3) anodes.

Name of Supplier: Northern Steel Tanks, LLC., Mounds View, MN 55112

Bid quote: \$94,000

Reason for Waiver: The existing tank is a glass fused steel tank. The concrete slab, piping and mixing systems were in good condition and are to be reused. The only US manufacturer of glass fused steel tanks is CST Industries, Inc. CST Industries does NOT offer custom sized sheets fabricated to match the Fusion tank bolt patterns. Therefore, the only source of glass-fused panels is a foreign manufacturer. To match the bolt pattern, we will need the original manufactured panels from Permastore (Fusion). Attached are emails from CST Industries explaining they cannot supply the replacement panels.

Date needed: Waiver Request as soon as possible, 2024. The project has been bid and awarded to Olympic Builders General Contractors, Holmen WI in March 2024. To maintain the schedule the waiver request is necessary so the Village can continue to store sludge. There are only two (2) times annually that the Village can take the tank out of service, in the spring and in the fall to land apply the sludge stored. Currently the tank is leaking and may not last another winter season without repairs.

|                    |        |
|--------------------|--------|
| Standby Pump Start | 882.50 |
| Lead Pump Start    | 881.50 |
| Both Off           | 880.50 |

| <u>Secondary Control Action (Floats)</u> | <u>Elevation</u> |
|--|------------------|
| High Level Alarm                         | 883.00           |
| Standby Pump Start                       | 882.50           |
| Lead Pump Start                          | 881.50           |
| Both Off                                 | 880.50           |
| Low Level Alarm                          | 880.00           |

**6.10.29 WARRANTY, SHOP DRAWINGS, O&M MANUALS.** Equipment suppliers shall refer to Section I - General Conditions of the specifications. In addition to general requirements, refer to Patent Fees and Royalties (I.6.07), Shop Drawings and Samples (I.6.17), Supervision of Erection (I.6.06 J.) and Operation and Maintenance Manuals (I.6.22) to be furnished and similar items are detailed.

- A. Reference to a brand name and model for a particular item of equipment does not waive the requirement to comply with these specifications. All equipment and approved suppliers shall fully meet the specified requirements. Only deviations specifically approved by addendum prior to bidding will be permitted. **READ THE SPECIFICATIONS – DO NOT ASSUME THIS A STANDARD EQUIPMENT ITEM**

### **SECTION 6.11.0 –SLUDGE STORAGE TANK REPAIRS**

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**6.11.1 GENERAL.** The existing sludge storage tank is a glass-fused to steel, bolt steel tank. The interior and exterior colors are Cobalt Blue. The nameplate data for the existing tank is Project # E37643; Model 3017.5 SR9”, as manufactured by **Permastore Ltd**, tank installation date of 1999. The tank has a volume of 91,000 gallons, is 31 ft in diameter and has a height of 17 ft with an embedded starter ring and an open top. Tank panels are exhibiting ice damage requiring panel replacement and joints shall be resealed. **See Inspection report provided by Norther Steel Tanks, November 15, 2022.**

- A. The Owner will arrange for removal of the sludge from the storage tank. The Contractor shall immediately inspect steel surfaces to determine if further repair sheets need to be fabricated. The Contractor shall clean the tank as needed for their operations. General Contractor shall protect process equipment and shall exercise care to keep all drainage facilities open during cleaning operations. Tanks shall be completely cleaned in one continuous operation.

**6.11.2 TANK PANEL REPLACEMENT.** The Contractor shall furnish and install, 20 replacement panels (10 – Ring No. 2, eight (8) – Ring No. 3, and two (2) – Ring No. 4) with panels as manufactured by Permastore Ltd. Replacement panels shall include new hardware for the replacement panels as recommended by Permastore. The work shall be performed by a representative of the manufacturer.

**6.11.3 INTERIOR RESEAL OF SIDEWALL.** Existing interior sheet edge sealant fillet shall be stripped. Wire brush sheet edge and bolt line areas for clean, competent surface. Place CIM industrial membrane over interior lap joints and bolt lines; extending 1-inch beyond sheet edge and bolt line. Plastic floor nuts will remain in place with CIM placed around base. The work shall be performed by a representative of the manufacturer.

**6.11.4 REPOINT EXTERIOR SEALER.** Strip existing sealer and repoint with new sealer over the complete exterior of the tank. Provide black polyurethane tank sealant to cover exterior sheet edge.

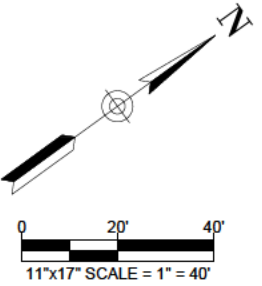
**6.11.5 CATHODIC PROTECTION ANODES.** Magnesium cathodic protection anodes shall be provided. The anodes shall be floor mounted and shall be 2-inch by 2-inch by 48-inch anodes. Included with the new anodes shall be connection wire, plastic bushings, and FRP clips as required and recommended by the manufacturer.

