

16297 E. Crestline Lane Centennial, CO 80015 Phone: 303-400-4220 Fax: 303-400-4215

Inspection Report for

Apple Valley Heights CWD Apple Valley, CA



20MG Steel On-Grade East Tank

Date Completed: January 9, 2023

Commercial Dive Team:

Diver – Colin Lafever Dive Controller – Ceasar Hernandez Tender – Noah Coleman

Scope of Work:

Our team completed sediment removal using underwater vacuum equipment. Sediment depth, averaging 1/16 inch, was removed from the tank floor. When the cleaning process was finished, a full visual inspection was performed of the tank interior and all interior fixtures. The team also performed a full visual inspection of the tank exterior and all attached fixtures. The details of the inspection findings are included in the report below.

Summary of the Inspection:

Exterior Inspection

- 1. The team had to go portable to get to the tank. (In a gated area)
- 2. The wall was found in good condition with minor oxidation and heavy chalking noted.
- 3. The overflow was found in poor condition with heavy oxidation, 0.3% erosion corrosion and 16% uniform surface corrosion noted. There are also holes in the pipe.
- 4. The manway was found secure and in good condition with heavy chalking noted.
- 5. The water level indicator was found in poor condition with 3% uniform surface corrosion noted.
- 6. The ladder was found secure, OSHA approved and in good condition with minor oxidation, moderate chalking and 0.03% uniform surface corrosion noted.
- 7. The roof was found in good condition with minor oxidation, heavy chalking and 0.3% uniform surface corrosion noted.
- 8. The hatch was found bolted shut with no gasket present and in good condition.
- 9. The vent was found in good condition with minor corrosive staining and 0.1% uniform surface corrosion noted.

<u>Key</u>

Excellent – Like new, no repairs needed Good – Cosmetic problems, repair if utility wants Fair – Minor problems, repairs needed Poor – Major problems, fix now

Summary of the Inspection:

Interior Inspection

- 1. The interior roof was found in good condition with minor oxidation and 0.01% uniform surface corrosion noted.
- 2. The ladder was found secure and in good condition with minor to moderate corrosive staining, heavy sediment staining, 0.01% rust noduling and 0.3% uniform surface corrosion noted.
- 3. The overflow was found in good condition with moderate oxidation, corrosive staining and 0.03% uniform surface corrosion noted.
- 4. The interior wall was found in good condition with minor to moderate corrosive staining, heavy sediment staining and 0.1% uniform surface corrosion & rust noduling noted.
- 5. The floor was found in poor condition with heavy sediment & corrosive staining, 1/32 inch deep pitting, 50% rust noduling and greater than 50% uniform surface corrosion noted.
- 6. The manway was found in fair condition with heavy sediment & corrosive staining, 1/32 inch deep pitting, 10% rust noduling and 16% uniform surface corrosion noted.
- 7. The common inlet/outlet was found in good condition with heavy corrosive & sediment staining, 1/32 inch deep pitting, 0.1% rust noduling and 0.3% uniform surface corrosion noted.
- 8. The drain was found in good condition with heavy sediment & corrosive staining, 0.01% rust noduling and 0.1% uniform surface corrosion noted.
- 9. The float was found in fair to poor condition with the cable and guidelines unattached.
- 10. The support column was found secure and in good condition with minor corrosive staining, heavy sediment staining and 0.1% uniform surface corrosion noted.

Recommendations:

