



London Borough of Hounslow

Mogden Sewage Treatment Works

TW Site Inspection

Date of inspection: 17 th May 2018	
Attendees: Mr Leroy Phillips (London Borough of Hounslow) and Mr Manzoor Hussain (Thames Water)	
LB Hounslow Observation	Thames Water Action / Response
<p><u>Storm Water Storage Tanks (SWST)</u></p> <p><u>Tank 1A</u> – Tank empty and clean – Hoppers 1, 2 & 3 all drained down to lowest point.</p> <p><u>Tank 1B</u> – Tank empty and clean – Hoppers 1, 2 & 3 all drained down to lowest point.</p> <p><u>Tank 2A</u> – Tank empty and flushed clean - Hoppers 1, 2 & 3 drained down to bottom level.</p> <p><u>Tank 2B</u> – Tank empty and clean – Hoppers 1, 2 & 3 all drained down to lowest point.</p> <p><u>Tank 3A</u> – Tank empty and clean – Hoppers 1, 2 & 3 all drained down to lowest point.</p> <p><u>Tank 3B</u> – Tank empty and clean – Hoppers 1, 2 & 3 all drained down to lowest point.</p> <p><u>Tanks 4A, 4B, 5A & 5B</u> - which are covered and odour controlled were all empty - unable to gauge condition as lighting system still not</p>	

working.

Tank 6A – Tank empty and clean – Hoppers 1, 2 & 3 all drained down to lowest point.

Tank 6B – Tank empty and clean – Hoppers 1, 2 & 3 all drained down to lowest point.

Tank 7A – Tank empty and flushed clean. Hoppers 1, 2 & 3 full (with water leaking back to tank) issue with faulty subterranean non-return valve allowing back-filling of hoppers – requires repair/replacement.

Tank 7B – Tank empty and clean – Hoppers 1, 2 & 3 all drained down to lowest point.

Tank 8A – Tank empty and flushed clean. Hoppers 1, 2 & 3 full of effluent water – surface of green algae no odour detected.

Tank 8B – Tank empty and clean – Hoppers 1, 2 & 3 all drained down to lowest point.

Feed Channel - The level of effluent in both feed channels was low – approximately 5-10% - almost bottomed out in places – some grit and sludge – no local odour.

Complaints

The Council directly received no complaints by telephone in the preceding week.

The Council directly received no complaints by email in the preceding week.

The Council received no complaints by email from MRAG.

Thames Water controller advised that they had received no direct complaints in the preceding week.

Odour Monitors

The odour readouts (H₂S) for all of the monitors, which were providing data at time of inspection:

Monitor 1	0.005	ppm	12:44
Monitor 2	0.005	ppm	12:44
Monitor 3	0.000	ppm	12:44
Monitor 4	0.000	ppm	12:44
Monitor 5	0.004	ppm	12:44
Monitor 6	0.007	ppm	12:44
Monitor 7	0.007	ppm	12:44
Monitor 8	0.006	ppm	12:44
Monitor 9	0.006	ppm	12:44
Monitor 10	0.000	ppm	12:44
Monitor 11	0.005	ppm	12:44
Monitor 12	0.005	ppm	12:44
Monitor 13	0.006	ppm	12:44

Odour Log (Thames) - Photocopies of log entries taken:

Wednesday 9th May 2018

AM – No odour spikes no issues.

Actions: None noted.

PM – No odour spikes no other issues.

Actions: None noted.

Thursday 10th May 2018

AM: OM1–5 = 0.017 at 16:58 to 17:13.

7 = 0.016 at 13:57 to 14:11.

7 = 0.021 at 10:57 to 11:11.

Actions: None noted.

PM: No odour spikes. No other issues.

Actions: None noted.

Friday 11th May 2018

AM: OM1–5 No spikes. OM6–13 No spikes.

Observations: No odour spikes. No other issues.

Actions: None noted.

PM: No odours reported of found. No spikes on trends.

Actions: None noted.

Saturday 12th May 2018

AM: OM1–5 = Mon 5 = 0.015 at 02:28–2:41.

OM6–13 = Zero spikes.

PM: OM1 spiked at 19:02–19:15 0.031ppm but less than 15 minutes duration.

Actions: Filling storm tanks.

Sunday 13th May 2018

AM: OM1–5 = None. OM6–13 = None

Actions: None noted.

PM: Two spikes from OM9 at 22:09 and 22:39, both less than 15 minutes duration max 0.016ppm.

Actions: None noted.

Monday 14th May 2018

AM: No odour issues nothing to report on trends.