### **SECTION 6.12.0 – POSITIVE DISPLACEMENT BLOWER**

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**6.12.1 SCOPE.** Positive displacement blowers include all labor, materials, equipment and services necessary for furnishing two (2) Positive Displacement Blowers. The blower shall be the Sutorbilt 3M-DSL “Legend” Series, Aerzen Generation 5 Delta, Universal Blower 3C-PAC or equal. The blower shall be furnished completely packaged with all accessories, tested and ready for operation.

| BENCHMARKS |              |  |
|------------|--------------|--|
| BM #1      | ELEV. 896.64 | THIN, HYDRANT EAST OF EXIST. POLE BUILDING     |
| BM #2      | ELEV. 897.92 | NAIL @ TOP OF OXIDATION DITCH WALL, NORTH SIDE |
| BM #3      | ELEV. 896.80 | NAIL @ TOP OF CLARIFIER WALL, SOUTH SIDE       |



REMOVE TREES (TYP.)

PROPOSED AEROBIC DIGESTER

SLUDGE STORAGE TANK REPAIRS & MODIFICATIONS SEE NOTE 1

EXIST. GENERATOR

EXIST. CONTROL BUILDING

EXIST. STM INL

FINAL CLARIFIER

POLE BUILDING

CHEMICAL FEED ROOM

OXIDATION DITCH

SUPERNATANT PUMP STATION

PROVIDE GATE SEE DETAIL

REMOVE CHAINLINK FENCE SEE NOTE 3

NEW CHAINLINK FENCE SEE DETAIL

WISDOT OBELISK

PROPOSED GRAVEL DRIVE SEE DETAIL

PROVIDE GATE SEE DETAIL

PROPOSED HEADWORKS AREA

PROPOSED PROCESS CONTROL TANKS

EXIST. GRAVEL ACCESS DRIVE SEE NOTE 2

- NOTES:
- SEE SPECIFICATIONS FOR MODIFICATIONS & REPAIR TO GLASS-FUSED BOLT STEEL SLUDGE STORAGE TANK.
  - CONTRACTOR TO RESTORE EXISTING GRAVEL DRIVE.
  - SALVAGE CHAINLINK FENCE FOR OWNER.

| REVISION DATE | REMARKS                |
|---------------|------------------------|
| 08/25/2023    | ADDED AEROBIC DIGESTER |
|               |                        |
|               |                        |
|               |                        |



**DAVY ENGINEERING CO.**  
LA CROSSE, WISCONSIN

**GENERAL SITE PLAN**  
WWTP IMPROVMENTS  
LYNDON STATION, WISCONSIN

|                  |                |
|------------------|----------------|
| FIELDBOOK:       | PROJECT NUMBER |
| SCALE: AS SHOWN  | 1072-003.020   |
| DRAWN: KK/CSM    | SHEET NO.      |
| CHECKED: SSW     | G10            |
| DATE: 02/07/2023 |                |

H:\AutoCad Drawings\2020\Lyndon Station, WI\1072-003 WWTP\CAD Drawings\Civil\DELIVERABLES\WWTP\1072-003 SITE PLAN.dwg, 8/25/2023 1:26:31 PM



# 840-012 ✓

Northern Steel Tanks, LLC  
7301 Parkview Drive  
Mounds View, MN 55112  
218-779-2409 Phone

Section 6.11.0

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**To:** Estimator  
Bidding Contractor

**Proposal:** Permastore (Fusion) Sludge Tank Service & Repairs  
Village of Lyndon Station, WI

**Date:** January 17, 2024; 2:30 PM  
Addenda: 1-5

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Northern Steel Tanks is pleased to offer the following quote for various service and repair items on the existing sludge tank. The original tank manufacturer, Permastore (Fusion), is located in England and cannot comply with American Iron & Steel provisions for the glass-fused-to-steel panels. Steel materials quoted here-in are based upon a pending project specific waiver (Addendum 5) for tank components which will allow use of Permastore/Original Manufacturer components.

**Tank Panel Replacement:**

1. Furnish and Install 20 replacement panels (10 – Ring 2, 8 – Ring 3, 2 – Ring 4) with Permastore original parts; includes new hardware for replaced panels.
2. Includes tools, labor, and equipment to remove existing panels and place new panels.

**Interior Reseal – Sidewall:**

1. Strip existing interior sheet edge sealant fillet.
2. Wire brush sheet edge and bolt line areas for clean, competent surface.
3. Place CIM industrial membrane over interior lap joints and bolt lines; extending 1” beyond sheet edge and bolt line. Plastic floor nuts will remain in place with CIM placed around base.

**Repoint Exterior Sealer:**

1. Strip existing sealer and repoint with new sealer; complete exterior.
2. Includes supply of Black polyurethane tank sealant to cover exterior sheet edge.