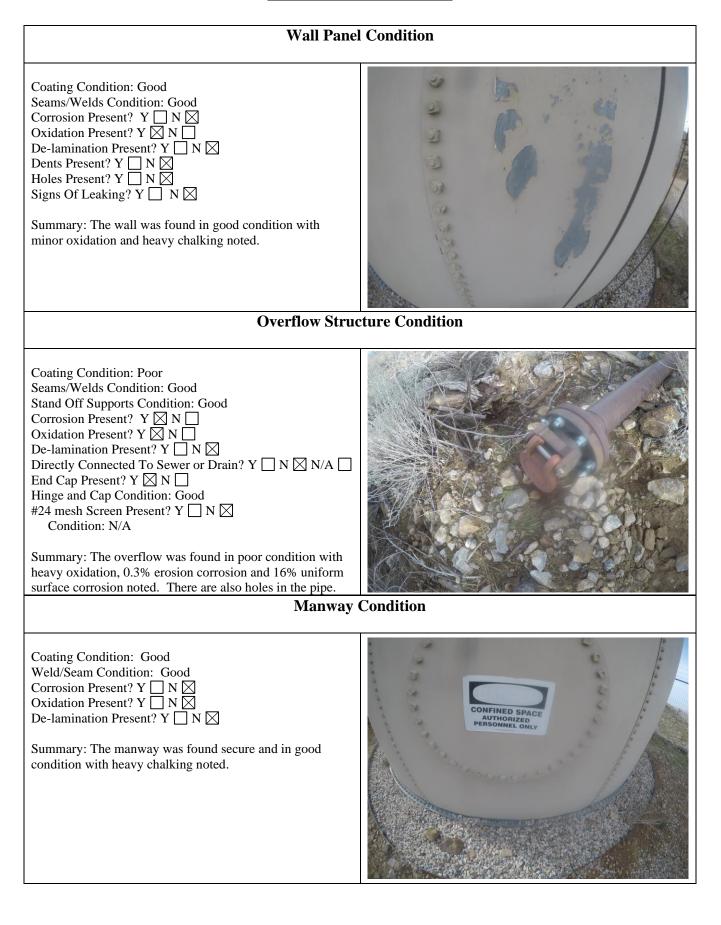
1. Schedule a blast and recoat of the interior or replace the floor as soon as budgets will allow. If, within 3 years, the recoating or replacing has not been completed, schedule a follow-up clean and inspect as recommended by the AWWA.

<u>Key</u>

Excellent – Like new, no repairs needed Good – Cosmetic problems, repair if utility wants Fair – Minor problems, repairs needed Poor – Major problems, fix now







Water Level Indicator Condition		
Marker Condition: Poor Attached & Accurate? Y □ N ⊠ Marker Board Condition: Poor Is the level reading visible? Y □ N ⊠ Pulley Condition: Poor Attached Properly? Y □ N ⊠ Cable Condition: Poor Attached Properly? Y □ N ⊠ Hardware Condition: Poor Corrosion Present? Y ⊠ N □ Summary: The water level indicator was found in poor condition with 3% uniform surface corrosion noted.		
Access Ladder Condition		
Ladder Type: Steel bolted Is Ladder and Safety Climb OSHA Approved? Y ⊠ N □ Is Vandal Guard Present? Y ⊠ N □ Locked? Y ⊠ N □ N/A □ Safety Climb Type: N/A Safety Climb Condition: N/A Is Top Of Tank Easily Accessible? Y ⊠ N □ Coating Condition: Good Seams/Welds Condition: Good Stand Off Supports Condition: Good Stand Off Supports Condition: Good Corrosion Present? Y ⊠ N □ Oxidation Present? Y ⊠ N □ De-lamination Present? Y ⊠ N □ Summary: The ladder was found secure, OSHA approved and in good condition with minor oxidation, moderate chalking and 0.03% uniform surface corrosion noted.	<image/> <image/>	
Roof Type: PitchedCoating Condition: GoodSeams/Welds Condition: GoodCorrosion Present? $Y \boxtimes N \square$ Oxidation Present? $Y \boxtimes N \square$ De-lamination Present? $Y \square N \boxtimes$ Low Spots Present? $Y \square N \boxtimes$ Holes in Roof? $Y \square N \boxtimes$ Cathodic Protection Plates Present? $Y \square N \boxtimes$ Sealed Edges: $Y \square N \square N/A \boxtimes$ Loose Plates? $Y \square N \square N/A \boxtimes$ Missing Plates? $Y \square N \square N/A \boxtimes$ Summary: The roof was found in good condition with minor oxidation, heavy chalking and 0.3% uniform surface corrosion noted.		

