



**Site: Wincombe lane,
Shaftesbury,
SP7 8QD.**

Visual Tank Inspection Report

Sludge Tank

Client Contact: Paula Boulton

Date of Test: 23rd January 2023

Report Number: 23-004

API 653 Inspector: Ian Hooley

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Summary

Tank T3 should have been internally cleaned and inspected on a 5 yearly rolling program, however this has not been carried out. It is now vital to the integrity of the tank that this program is implemented in the soonest possible timeframe.

The 50mm overflow pipework from course two is exhibiting signs of age hardening, with fungal growth build-up. This should be replaced within the next 6 months.

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Results Summary

Base			
	Pass	Fail	Not Applicable
Visual	☐	☐	☒
Vacuum Box	☐	☐	☒
Hydrostatic Testing	☐	☐	☒
Shell Results			
Visual	☒	☐	☐
Hydrostatic Testing	☐	☐	☒
Roof			
Visual	☒	☐	☐
Nozzles			
Visual	☒	☐	☐
Hydrostatic Testing	☐	☐	☒
Foundation			
Settlement	☒	☐	☐
Planer Tilt	☒	☐	☐
Accessories			
Access Structures	☒	☐	☐
Mixers/Agitators	☒	☐	☐
Safety Critical			
Venting Capabilities	☒	☐	☐
Alarms	☒	☐	☐
Pipework			
Tank Piping	☐	☒	☐
Fire Deluge	☐	☐	☒

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Actions & Conclusions

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Mandatory actions

No Mandatory Actions.

Recommendations

Feature	Action	Time Frame	Page Reference
Shell			
Overflow Pipework	Replace age hardened plastic pipework	6 months	12
Internal Surfaces			
Internal Inspection	Clean out and inspect internal surfaces.	ASAP	2

Report Conclusion

Based on the inspection results, the tank is fit for operation.

Next Recommended Scheduled Inspections taken from Table B-1 Inspection frequencies: -

- Group 9
- Unknown corrosion rates
- Climate Code B

External Inspection (Visual)
Internal Inspection (Detailed)

1 year from entry into service
5 years from entry into service

WSG Inspection Tank Assessor

Name: Ian Hooley

Signature:



Client Storage Tank Engineer

Name:

Signature:

Date: 30 January 2023

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Introduction

WSG Eagle Eye Ltd conducted an IN-SERVICE Visual inspection to T3 Sludge Tank.

Scope:

The inspection Methods: -

- A Close Visual inspection for surface defects.

Areas Inspected (where accessible): - ☐

- Change of surface condition.
- Visual signs of joints leaking.
- General condition of permanent fixtures eg ladders & platforms.
- The condition of the mastic fillets.
- Impact damage to shell. ☐
- The condition of GFS coating to the face of the tank sheets
- Discolouration to the shell.
- White or coloured spots.
- Cracks and fissures.

The inspection assumes that the tank has been designed and constructed in accordance with - Specifications for design and construction of Bolted steel sectional tanks.

The inspection report should be referenced alongside the Fabrication Monitoring and Installation reports produced when the tank was first constructed.

The inspection is based around ISO 28765 & BS7543 :2003

The purpose of the report is to ensure that the tank is suitable for the intended use, is maintained in an efficient state, efficient working order and in good repair for continued safe use.

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Tank Details

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Tank Details

General	
Tank Identification	Sludge Tank T3
Tank Type	Steel Bolted Tank.
Design Standard	BS 7543:2003
Manufacturer	Permastore
Drawing Number	K31703-102-1110
Year of Build	2010
Tank Diameter	3.4m.
Tank Height	2.8m.
Tank Volume (m³)	25
Construction Material Grade	Glass fused to steel
Design Pressure (mBar)	Unknown
Design Vacuum (mBar)	Unknown
Design Gravity	1.05
Design Wind Speed	45m/s.
Max Pump-In Rate	Unknown
Max Pump-out Rate	Unknown
Tank Shell	
Maximum Fill Height	2.1m
Insulation External	No
Lining Internal	Glass lined.
Number of Nozzles	6
Tank Base	
Design Type	Concrete Base
Number of Sumps/Nozzles	None
Tank Roof	
Roof Type	Flat (Grp)
Number of Nozzles	2
Tank Appendage & Area Details	
Foundation Type	Type D/E Concrete Raft/Raft Piled.
Bund Type	Earthen bund wall
Roof Vent PRV Details	150mm NB free vent
Roof Access Details	No Access