Actions: Storm Channel No 6 SWT flushed with effluent.

PM: No odour issues found or reported. No spikes on trends.

Actions: None noted.

Tuesday 15th May 2018

AM: OM9 spiked to 0.017PPM at 08:29 to 08:44.

Actions: None noted.

PM: OM1-5 = no spikes. OM6–13= no spikes.

Actions: None noted.

Wednesday 16th May 2018

AM: No odour issues nothing to report on trends.

Actions: None noted.

PM: OM 1–5 no spikes. OM6-13 no spikes.

Actions: None noted.

Sludge Dip Records

Date	West PSTs 1	West PSTs 2	West PSTs 3	West Total	East PSTs	Grand Total
	All units in m ³					
OMP limit	500					
13/05/18	244	1963	450	2657	8261	10918
14/05/18	813	1401	450	2664	4900	10779
16/05/18	108	1176	450	1734	3268	5002

The sludge stock levels for the West side circular primary settlement tank 1 were **compliant** with the OMP trigger level (500m³) for all of the dates for which data has been provided.

There are no limits for the East side primary settlement tanks as these are covered and odour controlled. Thames is required by the terms of the abatement notice agreed in 2005 to notify LBH on the next working day of any such exceedance and notify LBH within three working days of any appropriate remedial measure taken within three days.

Digesters

Digesters 1-4 – Out of use (permanent).

Digester 5 Was in use had a weak sloppy seal. No evidence of spillage.

Digester 6 Was in use had a weak sloppy seal. No evidence of spillage.

Digester 7 Was in use had a weak sloppy seal. No evidence of spillage. Digester gassing off slightly.

Digester 8 Was in use had a weak sloppy seal. No evidence of spillage.

Digester 9 Was in use had a weak sloppy seal. No evidence of

spillage.

Digester 10 Was in use had a weak sloppy seal. No evidence of spillage.

Digester 11 Was in use had a weak sloppy seal. No evidence of spillage.

Digester 12 Was in use had a weak sloppy seal. No evidence of spillage.

Digester 13 Out of use. Empty and clean. Contractor on site undertaking maintenance.

Digester 14 Was in use had a weak sloppy seal. No evidence of spillage

Digester 15 Was in use had a weak sloppy seal. No evidence of spillage.

Digester 16 Out of use. Empty and clean. Contractor on site undertaking maintenance.

Digester 17 In use - Good seal pellets in use. No evidence of spillage.

Digester 18 In use - Good seal pellets in use. No evidence of spillage.

Digester 19 Out of use. Empty and clean. Contractor on site undertaking maintenance.

Digester 20 Was in use had a weak sloppy seal. No evidence of spillage.

There was evidence of anti-foaming agent in use and TW advised that this is applied daily to all of the digesters that are operational.

GENERAL

Sludge Screening House

Shutter doors closed at time of inspection. No local odours.

Imported Sludge

Four imports of 35m³ daily for preceding seven days.

Final Settlement Tanks East Side of Works

The 8 circular tanks previously used as PSTs are now being used as final tanks (71-78). All tanks in service and no issues to report.

Skips

2x large skips covered general waste skip.
1x small open skip empty covered.

East Side Screen House

All doors closed.

Pasteurisation Plant

The pasteurisation plant is in service and fully operational.

West side primary settlement tanks (PST)

Rectangular PSTs – no issues
Circular PST's 9, 10, 11 & 12 all in use.

West Side Aeration Lanes (Old)

Battery C aeration feed channel approximately 60% obstructed in one channel - requires jetting.

New Works (West Side)

Feed Channel for Aeration Lanes 23-25 totally obstructed and Aeration Lane 21 approximately 75% obstructed - requires jetting.

Approximately 100% of tanks have again developed “fluffy” coverage

across surface, worsened since previous inspection. Quantity of physical detritus in tank that has bypassed screener has decreased significantly.

Odour Control Unit (OCU) performance monitoring – (17/05/18)

Plant	Reading (ppm)	Action Level (ppm)	Compliant
Main pumping station outlet	0.00(av)	0.2	Yes
East OCU	0.00(av)	0.05	Yes
West inlet	0.00(av)	0.05	Yes
Sludge reception outlet	0.00(av)	0.8	Yes
Thickening plant outlet	0.00(av)	0.6	Yes
Pasteurisation plant outlet (OCU 12)	0.00(av)	0.5	Yes
Transfer PS outlet	0.00(av)	0.6	Yes
New West OCU 11 outlet	0.00(av)	0.6	Yes

Jerome reading