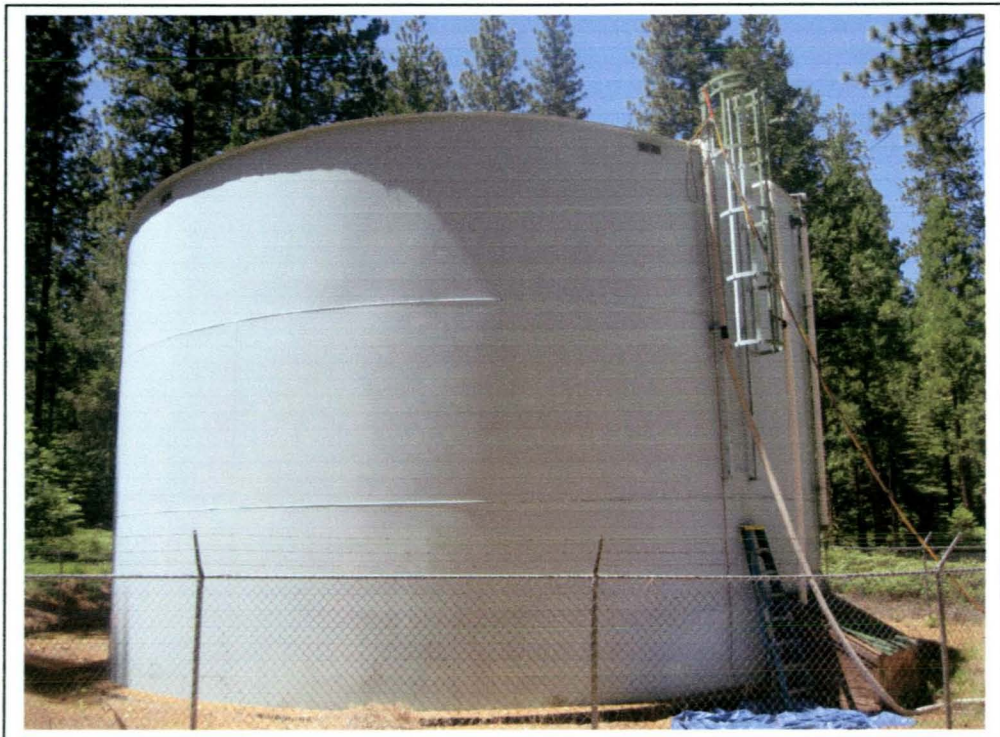




Inspection Report for
Odd Fellow Sierra Recreation Association
Long Barn, CA



210 KG Steel on Grade Tank

Date Completed: July 4th, 2010

Commercial Dive Team:

Diver – Ian Stephens
Dive controller – Brett Taake
Tender – Tom Romel

Scope of Work:

Our team completed sediment removal from the tank floor using underwater vacuum equipment. Sediment depth ranging from 4 to 8 inches (flock) was removed from 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. There was limited access to the tank.
2. The hatch was found locked (bolted) with a gasket present and in good condition with corrosion and de-lamination noted. Bolts were difficult to remove.
3. The ladder and manway were found secure and in good condition with corrosion noted.
4. The vent was found in good to fair condition with a screen in place.
5. The exterior walls and roof were found in good condition with corrosion, blistering and de-lamination noted.

Interior Inspection

1. The common inlet/outlet, ladder and manway were found in good condition with corrosion noted.
2. The overflow and drain were found in good condition.
3. The interior walls were found in good condition with sediment present and staining noted.
4. The interior roof and support column were found in good to fair condition with corrosion and de-alloying noted.

Recommendations:

1. Install a new gasket on the access hatch.
2. Replace existing bolts with stainless ones to aid the removal of the hatch lid.
3. Install a finer, mesh screen over the existing one on the vent.
4. Schedule time, at the next cleaning, to repair the corrosion to the problem areas of the tank.
5. Schedule time to clean interior walls and support column.
6. Clean and inspect every 3-5 years per AWWA recommendations.

Key

Excellent – Like new, no repairs needed

Good – Cosmetic problems, repair if utility wants

Fair – Minor problems, repairs needed

Poor – Major problems, fix now



Inland Potable Services, Inc.

