



USG WATER
— SOLUTIONS —

City of Buhl, MN

CONDITION ASSESSMENT REPORT



Tank Name:

Cone Top Tank

Location:

Wanless St. and Culver Ave.

Tank Size and Style:

100,000 Elevated

Inspection Date:

October 4, 2023

Inspected By:

Tucker Fosha

City of Buhl Contact Information:

Administrative:

Trent Pink

Address:

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Job:

Trent Pink

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Address

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PO Box 1350
Perry, GA 31069

Email and Website

Website: www.usgwater.com
Email: us.vna.customerserviceadvancedsolutions
.all.mailbox@veolia.com

Customer Service Information

Carolyn Griner
800.942.0722

WATER STORAGE FACILITY DATA

TANK NAME:	Cone Top Tank				
TANK DESIGN:	Elevated	CONSTRUCTION TYPE:	Steel Welded		
LOCATION:	Wanless St. and Culver Ave.				
	CITY:	Buhl	STATE:	MN	
CAPACITY:	100,000 gallons	HEIGHT	150	DIA:	n/a
BUILDER:	Unknown	YEAR:	Unknown	CONTRACT #	Unknown
EXT. COATING:	Metal Flake Filled Acrylic	LEAD:	2,500 ug/g	CHROMIUM:	None Detected
INT. COATING:	Epoxy	LEAD:	260 ug/g	CHROMIUM:	None Detected
INSPECTED BY:	Tucker Fosha		DATE:	October 4, 2023	

SUMMARY

The tank interior was cleaned, inspected and disinfected in accordance with AWWA Standards Spray Method #2 and made ready for service.

Work Completed During Inspection

- **Sediment Removal:** During the interior cleaning, heavy sediment accumulation and staining was removed from the lower bowl area.



EXTERIOR COATING CONDITIONS

The tank exterior is in poor condition. Heavy corrosion is occurring on all areas of the exterior sidewall. There is significant delamination occurring on multiple tank legs and on the exterior surface of the tank roof. The adhesion is currently stable but is beginning to show signs of failure. The coating is also heavily chalked due to UV degradation. It is recommended that an exterior renovation be scheduled immediately.

One of the tank legs is completely surrounded by small trees and large bushes. It is recommended that this excess vegetation be removed to prevent continuous brushing against the coating system on the tank leg.

INTERIOR COATING CONDITIONS

Overall, the tank interior is in fair condition. Moderate crevice corrosion was detected on multiple ceiling weld seams. There is also mild corrosion occurring on the ceiling rods.

The interior tank surface below the water line is completely covered in heavy staining. This staining could not be removed through pressure washing and is too thick to allow for a thorough inspection of the tank floor. The visible areas of the tank floor and lower sidewall appear to be in fair condition with no apparent signs of major corrosion. It is recommended that a chemical cleaning be performed to fully remove the staining.

SAFETY AND SECURITY

All access ladders are in good condition with no apparent signs of damage or deficiencies. It is recommended that flex cable safety climb devices be installed on all exterior ladders. The ladder gate on the tank leg access ladder is heavily damaged and it is recommended that the ladder gate be replaced.

The roof access hatch is also in good condition with no signs of corrosion or damage. The roof hatch was closed but not locked at the time of inspection. A lock was placed on the roof hatch by the inspector on-site.

SANITARY

The roof vent is in good condition and the vent screen is fully intact and functioning properly. The overflow system is also in good condition but it is recommended that a flapper valve/mesh screen combination assembly be installed at the termination point to prevent insect contamination.



A significant amount of sediment accumulation as found covering the floor of the tank at the time of inspection. Washout inspections are recommended every two years to provide a comprehensive condition assessment with sediment removal.

STRUCTURAL

The concrete tank leg foundations all appear to be in good condition with no apparent signs of cracking or erosion. However, the concrete riser foundation is significantly damaged and partially covered by grass and soil. It is recommended that the riser foundation be repaired.

RECOMMENDATIONS

- **Interior Coatings:** Continue to monitor areas where corrosion is occurring. An interior renovation is recommended immediately.
- **Exterior Coatings:** Continue to monitor areas where corrosion is occurring. An exterior renovation is recommended immediately.
- **Interior Cleaning/Condition Assessment:** Washout inspections are recommended every two years to provide a comprehensive condition assessment with sediment removal.
- **Install screen/flapper combination assembly at termination point**
- **Repair concrete riser foundation**
- **Replace ladder gate on tank leg ladder**
- **Remove excess vegetation from tank leg**
- **Perform chemical cleaning to remove staining from tank interior**



View of tank exterior

Exterior riser and tank foundation



Riser and tank legs

Tank leg and foundation





Tank leg surrounded by vegetation



Overflow pipe



Overflow termination point



Tank leg and foundation





Tank leg ladder



Ladder gate



Adhesion test result



Catwalk platform





Sidewall and logo



Catwalk platform



Sidewall and logo



Sidewall and corrosion





Sidewall access ladder



Catwalk platform and ladder



Roof ladder



View of tank roof





Roof vent



Vent screen



View of tank roof



Roof access hatch





View of wet interior before washout



Interior ceiling and sidewall



Interior sidewall



Interior ceiling





Interior ceiling



Lower sidewall before washout



Tank floor after washout

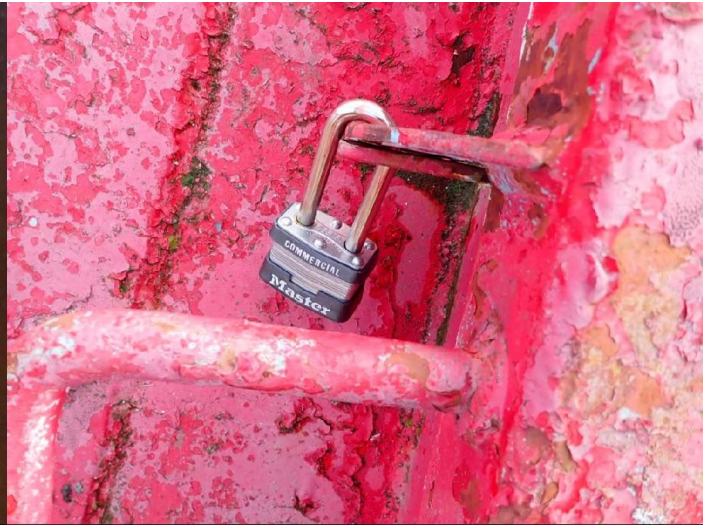


Sidewall after washout





Lower sidewall after washout



Roof hatch w/ lock

