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August 23, 2022

Report on Tank Inspections at Arlington, VA Water Treatment Plant #2325, Arlington, VA

Inspection Date- July 18, 2021

For: Jacobs Water Engineering, BIAF

Location: 33402 South Glebe Road, Arlington, VA

SCOPE: Inspect for Exterior Damage to the tank and any evidence of leaking or concerns.
Visually Inspect for Interior Corrosion to tank walls/ liner/floor and do an adhesion "peel" test if possible
If Interior is open and able to be entered, take Barcol readings
Check for corrosion damage to interior piping and nozzles inlets
Take Barcol readings when needed and possible to perform

Tank-Ferric Chloride Tank #2

Inside- Barcol Avg is 32 on the walls and floor. This is within the normal range.
The walls show no visible deterioration and all the inlet piping looks good with no deterioration.
Outside- There was no visible cracking or leaking flanges.

Tank- Ferric Chloride Tank #1

Outside- There is possibly a slight leak from a crack on the lower band of fiberglass roving. An inside inspection needs to be performed in order determine the extent and depth of the cracking. **An inside inspection should occur to discover the extent of the issue.**
The flanges and hold down lugs look good and no leaks are evident.
The manway is leaking which indicates it could need a new gasket or may just need to be re-torqued using a torque wrench sequence. **Remove manway cover when tank is empty and inspect gasket. If in good condition, clean and re-install using a star pattern torque sequence on the bolts (Tank should be emptied before re-torquing).**
Inside- Tank was in use and could not be inspected.

Tank-Sodium Hydroxide (NaOH) Tank

Outside- There is a leaking 4" flange and the head to shell weld is leaking 25% around the bottom of the tank. **This should be repaired.**

Tank- PTB Hypo (HCl) Tank

Inside- Repaired a 4" scratch on the inside. There is a false bottom in this tank and it is cracked around in the corner of the radius. When stepping on the bottom, liquid would squeeze out the crack in the corner of the radius. **This needs to be repaired.**

Tank- Polymer Tank

Outside- No visible issues
Inside- Looks good. There are spots on the bottom that look like product residue. Viewed from top manway

Tank- Polymer Tank 2

Outside- No visible issues

Inside- No visible issues as viewed from top manway

Tank- Polymer Tank 1

Outside- No visible issues

Inside- No visible issues as views from top manway

Tank- Polymer Mixing Tank 1

Outside- No visible issues

Inside-Tank in use and could not be inspected

Tank- Polymer Mixing Tank 2

Outside- No visible issues

Inside-Tank in use and could not be inspected

Tank- Polymer Mixing Tank 3

Outside- No visible Issues

Inside- Inside structure is good but tank has construction issues. There are no inside welds on the flanges and poor welds on the tank baffle joints. **These issues should be remedied to prevent future issues, most importantly the baffles coming loose.**

Horizontal Hypochloric (HCl) Acid Tank

Outside- No Visible Issues

Inside-Tank in use and could not be inspected

Thank you for this opportunity to provide you with pricing and services. If you have any questions regarding this report, please contact me direct.

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