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In-Service Visual Inspection

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Tank Shell Visual Inspection

Action Status		
Fit for Continued Use	Maintenance/Repair Required	Major Repair/Action Required

Feature	Comments	Action Status		
		1	2	3
External Condition	Visually in good condition	√		
Internal Condition	Not Applicable			
External Joints	The mastic fillets are in good condition with no signs of leakage	√		
External Nozzles	All nozzle connections are tight and secure, with no cracking of mastic sealant.	√		
Internal Nozzles & Pipework Connections	Not Applicable			
Patched areas	None.	√		
Ripples/Buckles/Deformation	None	√		
Voids	None	√		
Pipework & Pipework connections	The 50 mm overflow pipework is exhibiting sign of age hardening and fungal growth (See Photo 4)		√	
Other	N/A			

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Tank Roof Visual Inspection

Action Status		
Fit for Continued Use	Maintenance/Repair Required	Major Repair/Action Required

Feature	Comments	Action Status		
		1	2	3
External Condition	The GRP roof is in good condition	√		
Internal Condition	Not Applicable	√		
External Joints	No joints. One piece Grp Roof	√		
Internal Joints	Not Applicable			
External Nozzles & Pipework Connections	All nozzle connections are tight and secure, with no cracking of mastic sealant.	√		
Internal Nozzles & Pipework Connections	Not Applicable	√		
Patched areas	None	√		
Ripples/Buckles/Deformation	None	√		
Voids	None	√		
Pipework Hazardous to Shell Condition	None	√		
Other	None			

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Foundation Visual Inspection

Action Status		
Fit for Continued Use	Maintenance/Repair Required	Major Repair/Action Required

Feature	Comments	Action Status		
		1	2	3
Foundation Type	Type D/E Concrete Raft/Raft Piled.	√		
Shoulder	N/A.			
Cracking/Spalling of Concrete	None.	√		
Cavities Under Foundation	None.	√		
Drainage issues	No standing water was noted to the bund floor.	√		
Tell Tail Drains	N/A			
Bit-Sand condition/Settlement	N/A			
Visible Settlement	None.	√		
Foliage/Growth	None.	√		
Evidence of Leakage	None.	√		
Anchor Points	The tank is concreted into the floor and has no anchor bolts fitted.			
Other				

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Tank Accessories Inspection

Action Status		
Fit for Continued Use	Maintenance/Repair Required	Major Repair/Action Required

Feature	Comments	Action Status		
		1	2	3
Access Stairs	Not installed			
Access Ladder	Not installed			
Access Platform	Not installed			
Mixers/Agitators	In serviceable with no signs of leaks, vibration or noise	√		
Fire Deluge	Not installed			

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Appendix A – Photographs

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Photo 1	Photo 2
Shell	Roof
General View	General View
	
Photo 3	Photo 4
Concrete to base	Pipework
No cracking or spalling of concrete around base of tank	Overflow pipework is exhibiting signs of aging & previous repairs to joints
	
Photo 5	Photo 6
Shell Nozzles	Joints
No signs of leakage with good mastic condition,	Mastic joints free from cracking or deterioration
	

Appendix B – Qualifications

API INDIVIDUAL CERTIFICATION PROGRAMS



verifies that

Ian William Hooley

HAS MET THE ESTABLISHED AND PUBLISHED REQUIREMENTS FOR API CERTIFICATION AS AN
API 653 ABOVEGROUND STORAGE TANK INSPECTOR

IN ACCORDANCE WITH THE KNOWLEDGE DEFINED IN THE **API Standard 653**

CERTIFICATION NUMBER **56108**

ORIGINAL CERTIFICATION DATE January 31, 2015
CURRENT CERTIFICATION DATE January 31, 2021
EXPIRATION DATE January 31, 2024



Manager, Individual Certification Programs



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