**Cathodic Protection Anodes:**

1. Furnish new magnesium cathodic protection anodes; floor mounted 2”x2”x48” anodes.
2. Includes supply of new anode connection wire, plastic bushing, anode, and FRP clip.



**Clarifications/General Exclusions:**

1. Customer to drain and wash tank; tank to be fully isolated from process train to allow safe access without risk of immersion and air quality concerns.
2. **Excludes special access requirements.** Based upon performing work uninterrupted by other trades after tank cleaning. Suitable site access for crew and delivery trucks to be provided and maintained by Customer.
3. Excludes any electrical, controls, or sensors supply, install, disconnect or reconnect.
4. Excludes supply of water and filling of tank for hydrostatic testing. Northern Steel Tanks will address any sidewall leaks should they occur during initial fill test following tank reseal.
5. Excludes tank disinfection or bac T testing. Northern Steel Tanks will sweep clean tank interior.
6. Overtime pay (schedule acceleration), prevailing wages, union labor, or other hiring preferences.
7. Any Owner or site specific safety requirements beyond OSHA standards or restrictive work rules.
8. Customer to provide temporary utilities: Temporary toilets, 1ph 120V 20A electrical power, garbage bin.
9. Customer to perform all blinding and purging as may be necessary to provide a safe work environment.
10. Excludes any inspections or modifications to concrete floor.
11. Excludes any electrical or controls disconnects or removals; any electrical or controls re installations or terminations.
12. Level work area around tank with no open trenches or pits to allow safe access. Tank perimeter clear of any stored or temporary materials.
13. Customer to secure and Building or other site specific permits that may be required.
14. Customer to provide 110V electric within 100 feet of tank pad.
15. Customer to provide portable toilet within 50 feet of tank pad.
16. Excludes State and Local Sales & Use Taxes on materials incorporated into the work.

**Tank Service - Complete:**

|   |                     |
|---|---------------------|
| <b>Section 6.11.0 Sludge Tank Repairs per above Scope .....</b> | <b>\$ 93,600.00</b> |
|---|---------------------|

## **Terms and Conditions**

**Agreement:** This proposal scope and pricing is subject to execution of a mutually acceptable form of agreement between Contractor and Customer.

**Payment:** Materials to be invoiced 50% at release to fabrication and 50% at delivery to site. Balance of work to be invoiced on monthly progress completion. Net 30 days.

**Schedule:** Submittals to be provided five (5) weeks after receipt of order. Material delivery to be eighteen (18) weeks after approved submittals/release to fabrication. Two (2) weeks for tank installation per tank (after material delivery); site installation subject to crew schedule at time of fabrication complete.

**Validity:** Price is firm for 30 days. After validity, price is subject to change due to fluctuating material and labor costs. Any regulatory change impacting the cost of the work will result in a price adjustment.

**Approval Drawings:** Shop drawings on the tank are completed and stamped by our registered professional engineer in the state of installation.

**Quality:** Installation service offered in the Proposal will be performed by trained personnel regularly engaged in the installation of bolted storage tanks. All work will be performed in an excellent workmanship manner and in accordance with the tolerances and specifications called for by the manufacturer. In the absence of a technical specification, the manufacturer's specifications shall prevail.

**Safety:** Northern Steel Tanks has a comprehensive safety program that complies with OSHA standards and general industry safety requirements and is the standard for its employees and subcontractors.

**Bonding:** Bonds are not included. Bond add available upon request.

**Insurance:** We will provide a certificate of insurance covering our portion of the work.

After you have had an opportunity to review the above proposal and should you have questions, please contact Tony Belden, Great Northern Environmental, at 612-868-1097.

Thank you for this opportunity.

Sincerely,

Aaron Nelson, PE (MN)  
Member  
NORTHERN STEEL TANKS, LLC

Lyndon Station, WI-WWTP Improvements - Bid 1.17.24 2:30 p.m.

Tony Belden <Tbelden@gnenv.com>

Tue 1/16/2024 4:33 PM

To: Tony Belden <Tbelden@gnenv.com>

1 attachments (392 KB)

2024.01.17 - WI Lyndon Station - Permastore Tank Service.pdf;

Dear Prime Contractors,

**GNE submits the proposal and pricing of Northern Steel Tanks for the subject project per specification section 6.11.0 – Sludge Storage Tank Repairs.**

Following your review, should you have any questions, please contact us. It is our understanding that there are no prevailing wages on this project. We are in receipt of addendums 1 – 5. Please be familiar with addenda 5 issued 1.16.24 regarding this work. Good luck on your bid.

Respectfully,

Tony Belden



**Anthony (Tony) J. Belden**

Outside Sales, **Great Northern Environmental**

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**A** 1300 Helmo Avenue North, Oakdale, MN 55128

**O** (651)289-9100 **M** (612)868-1097

**E** [tbelden@gnenv.com](mailto:tbelden@gnenv.com) **W** [www.gnenv.com](http://www.gnenv.com)