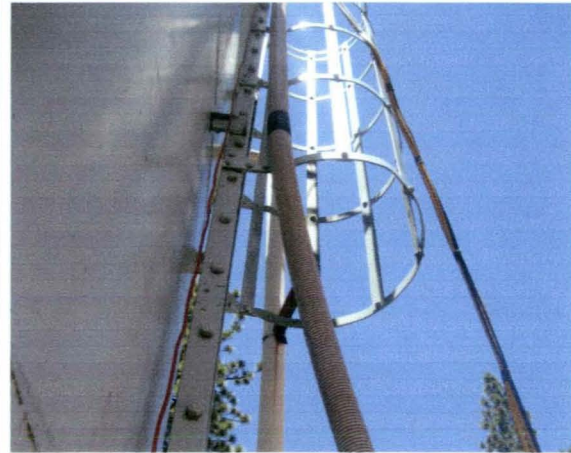
Exterior Inspection Report



Access Ladder Condition

Ladder Type: Metal
 Coating Condition: Fair
 Corrosion Present? Y N
 Seams/Welds Condition: Good
 Oxidation Present? Y N
 De-lamination Present? Y N
 Stand Off Supports Condition: Good
 Safety Climb Type: Cage
 Safety Climb Condition: Good
 Is top of tank easily accessible? Y N
 Is the ladder and Safety Climb OSHA approved? Y N

Summary: The ladder was found secure, OSHA approved, and in good condition with 15% uniform surface corrosion and 15% de-lamination noted.



Roof Condition

Coating Condition: Good
 Corrosion Present? Y N
 Percentage: 5%
 Seams/Welds Condition: Good
 Oxidation Present? Y N
 De-lamination Present? Y N
 Low Spots Present? Y N
 Holes in Roof? Y N
 Cathodic Protection Plates Present? Y N
 Sealed Edges: Y N NA
 Loose Plates? Y N NA
 Missing Plates? Y N NA

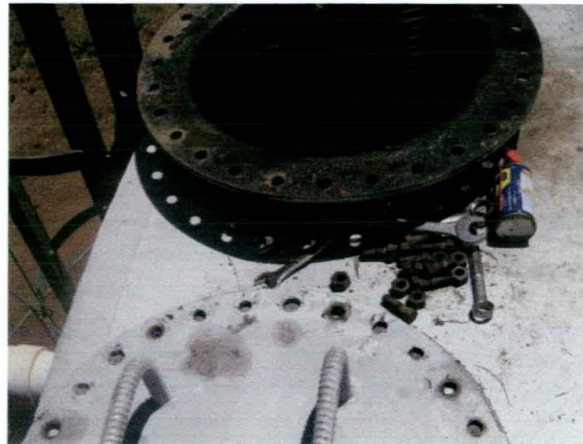
Summary: The roof was found in good condition with corrosion, 10% blistering, 5% de-lamination, and 3 to 4 inches of pine needles noted.



Access Hatch Condition

Coating Condition: Good
 Corrosion Present: Y N
 Seams/Welds Condition: Good
 Oxidation Present? Y N
 De-lamination Present? Y N
 Hatch Size: 26 inch round
 Hatch Locked? Y N (bolted)
 Hinge Condition: N/A
 Gasket Present? Y N
 Intact? Y N NA
 Insects, dirt or debris present under hatch? Y N

Summary: The hatch was found locked (bolted), with a gasket present and in good condition with corrosion and de-lamination noted. Recommend replacing the gasket. The bolts should also be replaced with stainless ones because the present ones are corroded and difficult to remove.



Wall Panel Condition

Coating Condition: Good
Corrosion Present? Y N
Percentage: 1%
Seams/Welds Condition: Good
Oxidation Present? Y N
De-lamination Present? Y N
Dents Present? Y N
Holes Present? Y N

Summary: The walls were found in good condition with corrosion, 3% blistering and 1% de-lamination noted.



Overflow Structure Condition

Coating Condition: N/A (PVC)
Corrosion Present? Y N
Percentage: N/A
Seams/Welds Condition: N/A
Oxidation Present? Y N
De-lamination Present? Y N
Stand Off Supports Condition: Good
End Cap Present? Y N
Hinge and Cap Condition: Good
Screen Present? Y N
Condition: Good

Summary: The overflow was found in excellent condition with an end cap and screen present.



Vent Condition

Coating Condition: Good/Fair
Corrosion Present? Y N
Percentage: 5%
Seams/Welds Condition: Good
Oxidation Present? Y N
De-lamination Present? Y N

Screen in Place? Y N
Condition: Poor
All Openings sealed? Y N
Cap Condition:

Summary: The vent was found in good to fair condition with a screen in place and corrosion noted. Recommend installing a mess screen over the existing one.