Access Hatch Condition		
Coating Condition: N/A Seams/Welds Condition: Good Corrosion Present: Y □ N ⊠ Oxidation Present? Y □ N ⊠ De-lamination Present? Y □ N ⊠ Hatch Size: 18 inch round Riser Height: 4 inches Lid Height: 1 inch Hatch Locked? Y □ N ⊠ bolted Hinge Condition: N/A Gasket Present? Y □ N ⊠ Intact? Y □ N □ N/A ⊠ Insects, Dirt Or Debris Present Under Hatch? Y □ N ⊠ Summary: The hatch was found bolted shut with no gasket present and in good condition.		
Vent Condition		
Coating Condition: Good Seams/Welds Condition: Good Corrosion Present: Y ⊠ N □ Oxidation Present? Y □ N ⊠ De-lamination Present? Y □ N ⊠ #24 Mesh Screen in Place? Y ⊠ N □ Condition: Good	All Openings Sealed? Y X N Cap Condition: Good Summary: The vent was found in good condition with minor corrosive staining and 0.1% uniform surface corrosion noted.	





Roof Condition		
Coating Condition: N/A Welds/seam Condition: Good Corrosion Present On Panels? Y N D Oxidation Present? Y N D De-lamination Present? Y N N Summary: The interior roof was found in good condition with minor oxidation and 0.01% uniform surface corrosion noted.		
Ladder Condition		
Ladder Location: 12 o'clock Coating Condition: N/A Weld/Seam Condition: Good Supports Condition: Good Corrosion Present? Y N N Oxidation Present? Y N N	De-lamination Present? Y N N S Summary: The ladder was found secure and in good condition with minor to moderate corrosive staining, heavy sediment staining, 0.01% rust noduling and 0.3% uniform surface corrosion noted.	
Overflow Condition		
Overflow Location: 9 o'clock Coating Condition: N/A Weld/Seam Condition: Good Corrosion Present? Y ⊠ N □ Oxidation Present? Y ⊠ N □ De-lamination Present? Y □ N ⊠ Summary: The overflow was found in good condition with moderate oxidation, corrosive staining and 0.03% uniform surface corrosion noted.		

Wall Panel Condition

Coating Condition: N/A Welds/seam Condition: Good Corrosion Present On Panel? $Y \boxtimes N \square$ Oxidation Present? $Y \square N \boxtimes$ De-lamination Present? $Y \square N \boxtimes$ Is Biofilm Present: $Y \square N \boxtimes$ Any irregularities or structural deficiencies? $Y \square N \boxtimes$ Summary: The interior wall was found in good condition with minor to moderate corrosive staining, heavy sediment

staining and 0.1% uniform surface corrosion & rust

noduling noted.



Floor Condition

Coating Condition: N/A Welds/seam Condition: Fair Corrosion Present? Y \vee N \vee Oxidation Present? Y \vee N \vee De-lamination Present? Y \vee N \vee Any irregularities or structural deficiencies? Y \vee N \vee

Summary: The floor was found in poor condition with heavy sediment & corrosive staining, 1/32 inch deep pitting, 50% rust noduling and greater than 50% uniform surface corrosion noted.



Manway Condition

Manway Location(s): 9:50 o'clock Coating Condition: N/A Weld/Seam Condition: Good Corrosion Present? Y \vee N \vee Oxidation Present? Y \vee N \vee De-lamination Present? Y \vee N \vee

Summary: The manway was found in fair condition with heavy sediment & corrosive staining, 1/32 inch deep pitting, 10% rust noduling and 16% uniform surface corrosion noted.



Inlet and Outlet Condition		
Common Inlet/Outlet? Y X N Location: 11 o'clock Coating Condition: N/A Weld/Seam Condition: Good Corrosion Present? Y N Oxidation Present? Y N De-lamination Present? Y N Summary: The common inlet/outlet was found in good condition with heavy corrosive & sediment staining, 1/32 inch deep pitting, 0.1% rust noduling and 0.3% uniform surface corrosion noted.		
Drain Condition		
Drain Location: 9:05 o'clock Coating Condition: Good Weld/Seam Condition: Good Corrosion Present? Y ⊠ N □ Oxidation Present? Y □ N ⊠ De-lamination Present? Y □ N ⊠ Summary: The drain was found in good condition with heavy sediment & corrosive staining, 0.01% rust noduling and 0.1% uniform surface corrosion noted.		