Foundation Condition

Foundation Exposed? Y N
Anchor Bolts Present? Y N
Corrosion on Anchor Bolts Present? Y N NA
Anchor Bolts Loose? Y N NA

Cracking Noted in Foundation? Y N NA
Spalling Noted? Y N NA

Summary: The foundation was found in excellent condition.



Manway Condition

Manway Location: 11:45 o'clock
Coating Condition: Good/Fair
Weld/Seam Condition: Good
Corrosion Present? Y N
Percentage: 5%
Pitting noted in metal? Y N
Depth: N/A

Summary: The manway was found secure and in good to fair condition with uniform surface corrosion noted on the hardware.





Inland Potable Services, Inc.
Interior Inspection Report



Inlet and Outlet Condition

Common Inlet/Outlet? Y N Location: 11:50 o'clock
If No:

Outlet location: N/A

Inlet Location: N/A

Coating Condition: Good

Weld/Seam Condition: Good

Corrosion Present? Y N

Percentage: 3%

Pitting noted in metal? Y N

Depth: N/A

Summary: The common inlet/outlet was found in good condition with corrosion noted.



Ladder Condition

Ladder Location: 12 o'clock

Coating Condition: Good

Weld/Seam Condition: Good

Supports condition: Good

Corrosion Present? Y N

Percentage: 2%

Pitting noted in metal? Y N

Depth: N/A

Summary: The ladder was found secure and in good condition with corrosion noted.



Manway Condition

Coating Condition: Good

Weld/Seam Condition: Fair

Corrosion Present? Y N

Percentage: 6%

Pitting noted in metal? Y N

Depth: N/A

Summary: The manway was found secure and in good to fair condition with corrosion starting on the seam and bolts.



Overflow Condition

Overflow Location: 11:45 o'clock
Coating Condition: Good
Weld/Seam Condition: Good
Corrosion Present? Y N
Percentage: N/A
Pitting noted in metal? Y N
Depth: N/A

Summary: The overflow was found in good condition.



Drain Condition

Drain Location: 11:55 o'clock
Coating Condition: Good
Weld/Seam Condition: Good
Corrosion Present? Y N
Percentage: N/A
Pitting noted in metal? Y N
Depth: N/A

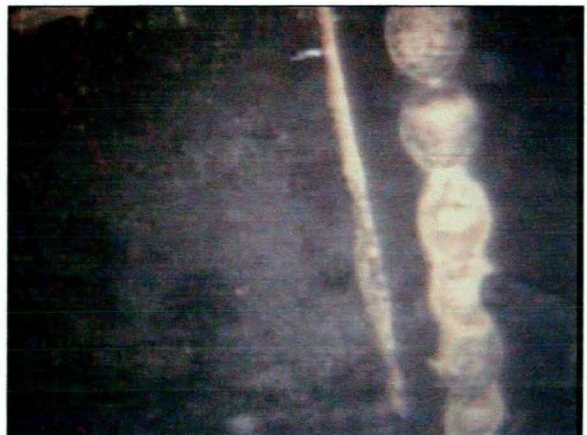
Summary: The drain was found in good condition.



Wall Panel Condition

Coating Condition: Good
Welds/seam condition: Good
Corrosion Present on panel? Y N
Percentage: N/A
Pitting noted in metal? Y N
Depth: N/A

Summary: The walls were found in good condition with sediment and staining present.



Roof Condition

Coating Condition: Good
Welds/seam condition: Fair
Corrosion Present on panels? Y N
Percentage: 10%
Metal De-alloying noted? Y N
Percentage: 5%

Summary: The roof was found in good to fair condition with uniform surface corrosion starting on the panels and de-alloying noted on the beams.



Support Column Condition

Coating Condition: Fair
Welds/seam condition: Good
Corrosion Present? Y N
Percent: 10%
Pitting noted in metal? Y N
Depth: N/A

Summary: The support column was found secure and in good to fair condition with corrosion noted and sediment adhering to the column. There is also de-alloying noted on the top three feet of the column.



Floor Condition

Coating Condition: Good
Welds/seam condition: Good
Corrosion Present? Y N
Percentage: N/A
Pitting noted in metal? Y N
Depth: N/A

Summary: The floor was found in good condition. Between 4 and 8 inches of sediment was removed.



Tank Layout

Quadrant #4

Quadrant #1

Overflow
Pipe

Inlet/
Outlet

Access
Hatch

Drain

Support
column

Center
Vent

Quadrant #3

Quadrant #2

